

**THE RELATIONSHIP BETWEEN CREATIVITY ACUMEN AND VISUAL ART CREATION IN
GRADE 11 LEARNERS IN JOHANNESBURG, GAUTENG**

By

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Submitted in part fulfillment of the requirements for the degree of

**MASTER OF EDUCATION
WITH SPECIALIZATION IN GUIDANCE
AND COUNSELLING**

At the

UNIVERSITY OF SOUTH AFRICA

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ACKNOWLEDGEMENTS

I would like to take this opportunity to express my heartfelt gratitude to Professor Krüger for the support and dedication throughout my dissertation, as well as her guidance and patience with me. I felt fortunate to be given the encouragement with fortitude from a great teacher whom I hold in the highest regard.

I would like to thank the art educator, Mrs Von Maltitz and the Visual Art learners at the research site for their invaluable enthusiasm towards this research.

I would like to thank Mrs Lynda Blore for her enduring belief in me and her time and additional assistance throughout the research process.

I would like to take this opportunity to thank my wonderful family and friends for their enduring grace, support and interest in the creative process over the past year.

ABSTRACT SUMMARY

This study explored Visual Art creation by Grade 11 learners in the art classroom and the relationship with attaining creativity acumen. Creativity acumen in this instance is looked upon as the ability to visually conceptualize imaginative ideas and then translate that into an individual rendition of a concept presented. The learners first perceive an idea and then conceive a concept. Visual perception is a function of how the eyes and brain see whole images, but these images are broken down into their visual elements, such as lines and shading during Visual Art creation. The visual elements are then created in forming an art-work, which in turn lends itself to understanding complex concepts and themes. Creativity acumen involves two processes: having ideas (creativity-relevant processes) and then producing a visual exposé of such ideas.

A literature review was conducted which provided useful insight into the components of the creative process and the contextual factors influencing creativity acumen within the school environment. An empirical study was conducted with six art learners in Grade 11, selected through purposive sampling. Creativity questionnaires were completed pre- and post-art creation as a self-assessment tool of how effectively individual implementation of the creative process occurred during idea development and artistic expression in attaining creativity acumen during Visual Art production, if at all. The art creations were observed from task presentation through to completion deadline. Photographic records of the art creations were captured as they were produced and completed. Interviews were conducted at the end of the art creative process. The data was descriptively tabulated into photo-sheets and tabulated for qualitative interpretation and description of findings and results.

From the empirical study it can be concluded that there is a dialectic relationship between the creativity-relevant processes and art-relevant skills, as set out theoretically by Amabile (1996) when creating Visual Art. The relationship is intertwined and compounded by overlapping factors in acumen to be creative and creating an art-work. Both require openness to new ideas and perspectives and both need perseverance and effort to learn new skills and craftsmanship.

The conclusion of this study is that creativity acumen and art creation have variation of outcome and expansion of ideas in common. Creativity acumen is a means of extending one's outlook and ability to question, look for new information, develop ideas independently while art creation is a means of visual expression in learning to elaborate on a concept through externalised representation which guides further possibilities and understanding of new concepts and perspectives. There is a dialectic relationship between art creation and creativity acumen or ability as one possibly informs and develops the other.

Keywords: Creativity, creativity acumen, creative process, Visual Art, art-work, relationship, creativity-relevant processes, art-relevant skills, idea generation, conceptualisation, realisation, creative outcome.

DECLARATION

STUDENT NUMBER: 748-303-1

I hereby declare that **THE RELATIONSHIP BETWEEN CREATIVITY ACUMEN AND VISUAL ART CREATION IN GRADE 11 LEARNERS IN JOHANNESBURG, GAUTENG**, is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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CHAPTER 1

INTRODUCTORY ORIENTATION, STATEMENT OF THE PROBLEM, AIM OF THE STUDY AND CLARIFICATION OF CONCEPTS

1.1 INTRODUCTION

Creativity originates from the experience of relating to the environment in order to gain greater awareness of the world around us. Creativity acumen can affect the development of our society; it is the interaction between a person's thoughts and a socio-cultural context (Csikszentmihalyi 1996:23). Generally, the outcome of a creative experience is a new idea, object or product. Creativity acumen is part of the human cognition and results in behaviour that can be accessed through a number of strategies (Feldhusen & Goh 1995:231).

Even though creativity acumen has been recognized by research (Amabile 1983a, 1985; Guilford 1981; Plucker, Beghetto & Dow 2004), as essential in understanding complexities in our world, creativity in schools is often suppressed by academic hegemony. The world over, a hierarchy of learning appears with Mathematics and Science leading in pole position, then Languages and Humanities, and Arts trailing behind in educational reverence (Eisner 1999:17). Budget cuts for arts education, leaves art on the periphery of educational reforms (Darts 2006:10-11). The Dakar Framework for Action, held in April 2000, for world education underscores that an active pedagogy be used for good education, which will enable adolescents to gain awareness of their potential and develop their capacities as well as prepare them to take control of their own destiny, liberate them from dependency and endow them with initiative, creativity, enterprise and appreciation of diversity. Schools can be thought of as a culture of opportunity and a culture of growing minds (Eisner 2005:129). (The Dakar Framework for Action and World Education Forum 2000:27). Schools thus have a major role to play in assisting learners to develop creativity acumen. Promoting creativity has emerged as a major educational issue (Grierson & Brearley 2009:139; Wang 2011:1). However, this is not a new issue, Fritz (2004) hones in on developments that civilisation has enjoyed, which has evolved through the creative process, but ironically, most people are not taught to be creative. In appealing for arts education and creativity promotion in school, for all individuals, the Director-General of UNESCO accentuated that, "...the school of the twenty-first century has to be able to anticipate new needs and give a privileged place to value art education in order to favour creativity, which is the human being's distinctive skill" (Document based on the conclusions of the Regional Conference on Arts Education, South Africa 2001:6: Division of the Arts and Cultural Enterprises, Sector of Culture, UNESCO). Scholastic endeavour is based on the adolescents' ability to recognise and develop their creativity acumen in the resolution of daily obstacles with artistic activity replacing precise memorisation with alternate views of reality (Eisner 2005:114). Therefore, curriculum transformation and education systems with a cultural dimension, according to both The Dakar Framework for Action (2000:27), and the Regional Conference on Arts Education (UNESCO 2001:6), should focus on the

learner and the learning process, plus the quality of inspiring learning environments that consequently develop artistic creativity and the role of art.

Artistic creativity, as defined by Amabile (1983a), is a range of multidimensional processes that include knowledge of art concepts, traditions in a culture, creative thinking skills and intrinsic motivation (Zimmerman 2005:65). Each human being has some degree of creativity acumen alongside other abilities. Creative behaviour and human creativity is a process, which occurs with effort and intention (Csikszentmihalyi 1996:8). Creativity acumen is dynamic and can be seen as actions or as sets of behaviour in individuals, in relation to environmental demands. These creative activities include the ability to generate ideas, visual realisation of a concept and have an evaluative component (Runco 1990:234). If an idea is conceived, it requires practice in order to make it a reality. The creative activities launched in the Visual Art classroom are bound to generate new visual images and ideas in the formulation of art-works. My contention is that the Visual Art classroom could develop creativity acumen and mobilise expression and insight, as a learner utilises independent knowledge, concept exploration, reflection and some risk-taking in determining where and how to proceed when committing to the creative process. Woolfolk (2007:306-7) states that people are creative in a particular area and in order to display creative acumen, the 'invention' must be intended, used together with a rich store of knowledge and flexibility as a necessity for creativity. The plasticity of creating Visual Art, both cognitively and behaviourally, will impact the learner's creativity acumen.

The Visual Art classroom offers learners the opportunity of self-expression in responding to their world. Within the social cultural environment, the art class is a 'doing' class, involving learners in creativity and development. It provides opportunities to stimulate and develop learners' intellect, engaging their creative imagination through visual experiences and the manipulation of art materials in realising ideas and concepts (Klug & Whitfield 2011:163).

Davis (1997:60) explains that when a learner is involved in creating something, two distinct activities are taking place. The first has to do with process and the second relates to the product created. The creative product results from both processes. It is often difficult to pinpoint where the process ends and the product begins. The creative processes first proposed by Wallas (1926), introduced a creative process model that could be used to deliberately facilitate creative thinking, and further develop creativity through practice. This study aims to explore the creative process or procedure relating to a successive result in Visual Art, the characteristic thinking and some strategies of creative behaviour. These creative actions occur consciously or unconsciously, to birth new ideas, combinations, meanings and transformations when producing something that resolves a challenge undertaken (Csikszentmihalyi 1996; Cropley & Cropley 2005; Sternberg & Kaufman 2010). I am inclined to agree

with Basadur (2005:261-2) when he mentions 'applied creativity' as a process with multiple phases and stages.

It is possible to observe behaviours that indicate a predisposition to create or manifest art-works through intense involvement (Zimmerman 2005:65). By actively engaging in the processes in Visual Art via visual inquiry, learners become aware of the creative process and according to Petty (1996) unknowingly go through 'working phases' where creativity appears to imply change. Csikszentmihalyi (1996:256) states that to look at something is to change it or be changed by it. The art-works form a body of evidence of the learners' progress over time (Goldberg 2006:201).

1.2 AWARENESS OF THE PROBLEM

My interest in creative processes began with wanting to pursue the arts at school, with a particular interest in the impact of where visual imagination can lead. As a university student I wrote a paper on Darwin and the processes underpinning natural selection, whereby organisms become better adapted to changes in the environment, highlighting characteristics of creativity acumen by the ability to achieve diversity as a result of a variation and versatile action to a more successful outcome. As a school teacher, my interest was piqued, as I became aware that learners who were deeply involved and actively engaged in tasks, with a sense of interest and awareness seemingly had a better capability to be open to discovering new perspectives and developing creative (new) possibilities. It struck me that there could be a relationship between the ability to be creative and the engagement in activities which are of interest and purposeful to developing success in learning and re-learning (adapting to circumstances). Creativity acumen would provide learned skills for success in meeting challenges.

In this study, these activities and processes include drawing, collage and paintings in the Visual Art classroom. I wish to examine whether this contributes to the ability to re-organise and evaluate visual information, expand ideas with various thinking skills, to confront change in order to plan the next move forward. I believe, like Harrington (1990:161) that the study of human creativity would benefit from attention to the processes by which creatively active people choose and shape their own environments. I am convinced it is necessary to develop human beings' ability to imagine and create new solutions to social and cultural challenges. Exploratory visual learning could develop practical and creative acumen to align with education policy (Chaijareon, Charuni & Kanjug 2012 :213-218; Smith & Smith 2010:250).

I agree with Guilford's (1950), presidential address to the American Psychologists Association, calling on psychologists to investigate issues of creativity, which he believed to be the relationship between creativity and learning. Perhaps, what is accomplished in the Visual Art classroom is creative learning,

offering learners the opportunity to create insights, personal vision and develop creativity acumen. The ultimate process of developing a creative lexicon is to take action and manage changes when learning how to create something new. Learners are influenced by what they see and hear. As young adults who inherit the future, they use visual data to communicate a visual message or idea, or transform a situation. The external production of Visual Art is related to the inner thinking and choices selected by the Visual Art learner. In “How schools kill creativity”, Robinson (2006) mentions that while children are curious, it must be noted they have also been in the school system for many years and educated to the ‘...fear of making mistakes’. The Grade 11 adolescent learners are quick to notice their shortcomings, are self-conscious and need to be encouraged constructively through the creative process with empathic critique. Differing creative experiences and knowledge could either stifle or develop creativity acumen. I would assume a new insight is developed by the learner’s personal absorption with an idea. Visual Art activities provide learners with the opportunity for reflection on own and others’ work, as well as with visual media and the symbolism to express their understanding and make adaptive changes until satisfied with the outcome.

1.3 EXPLORATION OF THE PROBLEM AND PRELIMINARY LITERATURE INVESTIGATION

“Great Art, wrote the naturalist Loren Eiseley, consists in so rendering a common thought or emotion that we cannot encounter that thought or emotion without thinking, if only subconsciously of the work of art” (Rechtschaffen 1996:224).

1.3.1 The Components of creative thinking and behaviour

In attaining creativity acumen, there is a gradual development of judicial thinking ability (*judicial thinking* is a sophisticated preview of alternate selections, processes and past analogies, prior knowledge), while concurrently generating ideas. The generation or ‘flow’ of ideas and imagination are inextricably related to the ability to manifest a new creation. Plato, Rousseau and Dewey’s central view of educational development was “not to be bound by conventional ideas as an individual...while being part of a process that awakens the person to a kind of thought that enables him or her to imagine conditions other than those that exist or that have existed” (Egan 1992:47). Creativity acumen, and especially creating art is the act of transforming new imaginative ideas and concepts into reality. This is how creativity acumen could be used constructively in conceptualising and evaluating (inner understanding), while making or developing a visual art-work (external presentation). The concept *creativity acumen* (creativity) rarely appears in visual art education literature (Zimmerman 2005:61). *Creativity acumen* is the individual’s ability to develop creative thinking and behaviour strategies involving both the inner dialogue of the learner (knowledge and generation of ideas) and the outer creative response in the environment of the classroom, while creating art. Creative behaviour carried out by making art is observed via human actions. Creativity acumen includes many different components such as, the understanding/grasp of complexities in ideas, the procedure and skills in

creating something and the motivation to proceed. The learners' creativity acumen lies in the development of the mind and how actions are focused to direct activities to create something new; and the understanding of an ideographic world includes an awareness of what we think and feel, with the mind choosing where to focus attention and what to ignore. According to Amabile's Componential Theory of Creativity (1983), four components are necessary for any creative response. Three of the components exist within the learner-art-relevant knowledge, creativity-relevant skills and task motivation. The social environment of the art classroom, in which the learner works, is the only external component.

1.3.2 The construction and development of creativity acumen through the creation of Visual Art

The concept of creativity in educational psychology is a case for constructivism. Constructivism lends itself to understanding and development of a range of skills through social influence and guidance or collaboration, which exceeds what, could have been accomplished alone. Constructivist approaches to learning and teaching stress that ideas (knowledge) and concepts are created and developed as opposed to simply being transmitted. Constructivism is essentially involved in conceptual strategies and activities as a process approach to creative learning. Creativity acumen and the capacity to recombine previously given elements into unique configurations appear to be an important component of creative cognitive abilities, scholastic and adult success. Vygotsky (2004:7) asserts that any human act that gives rise to something new is referred to as a creative act, regardless of whether what was created is a physical object or some mental construct that lives within the person that created it and is known only to him or her. Creating Visual Art is a behaviour, which could develop the learners' experience and insight of strategies which could give them a 'creative edge'. Yet the study of creativity acumen is not nearly as sturdy as one would expect, due in part to the quality of assumptions about creativity that collectively stifle most research efforts in this area. Compounding issues are; the lack of a universal consensus or definition of creativity (Plucker et al 2004:83).

The emphasis is process-oriented in Visual Art teaching and focuses on the language and creative strategies that learners need to develop in order to generate ideas or create art-works. As the learners' interact with the teacher and with each other, they practise using visual symbols in a variety of contexts developing creativity acumen as they do so. Vygotsky's contention of tool-mediated learning in the form of language, signs and symbols (also known as psychological tools), together with the art materials used and art tasks created, is therefore relevant. According to Rostan and Goertz (1999:109) the propensity for wondering (divergent thinking), taking alternate paths paired with external creative activity, could be critical processes in the development of creativity acumen. Due to more choices, more complexity, more information, according to Puccio and Murdock (2001:68), creativity acumen is an essential life skill. The kaleidoscopic lens of creating Visual Art includes individual freedom of mental activity, a variety of ideas and belief in solutions providing opportunities

for making connections with the world (Klug et al 2011:160).

1.3.3 The process approach to creating Visual Art

In a process approach, Edwards (2002:32-33) explain, a context is created within which learners sharpen the ability to explore new ideas and experiences. The teacher's role in providing information decreases and is replaced by a "strengthened role in eliciting and supporting learners' own thinking and meaning-making abilities". Therefore ideas are allowed to develop in the learner's own mind through a series of related, supportive activities; where taking risks and generating alternative ways are encouraged by postponing judgement. New skills are learned in supportive instructional contexts (Edwards 2002).

The Componential Theory of Creativity (Amabile 1983) underpins this process with a comprehensive model of the social (scholastic) and psychological components necessary for a learner to engage in art creation and the conceptual definition of creativity as a response which is novel as a solution to a heuristic task (Amabile 1996:133); while the Vygotskian paradigm of development interrelates with the learning as mediated by the creative processes used in Visual Art. The '**ICEDIP**' model of the creative process (Petty 1997) rests on the constructivist view of learning and includes the following phases of the creative process, namely, **I**nspiration, **C**larification, **E**valuation, **D**istillation, **I**ncubation and **P**erspiration (perseverance). Visual Art affords the learner the opportunity to use both art material and skills and patterns of creative intervention in the art classroom. The observation of the learner, during the creative process, is the defining factor to understanding creativity acumen. And because creativity is behaviour, variations from the prevailing consensus must be taken into consideration (Albert & Runco 1990:264).

1.4 DELIMITATION OF THE STUDY

This study is limited to a sample of one Head of Department, and a sample of six Grade 11 Visual Art learners who have selected Visual Art as a subject. Hanson and Herz (2011:33) alert us to the idea that people do not choose Visual Art and then become involved with the challenges, but rather that individuals are attracted to the discipline and then choose to engage with the activities and challenges faced. The Head of Department is the art teacher for the Grade 11s in the study. In a prior Model C, well-resourced secondary school in Gauteng, six data rich learners, of both genders from diverse cultures were selected with varying intellectual and artistic ability.

A relationship exists between something seen or perceived and the response to create something new. The construction of meaning is related to a human activity. A human activity of creating visual symbols and rearranging pictorial elements includes the creative process (preparation, evaluation, flexibility, distillation of ideas, incubation) and the making of a visual art-work.

The study will attempt to describe creativity acumen while examining the interaction between Visual Art learners and their creative actions during the application of the creative process, the rationale being to show the relationship between the Visual Art learners' ability in solving conceptual visual tasks and the learners' creativity acumen (ability to grasp what is required to resolve visual art-works). Resolve in Visual Art being a) selecting a path to the visual creation or outcome and b) the firm determination or perspiration to do so with purpose and clarification.

This has appealing educational and psychological implications. In this study, *Creativity acumen* is the ability to freely present oneself, discern timeously as to what route to take in order to reach a creative and satisfactory outcome. It relates to an individual's keenness to function at the maximum level of competence. I argue that a learner's creativity acumen can develop within his or her creative potential when given the social (scholastic) opportunity. With the development of creative acumen, provision is made for an individual's creative performance to develop along a continuum, during the creative act of making a visual art-work. Creative development cannot occur automatically. Effort must be exerted at the person's boundary of potential for creative acumen to develop further. However, an individual's efforts are influenced by factors such as knowledge, motivation and taking on new perspectives as well as the opportunities afforded by the environment.

The parameters set for this particular study follow Amabile's Componential Model (1996:113) of Creativity and Petty's (1997) Creative Processes as a way to examine creativity acumen.

Amabile's (1997:42) Componential Theory includes:

- Art-relevant skills and expertise - viewed as a 'network of possible wanderings' while doing a given task.
- Creativity-relevant processes - this component assumes that the learner is prepared and inspired to tackle the task which will develop creative performance. A Visual Art learner's arsenal of creativity-relevant processes will include the ability to tolerate ambiguity, learn without copying by risk-taking, ignoring difficulties while conceptualising visual ideas.
- Task motivation - is viewed as the difference between what learners can do and what they will accomplish. The learner might be most creative when they feel primarily motivated by the interest, inspired by the challenge of the task itself.
- The Componential Theory of Creativity assumes that all humans are able to produce creative work (through activity), and that the social environment (the art classroom) could possibly develop the level and frequency of creative behaviour (Amabile 1997:42). These components of creativity acumen relate to the school curriculum for Visual Art (see
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- Table 1. 1).

1.4.1 The relationship between Visual Art learning and the principles of the National Curriculum Statement

The Visual Art curriculum lays the foundation for the achievement of social transformation by stipulating outcomes that underpin learning in Visual Art (see Table 1. 1). Visual Art from past civilisations tell us which social values were held dear. From early time, humans have had a compelling urge to develop ways of expressing ideas, with visual expression as a constant message through the ages. A Visual Art adolescent learner enquires via ideas and concepts. Meaning is transformed into visual symbols. Visual Art education is a multi-dimensional creative process. Visual Art contributes to society's needs of creative people by challenging values and attitudes through art practices, processes and products (National Curriculum Statement (NCS). Learning Programme Guidelines: Visual Arts 2008:9).

1.4.2 The relationship between Learning outcomes in Visual Art and development

The South African government started developing a new curriculum for the school system in 1995 with two imperatives. "First, the scale of change in the world, the growth and development of knowledge and technology and the demands of the 21st Century requires learners to be exposed to different and higher level skills and knowledge than those required by the existing South African curricula. Second, South Africa had changed. The curricula for schools therefore required revision to reflect new values and principles, especially those of the Constitution of South Africa" (NCS.Learning Programme Guidelines: Visual Arts 2008:2). The Constitution of the Republic of South Africa, inclusive of the Bill of rights (Act 108 of 1996) provides the basis for curriculum transformation and development in South Africa, as outlined by section 16 on freedom of expression and freedom of artistic creativity and predicates the profile of a learner leaving the school system as a productive and creative human being. This is articulated in the Curriculum and Policy Assessment Statement (CAPS)(2011:10-11) (see Table 1. 1:Curriculum and Policy Statement for Visual Art for Grade 11) below. The assessment criteria used informs creative thinking and behaviour in the form of the following dimensions of art-based activities: conceptualising, making, presentation, management and evaluation, which includes the application of the creative process. The curriculum outcomes are cross-referenced with Amabile's Components of Creativity below.

Table 1. 1: Curriculum and Policy Assessment Statement for Visual Art for Grade 11

CURRICULUM AND POLICY ASSESSMENT STATEMENT (CAPS)		
GRADE 11	Creativity-Relevant Processes	Developmental Process (conceptualisation and development of creative ideas and creativity-relevant processes) Apply different approaches to generating ideas in response to an art task assigned Engage with own experience through exploring signs\ symbols drawn from a broader visual culture
		Realisation of a concept (applying the creative process) Apply the creative process to solve visual and conceptual dilemmas within art classroom
	Art-Relevant Skills	Making of Art-works (applying art-relevant knowledge) Explore and effectively apply a selection of materials, tools and processes Demonstrate technical/artistic expertise and knowledge, art techniques and processes Evaluate and document own creative process and art-works Ensure art-works are appropriate to the task assigned
	Task Motivation	Management and Presentation (includes the creative process within an environment) Plan and complete tasks within allotted time given Use of materials and tools effectively and correctly Maintain journals/document own developing acumen (grasp) of visual communication and concepts [visual conceptualisation]

1.5 ANALYSIS OF THE PROBLEM

I wanted to investigate the relationship between creativity acumen and Visual Art creation in Grade 11 learners. The phenomenon of creativity acumen is divided into sub-dimensions as related to the engagement with creating Visual Art and will be explored along those lines.

1.5.1 Sub-dimensions of the Study

The following sub-dimensions become apparent from the research problem.

- Which creativity-relevant processes are present and can be related to the attainment of creativity acumen while creating Visual Art?
- What art-relevant skills and components relate to attaining creativity acumen in the Visual Art learner while applying the creative process?

1.5.2 General aim

The general aim was to investigate the relationship between the attainment of creativity acumen and the creation of Visual Art in Grade 11 learners.

1.5.3 Specific aims

To reveal whether creativity acumen is attained as an outcome of application of the creative process and reflection during the art creation. The creative behaviour was related to the ability to make sound

judgements to bring the idea to completion, within a timeframe and to the satisfaction of the learner.

This study explored the two relationships in the research question, namely

- The creativity-relevant processes which are present and can be related to the attainment of creativity acumen while creating Visual Art.
- The art-relevant skills and components related to attaining creativity acumen in the Visual Art learner while applying the creative process.

Interestingly, Albert and Runco (1990:265) mention that in creative behaviour the essential component is variation in styles, patterns and methods of working, while Amabile (1983) assumes there is an intrinsic drive to creativity acumen in individuals.

1.5.4 A Literature review

An extensive literature study was conducted by consulting books and journal articles on creativity, the creative process and Visual Art. In the first section of the literature review an attempt was made to clarify various scholars' viewpoints on what it means to demonstrate creativity acumen and the dynamics between learners in the creative domain of Visual Art. Similar concepts of creativity acumen was translated to descriptors in table form (see **Addendum B**: Creativity concepts explained), to avoid confusion of concepts, which could mean the same thing, such as *ability*, *acumen* and *skills*. The literature was further explored to gain a perspective on components of creativity and the dynamic relationship between those components when engaged in the creative process of Visual Art creation. The literature study aimed to provide information regarding creativity acumen; aspects which are related to Visual Art as a learning intervention.

1.5.5 Empirical inquiry

In addition, in order to gain an understanding and assessment of creativity acumen development, various methods were utilised: 1) Creativity questionnaires of pre- and post-creation responses of creative process used (see **Addendum J & K**); 2) descriptions obtained from art learners' initial written to their intended art creation (see **Addendum D**); 3) photo sheets of the photographs of the participants' formal drawings (see **Addendum G**), photo sheets of the participants' creation of collages (see **Addendum H**), photo sheets of the participants' Visual Art painting creations (see **Addendum I**); 4) descriptions of classroom observations while applying the creative process to Visual Art creations (see **Addendum F**); 5) semi-structured interviews with research participants (see **Addendum M**). The data was analysed using qualitative methodology.

1.6 CLARIFICATION OF CONCEPTS

1.6.1 Creativity

Creativity is described as the use of mental processes (imagination) or originality, that lead to solutions, ideas, conceptualisation, artistic forms (Dictionary of psychology 1985:165). *Original* is more limited and specifically denotes someone who comes up with something no-one else has thought of (an original approach to painting a picture) or thinks in an independent or creative way. *Imaginative* implies having active creative imaginings, which often means that the person visualises things differently than they appear in the real world. The practical side of imaginative is *inventive*.

Having a definition that situates creativity in a particular context helps to bridge the connection between creativity acumen and the study of everyday creative acts (Plucker et al 2004:92). Amabile (1983b:357) considers the definition of creativity within a componential framework for conceptualising creativity acumen as a set of necessary and sufficient components, including (a) artistic-relevant skills (art expertise / knowledge of art techniques and materials); (b) creativity-relevant processes (creative behaviour conducive to creation of something new); and (c) task motivation (the will and inspiration to create).

Amabile (1996) as quoted in Zimmerman (2005:65) views *artistic creativity*, as a subset of creativity, defining it as a range of multidimensional processes that includes knowledge (of art concepts and art traditions), creative thinking skills and intrinsic motivation. James (1999-2000) defines *artistic creativity* in Zimmerman (2005:65) as “A series of decisions and actions that are purposeful and not predictable...it is an individual and social process during which materials, forms and cultural conventions are fused with the artist’s personal history and emotions”. Plucker et al. (2004:92) define *creativity* as: “...the interplay between ability and process by which an individual or group produces an outcome that is both new and useful as defined within some social context”. All creative work, according to Sternberg (1999), happens in one or two domains as he feels people are not creative in a general sense, they are creative in particular domains such as Visual Art. While examining the art outcomes as evidence of creativity in Visual Art is common, it is also possible to observe the behaviours that may indicate the manifestation of creativity in engaging in art-making (Zimmerman 2005:65).

The concept of creativity acumen will be explored further in chapter 2. For the purposes of this study, *creativity acumen* is defined conceptually as comprising two distinct elements: “An outcome or response displaying creativity to the degree that it is both (a) new and appropriate or valuable response to the task at hand and (b) the task is heuristic rather than algorithmic” (Amabile 1996:35). “*Heuristic processes* do not have a clear path to follow and the ‘path to solution’ refers to the creative thinking set and motor operations that will lead to an acceptable response or product in the domain of

endeavour” (Amabile 1996:35). The relationship between a purposeful response to visual stimuli and the creative process will inevitably raise questions as to whether a resultant increase in creativity acumen may be expected. Creativity is a complex process that can be viewed as inter-related system between people, process, products and socio-cultural contexts (Csikszentmihalyi 1996; Sternberg, 1999; Zimmerman 2005:62). Creativity acumen involves both the process and outcome of new ideas and actions by which the learner manages or makes changes to the art-works (drawings, collages and paintings). According to Adair (1990:95) creativity and creative thinking are not quite the same thing, as *creative thinking* leads to a new idea: *creativity* includes actually bringing a creative solution into existence (action), which requires a range of skills, such as flexibility in exploring cognitive pathways, attention to particular aspects of the task and hence which avenues are trundled down in pursuit of an outcome or goal (Amabile 1990:82).

1.6.2 Creative

The Reader’s Digest Illustrated Oxford Dictionary (1998:195) describes creative (adjective) as ‘imaginative and inventive’ and as ‘being able to create’. Many scholars have referred to creativity as inventiveness within a domain of knowledge (Csikszentmihalyi 1996; Feldman 1982; Gardner 1999). The term creative is related to involving the imagination or original ideas, especially in the production of artistic works.

1.6.3 Creative process

The creative process involves bringing ideas together. Executing ideas involves an explicit decision to pursue selected strategies to produce something new through imaginative skill. Creativity acumen does not only involve the product but also the process, how one does a task. According to Amabile (1990:79-80), the way in which an individual might assemble information in trying to arrive at a creative solution or response, will be influenced by the three creativity components of art-relevant skills, creativity-relevant processes and task motivation. During art creation different facets and concomitant mind-sets of inspiration, clarification, incubation and evaluation are included as part of the creative process (Petty 1996). According to Jane Piirto (2005:16), improvisation seems to be part of the creative process, transcending the objective world (with imagination).

1.6.4 Acumen

It is the ability to make sound judgements and accurately understand and deal with a situation or choice, typically in a particular domain. The word *acumen* means keen insight, and in Latin means ‘point’ but figuratively it means ‘sharpness of mind’ and ‘quickness of perception’ (The Reader’s Digest Illustrated Oxford Dictionary 1998:24).

1.6.5 Creativity acumen

Is simply the ability to establish something that had not been there before. Although the general belief in the past was that only a few privileged individuals have the acumen to be creative, each person has some degree of creative acumen, that to a lesser or greater degree, which can be developed. Individuals will vary in how much novelty and originality they will produce. Creativity acumen includes the ability to think and/or act creatively. Torrance (1994:20) recognised that creative behaviour is motivated and stated that an individual must “not be afraid to fall in love with something and pursue it with intensity and depth”. Creativity acumen includes both the use of divergent thinking, and executing creative behaviour through effort, motivation and effective strategies to create art. To a large degree, it is a hidden effort (bearing in mind the three components of Amabile’s theory) and the commitment with which the creative task is tackled.

1.6.6 Creativity acumen in Visual Art

This concept refers to the act of applying one’s imagination and capacity for critical analysis in order to conceive and then realise ideas which allow one to think or act creatively. Creative thinking in academic contexts assumes the ability to generate a variety of original ideas, to see different possibilities and elaborate on ideas (Meintjies & Grosser 2010). The criterion by which creativity acumen will involve bringing an idea or theme to fruition will be evaluated as creative when the artwork is produced within the allotted time to the satisfaction of the Visual Art learner in the school context. According to the document based on the conclusions of the regional conference on Arts Education: Cultural heritage, creativity and education for all in Africa (2001:10), where traditional education emphasised a child’s capacity to absorb large amounts of knowledge, new education focuses on children’s aptitude to express themselves’ (acumen) and on the quality of their understanding of the world. The above-mentioned document (Regional conference on Arts Education 2001:10) outlines the following:

“ It has therefore become essential to cultivate in each individual a sense of creativity and initiative, a fertile imagination, a capacity for critical reflection, a sense of communication and autonomy and freedom of thought and action – the whole based on moral and ethical values. A way must be found, through education for all, for new educational needs to be met for all children and adolescents, and not just for the few from intellectual backgrounds who, from an early age, benefit from a home environment that encourages their artistic development. The foundations of creativity lie in artistic activity, which in turn is upheld by cultural and family traditions, that surround every child as he or she grows” (Regional conference on Arts Education 2001:10).

Within the same afore-mentioned document, the characteristics of arts education are described as: “Increasingly open-ended in that it follows the mutations of artistic creation, which offers a unique opportunity to ensure that methods of art education are coherent with those of the social environment, the material resources of the physical environment, whatever their limits. Arts education extends the

entire range of expression available and their play and normal activities help them rediscover themselves and their socio-cultural environment” (Regional conference on Arts. Education.Division of the Arts and Cultural Enterprises UNESCO 2001: 20).

1.6.7 Visual Art and art

The Reader’s Digest Illustrated Oxford Dictionary (1998:53) depicts art as a human creative ability and creative activity such as painting and drawing, which results in a visual representation, those branches of learning associated with creative skill or its application in workmanship exhibiting such acumen. In the Australian Curriculum Draft (2010:6), Visual Art is indicated as:

“...an imaginative engagement with visual and material skills, a way of making thinking visible. Ideas are manifested in two dimensions by constructing art-works and engaging visually, creatively and cognitively with a multi-modal visual world. Visual Art includes objects and images. Art-works embody cultural, cognitive and spiritual knowledge and are subject to critical scrutiny via the histories, theories and critical contexts informing the body of knowledge in the field”.

The term *Visual Art* refers to any piece of work that has been created which can be looked at and aesthetically be appreciated or despised. For the purposes of this study, the learners Visual Art includes: i) Drawing; ii) Collage and iii) Paintings.

1.6.8 Visual culture

There is no specific definition of visual culture, hence I have separated the two words in an attempt to clarify its meaning. The visual imagery is what we see, the physical world around us that we see every day. However, the visual is much more than this. It is a process of vision and perception, which is culture-dependent. Culture can be defined as what humans have done or added to nature by means of their labour or inventiveness (NCS. Learning Programme Guidelines Visual Arts 2008:35). “Visual culture is therefore the vast spectrum of the visual in all cultural practices, with art being only one aspect of that visual field” (NCS. Learning Programme Guidelines:Visual Arts 2008:35).

1.6.9 Relationship

This study refers to the relationship between Visual Art and creativity acumen and the manner in which the two concepts are affiliated, connected, associated and involved. Relationship is defined as “the fact or state of being related by a connection or association (The Reader’s Digest Illustrated Oxford Dictionary 1998:693).

1.7 RESEARCH DESIGN

The empirical research was conducted according to the constructivist paradigm, with the learner gaining experiential knowledge and reflecting on strategies of the creative process. My description of the creative behaviour was embedded in Vygotsky’s (1978) conceptualisation of learning as practice

within socio-cultural conditions and hinged on the social psychological framework of Amabile (1996). The research used qualitative procedures. According to Mack, Woodsong, Macqueen, Guest and Namey (2005:1), qualitative research seeks to understand a topic from the perspective of the local population which it involves.

Qualitative research shares the following characteristics: i) it is primarily concerned with the process rather than the outcomes; ii) it seeks answers to a question and explores a phenomenon; iii) it systematically uses a predefined set of procedures to answer the research question(s); iv) it collects evidence and produces findings that were not determined in advance where it could produce findings that are applicable beyond the immediate boundaries of the study.

Qualitative data is generally open to multiple interpretations. The research will be primarily descriptive with ethnographic characteristics. Ethnographic methods involve studying the naturally occurring events in the life of a group and trying to understand the meaning of these actions (Woolfolk 2007:10). This could include their relationships to one another in a school context (Meador, Hunsaker & Kearney 1999:241). The Componential Theory of Creativity will form the conceptual and theoretical framework articulated through the constructivist paradigm of Vygotsky in understanding the process of the art-making in relation to attaining creativity acumen. Art education lends itself naturally to constructivism as learning occurs through establishing pictorial elements in Visual Art. The challenge lies in the simplifying the complexity of the process and actions of both creativity acumen and Visual Art creation.

The *ICEDIP* creative phase model of Petty (1996) involves active construction of the Visual Art learner's own artistic expression. Art requires the learner to conceptualise, realise, make and evaluate creative concepts and ideas. The concept of creativity acumen was treated as developing artistic skill and creativity reasoning ability, which relied on observational approaches and self-reporting techniques (questionnaires and interviews). Cohen (1989) is quoted in Rostan and Goertz (1999:98) as proposing that creativity acumen evolves on a continuum of 'adaptive creative behaviours' throughout the life of the creator, with one end of the continuum being learning something new and making novel connections to moving to the other end by developing heuristics, producing ideas and extending learning (in this instance, Visual Art).

1.7.1 Research Methods

1.7.1.1 *The selection of participants*

For the purpose of this study, a purposive sample of six participants will be selected. These six participants are selected according to the following criteria: a) each learner is in the Grade 11 Visual Art class chosen for the study and b) the learner may be of any gender, culture or creed.

The participants were observed in the natural setting of the Visual Art classroom, with observations recorded. Informal interaction with members of the study group was also an important component of the method and was recorded by taking photographs of the learners' art-making processes.

1.7.1.2 Data Collection

The purpose of data collection in qualitative research was to provide evidence of behaviour which was being investigated. A discussion of the methods for collecting data in this study will follow:

i) Creativity Questionnaire (Petty 1996)

A questionnaire was implemented to discover how the learners made use of the creative process during the artistic creations. It was based on the *ICEDIP* model of the creative process. This self-assessment assisted the Visual Art learners to reflect on and evaluate their creative operandi as they created art-work. The *ICEDIP* model outlines six key working phases that the Visual Art learner may experience several times, during creative work. The six phases are inspiration, clarification, evaluation, distillation, incubation and perspiration (perseverance) and are explained below:

- Inspiration - generation of different ideas and looking at different sources.
- Clarification - further exploration of those ideas, evaluation of goals by using creative thinking strategies.
- Evaluation - review phase where the learner looks back, abandons drafts in determining own progress.
- Distillation - decision of which ideas to pursue, path to solution (Amabile 1996:35).
- Incubation - taking time to 'hatch' ideas and experimenting with building self-trust.
- Perspiration - where the learner brings ideas to external fruition which relies on perseverance and self-belief.

The creativity questionnaire could reveal the individual learner's favoured use of the six creative processes as hinged on the developmental Vygotskian paradigm. This paradigm fits in with developing acumen by encountering concepts or tasks that lie just beyond the learner's immediate ability, but with guidance and strategies, attainment may be realized. The creative phases acted as the strategies which the art learner used to develop their creations and were called on in any unpredictable order. The questionnaire was analysed qualitatively and interpreted according to the learner's responses to the items in each of the creative phases experienced using art-relevant skills and creativity-relevant processes in attaining and even enhancing creativity acumen. The Visual Art learner experimented with new concepts while evaluating his/her own creative development as an important precursor to assist exploration of what it means to attain creativity acumen to uncover and discover what the creative process involves. Even though the Visual Art learners' final outcomes may differ enormously in creativity acumen, they could be achieved from the same basic underlying process (Amabile 1996:39). There can be progression of the process whether or not there are true qualitative changes (or discontinuities) in the creativity of outcomes.

ii) Observational method of the art creation process

We rely on observations in order to learn about human behaviour and responses. The primary goal of observational methods is to describe behaviour (Shaughnessy, Zeichmeister and Zeichmeister, 2009:95). While it is impossible to observe all of a person's behaviour, systematic observation is an important tool. The learners were observed in the natural setting of the school art classroom. The aim of naturalistic observation is to describe behaviour as it ordinarily occurs and to investigate the relationship among the variables (creativity acumen and Visual Art creation) that are present as outlined in Error! Reference source not found.. An observation grid (see **Addendum E**) was used. The variables were collapsed into the various components of creative acumen and behaviour through a composite observation grid (see **Addendum F**). The table of observation of art creation followed the components from Amabile's Componential and Theoretical Framework (1996) of Creativity and the Creative Process (Petty 1996), to record the classroom experience of the developing Visual Art-works of the learners. The components included art-relevant skills such as generating ideas, creativity-relevant processes and the motivation to start, stay with and complete the task(s).

iii) Photographic visual documentation of the art-making process

Photographic inquiry was a form of investigation using photographs of the art-making process in the Visual Art classroom as a means of providing a more or less faithful reproduction of behaviour as it occurred originally. Photographs were taken of the participants' as they created and developed the art-works assigned to them. The photographs were taken over a five week period. The photographs were downloaded onto computer from the digital camera and divided into each participant's artistic progression. These photographs were placed into photo-sheets and used to describe the creative development and creative components used during Visual Art creation.

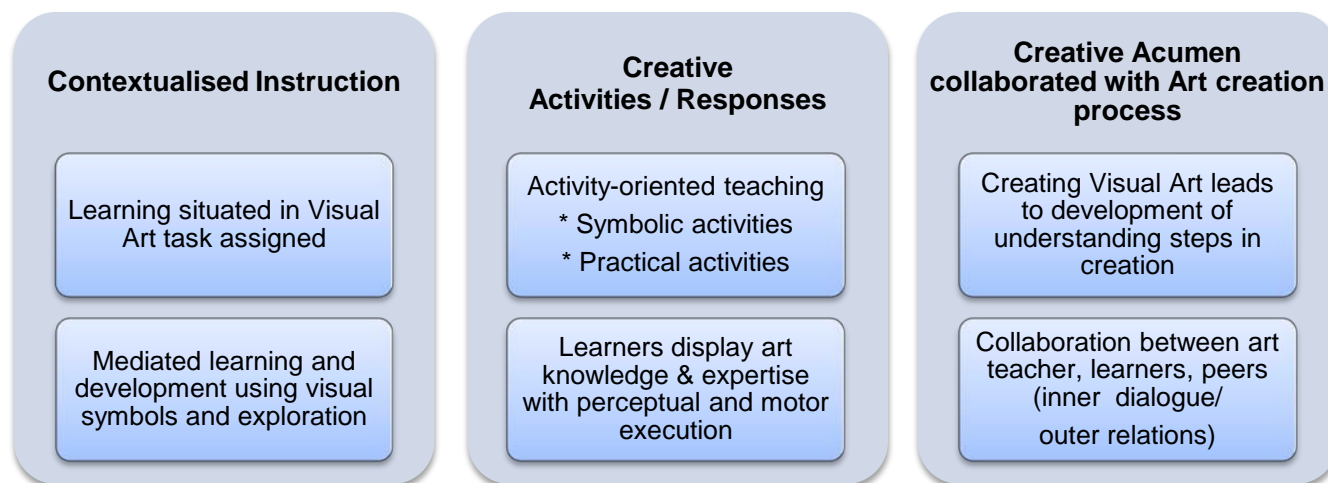


Figure 1. 1: The interrelationships between Visual Art tasks assigned and various components in the creative process of making art. (Adapted from Eun, 2010:405).

iv) Semi-structured Interviews

Semi-structured interviews were conducted with each of the participants to elicit their understanding of the creativity-relevant processes they used. This included a verbal picture of their own developmental assessment of their competence, autonomy and knowledge as well as learning attained. The interest in a creative activity, taking the risk to challenge themselves beyond their current skill-level and grasping the personal value of mistakes, was taken into consideration. The interviews were recorded and transcribed. Themes were sourced according to the responses and data was reduced and described according to Amabile's (1983) Creativity Components (task motivation, art-relevant skills and creativity-relevant processes) and Petty's (1996) Creative Process Model (inspiration, clarification, evaluation, distillation, incubation and perspiration).

1.8 ETHICAL CONSIDERATION

In order to meet with ethical considerations, certain measures were taken: obtaining written permission from the Headmaster of the school to conduct research, as well as the relevant stakeholders, being the parents, the Visual Art learners and the educator (see **Addendum A**). Information regarding the rights of the participants and the final purpose of the study was divulged to those participating in the inquiry. The Gauteng Education Department issued a letter of consent to commence with research within the school environment. The participants were purposefully selected as information rich cases who could contribute significantly towards the study.

I did not foresee any harm to the participating learners in any way. It has to be considered that the Visual Art learner may be sensitive to the observation of the creative process they were engaged with. I, as the observer, took every precaution to not interfere with the creative process in which the research participants were engaged.

1.9 RESEARCH PLAN

This dissertation consists of five chapters:

- Chapter 1: Introductory orientation, statement of the problem, the aim, clarification of the concepts.
- Chapter 2: Literature review with reference to Visual Art and the relationship to creativity acumen.
- Chapter 3: Research design and methodology.
- Chapter 4: Creativity acumen during Visual Art, findings, presentation and discussions.
- Chapter 5: Summary of the findings, conclusions and recommendations.

1.10 CONCLUSION

“I begin with an idea and then it becomes something else” - Pablo Picasso

In this chapter an overview was provided of the phenomenon of creativity acumen as it can be related to the act of Visual Art creation within the scholastic environment of the art classroom. It was explained that creativity acumen is rarely the outcome of a single moment, but more often is the result of a creative process with different phases. Creativity acumen includes the components of knowledge, art techniques and processes, seen as the art-relevant skills, creativity relevant processes and the intrinsic motivation as set out by Amabile's Componential Theory (1996). Creativity, like education, is a complex, multi-dimensional concept, but it is important to make it clear that creativity acumen, fostered in the art classroom, will enrich mankind's creativity worth beyond the classroom. Visual imagery and imagination within Visual Art education, fosters creative thought during the production of art-works, and could reveal clues to the creative skills used. I argue that a learner, who has not been engaged with the making of a creative piece of work, will not have practiced defending their choices, methods, or even the purpose of getting involved. Preparing and facing challenges are important components of being socialised into a learning culture of understanding that all actions have consequences and accidental mistakes may work out in the end. This study examines the creative process followed during the creation of visual art-works. The immersion of Visual Art learners in an art task together with examination of the visual culture in which we all exist, assists the learner to make connections between the evolving reality of inevitable changes in the art and themselves.

In relating Visual Art education to creativity acumen, it is assumed that to imagine, explore and question the societal and cultural signs and symbols will help a learner grasp the significance of the creative process as it is a rendition of their own personal values and what he or she brings to the world in the form of a new visual work or message. As Eisner (1972:254) stated so poignantly many years ago, “The major contribution of research in art is not its ability to provide directions – but its ability to provide perspectives”. It is envisaged that this study will highlight the creativity acumen harnessed by learners in relation to an increased awareness of the role of art education and creative performance as essential components of a 21st century classroom.

The concept of creativity acumen is intricate and complex and will be explored in Chapter 2. While creativity includes studies of the person, the place, the process and the product, this investigation will concentrate on the creative process as the learner proceeds through a series of stages or components within the art classroom.

CHAPTER 2

LITERATURE REVIEW OF CREATIVITY AS A MULTI-FACETED CONCEPT

*We can cling to that which is passing, or has already passed, **OR** we can remain accessible to - even surrender to - the creative process, without insisting that we know in advance the ultimate outcome for us, our institutions, or our planet. To accept this challenge is to cherish freedom, to embrace life, and to find meaning. Creativity can replace conformity as the primary mode of social being.*

Stephen Nachmanovitch, *Free Play: Improvisation in Life and Art* (1990)

2.1 INTRODUCTION

Creativity will be a pressing issue of the 21st century. Learners are a product of education which encourages the accumulation of facts rather than the development of creativity acumen through insatiable curiosity. We are all creative but education quashes creativity. Research done by Neethling (2002), the President of the South African Creativity Foundation, in fifteen countries explored the creativity of schoolchildren and showed the following results: creative behaviour diminishes from 98% in the 3-5 year old age group to 32% by age 10; by the time children are turning 15, only 10% are behaving creatively and it's only 2% by the age of 25 years. Many industries today change and restructure, thus seeking out creative individuals. Not surprisingly, many of them turn to the arts and artists – individuals whose tasks demand a continuous effort and creative acumen.

The processes and techniques used by artists are precisely the processes that encourage creativity acumen. And creativity does not just relate to resolving issues. A creative approach to learning, leadership, management, interpersonal relations, culture, development, communication, change or any other aspect of life could be what will distinguish success from failure in the 21st century.

Creativity acumen is a perplexing phenomenon. It is an immersive and practical activity of creating a new art-work. It includes kaleidoscopic facets, where a kaleidoscope is a constantly changing pattern or sequence of elements. Similarly, creativity acumen also encompasses changing patterns or sequences of events using knowledge, creativity relevant skills and task motivation. These characteristics of creativity can assist a person to be adept at making quick decisions while creating a visual art-work. Creating new images in a visual art-work requires attention to visual elements and the intention to undertake the creative task using creativity-relevant processes. The artistic creative process is borne out of the need for individuals to express themselves and also to gain insight into the self. We all observe and 'see' the world around us. We live in a world bombarded with visual images. Creativity acumen in Visual Art begins with the ability to conceive and perceive an idea or concept. Visual Art is the visual realisation and expression of ideas and thinking. Creativity acumen develops through sequences in the creative cycle, starting with being inspired to create. *Inspiration* is new life breathed into an old idea. The individuals engaged and immersed in the activity of creating art find

themselves at the intersection of introspection and inspiration. *Introspection* is the inner dialogue of individual's thoughts and ideas, while inspiration, interest or intention is to create something (Amabile 1996:112). The outer creative activity will become the lens through which the visually created art-work is developed and realized.

2.2 CREATIVITY ACUMEN AS A MULTI-FACETED CONCEPT

Both concepts, creativity acumen and creativity, will be used interchangeably to describe the development of Visual Art creation in applying the creative process. Creativity acumen and Visual Art require both the act of creating something and thinking in concepts. Creative *endeavour* in Visual Art involves noticing and rearranging perceived visual elements (perception) and making relevant changes by making use of flexible thinking (conceptualisation) to source original ideas and then have the perseverance to achieve a suitable outcome (see **Table 2. 1** below). *Creativity acumen* includes the ability to apply the creative process effectively. Creativity acumen can be developed in the school context, through the characteristics of a) receptiveness and acceptance of complexity and tolerance of ambiguity, b) the willingness to persevere to surmount obstacles, c) the motivation to improve and develop (learn from mistakes), and d) sensible risk-taking and the belief in oneself and the courage of one's convictions to pursue a goal or outcome (Sternberg and Lubart 1995:230) .

Creativity acumen is a multi-faceted concept (see **Addendum B: Creativity Concept Table**). Defining creativity is subjected to the influence of a wide range of contextual factors (Leung, Au & Leung 2004:113). Creativity acumen, is to a certain extent, both the creator's personal expression and the external judgement. The personal expression is the Visual Art creation, while the external judgment is the display of creativity acumen. For the purposes of this study *creativity acumen* will be defined as the ability to generate new ideas in making and managing new art tasks with display of fluency of thought in developing these new ideas. The lexicon of creativity acumen will be contextualised as the adeptness at creating Visual Art within a specified timeframe. This involves the learner's unique abilities and inner vision to produce an external art-work that is new and appropriate to the task assigned (Lubart & Georgsdottir 2004:35). To clarify the term *appropriate*, Amabile (1996:72) verifies that after many studies in the field of creativity, persons evaluating art-work as creative need not be experts, but must have formal training in the target area (see Table 2. 1). *Creativity acumen* is inextricably linked to our own personal, social, and cultural boundaries. Creativity has already been defined previously by many researchers (Csikszentmihalyi 1996; Feldman 1994; Sternberg 1999) as being related aspects of person, process, and products within social and cultural contexts (Zimmerman 2005:59). As has been indicated before, there are no definitions for *creativity acumen* per se. Creativity according to Loveless, Burton and Turvey (2006:3) is a term bandied around often in policy and practice of education, after years of concern about lack of creativity in the curriculum. The world over, national initiatives have engaged government and policy development to develop learners'

creativity, where it appears creativity is discussed as promoting both personal expression and enhancing opportunities to understand the complexities of solutions to the economic and cultural landscape of the 21st century (see § 1.4.2). The Visual Art learner is part of a creative environment in which inner ideas are given the opportunity for an external visual representation. The concern here is that the definition and practical experience of being creative and the creative process becomes simplistic and unable to reflect the complexity and challenge of developing creativity acumen in pedagogy and the curriculum (Loveless, Burton & Turvey 2006:4).

While it is practically impossible to indicate the many different definitions of creativity, the following will attempt to explicate the view of the study.

Table 2. 1: Creativity definition table

SCHOLAR	DEFINITION
Amabile (1996:35)	A product or response is judged as creative to the extent that (a) it is both a novel and appropriate, useful, correct response to the task at hand, and (b) the task is heuristic rather than algorithmic.
Csikszentmihalyi (1996:8)	Creativity is a process...New ideas, new paintings are what creativity is about. These changes do not happen automatically (like in evolution) and take a great amount of effort and time. If we want to learn anything, we must pay attention to the information to be learned". Csikszentmihalyi (1996) defined creativity as any act, idea, or product that transforms the existing activity or task into a new one.
Barron (1969:11)	The ability to bring something new into existence.
McKinnon, DW (1962) in Harrington (1990:145-146)	Creativeness fulfills three conditions. It involves a response or new idea. If a response is to be part of a creative process, it must be adaptive to reality; it must serve to solve a problem, fit a situation, or accomplish a recognizable goal. Thirdly, creativeness involves sustaining the original insight, an evaluation and elaboration of it, and developing it to the full. Creativity from this point of view is a process extended in time and characterised by originality, adaptiveness and realisation.
Sternberg & Lubart (1995:11)	A product is creative when it is (a) novel and (b) appropriate. A new product is original not predictable.
Naiman (2003:2)	Creativity is the act of turning new and imaginative ideas into reality. Creativity involves two processes: thinking and then producing. If you have ideas but do not act on them, you are imaginative, but not creative
Urban (2007:169)	Creativity is a human-bound potential, dependent on, demonstrated and manifested by a person, his/her thinking, acting and doing. This special human activity results in a new innovative product.

The above definitions have informed my understanding of creativity as the creation of something new and purposeful, using imagination and certain creative thinking skills. The definitions resonate with this study in the sense of highlighting that creativity acumen involves developing and building on an initial idea through visual images and then navigating through the changes in order to produce a new art-work. It takes time for all humans to develop their innate acumen and skills and improve on their strengths. This leads to the components needed to attain or develop creativity and creativity acumen.

2.3 CREATIVITY ACUMEN AND RELATED COMPONENTS

Creativity acumen remains a hypothetical construct which describes or explains a special type of human potential (Urban 2007:168). Creativity acumen is creating a new, with less focus on rules while changing patterns. In conceptualising creativity acumen, it will firstly include the components of adeptness in creativity thinking processes. Torrance (in Smith & Smith 2010:252) suggested original strategies to develop creative thinking skills through techniques of fluency, flexibility, originality and elaboration. This includes the ability of the learner to move between these thinking processes or mind-sets. Secondly it will include evaluation of the creative behaviour and creativity relevant skills, being the path(s) to solution which the learner has taken, with the ability to understand the complexity of a new concept and accept ambiguity. Creativity acumen requires many techniques or skills in 'doing' such as generation and expression, perception and evaluation of ideas and lastly the motivation to create something new and complete the tasks assigned.

The viewpoint is that, in order to display creativity acumen, the individual needs to (a) be inspired to create something original, that was not in existence before; (b) clarify the purpose of the task by navigating and accepting variation and ambiguity generally seen when making changes and adjustment;(c) distill the ideas and concept by making unrelated associations in generating and elaborating on the initial ideas; (d) evaluating progress by back-tracking and reflecting on what is being attained and (e) incubating ideas by reviewing challenges and obstacles faced, and ultimately perseverance in achieving the outcome with a successful finished art-work. An essential feature of creativity acumen from this perspective is the relation to an observable product or outcome. The observable outcome occurs through a range of recursive changes in the creative process. It is assumed that there are degrees or levels of creativity, with some people and products being more creative. This assumption is a continuous underlying dimension in psychological theorising on creativity acumen (Amabile 1996:34). The interest in this inquiry is the belief that all learners can foster and develop their innate creativity and creativity acumen through recognition and understanding of the creative process. This embellishes the rich stores of their own individual potential.

2.3.1 Assumptions, characteristics and related creativity components

There is no single set of characteristics of creative learners in Visual Art to describe all covert or overt manifestations of creativity acumen (Zimmerman 2005:67). Creativity acumen – as the ability to think and act creatively – requires more than just knowledge can provide. Creativity acumen has many components, operating on the premise of multiple reflections and evaluation. This includes divergent thinking patterns, creativity-relevant skill, and visual inquiry, among others (Damasio 2001:68). Inclusive in the mix is the learner's motivation and intention to actively engage in creating something new and of value.

The Visual Art learner is given the scholastic opportunity to develop and engage in the activity of art-making and to discern which aspects to tease out to be able to initiate and apply the creative process and complete the art-work satisfactorily. Creative thinking and behaviour are met with many assumptions. Challenging such assumptions means questioning everyday thinking and traditional practice. Below are some aspects and assumptions as indicated by Albert (1990) and Amabile (1996) in relation to the concept of creativity acumen which is relevant to this study.

2.3.1.1 Albert's assumptions of creativity

The Visual Art learner creates art-works in the art classroom. According to Albert (1990:19-20) there are six guiding premises regarding the broad relationship between a creative-person-to-be and the surrounding work setting or environment. They are:

- Creativity begins with expression of self and through the decisions made via the 'path-finding' which an individual exhibits.
- There is a related idea that an individual's self-knowledge and aspects of their world becomes the ultimate medium of creative behaviour, for knowledge determines decisions as much as opportunities. The person's knowledge can lead to perceptions of how much the art creation requires deliberate effort and choices to be made.
- Creative behaviour is highly intentional even if the intention is not initially evident.
- A learner's creative behaviour and identity are both emergent – they have the ability to develop and change at critical points and are based on both maturation and learning experiences within a social work setting.
- Creativity and identity drive one another and are dependent on the other's development. This develops at critical points of maturation as well as learning experiences.
- A learner's creative decisions and behaviour are based on personal motivation and cognitive responses to perceive possibilities, and may engage the learner on a personal level of their identity and creativity acumen.

Albert (1990:19) does not minimise the influence of social processes, but emphasises that the creative thinking, decisions and efforts are executed by the learner “without whom there would simply be nothing to concern ourselves with, to observe, to respond to, to note, to count and to evaluate in any place or time”. The self-knowledge and creative decisions/thinking which the Grade 11 learner brings to the Visual Art creation is relevant to this inquiry as it could impact on the creativity-relevant processes and task motivation displayed by the adolescent learner (see **Figure 2.1**).

2.3.1.2 Amabile's preliminary assumptions and observations

Within the context of the components of creativity acumen, creativity relevant skills referred to by Amabile, will include the environment in which the art creation takes place. This is significant to the art learner's work in the social setting of the art classroom. Amabile (1996:82) presents a theory of creativity, which expresses the preliminary assumptions and observations extracted below.

- A continuum exists from lower levels of creativity observed in everyday situations to historically significant advances in the arts. This implies it is possible for anyone with normal cognitive abilities to produce work that is creative to some degree in an endeavour.
- There can be degrees of creativity within one learner's work. Zimmerman (2005:62) mentions factors such as producing realistic art-work without much inventiveness or attempting to solve art tasks by producing entirely new solutions.
- It might be possible to slightly increase an individual's level of creativity acumen, for example through education and practice.
- There could be a connection between individuals and areas of activity.
- Talents, education and cognitive (thinking) skills do not by themselves appear to be sufficient for high levels of creativity. There is no agreement about the relationship among the concepts of creativity, giftedness and talent (Zimmerman 2005:59).
- Individuals showing creativity acumen have described the phenomenon of "incubation": When not concentrating consciously on a task or activity, an experience of apparent illumination occurs, during which there is unexpected insight.
- Being motivated to participate enthusiastically seems to be an essential component of enhanced creativity acumen, combined with 'play' and channelled freedom. Gardner (1999) found creative individuals to have high levels of energy while Csikszentmihalyi (1996) associated a dichotomous behaviour with creativity, as in being playful and disciplined, being passionate and objective about artistic work (Zimmerman 2005:63).

Many of the assumptions surrounding creativity have opened the discussion of creativity in education, and here specifically in the realm of Visual Art practice. Amabile (1996:93) reviewed her initial componential framework to develop a theory which could include the creative process. The framework assists with viewing *creativity* as an interactive outcome of a learner's knowledge, thinking patterns, personal preferences, motivation and the environment. The interrelatedness of the Visual Art creation

to creativity acumen, will include art knowledge or expertise, creativity-relevant processes and motivation of the learner within the context of the art classroom. “It is when a creative individual acknowledges and accepts his or her ability, for better or worse, that he or she can go beyond the self-doubts and on with the living with creativeness as an integral part of life” (Albert 1990:26-27). Creative behaviour is in response to a stimulus which can be observed. The activity of creating Visual Art will be associated with the creative processes such as preparation, incubation, reflection and evaluation.

2.4 THEORETICAL FRAMEWORK

Amabile (1983,1989,1996), was the first scholar to develop a comprehensive theory, the Componential Theory of Creativity, that includes a description of the creative process as well and the influences within and outside the individual (see **Figure 2. 1**). The theory can be regarded as the first one to comprehensively take into account – cognition, personal preferences, motivation, and social influence on the creative process and how these factors relate to the various phases in the creative process.

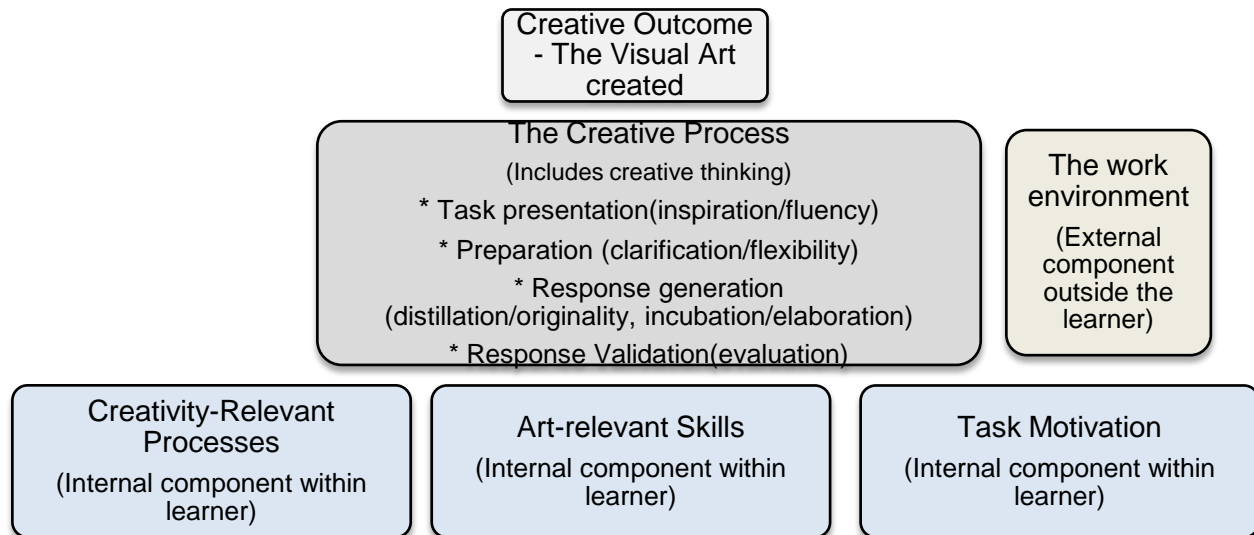


Figure 2. 1: Amabile’s Componential Model of Creativity Adapted from Amabile (1996:113)

2.4.1 Amabile’s Componential Model of Creativity

Amabile’s (1996) definition of *creativity* as a process resulting in a product or outcome, and as a novel and appropriate response to an open-ended task resonates with this study. The response must be new and appropriate to the task to be completed and the task must be *open-ended*, rather than having one single obvious solution (Amabile & Mueller 2007:33). Csikszentmihalyi made a conceptual advance in the area of creativity when he suggested ‘where is creativity?’ as opposed to ‘what is creativity?’ (Gardner 2001:130). Amabile (1997:40) stressed that the heart of creativity acumen is in producing novel ideas and works in any realm of activity. The activity of making new art most certainly

lends itself to generating new ideas and eliciting creative processes. This view has the basic elements and the inclusive description of the creative process with its various influences on its outcome and has similarities with other theoretical components of creativity (Sternberg & Lubart 1995; Wallas 1926) in psychology.

Amabile (1997:42) confirms conventional belief, that on the one hand, creativity is something done by creative individuals, and on the other hand, opposes personal traits of creative people as limiting and offering practitioners little to help learners develop creativity acumen in their tasks. Amabile (1990:66) also points out that while great artistic achievements lie on the high end of the creativity continuum – at the other end of the same continuum is the ‘everyday creativity’, with ideas and responses that are modestly novel. Amabile (1996:38-39) views no discontinuity in the abilities or thought processes behind differing levels of creativity. The assumption here is that the difference lies in differing acumen, inner motivation and outer circumstances. I concur with Amabile, namely that ‘ordinary individuals’ doing art-work can acculturate creativity acumen”. Previous research has resulted in the concentration on the ‘creative person’ to the exclusion of ‘creative situations’ (circumstances conducive to creativity) (Amabile, 1996:5). The malleability of the adolescent mind and the Visual Art classroom is a lens on a ‘creative situation’ whereby the creative approach and development can be seen first-hand.

The Componential Theory of Creativity specifies that all the components are necessary for creativity and that, generally, the higher the level of each component, the higher the ultimate level of creativity acumen attained (Amabile et al 2007:35). The influences on creativity acumen include three components within the individual – art-relevant skills, creativity-relevant processes (previously called creativity-relevant skills) and task motivation, and one component outside the person, the work environment (see **Figure 2. 1**). The three components are:

- Art-relevant skills (acumen to execute visual inquiry and use materials appropriately),
- Creativity-relevant processes (acumen to generate ideas, make alternate choices, persevere),
- Task motivation (acumen to display interest and inspiration with effort and perseverance to create).

2.4.1.1 Art Expertise-relevant skills (domain-relevant skills)

The domain or arena in this study is Visual Art and includes knowledge, expertise and technical skills. The scope of the Visual Art tasks of the learner includes visual references (see Figure 3. 2) with which a learner can access art materials, can conceive and devise ideas and participate in the artistic activity. The more experiences, or ideas, the learner has, the more the variety of choices or “paths to solution” (Amabile 1996:34). The acumen to imagine possibilities and play them out mentally, then bring them into reality, is significant in the creation of Visual Art.

Knowledge and art-relevant skills include the use of heuristics (trial-and-error techniques) to engage in art creation and creative behaviour can include:

- The selection of alternative paths to resolve visual problems. It might be expected that prior experience with a problem will allow greater creativity in solving it and that more creative responses will occur relatively late in any given process of task engagement (Amabile 1996:96).
- Use of analogies and accounting for exceptions.
- The ability to concentrate efforts for long periods.
- The willingness to work hard/improve.
- The perseverance when facing frustration and obstacles, even when not successful.

2.4.1.2 Creativity-relevant processes

Creativity-relevant processes include the learner's cognitive style and characteristics that are conducive to the following creative functioning:

- Open-ended approach and response (fluency) over a time span (Zimmerman 2005:62).
- Creative perception – taking new perspectives on tasks and grasping complexity (see § 2.5.2.1).
- Independence and autonomy, with disciplined work style
- Skills and useful techniques in generating ideas.
- Willing to take risks – abandon conventional rules.
- Manage transitions from one activity to another with sensitivity to changes.
- Use ubiquitous knowledge from own life experiences.
- Suspend judgement (Amabile 1996:113).

2.4.1.3 Task Motivation

The outside component is the work environment or more generally the social environment in which the work takes place. The environment can either assist or hinder the creativity acumen attained by the learner. According to Robinson (2011:4-5) anyone can be highly creative if the conditions are right, where the imagination is 'the process of bringing to mind things that are not present to our senses' and creativity is the process of developing original ideas. A learner who is skilled in generating ideas (creativity-relevant) but has no knowledge as to how to implement the ideas or reach a new and appropriate outcome (art-relevant skill), may find him- or herself less than satisfied with the outcome.

Task motivation is centrepiece, the most important component in Amabile's three-component theory.

Intrinsic motivation (from inner thoughts), as opposed to extrinsic motivation (from external sources), is necessary to reach the highest level of creativity according to Amabile's studies. Thus the activity of engaging in making Visual Art-works, involves the individual learner in the external social context, working individually and collaboratively alongside other persons. This leads us to the creative triangle.

2.4.2 The creative triangle as related to art creation

The creative behaviour may be observed, first out of the relationships between an individual and the art task and, second, out of ties between an individual and other people (Gardner 2001:118). Creative, artistic acumen is not an automatic consequence of maturation, but is a learned set of complex abilities, that to a great degree, are influenced by culture and available educational opportunities within that culture (Zimmerman 2005:64). Here creativity acumen can be more fully understood through Csikszentmihalyi's (1996) pioneering work, which shows the relationships between the learner, the art task and the environment of the organised activity (Gardner 2001:117,129). In emphasising the transformation from art activities into individual work, Vygotsky provided the dynamic mechanism for how the three points of Csikszentmihalyi's creative triangle (the person, the work and the environment) affect each other (Moran & John-Steiner 2003:62). Creativity can thus be viewed as everyday behaviour, culminating in an outcome of a set of influences (Albert & Runco 1990:256-257).

As scholars of creativity, Vygotsky, Csikszentmihalyi and Amabile agree that creativity acumen requires the confluence of the person who engages in the environment with an eagerness to partake and be involved with the activity, which allows a certain amount of freedom of personal choice and leads to a satisfying or successful outcome. Vygotsky's paradigm affirms that creativity acumen is the construction and synthesis of experience-based meanings and cognitive symbols as depicted in **Figure 2. 2**. The ability to create something new 'drives' the learner to make creative products or generate ideas with

originality and value. Central to creativity acumen is creative thinking and behaviour in the generation of ideas.

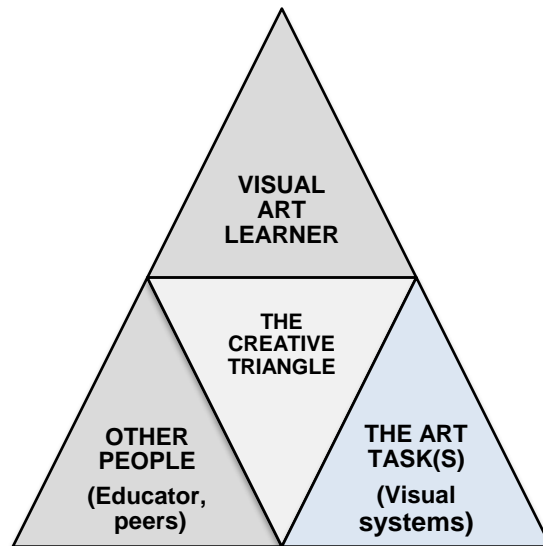


Figure 2. 2: The Creative Triangle
(Adapted from Gardner 2001:119)

2.5 THE ROLE OF CREATIVE THINKING AND BEHAVIOUR STRATEGIES IN VISUAL ART CREATION

The arts according to Eisner (2005:76-77) are cognitive activities, that make unique forms of meaning possible, with cognition as a process which makes awareness possible.

2.5.1 Torrance's creative thinking dimensions used in Visual Art

When a Visual Art task is presented to the learner in the Visual Art classroom, creation begins with an idea. The idea develops and generates other ideas. Ideas in Visual Art are perceived through visual stimuli and visual references. These visual images invoke the learners' interest to inspire, inquire and clarify what they see and understand. Creative actions proceed through the natural selection-process

of making decisions and choices. The Visual Art learner also evaluates and verifies his/her progress throughout this process. Arts-related creativity could possibly increase productivity throughout life.

Torrance, as a pioneer in the study of creativity acumen, identified four dimensions of creative thinking (fluency, flexibility, originality and elaboration) viewed as essential to performance in the creative process. Since Guilford (1950), divergent thinking has been a component linked to creativity (Urban 2007:171). The use of synectics (a technique which stimulates thought processes) might help generate ideas and symbols to promote creative ideas for making art. By using these strategies, the learner expands his or her creative thinking, which inspires fluency, flexibility, originality and elaboration. These levels exist in an ascending hierarchy of acumen and provide a guiding process for successful manipulation of synectics in an art classroom (Heid 2008:42). This is described in **Table 2. 2** below.

Table 2. 2: Torrance’s Creative Thinking Dimensions

DIMENSIONS OF CREATIVE THINKING		CREATIVE STRATEGIES EMPLOYED AND DISPLAYED
1 st level	Fluency (Idea generation)	The open-ended response when generating a variety of ideas and allowing free-flow of thoughts and freedom of association related to those ideas (Edwards 2002:38).
2 nd level	Flexibility (Conceptualisation of ideas)	The exploration of various possibilities toward the art task and looking at the situation from many different perspectives. For example viewing pictorial elements from different angles and finding analogies.
3 rd level	Originality (Unique re-combinations and analogies)	To have new ideas or produce something unique or place a new flair on something that already exists. The manipulation of materials to make new forms or combinations lends itself to the originality of the art-work.
4 th level	Elaboration (Embellishing on initial ideas)	To expand on initial ideas and add detail or finishing touches, embellish or extend thoughts and ideas (Edwards 2002:38). Example: deciding to add another material (purposeful additions or subtractions to the art-work) and housing the imagination of concepts conceived.

Creative thinking is outlined as an acumen using opposite cognitive processes (mind-sets); making the familiar unfamiliar and making un-related connections (Falconar 2000:47). In this way, creative

behaviour may be surprising and unexpected. As a Visual Art learner synchronises many ideas and techniques to create a new visual representation, the approach required is more than just generating a number of ideas. Purposeful efforts and visual inquiry relay the intention of the learner's motivation to create. Art creation leads to the two important creative processes – divergent thinking and transformative abilities. These take place simultaneously. Internal thinking and the external 'doing' can be seen as observable actions. Creative thinking while being differentiated from the making of art-works, cannot be separated from it. Creative thinking is infused with the art-making process, and its visual components.

2.5.2 Visual components and the visual inquiry cycle when making art

We live surrounded by visual images and visual messages (Howells 2003:1). While words are used to communicate ideas through language (Pfenninger & Shubik 2001:222-223), ideas and concepts in Visual Art are depicted and communicated visually, as a pictorial language. Duncum (2002:14) and Grubbs (2012:41) both comment that because we are saturated by visual images, if art education engages seriously with the learner's own preferences, a broad semiotic conception of visual images is needed and a 'curious eye' must be developed. Visual art-works make a complementary contribution to language, and suggests that we 'read' images as part of a complex interaction in understanding how people perceive objects, interpret what they 'see' and hence what they will learn from them (Elkins 2008:2). The internal cognitive strategies orientate the learner to the external creation of art. Vygotsky used the concept of *internalisation* to explain how individuals processed what they learned through mediated behaviour to develop consciousness through social interactions (Yamagata-Lynch 2010:17). Internal thinking retains a two-way relationship with external behaviour (Leont'ev 1981:58). Creative thinking begins with careful observation (Plsek 1996:2), which requires visual inquiry. When simplified it is the reflection of what we see when producing and analysing visual symbols. A symbol represents an idea, image or theme. *Symbol* in Greek means 'to throw together' (Gilot 2001:165). The idea or theme is then transposed by visual images. In conceptualising the idea in the art classroom, Visual Art learners can perceive what is observed and then conceive new ideas and images, abstracting visual images and changing what is seen. Learners conceptualise the ideas by engaging in a cycle of visual inquiry (Heid 2008:40). This suggests that the learners' arrive at decisions by perceiving the surrounding incoming visual stimuli. Visual Art not only places ideas and concepts in visible form, but also makes the thinking 'visible' as the learner forms the art-work (Marshall 2008:38). We conceptualise things personally (inner world) by means of our own ideas and we conceptualise things socially by means of interaction of others (social outer world).

2.5.2.1 *The components of visual inquiry*

- **Perception:** As the awareness of an integrated process focuses on the acumen to 'see' as a conscious event, the actual experiencing of a chain of processes is initiated by some external or internal stimulus.

This includes the entire sequence of events from the physical stimulus to the phenomenological experiencing of it (Dictionary of Psychology 1985:519).

- **Conception:** It is the mental process of thinking, conceiving or imagining; specifically, forming a concept and a mental attitude concerning something (Dictionary of Psychology 1985:141). It includes the conceptualisation of ideas first in the mind from observations, and then expressed outwardly.
- **Expression:** An external display, the realisation of ideas, is a process of making one's thoughts known (Dictionary of Psychology 1985:259).
- **Reflection:** This indicates the introspection and evaluation of the process followed. It denotes thinking about an idea, regarding previous experiences (Dictionary of Psychology 1985:611). Introspection is analogous to mulling over ideas – incubation, which is a kind of unconscious working through the problem (Woolfolk 2007:306-7).

Artistic knowledge and creative behaviour are related to the ability to 'see' things in a new way. Central to the concept of creativity acumen is *motive*, using one's will to relate to cognitive effort. The art learner's experience with a representative theme is based on the visual images he or she finally produces. By launching learners into the visual inquiry cycle, we help them think about how to approach their tasks, perceive and reflect on reality. Visual inquiry develops through the creative process of developing ideas visually and the perseverance to complete the art-work.

2.5.2.2 Turning creative ideas into creative behaviour/creativity acumen

Art creators mention the creative process as a dialogue between visual images and work in progress (Morrison & Wallace 2001:135). Art creation and time spent using visual imagery are good indicators of creative behaviour. Thus a significant relationship between Visual Art activity exists with the ability to create visual imagery (Morrison & Wallace 2001:146). Smith and Smith (2010:259) elaborate on the current views of creativity, beginning with the task-presentation which affords divergent thinking and the learners response to produce the art-work. Thus thinking creatively about the evolving art-work and evaluating it against current knowledge and expertise. Both creativity acumen and the creation of Visual Art are complex conundrums for grasping the ambiguities of visual elements used in art.

Table 2. 3: Amabile's Components of creative performance as related to Visual Art creation

CREATIVITY COMPONENTS		
ART EXPERTISE RELEVANT SKILLS	CREATIVITY-RELEVANT SKILLS	TASK MOTIVATION
<ul style="list-style-type: none"> • Exploring prior knowledge • Realisation of a concept, idea • Selection of different paths 	<ul style="list-style-type: none"> • Open-ended response • Risk-taking • Willing to learn from mistakes 	<ul style="list-style-type: none"> • Level of motivation towards task • Interest and inspired to create • Persistent effort

CREATIVITY COMPONENTS		
ART EXPERTISE RELEVANT SKILLS	CREATIVITY-RELEVANT SKILLS	TASK MOTIVATION
<ul style="list-style-type: none"> • Applying the creative process 	<ul style="list-style-type: none"> • Perseverance and personal high expectations 	<ul style="list-style-type: none"> • Ability to minimize external frustrations

(source: Amabile 1996: 84)

Amabile's framework clearly explains the process of creating, including the presentation of the task, the planning, idea generation, verification and the evaluation of the outcome. Artistic creativity takes place when these three components intersect, namely art-relevant skills, creativity-relevant skills, and task motivation. Creativity acumen and motivation are related to a social and symbolic system – acumen expresses the ability within the person to create Visual Art through the following dimensions:

- The conceptualisation of an idea through idea generation towards the creation of art.
- The preparation for the creation of an art-work through exploration (visual inquiry).
- Exploration of knowledge through diverse approaches and creative thinking (fluency).
- The resolution of visual challenges through visual analysis.
- The realisation of a concept through a creative process.
- The evaluation of one's own work and others' work.
- Awareness of individual expression (autonomy) with other's feedback (Amabile 1996:85).

Amabile (1983b, 1996) together with Csikszentmihalyi (1996) advocated the study of creativity within the social context. According to these scholars, whether creativity is considered as a creative behaviour or a cognitive process, it should eventually be related to the social context in which it occurs. The learners must have some knowledge or expertise in art (this relates to Amabile's Model) and be engaged with the art-work in order to construct increasingly complex and co-ordinated conceptual understanding about the tasks of creativity and art (Woolfolk 2007:37). Creativity is a behaviour (Gedo 1990:264). When engaged in creating Visual Art, the central concept of creativity acumen is motivation to turn creative thinking into practical 'doing'. That a person can alter the world through his or her actions is not there from birth, it develops from experience (Eisner 2005:60). Art creation, here is viewed as knowledge and relations which are continually re-negotiated. Creativity acumen is not a neat transfer of information to produce an artistic work, but a complex and often untidy interwoven system of techniques and relationships to transform and re-organise ideas and concepts.

2.6 THE ROLE OF VISUAL ART AS A CREATIVE PROCESS IN ATTAINING CREATIVITY ACUMEN

In Visual Art something new is being created. Visual Art makes it possible to teach learners about creative approaches to challenges as opposed to focusing too harshly on the content or the actual outcome. Since the creation of Visual Art depends on the practicing manipulating art materials and skills, there is a development of the learner's execution and insight into the creative process while drawing and painting. The intention towards attaining and developing the acumen to think and act creatively is often not without frustration and moments of wanting to abandon the task. It takes time to learn how to draw or paint and then it takes sustained effort and attention (perseverance) to bring such a creation into existence (Csikszentmihalyi 1996:8). The creation of art evolves and changes with the structure of the activity of drawing and painting, which will present opportunities for changes called *creative learning*. Vygotsky called these opportunities "zones of proximal development", defined as the notional gap between the learner's current level as determined by independent creativity acumen and the learner's potential level as determined by creativity acumen reached with assistance or in collaboration with more capable peers (Vygotsky 1978:86). In these "construction zones" creative learning takes place as the learners manipulate art materials and are changed themselves in the process as cognitive changes take place, both in terms of the individual learner's development and the support structure created by the educator and the art tasks in the setting (Newman, Griffin & Cole 1989:61). The zone of proximal development, is conceptual in understanding complex human activities while learners engage in developmental processes and interact with the environment (Yamagata-Lynch 2010:19).

2.6.1 Visual Art as a learning area and as a creative intervention

The view here is that the learner will attain creativity acumen in much the same way as a learner grasps a language or a new skill – through practice, clarification and reflection. Creativity acumen involves two processes of creating, namely thinking about the creation and then creating the art-work.

2.6.1.1 *The role of developing creative strategies and creativity acumen while creating art*

Development is the gradual growth or formation of something. Development of artistic creativity is the transformation of an idea or concept created through the creative process. John-Steiner and Mahn (1996) are quoted in Woolfolk (2007:39) as explaining that Vygotsky conceptualised development as the transformation of socially shared activities into internalised processes. These art-relevant actions of visual expression in realising an idea onto paper require the application of the creative process. Are learners aware of their art creation and also able to think about the art task independent of its production? According to Smith and Ward (1995:6) creative behaviour is mediated by evaluation and reflection as creative idea generation reveal conceptual structures and creative thinking. This reflection becomes the result of practical visual representation when creating the art. Everything in our homes, offices and life has been conceived and developed by individuals who turned an idea into a

practical implementation. The implementation of creative ideas is what occurs in the Visual Art classroom. Galler's (2001:116) belief that creative behaviour, continues to change with interventions, echoes the description of this study. Visual Art education as an intervention, relates to the efforts in visual inquiry and discernment of artistic elements and meaning.

2.6.1.2 The role of Visual Art as a learning intervention of creative behaviour

Learning to draw and paint as an educational intervention is a process, an intrusion of new ideas or concepts. Artistic learning is based on a relationship of certain expectations. This includes the relationship between reality and visual imagery. Such interventions should draw on strengths of the individual and the existing infrastructures. Learning is not a process undertaken alone. Through engagement in the art-creating actions in a supported setting, the learner grasps and develops a range of acumen, which could develop and surpass prior knowledge and ability. The Visual Art learner is learning to create something new and becoming more efficient at it, improving creative performance through experience as well as adding value through his or her own artistic and visual selections and creative initiative. A process-orientated, learner-centred activity such as Visual Art creation provides the learner with an opportunity to practise and develop creativity acumen. When the Visual Art learners are given permission to extend their thought processes and creative repertoire, it helps to honour and understand the cognitive and practical tasks that take place.

The Visual Art learner is given the opportunity to apply the creative process through the practice of creating visual art-works. Making an image helps him or her to grasp what needs to be executed to reach an outcome. Both creativity acumen and producing visual images, relate to the scope of human endeavour. In context of socio-cultural realms, Vygotsky would probably have agreed with Feldman (1994) that creativity is a 'transformational imperative' in everyone, as creativity acumen transforms both the creator, through the personal experience of the creative process, and others, through the impact of new knowledge and artefacts disseminated through a culture (Moran & John-Steiner 2003:72).

It is this personal experience of the creative process in the art classroom that this study would try to highlight. Visual Art creation is a dynamic process with many relative components in the art classroom. Within the framework of the school context and policy initiatives, a recent translation of the Curriculum and Assessment Policy Statement (CAPS 2011:23) for Visual Art, the Grade 11 learner is required to perform within a "...broad field of creative practice that involves the hand, eye, intellect and imagination in conceptualising and creating art-works, within environments which reflect the aesthetic, conceptual and expressive concerns of individuals or groups". Learners acquire the acumen to make practical and aesthetic decisions in the development of a coherent body of art-work. The subject of Visual Art is described within the realm of self-expression and offers learners a way to engage

meaningfully with, and respond to the art task presented. It provides the opportunities to stimulate and develop learners' intellect, engaging their creative imagination through visual experiences and the manipulation of materials in realising their ideas. "It also encourages development of visual language and literacy" (Curriculum and Assessment Policy Statement 2011:7).

2.6.1.3 *Visual Art Curriculum and the role of knowledge and learner development*

In the discipline of Visual Art, the imagination should be seen as an instrument in the pursuit of objective knowledge, together with the importance in the ability to experience the task with which it engages (Egan 1992:59). A successful creative person can create art-works and manipulate visual symbols in order to make decisions, select a path, see new perspectives, and know how to present work as well as recognise which ideas are worth pursuing. In so doing, when engaged with Visual Art tasks, the practice becomes a part of the learner's repertoire and understanding of the creative process. The learner does not simply internalise the information about the external world. Visual Art is subject for trying to grasp and understand-truly-various aspects of creativity by stimulating the learner's imagination's ability to conceive the possible. This empowers the learners' as a future generation to remain unshackled by conformity and uncommitted to certainty (Egan 1992:60). The value of expanding on Vygotsky's proximal development is reflected in adding time to the multi-directional relationships between the learner's mind, symbolic knowledge and the creative processes of the tasks. Most human learning is a complex result of our interactions with other people, mediated by tools (art) in the culture (Russell 2001:2). According to Vygotsky, the learner does not merely react directly to the environment, but acts on particular motives, interests or prompting, to reach a goal. According to the National Curriculum Statement (Grades 10-12) for Visual Arts: "Arts and Culture is a crucial component of developing our human resources. This will help in unlocking the creativity of our people...within the process of developing national culture, rediscovering our historical heritage, and assuring that adequate resources are allocated" (NCS. Learning Programme Guidelines: Visual Arts 2008:7).

According to the NCS. Learning Programme Guidelines: Visual Arts (2008:33), Grade 11 learners work on theme-based investigations according to the learners' interests and independent interpretation. During the Grade 11 year, learners should increasingly work developmentally, retaining evidence of the creative process. Sketches, investigative work and *preparatory drawings* (formal drawing) should be submitted with final pieces (paintings) and should be considered an integral part of the presented art assignment. Three topic strands are covered for Grade 11 (NCS. Learning Programme Guidelines. Visual Arts. 2008:33). They are:

a) Topic 1: Conceptualising through development and realisation of creative ideas

This includes a) the *developmental process* and b) the realisation of a concept. Within the developmental process, the learner should convey the ability to apply various approaches to generating ideas in response to a project brief (drawing and researching previous artists and their work, which will inform the learner's own work) and engage with own experience of the world through exploration of signs/symbols drawn from the broader visual culture (by finding and collecting interesting and stimulating references of personal significance which may prove useful to the practical activity). "The realisation of a concept is done through *applying the creative process* to solve visual art works through classroom assignments as well as document the process of conceptual development" (CAPS 2011:23).

b) Topic 2: Making of creative art-works, management of process and presentation

This includes exploration of materials, resources and the effective application of processes while documenting and evaluating own creative process – is it relevant to the assignment given?. The learner must convey the ability to *develop* technical expertise or skill and knowledge of a range of materials, techniques and processes. Management includes maintaining sketchbooks and portfolios that document the learners own developing acumen [grasp] of visual concepts/language. Planning and completion of tasks occurs within the time frames given, with available resources and in the space (environment) allotted. The presentation is where the learners display/exhibit their own work.

c) Topic 3: Visual Cultural studies: emphasis on Visual literacy

To analyse works of art in relation to social, cultural contexts, using appropriate arts terminology to describe art concepts, content, styles, materials. The ability to evaluate his/her own work and others', demonstrating an understanding of the process of critical analysis and providing reasons for aesthetic judgements. The emphasis is on increasing confidence, self-discipline, focus and creativity of the learner. Thus, for the purpose of this study, creating Visual Art will be viewed as a process embracing many of the creative 'behaviours' mentioned in the Visual Art curriculum. The developmental process of Visual Art creation and engagement will include the following componential dimensions: theme and idea conceptualisation, realisation via visual creations by using art-relevant skills (art knowledge, techniques) and creativity-relevant processes (management and application of the creative process) by expanding the range and complexity of the interactive expressive strategies and creative performance.

2.7 APPLICATION OF THE CREATIVE PROCESS IN THE CREATION OF VISUAL ART

Visual Art cannot be created without utilising a creative process. Eisner (2002) argued in Marshall (2008:39) that the physical practice of art, with discerning what to pay attention to, involves insight, evaluation and understanding. The creative process includes the insight (through inspiration by learning without copying), evaluation (through focussing on improvement and learning) and understanding (through purposeful perseverance and task motivation). Amabile's componential model originates from what is possibly the best known description of the creative process - Wallas'(1926) Model of the Creative Process. Amabile (1990:67) is of the opinion that the creative process is essentially the same for a scientist trying to develop a new process to an artist in his studio, admitting that different cognitive processes will be important, but will generally depend on the same components and be affected by social factors. As the learner creates an art-work and reviews the works of self and others, there is also a process of introspection on reflecting and responding to the outcome. The wide variety of activities in Visual Art creation will most likely render very different types of outcomes. For instance the way that one learner identifies (perceives and conceptualises a visual task), and responds to the task will differ from another learner, even though they have the same instructions and materials to carry out the art task. The creative process is seen as "a sequence of steps through which a person proceeds in making an art form, working on it - a product that resolves a challenge" (Edwards 2002:35). The creative process also refers to the techniques and strategies that creative learners use, consciously or unconsciously, to produce new idea combinations, relationships, meanings and transformations (Davis 1997:360).

2.7.1 The creative process according to Amabile's Componential Model

In the Componential Theory, the creative process emerges as five steps: task presentation, preparation, response generation, response validation, outcome evaluation. Furthermore, the process interacts with the three components (art-relevant skills, creativity-relevant processes and task motivation) which contribute to creativity acumen.

- **Task presentation** includes the learner identifying how he/she will respond to the task or external stimulus. This is where conceptualisation takes place.
- **Preparation** is when the learner displays keen observation, perception and starts to look for information (inspired) in planning what to do for the task at hand. This is when realisation takes place.
- **Response generation** will include the materials and the search for possible analogies or connections in creating Visual Art – this is the stage where ideas are generated.
- **Response validation** is the evaluation of where the learner was and where they currently are at present. This is when re-working, re-thinking of the original idea takes place. Evaluation and review of choices and decisions are made along the way. The evaluation is to review whether the ideas implemented have satisfied the challenge. In this study the challenge is to solve a visual task (according to the Visual Art Curriculum).

As stated before, with the non-linear nature of the creative process, it is often difficult to pinpoint where the process ends and the product begins. Learners could linger between strategies or phases of the creative process before producing a satisfying outcome. In concentrating on the creative process, the focus is directed towards the creative behaviour of doing and experiencing the art-making activity. This shift of focus requires personal acceptance and self-trust of what we are doing while we are doing it. David Rogers (2001:47), Carl Rogers' son, explains that the creative process is an "...activity that really requires a lot of attention to proceed in constructive ways". Attending to the process is not an easy thing for many people to do. Exploration in Visual Art can be a frustrating endeavour, and through the creative process, as in life, often we learn more from challenges and failure than we do from success. This can give the adolescent learner the necessary creative attitude, tools and feedback to develop their creativity acumen for future challenges. In grappling with new ideas, the changing world inherited by the learner, will require creative behaviours such as the ability to express ideas and manage doubts when acting autonomously, without wanting to be right or perfect in making those ideas a reality. If we are not prepared to be wrong, we will never come up with anything original (Robinson 2006).

In the process of creating art, such as drawing or painting a picture, the individual realises that he/she is 'seeing' an image as it is. Milton Glaser, an artist, speaks of creativity as a 'verb' – a very time-consuming verb, and that creativity means taking an idea in your mind and transforming the idea into reality. This is a long, challenging process which includes the ability to stick with the challenge until it [the process] surrenders. Practice precedes adeptness. The imagination is the internalisation of "cognitive play with images and ideas" (Vygotsky 1978). A convergence between imagination and thinking in concepts takes place during adolescence and continues to develop and evolve as a person's creative thinking matures into adulthood. Artistic (and scientific) creativity requires collaboration of imagination and thinking in concepts (conceptualisation). Originating from Bruner's education theory (1966), humans can learn anything as long as the materials are organised properly with three distinct stages of development: First active participation (by doing), second iconic stage (images are formed) and a third stage of visualisation and symbolic representation (recording experiences visually) which resonates with the framework of the constructivist paradigm of making Visual Art. In developing creativity acumen as part of the creative learning, Petty's Model of the Creative Process, is interrelated with the Componential Theoretical framework (see **Figure 2.3**)

2.7.2 Petty's ICEDIP model of creative process

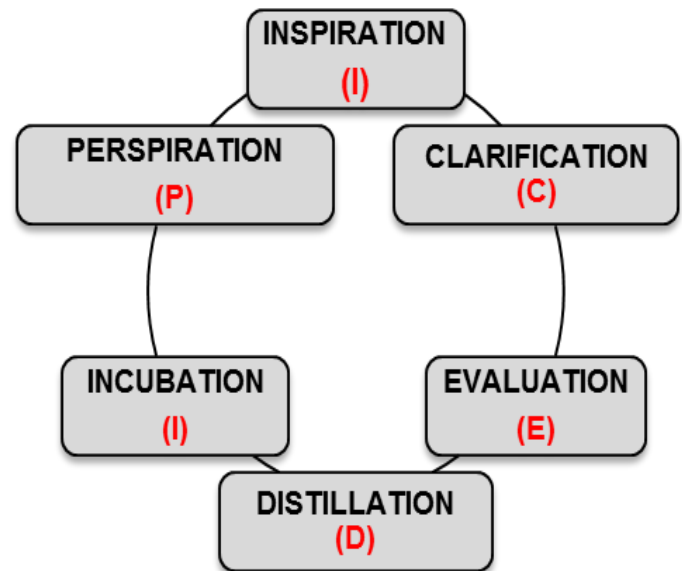
Petty (1996) utilises the six phase Model (ICEDIP) for the exploration of the creativity process (see **Figure 2.3** 1). In the Visual Art learner's approach to the creation of a visual art-piece, the learner is made aware of how he or she responds and enters the creative process in Visual Art. While Visual Art acts as a mechanism for creativity acumen, they do not occupy the same ontological space. Visual Art

is a means through which the art learner engages with the creative process. Creativity acumen is the keenness and understanding in deciding how to develop an idea with purpose. The Visual Art learner ‘sees’ what they have created and learned to do and can then focus on the next phase or challenge. These phases are the heuristic components of the creative process. This trial-and-error approach allows the art educator to ensure each learner works according to his/her own level and pace.

Petty (1996) confirms we learn by doing and recommends the use of the six phases in any order. The six phases (inspiration, clarification, evaluation, distillation, incubation and perspiration) can loop and do not follow a set sequence, hence there are no arrows in the diagram (see **Figure 2.3**).

Creative individuals seem to inherently resist external attempts to control their behaviour and desire complete control of the outcome (Amabile 1996:7). Within the creative process, inter-related dynamic dimensions between the techniques used and the particular artistic process are used when drawing and painting, with the Visual Art learner manipulating the art skills and materials to produce a creative outcome. A visual

task is presented to the learner and art creation begins with an idea which is sourced, generated and developed as well as being continuously evaluated and reviewed in terms of the learners’ progress towards completion of the art-work. The six phases of the creative process are described below:



(source: Petty 1996)

Figure 2.3: ICEDIP Model of the Creative Process

- **Inspiration:** where new ideas are generated, visual perceptions are formed and information is collected from external stimuli (relates to Amabile’s (1996) task identification and response generation in the Componential Theory).
- **Clarification (Verification):** where focus and attention occur on the outcome. May involve some risk-taking (relates to Amabile’s (1996) response validation in the Componential Theory).
- **Evaluation:** where the best path to follow is possibly sourced, the ideas which have the best potential are decided on, decisions are made and followed. Decisions are also made here as to how to make improvements (relates to Amabile’s (1996) outcome evaluation in the Componential Theory).
- **Distillation (Illumination):** is the process of concentrating ideas into a single vision. Finding the essence or the meaning behind it all (relates to Wallas’ (1926) illumination and Amabile’s (1996) task motivation in the Componential Theory).

- **Incubation:** is the process of mulling over the ideas and letting thoughts go to allowing new connections to happen naturally. This is the phase of wonder, wander and reflection. Allowing time away from a task allows for incubation or a kind of unconscious working through the problem (Woolfolk 2007:306-7) (relates to Amabile's (1996) response generation in the Componential Theory).
- **Perspiration/Perseverance:** is the hard work phase where actual plans are put into action, with determination. Creativity requires sustained creative energy and includes the attitude of openness and determination to complete a task (relates to Amabile's (1996) task motivation).

Previous scholars (Amabile 1996, Csikszentmihalyi 1996, Petty 1996) discussed a confluence of creativity-relevant processes, components within the work environment of what can be expected from the individual learner which is depicted in **Table 2.4** below.

Table 2. 4: Inter-related components of creativity acumen, the curriculum and the creative process:

The Componential Theory of CREATIVITY PERFORMANCE COMPONENTS (Amabile 1996)		The Outcomes Assessment of VISUAL ART (CAPS 2011)	The Creative Process CREATIVE PHASES (Petty 1996)
TASK MOTIVATION	Task presentation: is the external Visual Art reference given to art learners in the form of a theme.	Conceptualisation: is the realisation and development of creative ideas by observations and linking it with prior knowledge and experiences.	Inspiration: is the display of interest and the ability to follow path of choice, while being open to new experiences.
CREATIVITY-RELEVANT PROCESSES	Preparation: The learner calls on prior knowledge, how to use materials and resources.	Realisation: The learner conveys ability to plan task presented as an external stimulus within a set time.	Clarification and distillation: The learner displays deployment of mental imagery and fluent thought arrangement.
	Response Generation: An open response / fluency in generating ideas, autonomy and uses own life experiences, risk-taking* and suspends judgement. *May include risk of failure of completing the task or personal risk (fear of rejection) through unusual ideas or introducing new materials.	Application of the Creative Process: A response by applying various approaches to generating ideas and engaging with own (inner thinking) experience of the (outer) objective world through exploring visual symbols of personal significance.	Distillation, Incubation and Evaluation: by maintaining focus and attention on the task (perspiration). This includes displays of individual freedom and autonomy of symbolic and creative expression (flexibility).

ART-RELEVANT SKILLS	<p>Response Validation: by reviewing the choice(s) of paths to solution when resolving visual tasks against appropriate task-fulfillment. * ability to see results of artistic decisions made</p>	<p>Making Visual Art: by exploring materials and using the effective application of the creative process, with the ability to develop technical expertise and knowledge of art techniques in the learner's creativity arsenal. Demonstrate increasing awareness, confidence, focus on creative ability.</p>	<p>Clarification, Evaluation, Incubation & Perspiration: with visual analysis through the process of making unrelated connections, new combinations. Self-motivated to do tasks. Reflection and evaluation**, perspiration** to complete task and persevere despite obstacles.</p>
	<p>Outcome Evaluation (of creativity acumen): Assessed according to theory, curriculum.</p>	<p>Evaluation: of own and other's work, understand the process of critical analysis. **Evaluation of the creative process</p>	<p>Evaluation according to the strategies and phases used in the creative process.</p>

2.8 THE VISUAL ART CLASSROOM AS A CREATIVE SCHOLASTIC ENVIRONMENT

Historically, Dewey (1930's and 1940's) and Lowenfeld (1940's and 1950's) promoted the importance of the influence of art practice and the self-expression as well as creativity in Visual Art education. These two researchers' emphasis was on development of learners' creative acumen. The thinking of the time was however that creativity acumen could develop naturally without any intervention (Zimmerman 2005:58).

Visual Art images provide a powerful tool with which learners engage and reflect on ideas. The learner's personal thoughts and social interactions are where both creativity and acumen operate (Moran and John-Steiner 2003:66). Many Visual Art creators, mention the creative process in terms of a dialogue between the visual images and the work in progress (Morrison & Wallace 2001:135). The Visual Art learner must be alone to create, while also being part of the art classroom. Adolescence is a time of mastering one's internal world and growing into a society and culture (Moran and John-Steiner, 2003:71). Adolescents are creating, as a result of their actions, who they want to be in the world. Human expression and creativity is resistant to another's control and unpredictable. The creation of Visual Art is just as unpredictable. Runco (1990:234) warns that to "be creative is to be unpredictable". The individual process of making art includes ambiguity and unpredictability, while the school (social environment) is responsible for ensuring all learners have developed the ability to express themselves creatively (Lindström 2006:53). Lindström also explains the curriculum statements are very often high ideals that are not achieved in the classroom. The learners' evaluation of their own work, on the decisions made, could offer the opportunity to transform and expand on previous choices, to constantly make new observations and reflect on what has been accomplished or not (Lindstrom 2006:56). In agreement with Zimmerman (2005:62), creativity can be examined for what is creative for that art learner. I maintain that the individual learner may not attain a level of creative expertise and acumen without intervention and that all of us need the right opportunities and appropriate assistance in order to develop creativity acumen, if willing and motivated to do so.

2.9 SUMMARY

Last year (2011), the National Art Education Association, held a conference with the theme of: 'Creativity, Imagination and Innovation in Art Education', because all three concepts have been identified as critical 21st century skills that all learners will need in order to be successful in their lives (Kantawala 2012:81). In a session called 'purposes of an art education', the question was raised: 'If 5% of your classroom participants want to be artists, what do the other 95% need to know and be able to do now and in the future?' (Kantawala 2012:82). As long ago as 1934, Vygotsky's ideas resonated by representing creativity as a social and individual process regarding growth, innovation of creative imagination, with the changing impact of creative activities on individuals over their lifespans. Thus such creativity works in expanding individual and cultural meaning are timely to creative studies now (Moran & John-Steiner 2003:61). Cultivating the creativogenic accomplishments is an elemental function of the Visual Art classroom and perhaps paramount for the development of creativity acumen. In establishing experiences centred on cultivating creativity requires nothing less than an institutional intervention. Clinging to standard tradition and conforming leaves little space or time for nurturing creativity as education is not a linear process (Livingston 2010:60). To collaboratively explore this visual, creative, innovative world of ours, it is essential to grasp that art educators bring multiple visions but one goal: the power of Visual Art education to fulfill human potential.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapters have outlined some of the non-linear thinking and the intertwined creativity components that occur when an individual is involved in the creative process. The awareness gained through the implementation of the creative process during Visual Art creation provides the adolescent learner with the opportunity to perceive, create, relate and evaluate his/her expertise, knowledge and creativity. This artistic intervention of conceptualising and making Visual Art may be related to cultivating creativity acumen. The creativity-relevant processes and art-relevant skills will be used in this study as the basis for the research in illuminating creativity acumen: seeking alternatives, conceptualising ideas and development from own experiences. The relationship with creativity acumen was examined relative to the creative processes and mind-sets when creating Visual Art.

The aim of this chapter was to look at the methods used to attempt to understand the responses and practices followed by the learner in developing idea expression (creativity-relevant processes) and own knowledge base (art-relevant skills) in Visual Art creation. Creativity acumen, as the ability to freely express oneself via the practice of Visual Art creation may challenge the Grade 11 learner to engage, explore, challenge and use the creative process in realising or attaining a creative outcome.

Mc Burney (2001:80) suggests the research methodology outlines the descriptions of the research participants, the research design, the sampling method, data collection procedures and measuring instruments to be included (Strydom 2005:252-253).

3.2 PURPOSE OF THE RESEARCH

The aim of the research is to explore creating Visual Art as a creative process-orientated intervention in relation to the display and attainment of creativity acumen. To achieve this two research questions were posed:

- a) Which creativity-relevant processes are present and can be related to the attainment of creativity acumen while creating Visual Art?
- b) What art-relevant skills and components relate to attaining creativity acumen in the Visual Art learner while applying the creative process?

3.3 RESEARCH METHODOLOGY AND DESIGN

Research methodology suggests 'a general approach to studying research topics', whereas method refers to a specific research technique' (Silverman 1993:1). In this study, a qualitative research design was utilised and implemented. The aim was to understand 'what it [art creation] is like' or the quality or texture of the [art creation] experience (Willig 2008:8). Qualitative research design was selected as the most appropriate method as the questions revolve around 'how' and 'where' creativity acumen can be achieved or developed through the engagement in the creative experience during Visual Art creation.

Qualitative research is descriptive in nature with ethnographic characteristics. Ethnographic research can serve as a catalyst for holistic descriptions of the creativity and Visual Art creation relationship to one another in a cultural/scholastic context (Meador et al. 1999:241). The study attempted to describe the multi-faceted and enigmatic concepts of both *creativity* and *Visual Art*. In qualitative research, the use of a flexible design evolves throughout and with the research process. The challenge lay in the unpredictable nature of the art creation itself and variability of the creative outcome, as being embodied in the individual expression of the Visual Art learners. Here is a contextualised figure of the research:

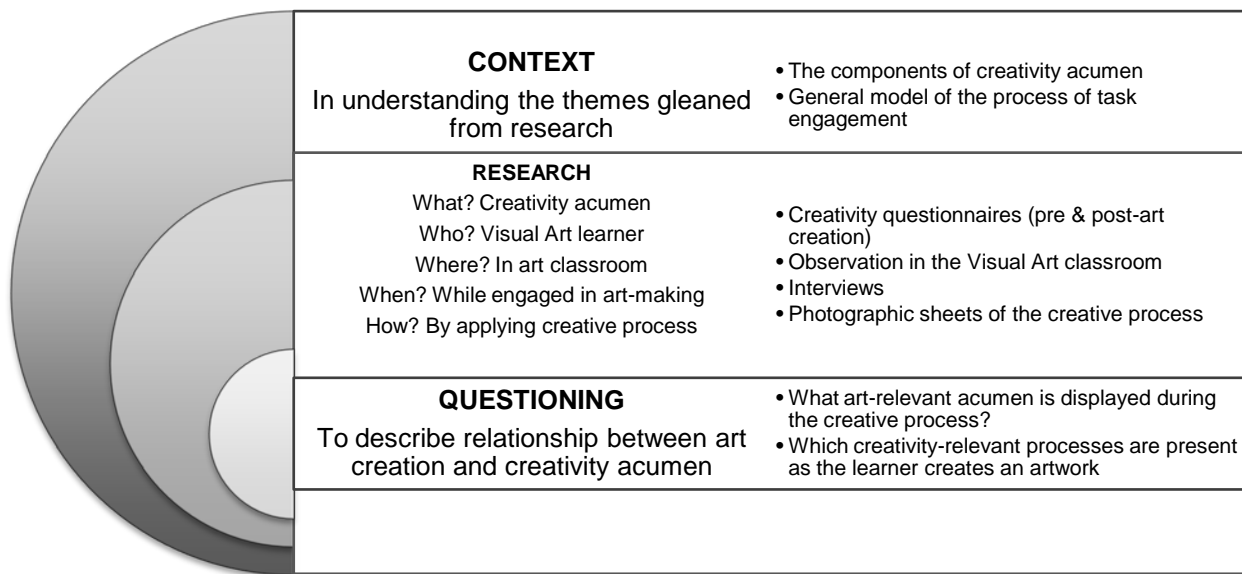


Figure 3. 1: Context of research methodology

Adapted from Amabile (1998)

3.3.1 Research paradigm

The research paradigm of the study included an interpretative framework within which creativity acumen was viewed as proposed by Moran (2010:84-85) in a Vygotskian light as the “construction and synthesis of experienced-based meanings and cognitive symbols from the individuals perspective which was embodied in the cultural artifacts”. This research involves visual symbolic interaction, which says people are constantly in a process of interpretation and definition as they move from one situation to another (Struwig & Stead 2001:15). The presented school task intersects with school and classroom influences. Within the theoretical framework included the Componential Theory of Creativity (Amabile 1996), the art task components act as the launching pad for both the creative and visual inquiry cycle that the learner will engage with, in the art classroom. This embeds the socio-cultural conditions within learning as the production of new knowledge (insights). This study was informed by the interpretative phenomenological stance in identifying categories of meaning and themes in the creative behaviour. The concept of attaining creativity acumen was viewed as an intermingled process

of creating art in relation to applying the creative process to achieve a valued, original outcome. The capturing of simultaneous diverse activities (see **Table 3. 3**) requires that the creative process will be used to delineate the parameters for the Visual Art learners. Silverman (1993:1) argues that 'without theory there is nothing to research'. The componential framework is a general model of the process of task engagement and may include both heuristic (open-ended) and algorithmic response generation to art creation tasks (Amabile 1996:97). If a task is purely algorithmic (one solution only) with no room for exploration of new idea generation, the variation in creativity acumen may not be evident and hence no room for creativity acumen development. Creativity acumen includes applying art expertise and the creative process to reach a successful or satisfactory outcome, according to the Visual Art curriculum too.

3.3.2 Qualitative research approach

Qualitative research is not one method of research only, but comprises numerous methods such as phenomenology, symbolic inter-actionism and discourse analysis (Struwig et al 2001:226). Qualitative research was based on a constructivist philosophy that assumes that reality is a multi-layer, interactive, shared social experience that is interpreted by the participating individuals. It is the perceptions of this constructed reality that directs the learner's thoughts and actions (McMillan & Schumacher 2006:315). Qualitative research is primarily concerned with *process* rather than outcomes. The type of data collected will need to be naturalistic (as derived from real-life art classroom situations). Qualitative research primarily involves fieldwork and interviews but can also include the analyses of photographs and documents (Struwig et al 2001:226). The qualitative data in this study will explore creativity acumen in the form of words, pictures, photographs and quotes to give an information-rich rendition of the research participants' creative actions, understanding and voices. The qualitative approach communicates the empirical research process followed through phases of art creation, data obtained and the findings thereof, for further integration and analysis (Delpont & Fouche 2005:351). This is relevant and important to this study.

In qualitative research, the researcher is directly involved in the setting, looking and asking. Therefore, the researcher can bring bias to the research process; in terms of the researcher's own understanding of the art creation procedures. Reflexivity (see **Chapter 5 § 5.5.1**) requires an awareness of the researcher's contribution to the construction of meanings throughout the research process and a commitment to remain objective towards the subject matter while conducting the research (Willig 2008:10).

Utilising the qualitative approach, the study attempted to relate creativity acumen to Visual Art creation, within a general framework, analytical objectives, question and data format and had some flexibility. The approach is summarised in **Table 3. 1** below.

Table 3. 1: The qualitative approach

QUALITATIVE APPROACH	
General Framework	Seeking to explore the phenomenon of creativity acumen in relation to artistic creative endeavour(s) within the school context.
	Using semi-structured methods such as interviews, questionnaires and participant observation with photographs.
	Flexible instruments such as a creativity questionnaire using simple language for adolescents, as a more iterative style of eliciting and finding themes after categorising responses to questions.
Analytical Objectives	To describe variation in combinations of creative intention, perspectives and behaviour and describe individual experiences with the creative process
	To describe and explain relationships between art creation and creativity-relevant processes and art-relevant skills
Data Format	Textual rendition or representation obtained from written questionnaires, observation grid, transcribed interviews and photographs of Visual Art-works (photo-sheets).

(Adapted from Mack, Woodsong, MacQueen, Guest & Namey 2005:3)

In qualitative research, the objective of data collection is to create a comprehensive record of participants' words and actions and making sure as little as possible is 'lost in translation' (Willig 2008:16). The voluminous data was managed and 'reduced' in the data analysis phase of the research and care was taken as to what was 'left out'. This raised the question of validity. Due to the flexibility and open-endedness of qualitative research methods, provision was made to address validity issues, by verifying the information with the participants and giving them an opportunity to challenge or correct the researcher's assumptions. Qualitative research acknowledges that the researcher influences and shapes the research process, both as a person and as a theorist/thinker (Willig 2008:18).

3.4 RESEARCH METHODS AND TECHNIQUES

Petty's (1996) proposed model of the creative process (ICEDIP Model) informed the creativity questionnaire which measured the creativity acumen as the learner actively engaged with a number of complex artistic tasks and skills to initiate simultaneous creative processes.

3.4.1 Selection of the sample

A decisive key in qualitative research includes the purposeful selection of participants from a sampling subset within the sampling frame, a class list of Grade 11 Visual Art learners (see **Table 3. 2**). The key feature of representative samples is that they are “like” the larger population from which they are drawn (Shaughnessy et al. 2009:96).

Table 3. 2: Sampling procedures

SAMPLING PROCEDURES	
STEPS	DESCRIPTION
1. Definition of the population: a) elements b) units c) time	The population will consist of: a) all Visual Art learners in selected classroom b) Grade 11 learners c) class time allotted according to curriculum in 2012.
2. Sampling frame specified	A Grade 11 class list of learners taking Visual Art is obtained.
3. Sampling unit specified	Only Grade 11 learners taking Visual Art with the art Head of Department are included in the study.
4. The sample method	Purposeful sampling will be the sample selection method to a sample of information-rich participants.
5. Determination of sample size	Due to time constraints and the limited scope of the study, six research participants were selected.
6. Selection of the sample	Included three willing male and three female participants. The participants were selected for their representative mixed ability levels, artistic ability, gender and culture from one art class.

The creative process in the componential theory adheres to the following procedures:

A. ART TASK PRESENTATION - INSPIRATION OF NEW IDEAS AND ART-RELEVANT SKILLS:

The Visual Art learners were presented with an A3 sheet of paper with a combination of drawings using visual references from various other artists' work. The art task presentation (see **Figure 3. 2**) was presented to provoke inspiration and visual inquiry in each art learner. The theme was then to be conceptualised and realized within the bounds of the Visual Art curriculum. This introduced the theme of the art task which was: "The Seven Deadly Sins". These are transgressions which impede spiritual progress and comprises of: pride, envy, gluttony, lust, anger, greed and sloth. Everyone sins. Pride may be an excessive belief in one's abilities and interferes with recognition of others' gifts. Pride is also known as vanity. Gluttony involves the desire to consume more than one requires and forms of excess consumption. Envy is the desire to have the abilities or situation of another, while greed is the avarice nature to gain wealth despite the costs to an individual's integrity or honour. Lust is the inordinate craving of bodily pleasures and sloth is the avoidance of physical work or any effort towards virtuous living. Anger is manifested when a person rejects love and opts for fury instead.

This combination of drawings from the works of previous artists in history is used to allow for planning, freedom of thought, idea generation and divergent thinking in the realisation of a new concept. Each art learner used the Visual Art reference (see **Figure 3. 2**) first to perceive the idea in written form and then to generate the first images of the sin they decide to create visual sketches (also known as formal drawings) (see **Addendum G**). The instructions of the assignment were divided into several components (see **Addendum C**). The issue of the A3 combination of drawings (see **Figure 3. 2**) acts as the visual inspiration for the learner to employ visual inquiry to first create a visual formal drawing (see **Photo A 2 to Photo F 2**). The visual drawings afforded the art-learners a wealth of images, elements and symbolism, to relate to and choose from (see **Table 3. 3**). Various elements were selected and re-combined according to their choices. The images in the drawings served as an introduction to a new idea or concept as well as a vehicle, which facilitated communication both visually and verbally. The Visual Art learners had the opportunity to develop decision-making skills: the ability to choose elements, materials and select alternative creative paths. The art assignment is set around one theme, but involved four different component art tasks: a written introduction, a formal drawing, a collage and three paintings (two 'practice' paintings with elements chosen within the theme to create a final painting). The creative outcomes included one theme with three assignment constituents:

Table 3. 3: Visual Art creation as related to creativity acumen components by learners approach

Visual Art Assignment Constituents	Art-relevant Skills (Amabile 1996, CAPS 2011)	Creativity-relevant Processes (Amabile 1996, CAPS 2011, Petty 1996, 1997)
<p>A written introduction and A formal drawing (imagery)</p>	<p>The learner chooses various visual elements to ‘copy’ through visual inquiry and use of heuristics. The art learner may think about how the elements relate to each other by clarification.</p>	<p>The written introduction and formal drawing involves an open-ended response with free association of ideas which includes the recombination of chosen visual images from the visual reference presented (see Addendum D).</p>
<p>A collage</p>	<p>This is a formal process of resolving visual spacing, shapes and formatting) and includes an artistic composition* of a medley of visual images pasted onto a surface.</p>	<p>The collage includes multi-media work, which allows the added dimension of resolving visual challenges of spacing and shape through visual inquiry, distillation of ideas chosen to pursue (see Addendum H).</p>
<p>Paintings (3) *composition implies, it is the way in which the whole is composed of various elements</p>	<p>This includes two painted compositions* (known as experimental drawings) and a final painting from the previous two ‘practice runs’). An experimental drawing is “drawing with the paint brush and oil pastels” (according to art educator). Own expression is sought.</p>	<p>The art learner conceptualises symbolic images into visual ideas from previous art-works and creative experiences depicted as a ‘new visual message’(see Addendum I). and insight into the concept of sin. This image-making requires a creative process as a structure-seeking activity more than a rule-abiding one (Eisner 2005:62).</p>

B. PREPARATION - CLARIFICATION AND RECEPTIVE RESPONSE OF VISUAL EXPRESSION:

Part of the art assignment was for the art learner to verbalize their ideas in both words and pictures. The preparation included the learner’s written introduction to the initial ideas generated of the ‘sin’ to be portrayed (see **Addendum D**). The next constituent was the formal drawing developed from free association with the visual reference (see **Figure 3. 2**) allowing open-ended responses, creative choices, visual solutions and beginning to clarify and depict their intentions (see **Addendum G**). It is the consequences of the sin (according to the art educator), which the learner will finally create in the form of a Visual Art painting.

C. RESPONSE GENERATION BY ART CREATION - CLARIFICATION, DISTILLATION, EVALUATION DURING GENERATION OF IDEAS AS CREATIVITY- RELEVANT PROCESSES:

The formal drawings, collage and the painting were executed one after the other. The formal process of resolving art elements and principles of composition in space, assisted the learner with presenting the thought processes visually (according to the art educator). The response generation merges the creative thinking (see **Table 2. 2**) and the non-sequential creative process (see **Figure 2. 3**). The learners generated their *own ideas* by finding and then pasting pictures from magazines (collage-making). This provided structure and a non-threatening means of expression. It was “an orderly process of solving art elements [through art-relevant skills] and principles [through creativity-relevant processes] of design in a composition” (according to the art educator). The learner then acted by developing, elaborating on and following through with the elements chosen to include in the art creation. The experimental drawing allowed greater freedom to use paint as a drawing tool to make and create a painting in a short time period. The learners were encouraged to ‘play with purpose’ (according to the art educator), with meaningful material. The preparation of the paintings included three prepared painted backgrounds. Paint allowed spontaneity and was ‘less structured’ than the drawings or collage. Painting, unlike the containment of the formal drawing and collage, relaxes rigidity and includes the creativity-relevant processes described here (these processes may be excluded and not observed as readily in the drawing and collage, as they utilise more formal strategies - done according to convention). The creativity-relevant processes may generate responses by the learner being *open-minded* to new ideas and unpredictable exploration of what Amabile (1996) calls ‘path to solution’, some risk-taking actions such as unusual choices of visual imagery or experimenting creatively by being open to new perspectives. The evaluation of the visual perceptions (see components of **visual inquiry § 2.5.2.1**) formed encompasses the time the learner has spent thinking about the way he or she will portray their ideas with the intention of creating a new visual work (incubation and clarification). Evaluation and review of the art-work as it was created, developed and completed included evaluation dialectically of the creative process applied, as first of all being receptive and open to new ideas. Then exhibiting open-ended responses with some skill in generating intended ideas, seeing new perspectives and experimenting with art techniques and previous knowledge while grasping ambiguity and complexity in the unfolding and evolving art-work. This evaluation throughout art creation will inevitably include some risk-taking in the form of doing what has personally not been done before and navigating the changes necessary to do so.

D. EVALUATION AGAINST CRITERIA

- i) ***The task presentation to the learner and art-relevant skills:*** involves the conceptualisation (CAPS 2011:23-24) of the original visual reference given to the learners, so that they might orientate

themselves to abstract ideas or concepts. The learners selected one sin from the theme, which was portrayed visually in the collage and paintings created by each learner.

- v) ***In preparation of the art creation:*** Responses were generated in images from prior personal knowledge and experiences within the timeframe allotted for the art-work.
- vi) ***The response generation from the Visual Art creator:*** generally included the open-ended response to ideas, the unpredictability and complexity of art-creation leading to a creative outcome. The process could not be predicted as the art learner applied the creative approaches through idea generation (fluency of thought), visual exploration and personal symbolic expression (flexibility when exploring different perspectives) and evaluation of progress.
- vii) ***The response validation and evaluation of creativity:*** This was where and when the learners evaluated their chosen path. The art educator gave feedback and assistance when asked. The aforementioned six creative phases were chosen and utilised according to the art learners personal arsenal of art-skills and creative grasp. As the componential framework of creativity acumen was used to make qualitative predictions of the outcome of the task engagement, the level of creativity components combine in a multiplicative fashion, with higher levels of each component lending itself towards a more creative outcome (Amabile 1996:102). Creative responses or creative outcomes were evaluated into high, moderate or low descriptors during classroom observation.

3.4.3 Data collection instruments

The recording of creative behaviour in this study included narrative records in the form of written descriptions of creativity-relevant processes related to creative understanding and acumen attained in the art classroom. This is included in the composite observation grid of creativity acumen during art creation (see **Addendum E & F**) with reference to the numbered photo sheets (see **Addenda G, H & I**) for each research participant. The collection of the data was done by means of a questionnaire (see **Addendum J**), observations and photographs of the art creation process, as well as by semi-structured interviews.

3.4.3.1 Creativity Questionnaire

The research participants were asked to complete a creativity questionnaire, based on Petty's (1996) creative process model (see **Figure 2. 3**), prior to creation of Visual Art tasks (pre-art creation) and again thereafter (post-art creation) assigned to the participants. The creativity questionnaire acted as a self-assessment tool of how the various phases of the creative process were implemented by the learners. The Creativity Questionnaire of Petty (1997), is inclusive of the six creative phases of inspiration, clarification, evaluation, distillation, incubation and perspiration (perseverance) which is visited many times during the construction and creation of the Visual Art-piece(s). The participants responded to the statements in the questionnaire by agreeing or disagreeing with them. The data was

recorded according to the participants' response to each statement (see **Addendum K**). This instrument was used to attempt to discover how the learners engaged with and navigated the creative process, and to evaluate where his or her preference lay while creating his or her own representation of the art-works (see **Addendum K**).

3.4.3.2 Observational method of the Visual Art creation process

The Visual Art learners were observed intermittently in the art classroom. The research study included observation without changing the normal educational setting, frequently called *naturalistic observation*. The major goals of naturalistic observation are to describe behaviour as it ordinarily occurs and to examine relationships between variables that are present (Struwig et al 2001:100). The creation of Visual Art was observed as a creative process, which unfolded over a time period of one school term. Objective notes of the art-learners creative responses were recorded on a composite observation grid of their creativity acumen, according to the creativity-relevant processes and art-relevant skills during response generation and the way in which the art creation responses proceed (the manner in which the different phases of the creative process were visited, explored and used).

This study attempted to examine the creative responses and processes as they took place. The naturalistic observations were descriptive accounts of what was seen and heard. A great deal can be learned from simply observing the actions of others (Shaughnessy et al 2009:30). *Observation* is a qualitative method with roots in traditional ethnographic research, which means getting close to the activities of other people, by watching and perceiving attentively in order to notice behaviour and understand them. This helps the researcher to learn the perspective(s) held by the study population. An ethnographer does interact with the research participants and is not separate from the research process. Informal interaction with participants was a component of the method and was recorded by photographs of the learners' art-making processes. The interaction with the art learners while they created the art-works was kept to a minimum, apart from taking the photographs of their work. The participants' own perceptions and actions were viewed with no evaluative feedback. It needs to be noted that there is a paradox in the observation of human artistic creativity in that scrutiny of the process almost opposes the very process it seeks to understand. An attempt will be made to explain the researcher's presence as an observer, through reflexivity in chapter 5 (see **Chapter 5 § 5. 6**).

Observation generally also provides a rich source of information about the Visual Art participants' creative actions and can lead to the first steps in discovering how learners' creative responses are influenced in certain settings and attributed to gaining creativity acumen. The observation was done from a developmental approach, which related the learners' visual perception, expression and analysis to what could be expected from them at the particular age level.

The creativity components that were included as parts of the observation during the art learners' creative work are described below. The art tasks were observed within the componential framework which constituted the following steps:

- i) **Task Presentation:** Is the theme/ concept of 'The Seven Deadly Sins' and includes: The visual reference by other artists (see **Figure 3. 2**), a written idea of the sin to be portrayed (see **Addendum D**). This is used as inspiration and conceptualisation of a new concept to the art learner.
- viii) **Preparation:** This is in essence the preparation for a final painting (learners are scaffolded through the process) which includes:
 - First, a formal drawing was created by visually re-combining artistic elements. This was a pencil sketch which allowed free-association of creative thinking (fluency) and inclusion of prior knowledge of art skills. There was little to no risk-taking at this point of art endeavour. This was an indication of open-ended responses (inspiration) required in creativity relevant processes aimed at the realisation of a concept, as required by the curriculum (Curriculum and Assessment Policy Statement (CAPS) 2011:23)
- ix) **Task response and response generation:** This included the art learner's initial and on-going responses to the unfolding creative processes where some risk-taking began in earnest.
 - Second, a collage was created, which afforded the art learner the opportunity to paste pictures and artistic elements onto a flat surface, preceding a painting. It involved the learners' own choice of different images with personal preferences. The artistic elements were chosen in relation to the generation of ideas as linked to the theme. This included a grasp of complexity and contradictions and involved visual inquiry.
 - Third, the art learner began with the art skill of painting, with the first experimental drawing (or painting composition) for the portrayal of their sin of choice. This involved the generation of ideas and suspension of judgement regarding sifting through which elements to include and which ideas to pursue, and which to discard. The art task engagement also included clarification, incubation and evaluation of ideas.
 - Fourth, in the second experimental drawing (second painting composition), the distillation of ideas occurred as part of the creative process, together with the willingness to learn from their mistakes as part of the art-relevant skills. The art learner began to ask, "What am I trying to achieve here?" Here, some ideas are pruned and some are developed.
 - The fifth and last component of the art assignment was to create the final painting (after multiple experiences of the creativity-relevant processes (creative phases) with the art skills relevant to each task. The creativity processes included the evaluation of their own and others' work and reflection on the techniques used to create the Visual Art painting of the sin chosen.
- x) **Response validation and evaluation:** of the final creative outcome was part of the learners' own reflection in the individual interviews.

3.4.3.3 *Photographic composite observation grid of creativity during art creation*

Photographs of the evolving Visual Art formal drawings, collages and paintings created by the learners served as real-time visual records of the creative response generation as it occurred inclusive of the creative phases (see **Addendum F**). The process of making art and the tandem documentation thereof influenced one another - see reflexivity section in chapter 5. I observed the art creation process in the classroom environment. Parts of the art-works were done at home by some of the learners.

3.4.3.4 *Interviews with art learners*

An *interview* is a method of gathering information by asking people questions. The participants were requested individually to answer open-ended questions in a recorded interview as their tasks were completed or drew to a close (see **Addendum L**). Audio recordings were made, transcribed and analysed into art-relevant skills which could relate to attaining creativity acumen and creativity-relevant processes that were present in relation to their creativity acumen. The audio recorded interviews with each participant also assisted with emerging patterns of creativity relevant processes used during art creation (such as creative perception, clarification and incubation during the art creations made) and responses within the various phases outlined by scholars (Wallas 1926, Torrance 1962, Petty 1996). The interviews possibly elicited individual experiences, opinions and understanding of the relationship between creativity processes present and the art-relevant skills which relate to attaining creativity acumen (see **Addendum M**).

3.4.4 Data analysis and interpretation according to the instruments

The data analysis in this study included the process of separating creativity acumen and Visual Art creation into its creativity-relevant processes and art-relevant skills as constituent parts while using the creative phases. For qualitative analysis this translates to reading and re-reading the text and written impressions of the data (Taylor-Powell & Renner 2003:2). The three categories, of creativity-processes/phases, art-skills and task motivation (Amabile 1996), were further divided into sub-segments related to the tasks such as drawing, collage and painting in creating Visual Art (see **Table 3.3**).

3.4.4.1 *Creativity questionnaires*

By means of the questionnaire, I tried to discover how the learner used the creative process (which included the creativity-relevant processes from Amabile (1996) and the application of the creative process during the generation of new ideas. Both the pre- and post-art creation creativity questionnaires were tallied to get totals of agree/disagree responses within each creative phases in the ICEDIP Model (Petty 1996) (see **Addendum J**). The pre-art creation responses were compared and related to the post-art creation responses in graphic form and interpreted and described (see

Addendum K). The agreement or disagreements with the criteria / items in each of the six creative phases were graphed to reveal the relationship between the creativity-relevant processes and art-relevant techniques used by participants' when creating something new. The participant responses were tabulated, interpreted and analysed according to the learners' application of the creative process.

3.4.4.2 Photographic composite observation grid of creativity during art creation

Naturalistic observations were analysed into patterns and themes according to the creativity-relevant processes and art-relevant skills mentioned. Thus the documentation of the process was an inextricable part of the art creation process. The observation grid formed the basis of the analysis and description of the creative process. which, together with the photo sheets attempted to give an exposition of the steps taken by the Visual Art learner while applying the creative process. In defining creativity acumen for the benefit of observation, Kirschenbaum and Armstrong (1999:330-331) believe that creative individuals strive to generate ideas (inspiration, preparation and incubation); push the boundaries (distillation, evaluation and risk-taking); seek constructive feedback and are internally motivated (task motivation and perseverance) to make decisions to reach their goals. This relates to the response generation and creativity-relevant processes of Amabile's (1996) model as well as the clarification and evaluation phases of Petty's creative process (1996).

Observations of the art creations were described according to task response and response generation of ideas and perceptions throughout the application of the creative process (see **Addendum F**). Levels of the creativity-relevant process, art-relevant skills and task motivation could possibly assist with the level of creativity acumen displayed throughout the art creation process. The degrees of creativity acumen in relation to Visual Art creation were indicated as low, moderate or high. Creativity acumen – was seen as an interactive outcome of the learners ability to use own knowledge, critical analysis, effort and use of art-skills, creativity processes with environmental feedback. The methodology for analysis of the observed art creations and photographs will include the components of the theoretical framework as shown below: Visual Art creation relative to creativity acumen followed the art creation process as the learner approached the task, responded and reflected on the creative images produced.

Table 3. 4 depicts how the observation data was catalogued, evaluated and described within the theoretical framework of Amabiles Componential Theory (1996) and summarised according to the components of creativity-relevant processes (creative phases) as related to the art-relevant skills utilised when creating Visual Art.

Table 3. 4: Creativity acumen as related to creation of Visual Art

CREATIVITY ACUMEN REQUIRES:	ICEDIP MODEL	IN RELATION TO:			VISUAL ART CREATION REQUIRES:
CREATIVITY-RELEVANT PROCESSES SUCH AS:		High Creativity Acumen	Moderate Creativity Acumen	Low Creativity Acumen	ART-RELEVANT SKILLS SUCH AS:
An open-ended and receptive response to art task (no predictable path followed) Creative thinking: Fluency	INSPIRATION	High display of creativity - relevant processes where operation of open-ended creativity heuristics directed to the task and creative thinking style that deals adequately with complexities and art-relevant skills which determines successful initial pathway to final outcome.	Moderate display of creativity - relevant processes where "correct" or "predictable" responses can be directed into moderate novelty and art- relevant skills which determine partial success to solution. Improved creativity could occur with greater skills repertoire	Mild display of creativity processes and art-relevant skills due to low interest in the process with generally weak creative response	The acumen to seek alternative paths to solution and use a heuristic approach Creative thinking: Fluency
Action: The acumen to see a new perspective – creative perception/visual inquiry Creative thinking: Flexibility	CLARIFICATION				The acumen to call on knowledge and/ or find analogies Creative thinking: Flexibility
Conceptualise visual ideas and generate ideas by using own knowledge or experience (fluency, originality)	EVALUATION				The conviction to learn from mistakes and the motivation to improve
The acumen to take risks by doing something not done before (stepping out from the 'known') and grasp complexity and contradictions (ambiguity)	DISTILLATION				Autonomy and self-expression through own representation of art/creative ideas (independent work style)
The acumen to manage changes and suspend judgement	INCUBATION				The ability to concentrate efforts for long periods
Task motivation to commit to and complete the art works within the allotted time	PERSPIRATION				The acumen to persevere, even when things do not work out

The observations together with the selected photographs of the art creation-processes were analysed and described within the categories of creativity-relevant processes and the art-relevant skills and task

motivation with reference to and dependent on: (a) the heuristic response with regards to task motivation and creative strategies, selection of alternative paths to generate new ideas, and hence visual creations; (b) verbal and non-verbal behaviour responses depended on what was said and done during the art-work, in the art classroom by both the art learner and art educator as a feedback loop of dynamic interaction with perseverance or even abandoning a task completely (see **Figure 2. 2**); (c) the physical actions (art-relevant skills) taken by using own knowledge and working style (creative arsenal) by adding or subtracting visual elements, colours, materials and techniques to make changes at will or with supervision; (d) the time for assistance, direction and guidance including time spent making improvements or learning from mistakes (how the art learner developed visual compositions of their work to add aesthetic value or originality to their ideas with critical awareness of quality);(e) the creative environment as adding to or assisting with artistic difficulties and creative obstacles dependant on which aspects may cause anxiety or frustration or resistance to application of the creative process within the art learner.

3.4.4.3 Interviews with Visual Art learners

An interview schedule, as an appropriate instrument to engage the participant and designate the narrative terrain (the art learners verbal experience), guided the interviews (Holstein & Gubrium 1995:76). The interviews were planned to elicit a picture of the Visual Art learners' perspectives and interpretations of the creative process in rendering a visual art-work and to validate the observations made during the art creation. The transcribed interviews were read and reviewed question by question, analysed and interpreted per participant. The interviews were analysed into meaningful segments for creativity-relevant processes and art-relevant skills, by making notes of the responses and highlighting key words, passages and quotes. The analysis of descriptive words and quotes in the transcripts captured the Visual Art learners' grasp of creativity processes and art skills they used or failed to use while creating, developing, and evaluating the Visual Art tasks. The Interpretation of the data was not just merely to report on, but also affords the reader insight into what may not be obvious at first glance. Data interpretation in qualitative research does not focus on prediction, causal determination or generalisation, but focuses on holistic understanding and extrapolation, by giving meaning to the raw data (Struwig et al 2001:172). The interpretation of the data did not deviate from the research aims.

The interviews were analysed for patterns or themes and interpreted using the ethnographic research for holistic descriptions of the creative acumen displayed and the subject Visual Art and their relationship to one another in a cultural context (Meador et al. 1999:242). The focus of the analysis was to look at how each participant responded to each dimension of the creativity-relevant processes and art-relevant skills while creating art. This analysis was done according to identified themes and/or

patterns of creative performance. A descriptive explanation was assigned to each art learners interview responses (see **Addendum M**).

3.4.5 Data reduction

Once all the responses were recorded and totalled according to creativity-processes or art-skills, they were reduced, classified and organised according to the broad themes of creativity components aforementioned. This included the abstraction and summary of identified similarities and frequency of responses amongst the participants while creating art. The observations and photographs were categorised into the art task constituents (formal drawing, collage and paintings). Thereafter the participants' creativity acumen was described in creativity-relevant processes or art-relevant skills as depicted in the composite observation grid (see **Addendum F**). In investigating the relationship between creativity acumen and Visual Art creation, creativity acumen was categorised into three broad categories of creativity-relevant processes, art-relevant skills and task motivation from Amabile's components of creativity (1996). Learners' ability to respond in a creativity-relevant manner generated a variety of new ideas and/or images according to the theme presented. Coding (a word, phrase or letters denoting art-relevant skills) was anchored in Amabile's (1996) Creativity Componential Framework. A code in qualitative research is most often a word or a short phrase that symbolically assigns a summative, salient, essence-capturing and/or evocative attribute for a portion of language – based on visual data (Saldhana 2009:3). The coding was short phrases and was used to describe the art learners experience of application of the creative process and efforts to conceptualise “The Seven Deadly Sins” into their Visual Art creations.

3.4.5.1 The creativity questionnaires

The questionnaires were first totalled according to the ‘agree’ and ‘disagree’ responses and totalled according to the given values and then graphed according to pre- and post-creation art and creativity responses. These responses were tabulated and counted (see **Addendum K**). The second phase of data reduction involved reviewing the questionnaire responses ‘agree’ or ‘disagree’ in relation to creativity-relevant and art-relevant responses. The information was tabulated against each item as seen in **Addendum J**. These responses were analysed and described according to the art learners' acumen to express their own ideas with a willingness to establish something new and appropriate to the art tasks set (creativity acumen) and make improvements. The graphed and tabulated responses were interpreted and described (see **Graph 1. 1 to Graph 6. 2**).

3.4.5.2 *Photographic composite observations and visual documentation*

The observational data was reduced by categorising anecdotal notes from the classroom observations according to the components of creativity-relevant processes and art-relevant skills and task motivation as the three major categories (according to the theoretical framework) as discussed before. Of the many digital photographs taken of the learners' art creation processes, photographs were reduced by selecting pertinent photographs which demonstrated the application and exploration of the creative process when solving visual and conceptual dilemmas (CAPS 2011:23-24). Permission regarding the publication of the learner's art-work was granted in the assent letter informing the participants that the art-works will appear in the dissertation.

3.4.5.3 *Interviews with Visual Art learners*

The interview transcriptions, after being read and reviewed were categorised according to responses, remarks and themes of creativity processes and art skills. The transcribed and tabulated data was reduced and searched for emerging patterns and categories of each participant's responses. These categories were reduced to the number of responses in each category. For instance the learner's response regarding personal attraction to certain visual elements or preferred art techniques to use was 'grouped' as the interview theme: Autonomy and personal visual realisation falling within the creativity-relevant processes used (see **Addendum M**).

3.4.6 Data display

The data was displayed in an organised, tabulated and charted manner so that conclusions may be reached. The data from the creativity questionnaire data were displayed graphically, relating pre-art to post-art creativity processes and art skills. The data from the questionnaires were tabulated according to the questionnaire items in the six creative phases. The data set achieved was used to describe the creative progress, and elucidate meanings of the study in relation to the research questions for each participant. Text or narrative data in the form of observation grids, photographs of the creative development of the art creations were corroborated with the responses from the questionnaires and interview transcripts. The data from the questionnaire responses, classroom observations of art engagement and interviews included identifying themes which were in essence patterns which repeated themselves. Those sub-themes were verified with the creative phases used as found in the creativity questionnaire (creativity-relevant processes) and observations and photo sheets of the art creations made (art-relevant skills). The data was displayed per research participant as questionnaires, observations and photographs of his/her art-works and interview responses.

3.4.6.1 *The creativity questionnaires*

This was graphically displayed to show the relative scores between pre-art creation and post-art creation. This was indicative of which creative phase(s) or predominant mind-sets the learners relied on while creating art. This was most likely the Visual Art creators' most pre-dominant mind-set when tackling a creative task. The data was described per participant.

3.4.6.2 *Observations and photographic visual documentation*

The observations made were documented in the composite observations grids (see **Addendum F**) and displayed according to the creativity-relevant processes and art-relevant skills. The creativity acumen was described and depicted as high, moderate or low. The photographs, which described the process of the art creation for each research participant, were placed into tabulated form, called a photo sheet. Each photograph of the art-works (drawing, collage and three paintings) was numbered and referred to when corroborating information with the questionnaires and interviews. Some observational descriptions accompanied the art-work in the photo sheet.

3.4.6.3 *Interviews with Visual Art learners*

The analysed and interpreted interview data were displayed as a tabulated description per participant. Pertinent responses and relevant quotations from Visual Art participants were included in the descriptive information which reflected the significance of the art learners' grasp of creativity with open-ended responses, commitment to create something new or creative art skills.

3.5 ETHICAL CONSIDERATIONS

Ethical guidelines serve as a standard which offers the researcher and participants' principles by which to make the most ethically responsible decisions (Strydom 2005:56).

3.5.1 Informed consent

Obtaining informed consent is crucial so that research participants fully comprehend the inquiry in terms of their time, voluntary participation, risks and disclosure of confidential information. The Gauteng Education Department issued a letter of consent to commence with research within the school environment. Written permission, to conduct research was secured from the Headmaster of the school. The teacher gave consent for my presence in the Visual Art classroom, to observe and take photographs of the art learners' art creations. Written consent was obtained from the parents of the research participant. Written assent was also obtained from the Visual Art learner participants. These five letters are in **Addendum A**.

3.5.2 Right to privacy, anonymity and confidentiality

The participants' identities were protected and their names were not divulged - pseudonyms were used. The right to privacy was upheld. The participants and their parents gave their permission for photographs to be taken of their art works. The photographic information remains the property of the participant; nevertheless permission has been granted by both the learners and their parents for publication as a dissertation. Observations were conducted under the assumption that findings would be kept anonymous. However this may be more difficult with the subsequent photographs of the participants' art-work.

3.5.3 Observation bias

Objectivity versus subjectivity in this research is another important consideration. The influence of the observer was taken into account. The learners could change their responses when they know they are being observed and may no longer be representative of their normal true nature. This is a reaction to demand characteristics, such as behaving differently due to an observer being present, in the research situation and is known as 'reactivity'. It is important to consider ethical issues when trying to control reactivity (Shaughnessy et al 2009:124). Due to the fact that the researcher was a passive observer in the classroom, there was no direct influence or risk imposed on the learners.

3.6 CONCLUSION

The creativity-relevant processes and art skills varied greatly among the Visual Art learners. The creative phases were used differently by each creative learner; but, the creative process must be utilised in order to consistently produce meaningful, conceptual art in any Visual Art classroom. From painters to designers, the first step is just as important as the last. The saying, "find your process, and you cannot fail" is relevant here. Creativity acumen includes the ability to visualise, think about and act on the idea, which has been initialised, either through a verbal or tactile (visual signals) instruction. The documentation of art creative processes and skills as well as their produced outcomes underpin the validation and evaluation of what it takes to attain creativity acumen and understand what it means to create something new. From the various artistic documentation and the analysis of the data, insight elucidated how creativity acumen relates to the creative behaviour and processes used by the art learner, including fluency, flexibility, constructive discontent and belief in the solution to mention a few. Their art-works reflected the context in which the work was created and their grasp of their inner and outer creative worlds.

Task motivation was generally observed in the learner's willingness to create art for its own sake. The Visual Art learner displayed this by taking up challenges and deciding on artistic avenues. Self-

expression, decision-making, risk-taking and self-management were some key factors as there was an awareness of both class and personal restrictions. Yet, the art educator seldom 'instructed' the learners what to do. By and large, each art learner pioneered their own way, own work-style and own evaluation of their work or development, notwithstanding the fact that the concepts and ideas introduced to them was not encountered before. The art task(s) which were completed at each 'stage' was a reflection of the art learner's ability to feel satisfied with what he or she had accomplished or the fact that he or she was simply ready to take leave of the efforts put in.

In the next chapter, the findings are documented and displayed to best illustrate the inter-related mosaic of creative actions depicting creativity acumen in the Visual Art classroom. I anticipate that the research will contribute to a better understanding of the relationship between the engagement in Visual Art creation and creativity acumen, along a continuum of learning tolerance of contradictions, openness to experience, preference for challenge and complexity, with some risk-taking in the form of pushing personal limits and the motivation to persevere.

CHAPTER 4 FINDINGS AND RESULTS

4.1 INTRODUCTION

“Imagination is the source of every form of human achievement... it's the one thing that Ken Robinson believes we are systematically jeopardising in the way we educate our children and ourselves.”

Sir Robinson 2006

The previous chapters have outlined the many facets of creativity acumen as a myriad of complex factors which are inter-related between the learners' thinking and the execution of an art task.

Chapter 4 provides a description of the findings and results of the study. An attempt has been made to link the creative phases of creating art with creativity-relevant processes and art-relevant skills. With task motivation, the process moves from task presentation to evaluation or satisfaction of the creative outcome.

According to Lehrer (2012:6-7), every creative journey begins with a problem and a feeling of frustration and in gaining artistic and creative acumen, there has to be a block before there can be a breakthrough. While Csikszentmihalyi (1996:345) is of the opinion that the most fundamental difference in the amount of creativity acumen displayed by an individual lies in the uncommitted attention they have in surplus to deal with new alternatives and possibilities. Latent creativity acumen lies in learning to develop *what we pay attention to* and *the intention to be engaged* in creating something new.

4.2 THE CONCEPT OF CREATIVITY, ACCORDING TO THE GRADE 11 VISUAL ART LEARNERS

Reflections on creativity were verbalised by the grade 11 learners themselves, across the study, for instance, Participant 4 stated: “Creativity is the ability to imagine. It is the ability to see images and be able to apply them to canvas or any piece [of work]”. Participant 6 said, “Creativity is the faculty you use to allow your inner self to be free. It liberates your soul and shows the depths of your mind – it reveals your true mind-set”. Participant 3 said, “Visual Art allows me to show my individuality in a free, non-judgemental space”. The context in which they reflected on Visual Art was specific to the creativity acumen with the common perception of being related to artistic creation as they experienced it in the school environment.

Other verbalised ideas from learners included the concepts of “open-mind”, “self-expression”, “visualisation”, “unique mind creation”, “creative perception”, “personal preference and interest”, “new and different perspectives “ and “art as a piece of self-reflection”. These concepts lend themselves to creativity-relevant processes, art-relevant skills as well as task motivation throughout the creation of art.

This chapter begins with the analysis and interpretation of the questionnaires on creativity. The results of the pre- and post-art creation questionnaires are presented both graphically and analysed descriptively as part of the process-oriented relationship between creativity acumen and art creation.

4.3 RESULTS OF THE QUESTIONNAIRES

Each participant was requested to complete the creativity questionnaire pre- and post-art creation. The aim of the questionnaire was to discover where and how the art learner experiences and self-assesses the use of the different creative phases during the tasks of creating Visual Art pieces, such as a formal drawing, a collage and three paintings.

The six phases discussed here in the creative process can be compared to the art learner's toolbox of creativity-relevant processes and art-relevant skills as part of his/her creativity acumen. In practice, an individual tends to have preferences for some phases over others (Petty 1996). If the art learner makes the decision to use the phase most appropriate to a successful outcome, then the intention to create requires the appropriate mind-set and creative thinking. The learner had to transform ideas into creative actions which made those ideas visible in the art created. One of the main difficulties when creating something new or when engaged in creative tasks is that the different creative phases required different, even opposite 'mind-sets', which was difficult to sustain without deliberate effort.

While the absolute scores of the 'agree' or 'disagree' totals are not necessarily meaningful on their own, the relative scores can be meaningful. The separate questions under each phase of the questionnaire gave an indication of where each participant spent his or her time, namely the predominant phases, during the process of art creation. The graphic representation of creativity-relevant processes and art-relevant skills, both pre- and post-art creation are shown below (see **Graph 1. 1 to Graph 6. 2**). This gave some insight into the Visual Art learner's thinking when engaged with the creative process. The agreement with the various items in the questionnaire possibly indicated the predominant phases relied on to create Visual Art-works, while disagreement with particular questions or items possibly pointed to a developmental area in both the art-skills and latent creativity acumen. The decisions made in application of the creative process were important to the quality of the creative outcome.

Creativity acumen and creative performance in art creation emerges from three necessary components, from combinations of innate skills (art-relevant skills), learned abilities and task attitudes (Amabile 1996:25). The data from the research participants' responses both before starting with the art assignment as well as after completion are graphically represented below and described according to the participants' responses in the questionnaire items according to creativity-relevant processes. Pseudonyms are used.

4.3.1 Creativity questionnaire graphic results and findings per participant

Creativity questionnaire results per participant: The detailed questionnaire results are reflected in **Addendum J**.

4.3.1.1 Summary of the creativity-relevant processes for participant 1: Betty

The following was highlighted from the participant's responses to the questionnaire items:

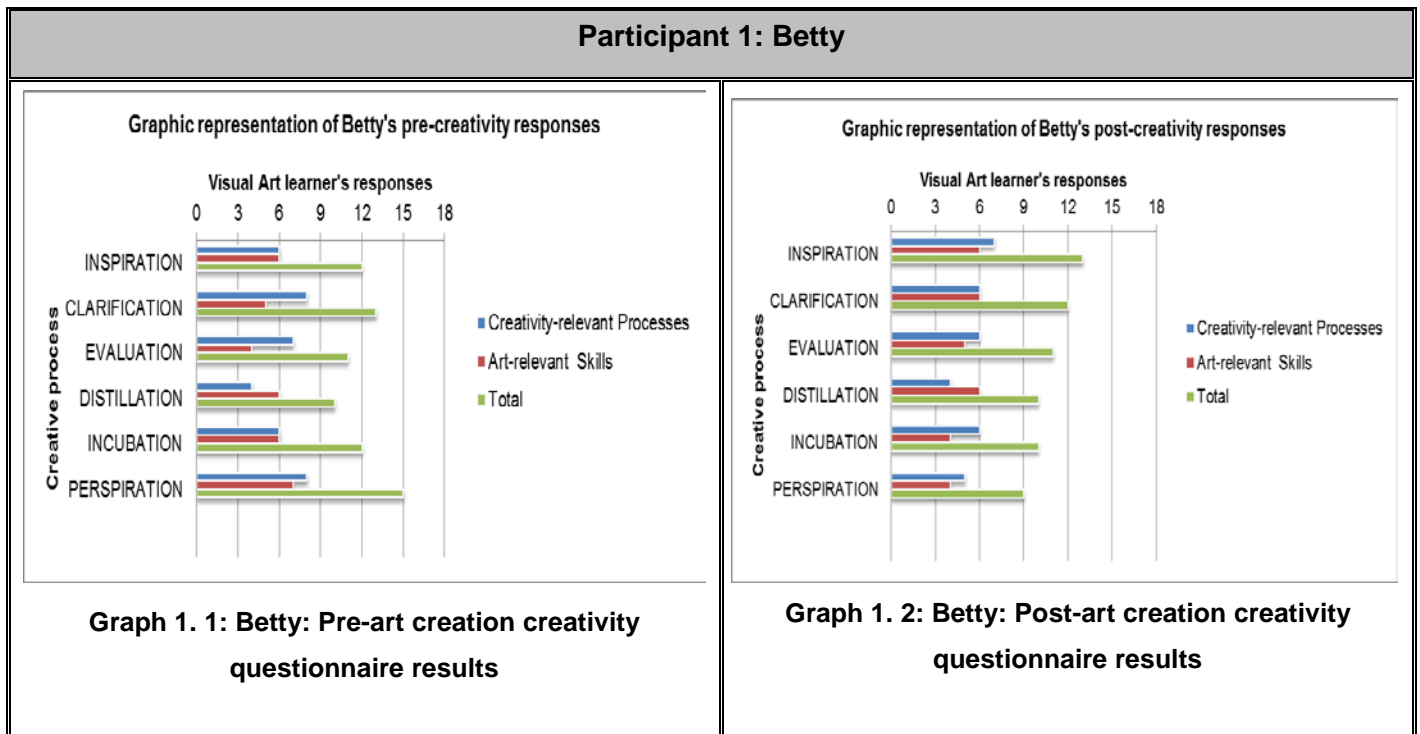


Table 4. 1: Creativity questionnaire findings for participant 1: Betty

<i>CREATIVITY-RELEVANT RESPONSES</i>		CREATIVE PHASES	<i>ART-RELEVANT SKILLS RESPONSES</i>	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
Betty struggled initially to be open and flexible to the new presented theme.	Betty used her own prior knowledge by using the analogy of sweets and cakes to endorse the idea of gluttony as sin.	INSPIRATION	Betty conveyed a more open approach to new ideas post-art creation than pre-art creation (see Graph 1. 1)	Betty used some heuristic approach. She used similar art skills for her visual creations throughout her art creations.
Betty used the creative thinking strategy of questioning which paths to take by referring to the her visual references, such as the collage often.	Betty displayed creative perception, by 'personalising' and focusing her attention on details of interest to her (see Graph 1. 2)	CLARIFICATION	Betty applied the creative process by clarifying the meaning of the theme of 'sins' by understanding the ambiguity of gluttony as being served in tempting ways (see Addendum H).	Betty responded with interest to the meaning of the art theme, there was an increase in clarifying the skills used when creating art post-creation.

CREATIVITY-RELEVANT RESPONSES			ART- RELEVANT RESPONSES	
Pre-art creation	Post-art creation		Pre-art creation	Post-art creation
Betty's pre-creation responses impress her self-criticism of her work. Betty's responses show that she will reviewed her art-work as it develops.	She evaluated her art creations mainly on focusing on improvement and learning from mistakes.	EVALUATION	Betty's evaluation throughout applying the creative process remained relatively stable. This was indicative of her planning which she adhered to.	Betty's evaluation of her art-skills has increased post-creation (see Graph 1. 2).
Betty responded with disagreement to experimenting with new and unknown ideas freely. She conveyed some anxiety with freedom of choice due to her high expectations.	Betty responses show that she is unwilling to take risks or experiment too much when creating art. Her responses remained the same both pre-and post-art creation.	DISTILLATION	Betty's higher pre-art-skills in the distillation phase conveys that she is able to grasp and realize the essence of the concept (see Graph 1. 1)	Betty did not experiment too much with different strategies and generally stuck to what she knew. Her responses were the same for pre- and post creation (see Graph 1. 1 & Graph 1. 2)
Betty pre-creation responses convey her ability to step away from her art-work at times. She re-iterates that she will review her work as it develops.	Betty responds post-creation that her reviews of the completed works have diminished (see Error! Reference source not found.). Yet the same value post-creation, conveys that she thinks of her art-work after completion.	INCUBATION	The Anxiety and lower self-belief is evident in lower scores in post-creation. Betty had used elaboration and mulling over ideas to her advantage.	Betty responses make known that the art-skills are lower due to finishing the art-works that have been assigned. The work session has ended.
Betty's responses show that will persevere with drafts and in meeting deadlines in the creative tasks assigned.	Betty's responses show less perseverance post-creation as is to be expected.	PERSPIRATION	Betty's responses show that she feels positive towards the task ahead and that drafts will be done to perfect the creative tasks.	Betty disagreed that the re-drafts had been done as first expected in pre-creation. Betty agreed that commitment and perseverance with the task does pay off in the end.

The responses were analysed and described into the possible relationship between creativity acumen and Visual Art creation as experienced by participant 1: Betty.

Betty agreed that ideas are unpredictable and although she felt some initial discomfort with a 'crazy idea' in pre-creation, Betty had increased her level of inspiration to be skilled in generating new ideas and the acumen to execute those ideas visually by post-art creation. This indicated that the learner's initial struggle with spontaneous responses to creative tasks had developed into a more open approach to different perspectives by post-art creation. Betty indicated in her responses that she initially accepted the first ideas she mentally deployed, rather than playing with more ideas (by selecting alternative paths to solution). In order to develop her initial ideas appropriately, harsh judgement prevented her from experimenting with the creativity-relevant processes fully. This participant displayed higher interest in clarifying the purpose of the task (pre-creation), which included

visual inquiry and creative perception when developing her creative ideas and artistic decisions to execute them. The learner’s ability to evaluate her own art development over time was based mainly on how to improve her work, and she indicated being self-critical of her own work. She engaged equally in the evaluation phase during both pre- and post-art creations. She used the ‘distillation’ phase fairly equally, which includes risk-taking when amalgamating her ideas and displaying originality of such ideas. Her responses indicated indecision with which criteria to use when selecting a path to follow (pre-creation) but development had occurred (in art-relevant skills) post-creation. Her responses denote that she was willing to clarify what she had accomplished, when reflecting on her art-work post-creation, with particular attention to improving on skills and understanding.

4.3.1.2 Summary of the creativity-relevant processes for participant 2: Charles

The following was highlighted from the participant’s responses to the questionnaire items:

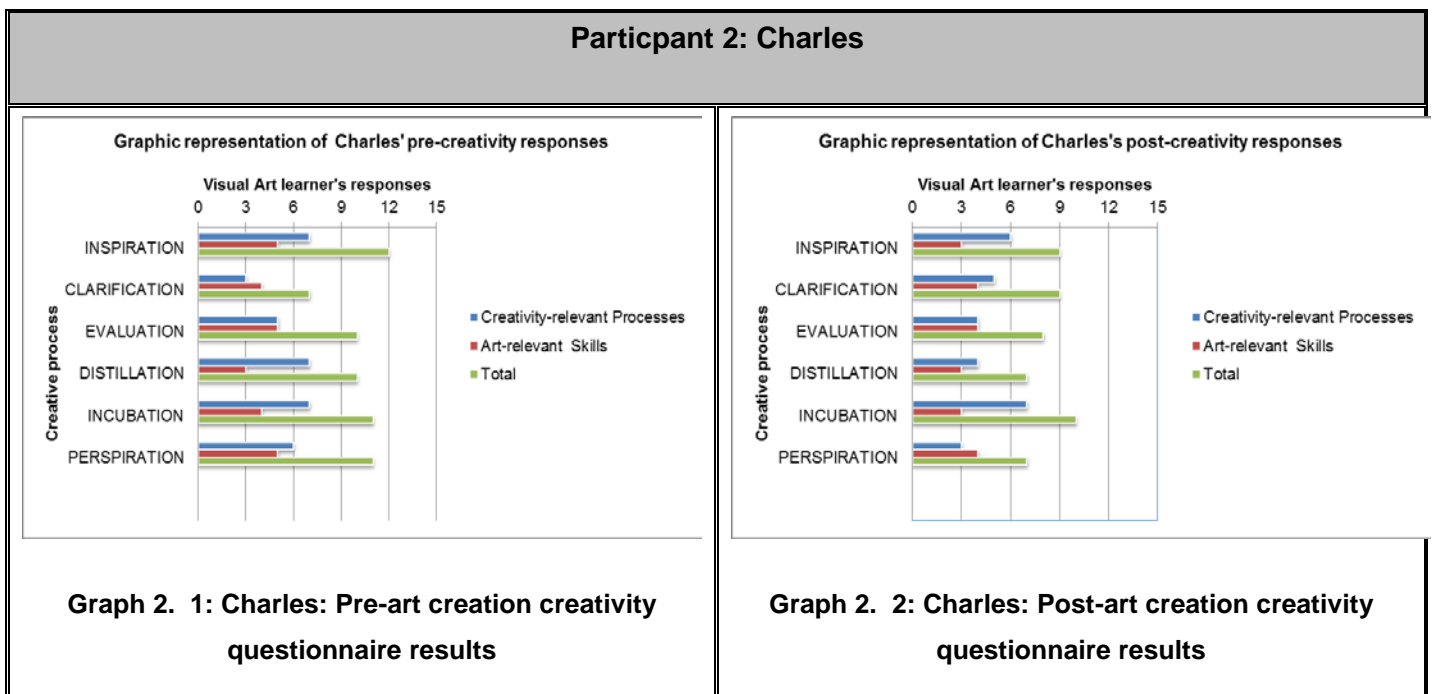


Table 4. 2: Creativity questionnaire findings for participant 2: Charles

CREATIVITY-RELEVANT RESPONSES		CREATIVE PHASES	ART-RELEVANT SKILLS RESPONSES	
Pre-art creation	Post-art creation		Pre-art creation	Post-art creation
Charles' responses denote he is open and flexible to the new ideas. His responses elicit the fact that he is not self-critical.	Charles' idea generation is slightly less at post-art creation, where he conveyed his constructive dissatisfaction with his initial attempts by disagreeing with taking time to research ideas.	INSPIRATION	Charles applied the creative process by using different art skills and techniques (see Photo B15 - 1).	Charles response showed he preferred to express his own ideas and his interest was not initially provoked.
Charles's responses convey he has innovative ideas and will use flexibility and fluency in the creative thinking hierarchy when deciding how to portray his art visually.	Charles conveyed his constructive dissatisfaction with his initial attempts by disagreeing with taking time to research ideas.	CLARIFICATION	Charles responses show a higher acumen for clarifying the purpose of the creative theme presented post-art creation (see Graph 2. 2).	Charles responded with questioning and reframing the art theme, with an increase in clarifying the skills used and what it takes when creating art, post-creation.
Charles' pre-creation responses show he is not self-critical of his art. This indicates that he will evaluate the work as it develops and not the worker.	Charles' evaluation of the creativity-relevant process had diminished post-art creation. This indicated his willingness to review his progress in the evaluation of the work.	EVALUATION	Charles' responses indicated he would have preferred to not conform to a theme. He responded by disagreeing with checking all tasks carefully, he wanted freedom of choice.	Charles' post-creation evaluation of his art skills are lower due to him being unable to ignore external opinion of his work, according to his response.
Charles' higher pre-creation responses conveyed his experimentation with more unusual ideas in realising the essence of the concept.	Charles' higher creativity process responses show that he was willing to take risks or experiment with which ideas to pursue (see Graph 2. 1).	DISTILLATION	Charles responded with disagreement in being clear on which art criteria to use when creating Visual Art. He also did not agree with doing re-drafts to get things right.	Charles' responses imply he experimented with different strategies and attempted to face challenges with autonomy in his art-works.
Charles' responses convey his ability to step away from his art-work at times. This suggests that he will review his work as it develops.	Charles' greater post-creation responses suggest that he is still reviewing the work on and after completion (see Graph 2. 2).	INCUBATION	Charles' responses indicated that he reviewed his work by building on self-trust. He indicated that he did reflect on work between the work sessions.	Charles' responses are lower due to finishing the art-works that have been assigned.
Charles responded that he will persevere in meeting deadlines in the creative tasks assigned.	Charles' responses show lowered perseverance post-creation as he disagreed with re-drafts helping with art creations.	PERSPIRATION	Charles' responses indicated that he felt positive towards the task ahead.	Charles disagreed that if material or skills had not worked out that it could just be corrected later. He agreed that commitment and perseverance of the task does pay off in the end.

The responses are analysed and described into the creativity processes as experienced by participant 2: Charles.

Charles strongly agreed that his ideas were unpredictable. A higher pre-art creation score in the ‘inspiration’ phase indicated his spontaneous and open-ended response to generating new ideas, while post-creation, Charles had realised that he had not called on prior art knowledge to assist him. He was less interested in the ‘clarification’ phase by looking for the meaning and new perspectives (pre-art creation), but by post- art creation, was more interested in clarifying concepts and agreed that the essence of an art-work often evolves and develops as one works on it (see **Graph 2. 2**). The evaluation score indicates the learner evaluated his art-work initially on how to improve it, and post-creation on learning from mistakes, at the outcome of his efforts. Charles was not critical of his own work throughout the art creation process. He did however agree that he was unable to ignore other’s evaluations of his work, and had difficulty with his own evaluation of the work. His responses in the ‘distillation’ phase denoted his preference for enigmatic ideas and he alluded that he is happy with ‘crazy’ ideas sometimes. He agreed that he preferred the ideas that people do not expect, but was not always clear on the criteria to use and therefore may have difficulty surmounting obstacles in his art-work. Hence the lower score in the ‘distillation’ phase post-creation, as he gained insight into the visual message (what to include or exclude too). He did not like the research part of art creation (pre- and post-creation). The learner’s responses indicated indecision when choosing a path to follow (pre-creation) but development had occurred post-creation.

4.3.1.3 Summary of the creativity-relevant processes for participant 3: Nkosi

The following was highlighted from the participant’s responses to the questionnaire items:

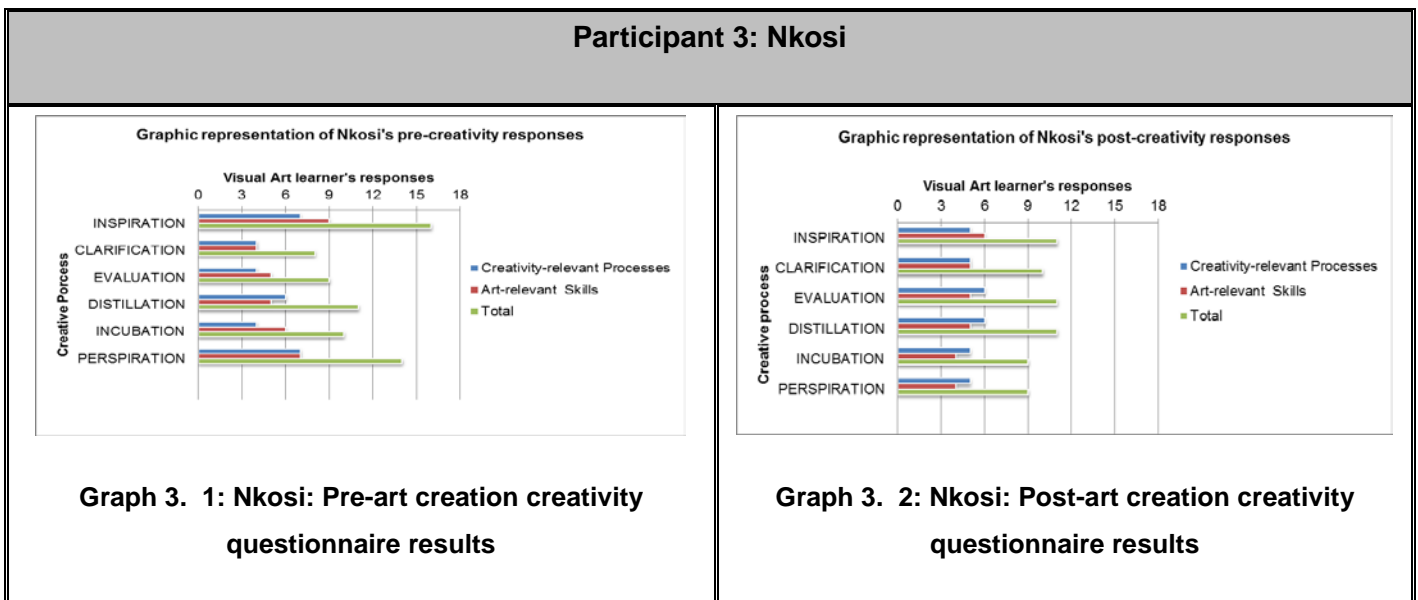


Table 4. 3: Creativity questionnaire findings for participant 3: Nkosi

<i>CREATIVITY-RELEVANT RESPONSES</i>		<i>CREATIVE PHASES</i>	<i>ART-RELEVANT SKILLS RESPONSES</i>	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
Nkosi's responses indicate she was extremely willing to be open to new ideas and take some risks as she agreed that she is not surprised by unusual ideas (see Graph 3. 1).	Nkosi responded post-creation that she has difficulty with coming up with ideas spontaneously as she is self-critical of her work.	INSPIRATION	Nkosi explored different art skills, materials and techniques (see Photo C10 - 1). She agreed she explores previous knowledge pre-art creation.	Nkosi's responses suggested she did take her time in researching ideas. She was interested in playing with art skills.
Nkosi's responses suggested that she would not refer to the art presented often or review the main purpose of the creation. She used fluency in the creative thinking hierarchy by exploring diverse approaches visually in her art.	Nkosi's responses show she had focused her attention on the creative outcome of the decisions she had pursued by post-art creation. She agreed that she had asked what she was trying to accomplish in the tasks set.	CLARIFICATION	Nkosi responded with realisation and an increase in clarifying the skills used when creating art as well as the understanding of a new concept.	Nkosi's responses indicate a higher acumen for clarifying the purpose of the creative theme presented post-art creation (see Graph 3. 2).
Nkosi's evaluation responses point to her self-criticism of her creative work, with her basing her review on how aesthetically pleasing the art-work is and her not learning from earlier mistakes.	Nkosi's post-creation response indicated that she accepted obstacles as part of the creative process and was clear on her 'path to solution' with some risk-taking.	EVALUATION	Nkosi responded by indicating she had abandoned drafts when she felt it was not resolving the Visual Art she intended to create (see Photo C12 - 2).	Her post-creation evaluation of art skills are the same as her pre-creation responses which show she knew what she liked in her art and was led by that.
Nkosi's responses in this phase of creative work remain equal throughout her experimentation with the visual portrayal of her ideas.	Nkosi agreed post-creation that the best ideas generated may require experimenting with turning the obstacles in the creation into goals.	DISTILLATION	Nkosi responded with disagreement in being clear on which art criteria to use when creating Visual Art.	Nkosi's responses imply she experimented with different strategies and attempted to face challenges with autonomy in her art creations.
Nkosi's pre-creation responses convey that she actually allowed random associations develop by not reviewing her created art-works immediately.	Nkosi's responses convey that she might still be reviewing the difficulties and obstacles faced when applying the creative process.	INCUBATION	Nkosi reviewed her work by building on self-trust by reflecting on work between the art-work sessions.	Nkosi's responses indicated that she mulled over the creative work and ideas after completion of the tasks.
Nkosi's responses indicate her will to meet deadlines and that he will persevere in meeting deadlines in the creative tasks assigned.	Nkosi's responses show lowered perseverance post-creation as she disagreed that she had done re-drafts to help with the final creative outcome.	PERSPIRATION	Nkosi's responses show that she did not adhere to previous evaluations and may have abandoned some ideas and art-works.	She agreed that commitment and perseverance of the task does pay off in the end.

The responses are analysed and described into the creativity processes as experienced by participant 3: Nkosi. Nkosi's ideas were unpredictable and somewhat original. Her pre-art creation

score in the 'inspiration' phase denoted that she preferred to 'play' with ideas and to generate many ideas before deciding on which path to follow. The low 'clarification' score pre-art creation indicated that this learner may not clarify the ideas in the initial phases of art creation by visual inquiry and through planning ahead. However, once she had created the art pieces, she had a higher score and gained new perspectives from knowledge and art-relevant experience (post-creation). She gained insight and creative perception to not reject an idea out of hand (suspend judgement) simply because it contained some flaws, and even developed the 'not so good' ideas (post-creation). The learner's responses indicated that making artistic decisions and visual realisation from the art brief were not expanded initially (pre-art creation). In evaluating her art-work, her responses translated to being led by her own sound judgement of what was personally and aesthetically pleasing to her. She evaluated her work in on how to improve it (pre- and post-creation). She was not overly critical of her work and was not perturbed when an idea was a challenge to get right (pre- and post-art-creation). During 'evaluation' in pre-art creation, her responses indicated that she was not always willing to learn from mistakes, but indicated a willingness to learn from mistakes post-art creation. The learner also conveyed the inability to ignore others opinion of her work. She indicated an ability to detach from art-work during work sessions (both pre- and post-creation). While this learner indicated she is not always clear on which alternative paths to take, she did agree that with effort and perseverance with art-tasks.

4.3.1.4 Summary of the creativity-relevant processes for participant 4: Samantha

The following was highlighted from the participant's responses to the questionnaire items:

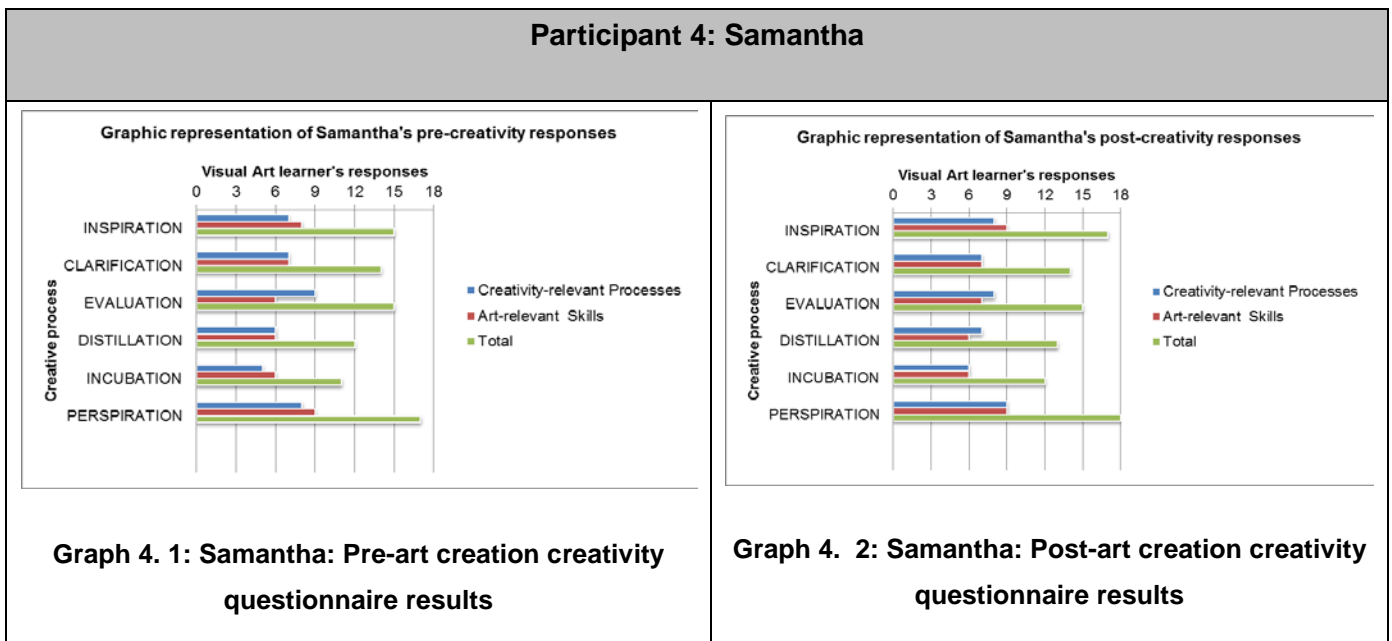


Table 4. 4: Creativity questionnaire findings for participant 4: Samantha

<i>CREATIVITY-RELEVANT RESPONSES</i>		<i>CREATIVE PHASES</i>	<i>ART-RELEVANT SKILLS RESPONSES</i>	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
Samantha's responses indicated she was extremely willing to be open to new ideas and take some risks as she agreed that she is not surprised by unusual ideas (see Graph 4. 1).	Samantha's post-creation responses convey that she prefers coming up with new ideas spontaneously. Her initial ideas were changed with her reviews.	INSPIRATION	Samantha's responses pointed to her wanting to 'play' with ideas and also take time to research ideas of her choice.	Samantha had developed her ideas by association and analogy by post creation. Her responses denote that she is more inspired to make changes and learn without imitation.
Samantha's responses suggested that she would refer to all art tasks carefully and review the main purpose of the creation. She used creative perception by exploring diverse approaches visually in her art and focussing on the experience.	Samantha's responses indicated equal efforts throughout her attention on the creative outcome with fluency (see Graph 4. 2). Samantha's responses indicated she was extremely willing to be open to new ideas and take some risks as she agreed that she is not surprised by unusual ideas (see Graph 4. 2). She agreed that she had asked what she was trying to accomplish in the tasks set.	CLARIFICATION	Samantha's responses indicated her planning, referral to the art task aided in clarifying the skills used when creating art. She also indicated understanding a new concept and the development of the art created, by tolerating ambiguity or complexities.	Samantha responded with equal acumen for clarifying the purpose of the creative theme presented post-art creation.
Samantha's responses denote her self-criticism of her creative work, with her main goal on how to improve and learning from earlier mistakes.	Samantha's post-creation response indicated that she accepted obstacles during application of the creative process and was clear on her 'path to solution' due to her convictions of her own preferences.	EVALUATION	Samantha's pre-creation responses pointed to her being critical of her own work and checking tasks carefully. She responded by stating that she was prepared to ignore external opinion of her art-work.	Samantha's post-creation responses of art skills are slightly higher than her pre-creation responses which suggested that she reviewed her art by her judgement of how good it was and was led by that.
Samantha's responses point to the fact that she had not realised the essence of the concept pre-creation.	Samantha's higher creativity relevant post-creation responses indicated her amalgamation of a new concept by turning the obstacles in her creation into satisfactory goals.	DISTILLATION	Samantha responded with preference for unexpected outcomes in her art creations and showed that she did not mind trying to navigate challenges in the art-work.	Samantha's responses imply that she experimented with different strategies and art skills when facing challenges with autonomy in her art-works.
Samantha responded by conveying that she allowed random associations to develop by not reviewing her created art-works immediately but a few days later.	Her higher post-creation responses convey that she might have put the creative 'accidents' to good use by 'hatching' new ideas when applying the creative process.	INCUBATION	Samantha reviewed her work by building on self-trust by reflecting on work between the art-work sessions.	Her responses indicated that she mulled over the creative work and ideas after completion of the tasks.

<i>CREATIVITY-RELEVANT RESPONSES</i>		<i>CREATIVE PHASES</i>	<i>ART-RELEVANT SKILLS RESPONSES</i>	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
Samantha's responses indicate her will to be motivated to create and persevere in meeting deadlines in the creative tasks assigned.	Samantha's higher responses prove greater perseverance post-creation(see Graph 4. 2). She agreed that she had done re-drafts to help with the final creative outcome.	PERSPIRATION	Samantha responses point to previous evaluations being considered with redrafts to improve ideas and art-works.	She agreed that commitment and perseverance of the task does pay off in the end.

The responses are analysed and described into the creativity processes as experienced by participant 4: Samantha.

Samantha was surprised by the presented theme initially. She agreed her ideas were unpredictable, and strongly agreed that she preferred to approach the creative works with an open-ended response in 'playing' with those ideas in order to develop them (both pre- and post-creation). She strongly agreed that she became deeply engrossed with the work (both pre- and post-creation). Equal scores in the 'inspiration' and 'clarification' phases indicated that the learner was as inspired by an idea at completion of the creative work as she was at the beginning of the art creations. Her responses translated to her wanting to spend time researching ideas and thinking about the brief given (the 'incubation' phase). This participant's responses denoted that she would utilise the creative phase of 'clarification' to clear obstacles in her creative work by thinking about the idea or concept presented. She strongly agreed with clarifying the purpose and meaning of the creative task 'involvement' (both pre-and post-creation). Her responses to the 'evaluation' items indicated that she was critical of her own work and was pedantic about checking all tasks carefully, and would do drafts and re-drafts to get things right. This included reflections on previous evaluations (both pre- and post-art creation) and how the work could be developed and improved. This participant's responses indicated that 'evaluation' was reflective of the value and appropriateness of creative perception, and was executed consistently while creating art. Hence the equal graphic representations in the 'evaluation' phase both pre- and post- art creation. The learner's response denoted she was willing to learn from mistakes (pre- and post-creation) in order to reflect on progress and maximize competence (acumen). Her low score in the 'incubation' phase in pre- art creation indicated her difficulty in detaching from the art-work when involved in another activity and that she was often thinking about the work between work sessions. In the 'perspiration' phase, she felt positive and enthusiastic with full task interest and motivation, indicated by the high scores in this phase. The high post-art creation score in the 'perspiration' phase denotes continued enthusiasm.

4.3.1.5 Summary for creativity-relevant processes for participation 5: Dan

The following was highlighted from the participant’s responses to the questionnaire items:

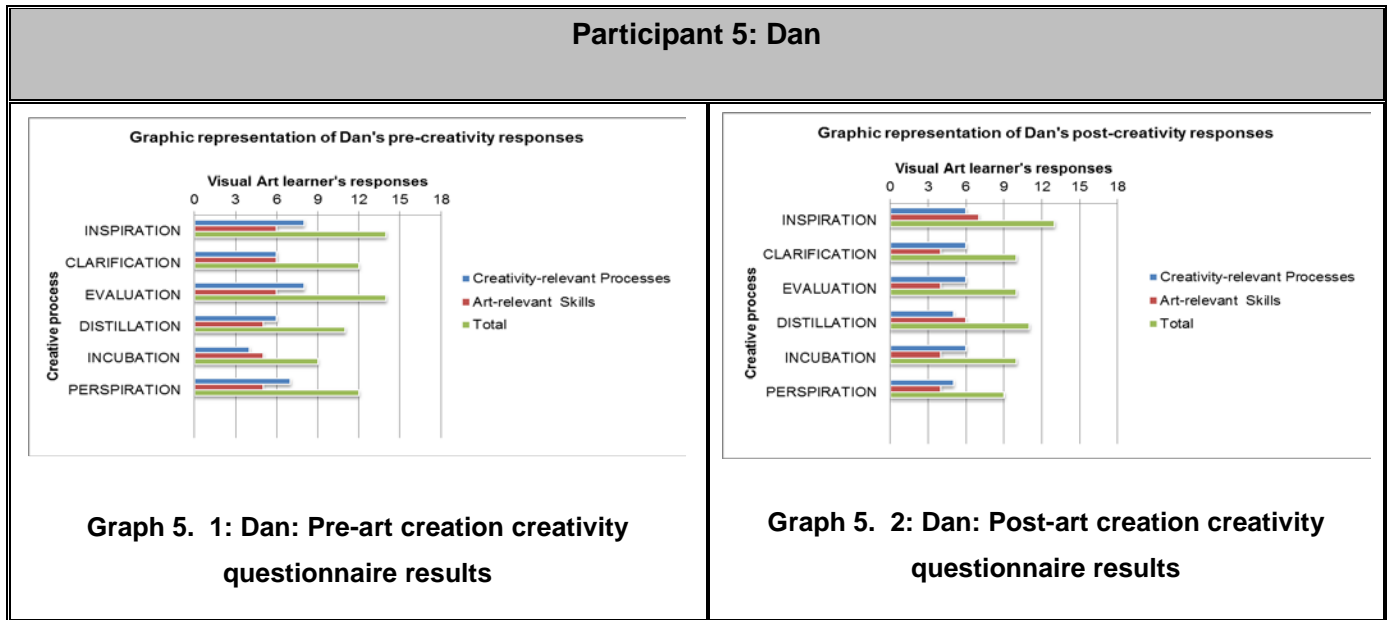


Table 4. 5: Creativity questionnaire findings for participant 5: Dan

CREATIVITY-RELEVANT RESPONSES		CREATIVE PHASES	ART-RELEVANT SKILLS RESPONSES	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
<p>Dan responded with a willingness to new ideas and he agreed that he is not surprised by unusual ideas and likes to research such ideas (see Graph 5. 1).</p>	<p>His reduced creativity relevant post-creation responses convey that he was fearful of taking risks and changing his focus. His initial ideas were later explored and changed with his reviews.</p>	INSPIRATION	<p>Dan’s responses pointed to him toying with his initial ideas and researching ideas of his choice.</p>	<p>Dan had developed ideas by association and analogy by post creation. His responses denote that he is more inspired to make changes and learn without imitation.</p>
<p>Dan’s responses suggested that he would refer to all art tasks carefully and would use creative perception by exploring alternative approaches visually in his art and focussing on the experience.</p>	<p>Dan’s responses indicated equal efforts throughout his attention on the creative outcome with fluency (see Graph 5. 1).</p>	CLARIFICATION	<p>Dan’s responses indicated his planning, referral to the art task aided in clarifying the skills used when creating art. He also indicated understanding a new concept and the development of the art created, by tolerating ambiguity or complexities.</p>	<p>Dan responded with equal acumen for clarifying the purpose of the creative theme presented post-art creation (see Graph 5. 2).</p>

<i>CREATIVITY-RELEVANT RESPONSES</i>		<i>CREATIVE PHASES</i>	<i>ART-RELEVANT SKILLS RESPONSES</i>	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
Dan's responses denote he was critical of his own creative work. His main evaluation was based on how to improve creative execution and learn from earlier mistakes.	Dan's increased post-creation tallied responses indicated that he accepted obstacles during application of the creative process. He would continue to review his work to follow the convictions of his own preferences.	EVALUATION	Dan's pre-art responses pointed to him taking his time to find art strategies to succeed. He responded by stating that he was prepared to ignore external opinion of his art-work if he was satisfied with his progress.	Dan's post-creation responses of art skills are lower than his pre-creation responses which showed that he was despondent with his art-work at times, when things did not work out. He did however learn to suspend judgement post-creation.
Dan's responses conveyed that he was working towards realising the essence of the concept presented pre-creation.	Dan's creativity relevant post-creation responses indicated a drop in amalgamating new ideas in his creations into satisfactory goals. He had focused on some weaknesses but agreed to being willing to accept the challenges when applying the creative process.	DISTILLATION	Dan responses imply his preference for unexpected outcomes in his art creations and showed that he was unsure before starting with the art-tasks as to how to navigate challenges in the art-work.	Dan's responses indicated increased 'distillation' of his art skills as he experimented with different strategies and choosing which ideas to pursue or abandon when facing challenges with autonomy in his art-works. This showed development in his art-skills.
Dan conveyed through his pre-creativity responses that he would not allow random associations to develop by reviewing his art-works immediately. This meant he may not 'brew' over ideas.	Dan's raised creativity-relevant responses post-art creation indicated that he had managed to avoid anxiety and start building self-trust in his work, by reflecting on the challenges he had faced and the ideas he had released when applying the creative process (see Graph 5. 2). This assisted his creative development.	INCUBATION	Dan's art-skill responses imply that he did not reflect and wander about the tasks by reflecting on his art-work between work sessions. Pre-creation he disagreed that review of the art-tasks was valuable to solving artistic dilemmas.	Dan's post creation responses showed that he no longer reflected on the art-work as the art work was completed. He had agreed that review while away from the art-tasks were indeed valuable in resolving an artistic problem post-creation.
Dan's responses indicated he was motivated and positive to create and persevere in doing drafts and meeting deadlines in the creative tasks assigned.	Dan's lower responses indicated less perseverance post-creation (see Graph 5. 2). He disagreed that he had responded previous drafts to help with the final creative outcome. This related to the 'incubation' phase.	PERSPIRATION	Dan's responses point to previous evaluations not being considered with redrafts to improve ideas and art-works. This lends itself to his despondency with an artistic outcome.	His self-criticism of his work has led to disagreement that perseverance of the task will pay off in the end. His lowered enthusiasm indicated this.

The responses are analysed and described into the creativity processes as experienced by participant 5: Dan.

Dan agreed that his ideas were workable, and could not have been predicted. His responses indicated that he was reticent in spending too much time thinking about the concepts of the task and how the ‘parts’ of the assignment relate to each other. His high score in ‘clarification’ before engaging in the art work indicated he was initially open to new perspectives and receptive to new ideas (pre-art creation). His responses to the ‘evaluation’ statements indicated insight and creative perception in not rejecting an idea out of hand because it contained some flaws, with the realisation that even ‘not so good’ ideas could to be developed (post-art creation). He also disagreed that he may show adequate or sound judgement of his own art-work, due to indecision with which idea path to pursue, as a realisation post-creation. In the ‘distillation’ phase, his responses indicated his preference for turning an idea or concept into a visual message in his art works, as he conveyed, he will leave the ideas for a day or two before returning to work on it (the ‘incubation’ phase). He agreed that he thinks about the art-work before starting with the task and agreed that he detaches himself from the work completely (post-creation). This learner’s responses denoted that his persistence with creative tasks did not pay off as he disagreed with the statement that he was always positive and enthusiastic in creative tasks (post-creation). He showed a willingness to learn and develop, but on completion of the task he was no longer motivated.

4.3.1.6 Summary for creativity-relevant processes for participant 6: Leo

The following was highlighted from the participant’s responses to the questionnaire items:

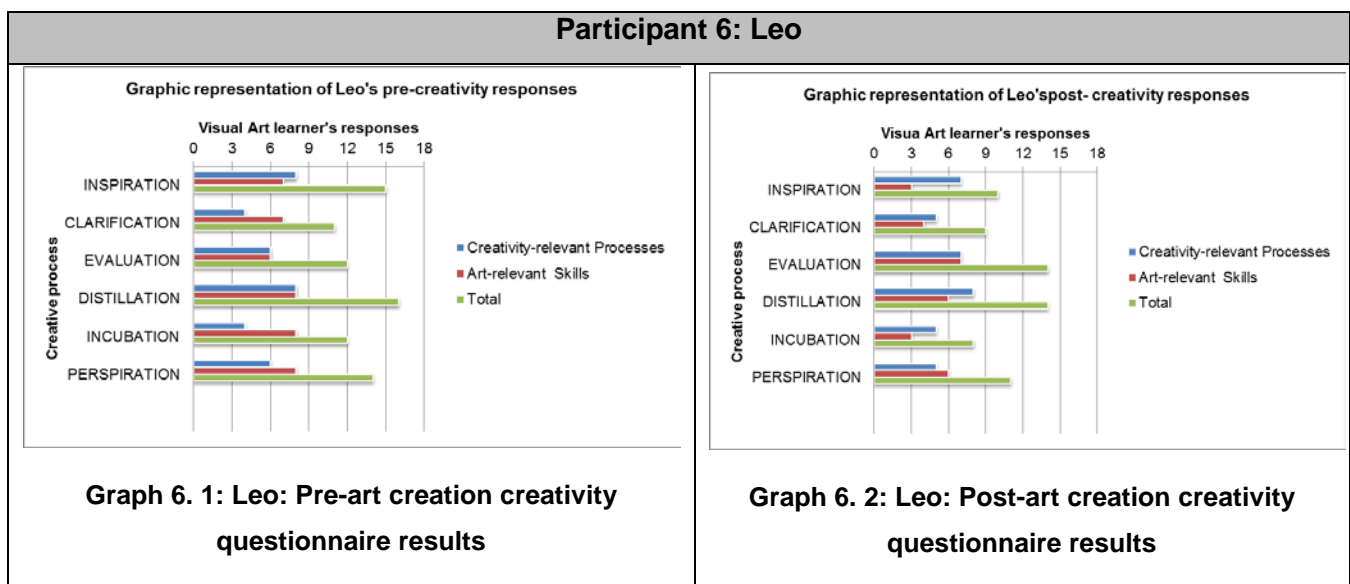


Table 4. 6: Creativity questionnaire findings for participant 6: Leo

<i>CREATIVITY-RELEVANT RESPONSES</i>		<i>CREATIVE PHASES</i>	<i>ART-RELEVANT SKILLS RESPONSES</i>	
<i>Pre-art creation</i>	<i>Post-art creation</i>		<i>Pre-art creation</i>	<i>Post-art creation</i>
Leo responded with willingness to new ideas and he agreed that he is not surprised by unusual ideas and likes to research such ideas (see Graph 6. 1).	His reduced creativity relevant post-creation responses convey that he did not 'play' with the ideas he deployed. His initial ideas were not explored and changed with his reviews.	INSPIRATION	Leo's low art-skills responses pointed to him not toying with his initial ideas and not changing focus in order to provoke new analogies. This suggested that he may not experiment fully with new ideas.	Leo's diminished responses imply he had not developed ideas by association and analogy by post creation. His responses denote that he is less inspired to make changes and learn without imitation.
Leo's responses indicated his impatience when clarifying the relative parts (creative perception) to art creation. He disagreed that he questions (through the hierarchy of creative thinking) his goals.	Leo's creativity-relevant responses post-creation indicated greater focus on the creative outcome with decisions pursued, without reflecting on the purpose of task (see Graph 6. 2).	CLARIFICATION	Leo's art-skills responses indicated that he was more interested in clarifying artistic accomplishments through thinking about the art brief often.	Leo's responses in clarifying the purpose of the creative tasks post-art creation had diminished as his 'tunnel vision' had influenced his artistic outcome (see Graph 6. 2).
Leo's responses denote he was critical of his own creative work. His main goal was based on how to improve the current value of his work and learn from earlier mistakes.	Leo's higher post-creation responses indicated that he reviewed his preferences during application of the creative process with the ability to resist self-criticism. His responses denoted preference for non-conformity.	EVALUATION	Leo's pre-art responses pointed to him taking his time to find art strategies to succeed. He responded pre-creation by indicating that he was initially not prepared to ignore external opinion of his art even if he was satisfied with his work.	Leo's post-creation responses of art skills are higher than his pre-creation responses. This showed that he was satisfied with his own judgement and was led by that. This suggested development of his art-skills and his self-confidence.
Leo's responses pre-creation suggested that he would be happy to generate unexpected idea and meet with challenges head-on.	Leo's higher post creativity-relevant responses indicated he had managed transitions and amalgamation of a new concept (sin) by experimenting with challenges while using his own knowledge.	DISTILLATION	Leo responded with a preference for unexpected outcomes in his art creations and showed that he did not mind trying to navigate challenges in the art-work.	Leo's lower post art-skill responses imply that he did not experiment with different artistic strategies and art skills when facing challenges. He did however convey autonomy by unusual portrayals.
Leo's pre-creation responses indicated that he would not allow time between work sessions for random associations in order to develop his art-works. He proposed he would review his ideas immediately they were deployed.	Leo's greater post-art creation response indicated that he had managed reflecting on his 'creative accidents' when applying the creative process. He had reviewed the challenges he had faced and reflected on the released ideas. This assisted creative development.	INCUBATION	Leo's pre-creation art-skills responses conveyed that he would spend much time thinking about his art-work between sessions.	His post-creation responses indicated that he no longer agreed that it was beneficial to mull over the creative work and ideas after completion of the tasks.

<p>Leo's responses indicated he was motivated to get involved in creative tasks and persevere in completing the creative tasks assigned.</p>	<p>Leo's responses prove dipped effort post-creation (see Graph 6. 2). He disagreed that he had done re-drafts to help with the final creative outcome.</p>	<p>PERSPIRATION</p>	<p>Leo's responses suggested he spent more time persevering with art-skills than with the application of the creative process. to previous evaluations being considered with redrafts to improve ideas and art-works.</p>	<p>Leo's responses showed his <i>commitment and perseverance</i> to the task as paying off in the end. He disagreed that artistic errors could just be 'corrected' down the line.</p>
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The responses were analysed and described into the creativity processes as experienced by participant 6: Leo.

Leo's ideas were unpredictable and he was open to 'playing' with ideas (indicated by his high 'inspiration' score pre-creation). Post-creation he agreed that he might follow the first ideas without generating new ones (post-art creation). He indicated impatience with the clarification of the art tasks and searching for exceptions in making creative decisions, as he is not always clear as to what art-relevant criteria to use in pursuing ideas (post-creation). His responses in the 'evaluation' phase denoted his ability to execute visual inquiry and think about how to improve his art-work (pre-creation) but realised he did not like taking time to research for ideas (post-creation). He indicated that he was not willing to evaluate his art-work immediately; he left it for a day or two and then resumed working on it. It appeared from his responses that he was critical of his own work and will continue to elaborate or reflect on what he had created. While he agreed pre-art creation, that he would check all the tasks critically, he disagreed post-creation that he 'checked' his creative tasks. He indicated his inability to ignore others' opinions of his own work (pre-creation). When stuck, he does not step back to re-evaluate the main purpose of art creation (pre- and post-creation). In the 'incubation' phase, he indicated that he preferred to take time off between work sessions with the preference to detach from art work (post-creation), but he had disagreed with these statements pre-art creation. This gave him time to allow ideas to take a foothold before developing a creative idea. The following summarises the participant's responses to the creativity questionnaire items:

4.3.2 Summarised report of the findings of the creativity questionnaire

The creativity questionnaire was used as a self-assessment instrument of the manner in which the participants responded to creativity-relevant processes as well as art-relevant skills, namely, realisation of a concept and selection of different paths to a creative solution. The creative response is as individual as the learner him/herself. The questionnaire was however, limited in the amount of information that could be gained from it, though it was useful to verify the relevant-creative processes and artistic components (thinking about the concepts and learning from mistakes) used by the Visual Art learners in gaining insight into the relationship between creativity-relevant processes, and creating something new, or that which has not been done before. These creativity-relevant processes act as

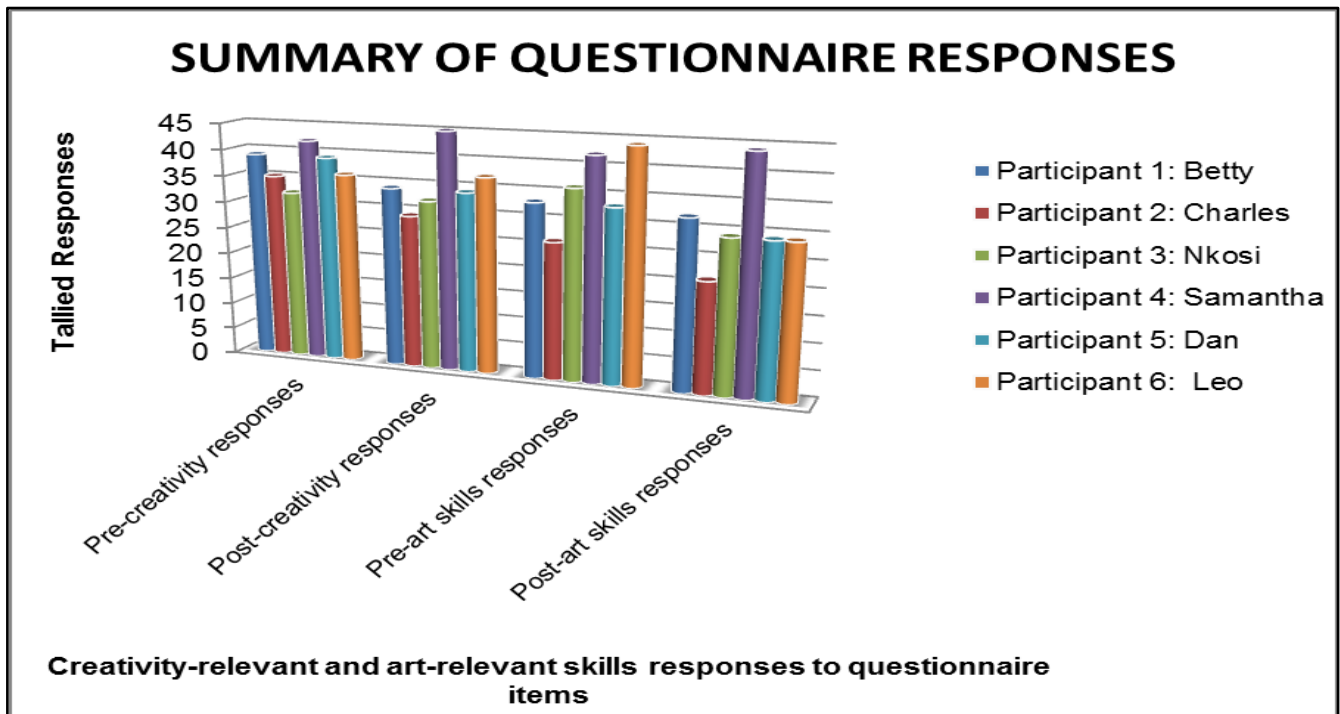
the executive controller during response generation which influence the way in which the responses (to a creative stimulus or artistic endeavour) will proceed (Amabile 1983:83). The division of the behaviour of art creation into different phases tends to imply that the final culmination of the creative process is the end creation. But in essence, the creative process may never culminate in a completed product. But inevitable changes to an initial idea or concept can be seen as developing significantly towards progress while learning from mistakes. A research participant's use of the creativity-relevant processes could determine the way in which his or her creative response and acumen will develop.

All six participants went through all the creative phases. The stages in the creativity-relevant processes as outlined by Petty (1996) began with being or feeling inspired. Inspiration commences with choices and decisions to generate heuristics or exploration of new pathways. Open-ended idea-generation is about accepting ideas (even if they seem strange) so that one is open to new ways and perspectives. All six participants executed creative ideas through creative thinking (see **Table 2. 2**). While the creative task generation as proposed by Amabile (1996) allows for creative idea execution by applying the creative process (see **Figure 2. 3**), the application of the creative process in turn allows for the actual execution of the learner's ideas and visual expression.

The participants individual graphs provide evidence that idea-generation was present for all research candidates in pre-art creation. The responses in the questionnaire elucidated the following: Participants 1, 2 and 5 had lower post-creativity responses, reflected by their disagreement that challenges and obstacles in the art-work or idea-generation were welcome. Participant 3 and 6 had equivalent creativity-relevant responses both pre- and post-art creation, indicative of consistent work-style, open-ended response to new ideas and grasp of complexity in expressing ideas as a visual message. Participant 4 was the only Visual Art learner to show an increase in the application of creativity-relevant processes. She used her own personal knowledge to represent her understanding of a new concept such as 'sin'. Where the participants' pre-creation scores were greater than the post-creation scores, this was an indication of the art learner's initial perception of how he/she would approach and execute the task, as well as their end satisfaction with the creative outcome. These Visual Art learners needed to be strategic (using heuristics¹), and pursue the chosen ideas with clarity. All of the participants agreed that it takes time to get things right, but with effort, 'they will get there in the end'. Three participants(50%) agreed that they were unable to ignore external opinion of their work, while three participants (50%) agreed that they were able to ignore external evaluation of their work. All participants agreed that they managed to learn from their mistakes. Participants 2,3, 5 and 6 responses showed they were unclear as to which relevant art-skills to use when deciding on which

¹ Heuristics is proceeding to an artistic solution by 'trial and error' enabling a person to discover the meaning or purpose of the work for themselves.

ideas to develop. This was reflected in depreciated art-skills responses post-creation. The three lowest response rates in pre-creativity appear to relate to lower post-creation art skills responses. This would suggest these art learners (participant 2, 3 and 6) were less satisfied with the creative outcome too. This may be related to higher task motivation initially (pre-creation). For instance, participant 4, who had a higher score-rate post-creation may indicate her motivation had increased with success of the previous art outcomes. Motivation and positive enthusiasm was present in all six participants pre-creation, but had waned in four participants (1, 2, 3 and 5) post-creation. The art learner has to expect obstacles within the art creation and must at times detach him or herself from the art-work and trust his or her creative perception (the ability to see a new perspective). This could indicate the amount of effort put into the art creation, as all six participants agreed that trying hard enough over time will triumph in the end. All six participants unanimously agreed on the following, namely that, ideas are open-ended and unpredictable, that they all became deeply involved and received enjoyment from being fully engaged with the art creation tasks as they generated new ideas and perceptions. Each participant agreed that their understanding of the realised concept of 'sin' developed as they created the art works. Five out of six participants were self-critical of the creative work output, but agreed that perseverance pays off in the end. All the participants managed to learn from their mistakes and conveyed the willingness to improve throughout the application of the creative process.



Graph 6. 3: Graphic summary of creativity questionnaire responses

The questionnaire gave some important clues as to the Visual Art learners workstyle when applying the creative process, during the creative tasks. The creative process might not always imply progress, but the description of how art creation originated and evolved, conveyed the changes which took place over a school term. This was not a static process but a dynamic and circular account of the intricate events as the Visual Art learners proceeded through a drawing, collage, two experimental paintings and a final painting. This afforded me the opportunity to observe the artistic process in relating Visual Art creation to the art learners creativity expression and acumen.

4.4 OBSERVATIONAL DATA: THE PORTRAYAL OF THE INITIAL IDEA AND FORMAL DRAWINGS

The observational data was gleaned from passive observation in the art classroom of the creative processes. The observations started with the task presentation of the theme: “The Seven Deadly Sins” and an instruction (by the art educator) to give a written portrayal of the idea which the Visual Art learner will want to depict in visual images. The portrayal of the written ideas and the formal drawings from each participant are outlined below.

4.4.1 Task presentation: Initial idea portrayal and formal drawings

Firstly, the initial portrayal of an idea in the form of a written presentation of the chosen ‘sin’ to depict, gives the learner an opportunity to verbalise their thoughts, and to realise the concept through making creative choices (according to the art educator) and includes engaging with own inner dialogue of the objective outer world. This also launches the realisation of a concept by applying the creative process (described by the questionnaire). The findings of each participant are depicted below.

The formal drawings (pencil drawings of re-combined Visual Art elements), require the creativity-relevant process of inspiration and clarification to explore and experiment within the boundaries of the creative stimulus (visual reference of other artists work). This artistic process lends itself to an open-ended² response and creative heuristics, but is also controlled so that the adolescent art learner ‘does not completely let go’ (according to the art educator). This ties in with the ‘zone of proximal development’ where the first contact with a new concept or theme is presented to the art learner in the controlled space of being challenging on the one hand, but on the other hand being capable of successfully attained with support. The free association is a way of selecting one or two features among a visual project and making it the basis for a loosely related theme. This includes visual inquiry and visual deployment of images.

² Open-ended response is allowing for a spontaneous unstructured response by being adaptable to change

4.4.1.1 Results from the initial idea portrayal and formal drawings

The following results are descriptions of the ideas generated in written form and executed as a formal drawing to start the Visual Art creation assignment for the term. As mentioned in chapter 2, creativity begins with visual inquiry. In preparation for the paintings that the learners will create, they draw re-combinations of a visual reference to release an open-ended response.

Participant 1 - Betty

i) Written introduction to the idea(s)

Participant 1 decided to portray the sin of gluttony and uses the slogan: “How much is enough” to conjure a visual message. The written introduction for this art learner is as follows: “The most common error about gluttony is to think it only pertains to food, when in actual fact it is about the excess of anything (see **Addendum D**). Gluttony takes resources away and may impact on financial well-being”. The visual deployment of images to represent gluttony included the following; A man gorging himself, bottles of wine and food, large piece of meat, demons portrayed in roman times as eating rats and snakes and a large atrium with two people, lying down, engorged with and surrounded by food. This denotes the use of analogies from own knowledge in ‘imagining’ *gluttony* as an idea/concept. This is her realisation of the concept.

ii) Formal drawings

The participant’s response to the pencil drawing is reticent (not initially spontaneous). The artistic choices of which visual images to extrapolate from the reference, shows the acumen to see new perspectives as depicted in **Figure 4. 1** below. Visual elements were added (more books) and erased (the nested eye), which is evidence of selecting alternative paths. Many ‘personal touches’ were included in the final presentation (see **Photo A 2**), such as the ‘turned page corners’ and ‘bubbles of sin’ floating between the visual elements chosen, which conveys generation of new ideas, clarification of the concept and willingness to improve the art creation.

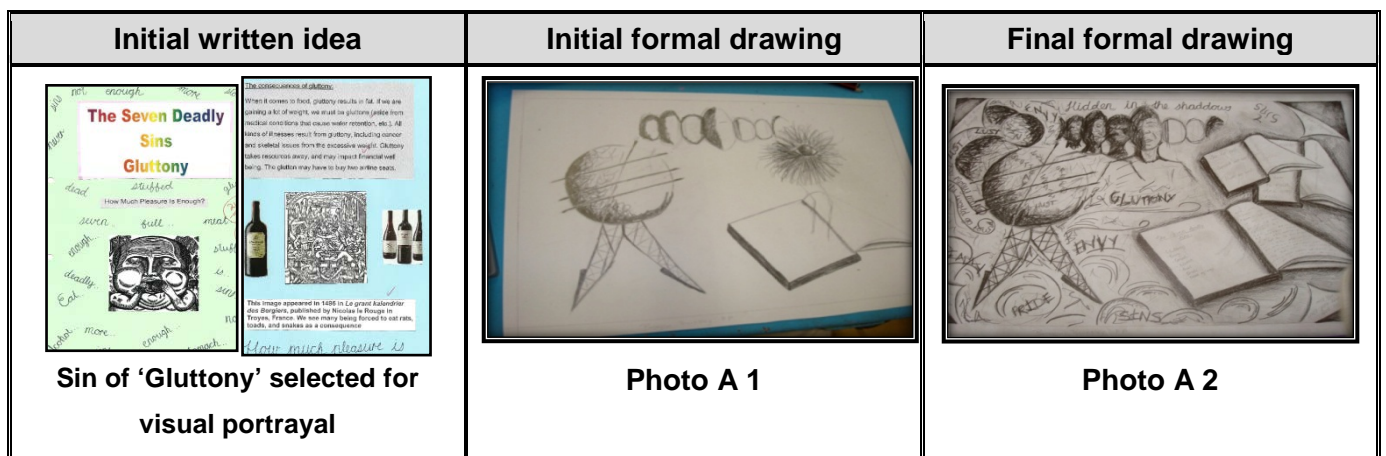


Figure 4. 1: Intial written introduction to visual idea and formal drawings for participant 1

Participant 2 - Charles

i) Written introduction to the idea(s)

No initial idea(s) and information in written form was done by this art learner. This showed his preference to portray his ideas visually as opposed to in words. While not portrayed here, participant 2 decided to depict the sin of *pride*.



Initial written idea	Initial formal drawing	Final formal drawing
NO WRITTEN IDEA SUBMITTED BY LEARNER	 Photo B 1	 Photo B 2

Figure 4. 2: Initial written introduction to visual idea and formal drawings for participant 2

ii) Formal drawings

The participant responded with a lengthy period of visual inquiry into the reference, and then chose a fish in combination with a man's face, and a woman carrying a pail (see **Photo B 2**). The visual elements chosen by this learner, while quite 'hidden' in the original reference, were then visually depicted in a much bolder and clearer fashion in his own portrayal. This conveys his creative perception ('clarification' of the concept) and his ability to see new perspectives, to select alternative paths with conviction. He changed the angles and sizes of the images into his own expression.

Participant 3 - Nkosi

i) Written introduction to idea

This participant decided to portray the sin of *lust* (see **Figure 4. 3** and **Addendum D**): "Lust or lechery is usually thought of as desire of a sexual nature. For my idea I will be combining a few ideas together that will portray the sin lust. I will be drawing lust and how two people will be peeping on another couple as they are busy with their own stuff. The couple will be in a room as the two people are peeping through a window with their heads covered with a mask as they will be keeping their identities secret". The visual deployment of ideas included the following, namely a naked women and semi-naked man in a sex act and a man reading a playboy magazine. This is the learner's conceptualisation of *lust*.

iii) Formal drawings

The participant's artistic choices of which visual images to select and portray, conveyed a spontaneous response and visual inquiry of how the elements relate to one another ('clarification'). The task was planned with demarcated lines first (see **Photo C 1**). The globe is replaced and changed by four faces to take central focal point of the formal drawing, denoting the willingness to improve the creative outcome. The pencil drawing was done over two days and charcoal was used as a medium (relevant art skill) to fill in darker shading and contrast as depicted in the initial visual reference (see **Photo C 2**).

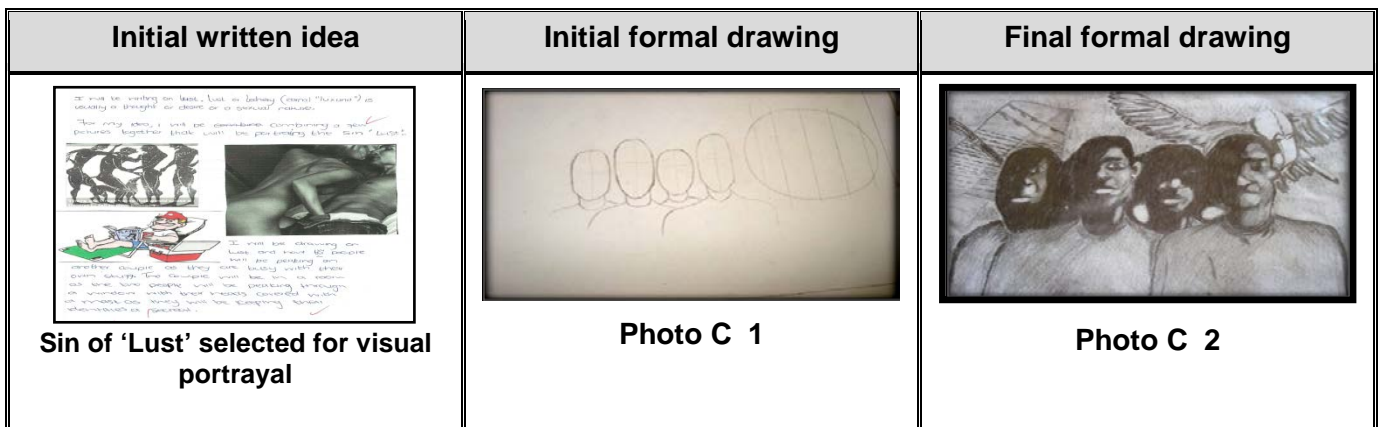


Figure 4. 3: Initial written introduction to visual idea and formal drawings of participant 3

Participant 4 - Samantha

i) *Written introduction to idea*

The participant decided to portray *vanity and pride* by elaborating in words: "Many define *pride and vanity* as a desire to be more important than the next person (see **Addendum D**). It is being better and having more than others. Pride makes one feel superior to the other person as you have something that others want. I do plan on keeping an open mind in respect of the topic. *Pride* could be a difficult 'sin' to choose because of the different ways to interpret it" (Samantha). Visual ideas shown were: A woman looking into a mirror; various women with mirrors in vain poses. This is this learner conceptualisation of the idea to be painted visually.

ii) *Formal drawings*

The visual elements selected by this learner are 'more obvious' within the reference (see **Photo D 1**). The wispy charioteer is discerned ('clarification') and artistically captured denoting the acumen to see new perspectives and select alternative paths. Attention is paid to detail and a personal quality is added to the formal drawing ('distillation') with more facial and landscape details added in, conveying keenness make use of heuristics and expression through her own visual representation.




Initial written idea	Initial formal drawing	Final formal drawing
 <p>Sin of 'Vanity and Pride' selected for visual portrayal</p>	 <p>Photo D 1</p>	 <p>Photo D 2</p>

Figure 4. 4: Initial written introduction of visual idea and formal drawings for participant 4

Participant 5 - Dan

i) Written introduction to idea

Participant 5 decided to depict the sin of *gluttony* and introduced his idea as follows: “In the Christian religions, it is considered a sin because of the excessive desire for food”. The images he selected were, a dog rolling in food, a baby in the womb, surrounded by ice-cream and hotdogs with the words: ‘pregnancy cravings’, a person gorging themselves and a table laden with food. This is this learner’s conceptualisation of the idea to be depicted in a Visual Art painting (see **Addendum D**).

ii) Formal drawings

This learner responded with his own representation of a human face in abstract form and incorporated a ‘disc’ over the left eye, conveying the ability to see different perspectives and select alternative paths to a solution (heuristics). The participant elaborated (‘evaluation’) on the initial visual elements presented as a source of inspiration (see **Addendum G**). The participant depicted his own version of an images with originality. He also inserted abstract images into the background. This conveys the creativity acumen to relate various visual parts in the drawing by making valuable modifications in his own representation of such visual elements (see **Photo E 2**).




Initial written idea	Initial formal drawing	Final formal drawing
 <p>Sin of 'Gluttony' selected for visual portrayal</p>	 <p>Photo E 1</p>	 <p>Photo E 2</p>

Figure 4. 5: Initial written introduction to visual idea and formal drawings for participant 5

Participant 6 - Leo

i) Written introduction to idea

This participant chose to portray *greed, lust and vanity*. He wrote: “I have chosen greed because it is easier to make comical jokes about it...lust as it portrays how people get so caught up in sex and lies” and ... vanity, as people get so caught up in their appearance...greed eats away at our morals”. The visual pictures in this introduction were namely greedy bankers burning money with cigars, a husband looking out the window while a naked man hangs from the window sill (indicating ‘adultery’), a blue collar worker with blood and money remnants around his mouth, throwing left-overs to one side (which people on the ground are scurrying for), as he calls them pigs (indicating *greed*) and a girl putting make-up on (indicating *vanity*).

ii) Formal drawings

This art learner ‘motored ahead’ with spontaneity in drawing the earth globe first. This element was his initial source of inspiration. The visual elements were chosen and elaborated on (creative perception). The drawing technique (art-relevant skill) used was very ‘grainy’ lines. The visual elements were placed together in an unusual way, showing originality and flexibility of thought (see **Photo F 2**). Participant 6 also added his own visual elements not originally included in the reference. This communicates receptiveness to new perspectives and self-expression through his own representation of the images (‘evaluation’ and ‘distillation’).




Initial Written Idea	First formal drawing	Final formal drawing
 <p>Sin of ‘Vanity and Pride’ selected for visual portrayal</p>	 <p>Photo F 1</p>	 <p>Photo F 2</p>

Figure 4. 6: Initial written introduction to visual idea and formal drawings for participant 6

4.5 PARTICIPANT OBSERVATION

4.5.1 Observations of the art creations: collages and the paintings

To serve as a source of inspiration for the paintings, a collage has to be created. The learners sourced their own visual references in order to portray a 'sin' of choice. The collages and paintings were an external and social vehicle to provide feedback to the learner in a way the images reflect back to the learner the idea or concept they have portrayed (Eisner 2005:60). Observations include the art learner's inner dialogue and actions as portrayed through the task presentation. Thus, it also includes listening to what is said while learners work and some of the observation data will be in the form of examples of what participants said. The art learners do not like to be interrupted or disturbed at times during lessons and work in silence. So the art classroom is very different in that it is an active 'doing' class' all of the time. Little instruction is actually given to the learners unless it is a lesson set specifically aside for the history or theory of art.

First, the art educator explained to the learners how to "create spaces in their collages". The art teacher made the learners aware that we live in an age of visual bombardment, where attention might become dispersed. Therefore the art learner had to choose visual images with discernment and then place them purposefully (according to the art educator). The instruction for the collages is not to choose well-known people or actors, but 'real people with flaws'. The creative art creation process was photographed and placed into a photo-sheet (**see Addendum H**) to depict the creativity acumen (processes and art skills) of each participant. The photographs and observations throughout the process show the main theme of their ideas and the learning experience.

Participant 1: Betty

B Task response and presentation of collage and paintings
Betty showed a high level of inspiration, spontaneity (open-

ended response) by selecting many sources, when creating the

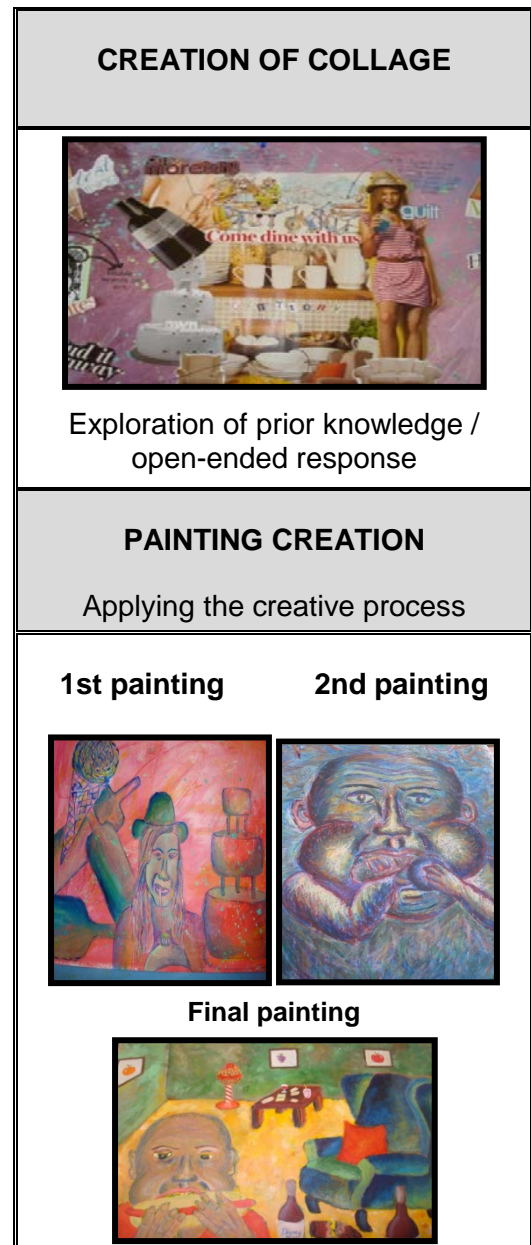


Figure 4. 7: Betty's Visual Art

collage (see **Photo A 5**). She visually communicated the idea of gluttony via imagery of food, plates (which is how gluttony is ‘served’) and a ‘lazy-boy’ chair. This conveyed her acumen for creative perception and skills in generating analogies and grasping the complexity and ambiguity of the concept (‘clarification’). The deployed images of wine, ice-cream and cake were obtained from the visual images pasted in the created collage (see **Addendum I Photo A14 - 1**). The image of the man stuffing food in his face was obtained from a picture used in the participant’s written idea of gluttony (see **Addendum D**).

C Creative task evaluation and creativity acumen during Visual Art art creation. The 1st painting was done onto a pink prepared background using the art-relevant skill of the ‘triangle method’ used by Leonardo da Vinci (see **Addendum I Photo A14 - 1**). The artistic paths selected showed trial-and-error (heuristic strategy) of additional paint added to backgrounds to improve the creative outcome. The art learner liked the background and ‘allowed it to be part of the painting’ (see **Addendum I Photo A17 - 1**). This conveyed suspending judgement as the visual elements were painted faintly onto the prepared background (see **Addendum I Photo A14 - 1**). The 2nd painting was inspired by the learner’s written introduction to the idea (see **Addendum I Photo A15 - 2**). Creativity acumen was evident in Betty’s paintings where colour and art technique changes were executed when applying the creative process, with her willingness to learn from her mistakes. She managed to manage transitions and display a convergence between ‘imagination’ and ‘idea generation’ while visually displaying conceptualisation. She conveyed her creativity acumen through creating Visual Art by adapting and changing techniques to make modifications to her art creations. She also took the theme presented and applied the creativity-relevant processes and art-skills learned in a way that was totally her own original representation of a concept she had been exposed to before.

Participant 2: Charles

B Task response and presentation of collage and paintings

Participant 2 approached his collage-making with an initial


CREATION OF COLLAGE	
	
Exploration of prior knowledge/open-ended response	
PAINTING CREATION	
Applying the creative process	
1st painting	2nd painting
	
Final painting	
	

Figure 4. 8: Charles’ Visual Art ₀

reticence and took long to start preparing his canvas and choosing visual elements to depict *pride* (see **Addendum G Photo B 3**). He worked logically, and pasted images in a separate linear manner onto his background. His visual exploration for his chosen sin of *pride* included poetry, pictures and words as well (see **Addendum H Photo B 6**).

C Creative task evaluation of creativity acumen during Visual Art creation

The participant paid attention to creative detail (see **Addendum I Photo B9 - 2**) and visual content, as he used open-ended responses, with no determined solution, to creating the visual paintings. He expressed the concept of *pride* through the use of symbols to communicate the visual details by means of a woman’s reflection in the mirror as depicted in **Figure 4. 8**. This conveyed his ability to grasp complexity and make use of creative analogies. He displayed the ability to use different strategies and creative heuristics (by making changes to the concept he was depicting in his paintings) (see **Addendum I Photo B13 - 2** and **Photo B14 - 1**). He displayed originality through his own ideas and thinking. He represented the theme visually through the art skills of using analogies, namely body-building and trial-and-error strategies. He used creativity processes by making alternative choices and finding new perspectives to combine the images he chose by presenting the concept of *pride* visually as his interpretation and appropriate to the task assigned (see **Addendum I Photo B14 - 2**).

Participant 3 – Nkosi

B Task response and presentation of collage and paintings

This participant implemented visual inquiry from the start of the task (see **Addendum H Photo C 5**). While she stuck to her initial idea in the final painting (see **Addendum I**), she allowed the images to develop from those images placed in her collage, by changing visual elements to depict *lust* (**Addendum H Photo C 6**).

B Task response and presentation of collage and paintings

This participant implemented visual inquiry from the start of the task (see **Addendum H Photo C 5**). While she had a goal in mind, and stuck to her initial idea as the visual ‘story’ of the



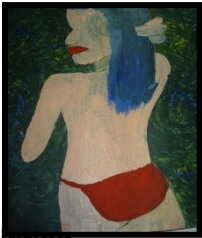

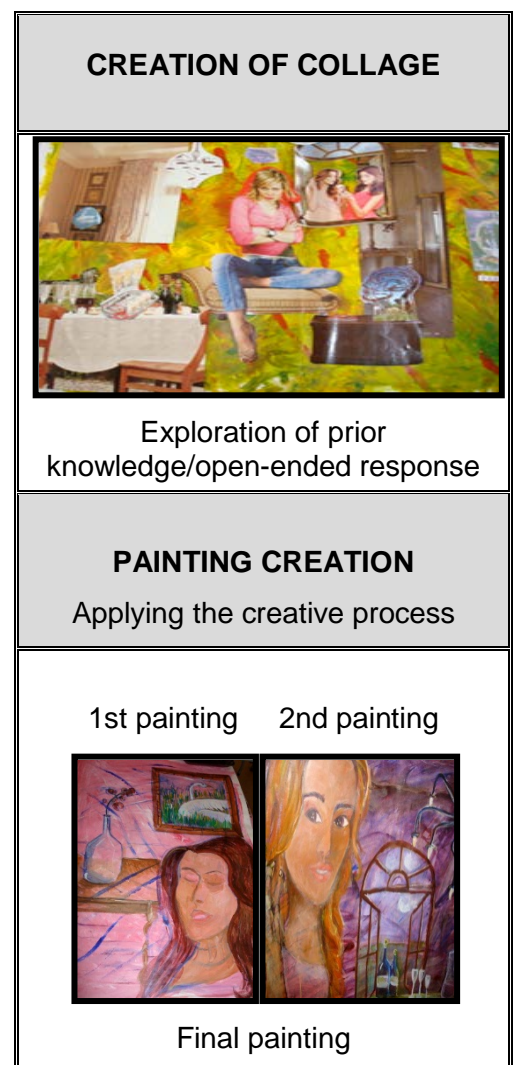
CREATION OF COLLAGE	
	
Exploration of prior knowledge/open-ended response	
PAINTING CREATION	
Applying the creative process	
1st painting	2nd painting
	
Final painting	
	

Figure 4. 9: Nkosi’s Visual Art 91

final painting (see **Addendum I** Error! Reference source not found.), she allowed the images to develop from those images placed in her collage, by changing visual elements to depict *lust* as depicted in **Figure 4. 9**. The images in her collage conveyed her realisation of the concept and included naked people and ‘sexy’ visuals such as perfume and fashion. This indicated risk-taking as the only participant to represent a risqué idea.



C Creative task evaluation of creativity acumen during Art creation

Nkosi approached the painting tasks as a challenge by choosing many 'lust-related' visual sources as inspiration for her three paintings. She indicated the use of selecting different paths to a creative outcome (see **Addendum I Photo C12 - 1**



to Photo C12 - 3). She spent much time on attending to artistic problems, such as colour blending and changing forms (see **Addendum I Photo C13 - 1**), and paid special attention to 'telling a story' through her choice of visual inquiry and imagery. She displayed autonomy and self-expression through her own conceptualisation of visual ideas by use of own ubiquitous knowledge. She displayed the ability of using different strategies and making use of many sources for inspiration. She conveyed motivation and displayed a willingness to persevere and learn from mistakes ('perspiration'). She took the theme presented and applied art skills and creativity processes to create her own representation of the concept of lust visually.

Participant 4 - Samantha

B Task presentation and preparation

Samantha's approach to planning the collage (see **Addendum H Photo D 4**) in preparation for the final painting (see **Addendum H**), which included the experimental drawings (see **Addendum I Photo D15 - 2**) was deliberate and executed using analogies and accounting for exceptions in artistic decisions ('clarification') as depicted in **Figure 4. 10** . She could describe in detail at any point during the creative process how she imagined the final painting. She seemed to have a clear idea of how she intended to achieve her final goal of Visual Art creation. She was focused and displayed a high level of task commitment throughout the art creation. The creative paths chosen included re-combinations of visual images from magazines, denoting the learners acumen in grasping complexity and ambiguity. This included the creative phases of 'distillation' and 'evaluation'.

C Task evaluation of creativity in art creation

Figure 4. 10: Samantha's Visual Art



The art creations represented by this learner were expressive and detailed (see **Addendum I Photo D15 - 2**). Her imagery also indicated a personal touch and inner dialogue of her own knowledge in processing the sinful concept of *pride* and reflecting essentially on the meaning and appropriateness of the ideas into Visual Art paintings. Samantha spent a lot of time during the art creation elaborating and embellishing on visual details, such as the chandelier and white swan (see **Addendum I Photo D15 - 3**) when conceptualising the idea of *pride*. By using her own ubiquitous knowledge ('evaluation') and by manipulating these visual images until she was completely satisfied with the creative outcome ('clarification'). She conveyed creativity acumen by making use of the creativity-relevant processes and art skills to create an art-piece depicting pride that was her own expression, ideation from visual elements chosen and changed in order to create Visual Art pieces of the sin *pride*.


Participant 5 – Dan

B Task presentation of collage and preparation for paintings

Dan used only a few sources of inspiration for the collage (see **Addendum H Photo E 4**). His use of 'path-finding' to a visual solution was limited by his choices of few images for placement in his collage. In planning and preparing for the painting tasks, Dan was at first very hesitant, and could not seem to find the 'correct' imagery to portray his sin of *gluttony*. He struggled with the initial task of preparing the background for the collage and paintings (see **Addendum I Photo E8 - 1**). Dan could not describe what his vision was for the final visual creation and was unsure as to which 'path to solution' to follow at times.

C Task evaluation of creativity during art creation

The paintings were approached with trepidation and anxiety initially and Dan's open ended responses were limited to the same depiction in the first two paintings as a man sitting and eating at a table (see **Addendum I Photo E16 - 2**). The final painting is privy to




Exploration of prior knowledge/ open-ended response

PAINTING CREATION

Applying the creative process

1st painting 2nd painting



Final painting




Figure 4. 11: Dan's Visual Art

this learner tenacity in reconceptualising and presenting a new idea visually appropriate to the art brief and with the original depiction of (see **Addendum I Photo E 17 - 3**). Dan struggled initially with the application of the creative process and did not incorporate any of his initial images from his collage creation or prior two paintings into his final painting as depicted in **Figure 4. 11**.

CREATION OF COLLAGE								
 <p style="text-align: center;">Exploration of prior knowledge/open-ended response</p>								
PAINTING CREATION								
Applying the creative process								
<table style="width: 100%; border: none;"> <tr> <td style="text-align: center; border: none;">1st painting</td> <td style="text-align: center; border: none;">2nd painting</td> </tr> <tr> <td style="text-align: center; border: none;">  </td> <td style="text-align: center; border: none;">  </td> </tr> <tr> <td colspan="2" style="text-align: center; border: none;">Final painting</td> </tr> <tr> <td colspan="2" style="text-align: center; border: none;">  </td> </tr> </table>	1st painting	2nd painting			Final painting			
1st painting	2nd painting							
								
Final painting								
								

Figure 4. 12: Leo’s Visual Art

Participant 6 - Leo

B Task presentation of collage and preparation of paintings
 The participant responded with his own open-ended ideas and took intermittent breaks during all creative tasks and then resumed art work. He almost appeared to be on ‘remote control’ at times as he prepared the backgrounds for the collage (see **Addendum H Photo F 6**) and paintings (See **Addendum I Photo F15 - 1 to Photo F15 - 3**). The art skills for paintings were appropriate for the ideas being expressed.

C Task evaluation of creativity during art creation
 The ideas expressed in visual form for this participant were images of a well-known personalities and while choosing many images as sources for the paintings, participant 6 make artistic decisions to paint the faces and heads in all three paintings. The final painting is a combination of the previous two experimental drawings (see **Addendum I Photo F16 - 3 1**). Leo amalgamated the visual images in the first two paintings into the final painting as depicted in **Figure 4. 12**.

4.6 SUMMARY

Creativity is a complex concept to understand. Using the Componential Theory (Amabile 1996) of creativity and the application of the creative process as described by the ICEDIP Model (Petty 1996), an attempt was made to observe,

photograph and describe what takes place during Visual Art creation in a high school classroom. This included trying to identify what the learners knew and what they would created visually with art techniques and images as they perceived them. In this way the components of creativity acumen and the ensconced creative processes, such as ‘clarification’ and ‘incubation’ were observed in relation to the art-relevant skills executed and developed by the art learner. A theme in all participants was that

the initial response to the presentation of the art theme caused some reticence as to what ideas to launch or which creative paths to select and follow. All research participants observed were deeply engaged with the task of Visual Art creation. Spontaneity (open-ended responses) in generating ideas was displayed according Amabile's Componential Theory (1996). The ability to understand the need for improvisation in responding to the theme and realising an idea visually as a conceptual 'sin' was represented in the form of creativity acumen development.

4.7 INTERVIEWS

(As the Visual Art learner had completed the final painting compositions, they reflected on the creative decisions made and relevant processes used to create a visual portrayal of a 'sin' within the theme: 'The Seven Deadly Sins'. In reflecting on their learning and the creative process while creating art, the creativity-relevant processes and art-relevant skills are referred to through the questioning in the interviews. What follows is the descriptions and findings of what the Visual Art learner's shared in their interviews regarding some of their own understanding of how Visual Art creation is executed making use of those creativity-relevant processes and art skills.

4.7.1 Findings from the interviews

Five themes emerged from the interviews, expressing the learners' main ideas about their art creation and accomplishment with regards to creativity acumen as depicted and graphically summarised in **Table 6** below. They were:

4.7.1.1 Theme 1: Autonomy and personal visual realisation (Task response and inspiration)

The responses from the learners regarding the ideas generated and their initial response to the task, highlighted initial reticence to 'play' with ideas (as did the questionnaire). It also brought to light what the learners liked, were attracted to or preferred within the visual inquiry. In order to remain motivated to create something new. The words used by the participants to indicate inspirational responses were 'intrigue', 'captivated', or 'interest'. The learning in Visual Art is developmental and implicit through the personal visual ideas expressed and portrayed by the individual learners. Creativity acumen in adolescence is often characterised by an intense concentration on a self-selected area of interest, with creative individuation by being able to nurture ideas through imagination and visualisation (Schmidt 2006:31). Visual Art participants grappled with their own previous knowledge, and what spontaneous (open-ended) or deliberate decisions they would make to begin the creative process. The learners' preferences and self-expression of the 'sin' concepts launched a challenge to create something not done before, by trial-and-error (heuristics). The participants were largely independent, and worked autonomously only asking for assistance when feeling 'stuck'. That is why they had to rely

on their own evaluation and perception of their work to determine its purpose, value and originality for what was deemed a successful outcome to the individual learner. This moved the locus of evaluation from external to internal motivation and persistence to complete the art assigned. All the respondents agreed to working independently and evaluating their own work with critical visual analysis of their art-work.

4.7.1.2 Theme 2: *Willingness to improve and learning from mistakes (Conceptualisation and evaluation)*

Evaluation (not be confused with being critical of one's work) determines whether the task response is appropriate towards attaining a final creative goal. Evaluation is necessary as a process of determining what paths to follow which impact on the significance of the result. This was mentioned often in the interviews. All of the participants realised the importance of going back to reflect on work done and trying 'new avenues' or strategies. They all evaluated their own art creation, mostly on how to improve it and make it more aesthetically pleasing. Three of the six participants admitted that a lack of knowledge of certain art skills felt like an obstacle to the overall art progress. Most of the participants realised the importance in going back to evaluate and change things in their art-works, and learning from mistakes, by either improvising or discarding ideas, visual elements or techniques that did not work.

4.7.1.4 Theme 3: *Visual conceptualisation of ideas: From conception to final composition (Task generation – clarification and incubation)*

It is by virtue of developing latent creativity acumen that the creation of drawings and paintings are used by the learners' for conceptualisation and visual expression. Expression, an art-relevant skill, is the primary form of 'vision' and 'imagination'. As learners create art, they can develop creativity acumen by responding receptively to a new idea or concept, by conceptualising those new and imaginative ideas into a visual realisation. Many of the participants used symbolic images to conceptualise the ideas imbedded in an abstract theme. The learners selected images and visual material which they understood from previous personal experience and knowledge. All learners recognised that they had been given the opportunity to plan their own creative perception of the theme. The task of relating one image to another is the perception of subtle relationships within complex visual arrangements. This does not occur naturally, as those who are immature tend to focus on one item at a time (Eisner 2005:63). Three out of the six participants mentioned remaining on the same visual elements for 'too long' and later realised they made greater strides by either detaching from the work at times or working on different elements simultaneously.

4.7.1.5 Theme 4: *Perspiration, Perseverance through trial-and-error*

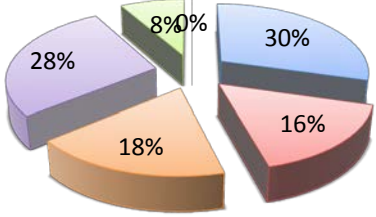
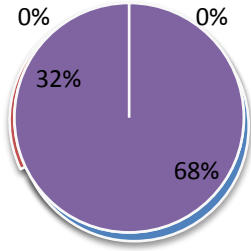
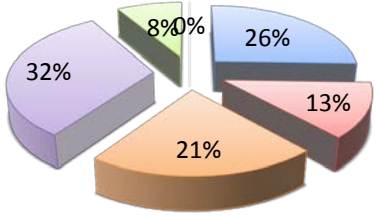
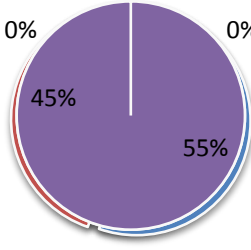
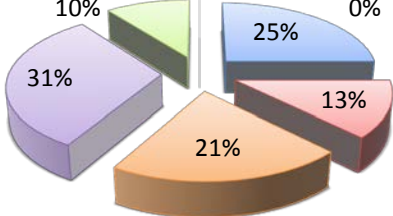
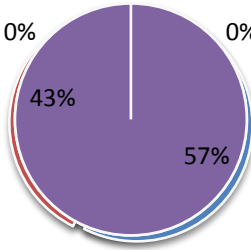
All participants made noteworthy reference to experiencing frustrations yoked to the new tasks and concepts presented. Effort is important when creating something from scratch, especially in grasping complexities of the concept of 'sin'. A key constraint for all participants was the time taken to produce the desired affects to do justice to their ideas. Thinking of ideas was not difficult, it was the visual production of the mind's images that served as a challenge. All participants mentioned that they had to concentrate their efforts to complete all art tasks on time. The responses included, "I should take more time doing...", "I thought I would run out of time", "We had to do a large amount of work in a short time". Four of the six participants admitted to spending too much time on artistic details; later feeling time constraints. This also led to their impatience with the development of the art creations. All the participants commented on overcoming the frustrations in order to engage in a range of creative processes, from the initial conceptualising to the evaluation, or incubating over ideas while developing the final art creation.

4.7.1.6 Theme 5: Newfound perspectives (way of looking and seeing) in managing artistic changes

Only two participants mentioned that they relied on extrinsic motivation from others. Most participants spoke of making changes and adjustments to improve their work to achieve the final outcome. The skills and creativity acumen with which these images were rendered (presented), were learned through continuous evaluation of their art creations and by making their own mistakes. Visual expression is a process whereby ideas are generated and clarified consistently. The learners' own verbalisations depicted what the Visual Art creations had afforded, or prevented them, from attaining with regard to creativity acumen (the ability to turn creative ideas into visual imagery). The interviews reflected the development of creative strategies during art creation in support of creativity acumen and the development of creativity-relevant skills. The art learners who did not have an initial grasp of the concept of 'sin' before creating their art-works, had a much better understanding post-art creation including ambiguities and complexities of an abstract concept that they had to produce visually in a final painting.

Table 4.7: Results from interviews with Visual Art participants

RESULTS FROM INTERVIEWS													
Interview results showing the relationship between art creation and creativity acumen used	Creativity-relevant responses as related to Art-relevant responses												
BETTY: PARTICIPANT 1	<p>Graph 7. 1: Interview results for Betty (P1)</p> <table border="1"> <caption>Data for Graph 7. 1: Interview results for Betty (P1)</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Autonomy and personal visual realisation (Creativity-relevant)</td> <td>15%</td> </tr> <tr> <td>Willingness to improve and learn from mistakes (Art-relevant)</td> <td>23%</td> </tr> <tr> <td>Visual conceptualisation (Creativity-relevant)</td> <td>21%</td> </tr> <tr> <td>Perseverance through trial-and-error (Art -relevant)</td> <td>24%</td> </tr> <tr> <td>Newfound perspectives in managing change (Creativity-relevant)</td> <td>17%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ■ Autonomy and personal visual realisation (Creativity-relevant) ■ Willingness to improve and learn from mistakes (Art-relevant) ■ Visual conceptualisation (Creativity-relevant) ■ Perseverance through trial-and-error (Art -relevant) ■ Newfound perspectives in managing change (Creativity-relevant) 	Category	Percentage	Autonomy and personal visual realisation (Creativity-relevant)	15%	Willingness to improve and learn from mistakes (Art-relevant)	23%	Visual conceptualisation (Creativity-relevant)	21%	Perseverance through trial-and-error (Art -relevant)	24%	Newfound perspectives in managing change (Creativity-relevant)	17%
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	<p>Graph 7. 2: Summary of interview responses Betty(P1)</p> <table border="1"> <caption>Data for Graph 7. 2: Summary of interview responses Betty(P1)</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Creativity-relevant responses</td> <td>53%</td> </tr> <tr> <td>Art-relevant responses</td> <td>47%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ■ Creativity-relevant responses ■ Art-relevant responses 	Category	Percentage	Creativity-relevant responses	53%	Art-relevant responses	47%						
Category	Percentage												
Creativity-relevant responses	53%												
Art-relevant responses	47%												
CHARLES: PARTICIPANT 2	<p>Graph 7. 3: Interview results for Charles (P2)</p> <table border="1"> <caption>Data for Graph 7. 3: Interview results for Charles (P2)</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Autonomy and personal visual realisation (Creativity-relevant)</td> <td>19%</td> </tr> <tr> <td>Willingness to improve and learn from mistakes (Art-relevant)</td> <td>26%</td> </tr> <tr> <td>Visual conceptualisation (Creativity-relevant)</td> <td>26%</td> </tr> <tr> <td>Perseverance through trial-and-error (Art -relevant)</td> <td>21%</td> </tr> <tr> <td>Newfound perspectives in managing change (Creativity-relevant)</td> <td>8%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ■ Autonomy and personal visual realisation (Creativity-relevant) ■ Willingness to improve and learn from mistakes (Art-relevant) ■ Visual conceptualisation (Creativity-relevant) ■ Perseverance through trial-and-error (Art -relevant) ■ Newfound perspectives in managing change (Creativity-relevant) 	Category	Percentage	Autonomy and personal visual realisation (Creativity-relevant)	19%	Willingness to improve and learn from mistakes (Art-relevant)	26%	Visual conceptualisation (Creativity-relevant)	26%	Perseverance through trial-and-error (Art -relevant)	21%	Newfound perspectives in managing change (Creativity-relevant)	8%
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	<p>Graph 7. 4: Summary of interview responses Charles (P2)</p> <table border="1"> <caption>Data for Graph 7. 4: Summary of interview responses Charles (P2)</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Creativity-relevant responses</td> <td>53%</td> </tr> <tr> <td>Art-relevant responses</td> <td>47%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ■ Creativity-relevant responses ■ Art-relevant responses 	Category	Percentage	Creativity-relevant responses	53%	Art-relevant responses	47%						
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Creativity-relevant responses	53%												
Art-relevant responses	47%												
NKOSI: PARTICIPANT 3	<p>Graph 7. 5: Interview results for Nkosi (P3)</p> <table border="1"> <caption>Data for Graph 7. 5: Interview results for Nkosi (P3)</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Autonomy and personal visual realisation (Creativity-relevant)</td> <td>15%</td> </tr> <tr> <td>Willingness to improve and learn from mistakes (Art-relevant)</td> <td>23%</td> </tr> <tr> <td>Visual conceptualisation (Creativity-relevant)</td> <td>26%</td> </tr> <tr> <td>Perseverance through trial-and-error (Art -relevant)</td> <td>18%</td> </tr> <tr> <td>Newfound perspectives in managing change (Creativity-relevant)</td> <td>18%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ■ Autonomy and personal visual realisation (Creativity-relevant) ■ Willingness to improve and learn from mistakes (Art-relevant) ■ Visual conceptualisation (Creativity-relevant) ■ Perseverance through trial-and-error (Art -relevant) ■ Newfound perspectives in managing change (Creativity-relevant) 	Category	Percentage	Autonomy and personal visual realisation (Creativity-relevant)	15%	Willingness to improve and learn from mistakes (Art-relevant)	23%	Visual conceptualisation (Creativity-relevant)	26%	Perseverance through trial-and-error (Art -relevant)	18%	Newfound perspectives in managing change (Creativity-relevant)	18%
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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SAMANTHA: PARTICIPANT 4</p>	<p>Graph 7. 7: Interview results for Samantha (P4)</p>  <ul style="list-style-type: none"> ■ Autonomy and personal visual realisation (Creativity-relevant) ■ Willingness to improve and learn from mistakes (Art-relevant) ■ Visual conceptualisation (Creativity-relevant) ■ Perseverance through trial-and-error (Art-relevant) ■ Newfound perspectives in managing change (Creativity-relevant) 	<p>Graph 7. 8: Summary of interview responses Samantha (P4)</p>  <ul style="list-style-type: none"> ■ Creativity-relevant responses ■ Art-relevant responses
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">DAN: PARTICIPANT 5</p>	<p>Graph 7. 9: Interview results for Dan (P5)</p>  <ul style="list-style-type: none"> ■ Autonomy and personal visual realisation (Creativity-relevant) ■ Willingness to improve and learn from mistakes (Art-relevant) ■ Visual conceptualisation (Creativity-relevant) ■ Perseverance through trial-and-error (Art-relevant) ■ Newfound perspectives in managing change (Creativity-relevant) 	<p>Graph 7. 10: Summary of interview responses (P5)</p>  <ul style="list-style-type: none"> ■ Creativity-relevant responses ■ Art-relevant responses
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">LEO: PARTICIPANT 6</p>	<p>Graph 7. 11: Interview results for Leo (P6)</p>  <ul style="list-style-type: none"> ■ Autonomy and personal visual realisation (Creativity-relevant) ■ Willingness to improve and learn from mistakes (Art-relevant) ■ Visual conceptualisation (Creativity-relevant) ■ Perseverance through trial-and-error (Art-relevant) ■ Newfound perspectives in managing change (Creativity-relevant) 	<p>Graph 7. 12: Summary of interview responses Leo (P6)</p>  <ul style="list-style-type: none"> ■ Creativity-relevant responses ■ Art-relevant responses

4.7.2 SUMMARY OF INTERVIEWS

Creativity acumen when creating Visual Art begins with the ability to conceive and perceive an idea or concept. A significant theme heralded from the interviews was the personal freedom of choice and the acumen to create a personal rendition of a presented concept. The learner's appreciated having the opportunity to experience the ability to do something not done before, involving a creative response to accomplish the Visual Art creation. The creative responses by all the participants involved an original visual reference, which then required delving into the creativity-relevant processes in how to respond to art tasks and generate ideas, evaluation and elaboration in proceeding to create Visual Art and developing the final outcome (painting). All respondents utilised more creativity-relevant processes and acumen while creating Visual Art than art-relevant skills (see **Table 4. 7**) above. The creativity-relevant processes which emerged from the interviews as: (a) personal visualisation and autonomy; (b) visual conceptualisation of a 'sin' and (c) newfound perspectives in managing changes through applying the creative process was representative of how the Grade 11 Visual Art learners managed to create completed art-works. While all participants felt frustrated with their art-works at times, they all persevered and tried to learn from their mistakes. This included internal motivation and the will to improve on previous tasks. This is indicated in the pie charts in Table 6 above by the 'segments' labelled: willingness to improve and learn from mistakes and perseverance through trial-and error strategies. Perseverance and visual conceptualisation make up the largest proportions in the above-mentioned pie charts (see **Table 4. 7**) and appear to be dialectically related. Seeing or conceiving an object and then visually portraying it with personal meaning and understanding was explained by the art learners as more difficult than one initially imagined it was going to be. Time was also mentioned as a factor when planning tasks in meeting the challenges and obstacles faced during art creation.

4.8 DISCUSSION OF THE RESEARCH RESULTS ACCORDING TO THE RESEARCH QUESTIONS

- a) Which creativity-relevant processes were present and could be related to the attainment of creativity acumen while creating Visual Art?

The creativity-relevant processes that were present during Visual Art creation were independent creative behaviour with personal interest and intention. From the observations of the Visual Art learners in the classroom, it was evident that the creativity-relevant processes being called on included a way of thinking and approaching a creative activity that was conducive to autonomy, visual conceptualisation, and to seeing new perspectives when managing the changes that were required from the initial tasks that were presented to the creative outcome that each learner produced. The cognitive processes included the ability to cultivate a wide array of ideas gained from previous knowledge and work which could be synthesized and inform the current art-work. Creativity acumen included the learner's ability to break with conventional algorithms and be willing to improve on

previous attempts. The inner personal processes include an independent workstyle (autonomy) and a tolerance of complexity (Amabile 2012:3). An important inter-relatedness was observed between the learners' conceptualisation of ideas and their acumen (grasp) of such creativity-relevant processes such as visual conceptualisation and their personal visual rendition and realisation. From the interviews, it was found that a large amount of what the participants visually portrayed in their art depicted their conceptual learning and understanding, through the visual realisation of a concept, and secondly, the ability to confront their fears as they applied the creativity-relevant processes in being willing to learn and improve, managing changes and expanding the concept(s) being learned in the art tasks. Creativity-relevant processes present during Visual Art creation in this study were, namely open-ended responses (spontaneity and autonomous self-expression) which included the response generation from personal preferences; skills in idea generation (some unexpected ones) which rendered unpredictable ideas and fluency of thinking in the learners; transformation and changes of visual images due to visual inquiry of related images or ideas; learning to be open to opportunities that were not foreseen (flexibly purposive) (Eisner 2005:60). This lends to the understanding that there was always more than one way when looking, seeing and thinking visually.

- b) What art-relevant skills and components related to attaining creativity acumen in the Visual Art learner while applying the creative process?

The creation of Visual Art is an external (social) vehicle for ideas to be expressed and fosters the acumen to pay attention to elements for potential development and to express ideas in visual form. The learners learnt from making images related to themes and ideas. This included the ease with which art knowledge was called upon during art creation by 'path-finding' and selecting what elements to pay attention to while making decisions regarding the standard of work. The images reflected back to the learner the idea or concept they portrayed. To create images, the learners needed to be engaged with the creative process. Visual Art creation is a deliberate process. Symbolic images began the creative journey as a visual reference (initial task presentation). Those symbolic images were used for free-association of thinking (fluency) to transport the mind into an imaginary world and to create, to conceptualise 'sins' as represented and transformed into what Eisner (2005:64) calls, *visual analogue*. The Visual Art learners displayed the acumen to be motivated, to engage with the creative processes, and to spend long periods concentrating on producing something new, and at times even surprised themselves with what they had attained. This was depicted in the statement by participant 2, "It is important for me, in that I can do better than I thought I could do".

Creativity acumen is a learned set of complex abilities. It is essentially linked to the learner's imagination (Eisner 2005:63). The imagination included idea generation, symbolic representation through the application of the creative process and art skills. The creative responses from each of the

six participants were as individual as they are. There was no way of predicting the art creations that these Visual Art learners would produce. The development of competence (creativity acumen) is a major source of self-satisfaction. The greatest spur to do more is to see that we have made progress, as no-one wants to show their weaknesses or stay at the same level (Eisner 2005:64). The creativity-relevant process of taking risks by doing something that has not been done before is related to the art-skills of self-expression in representing one's own original ideas. The six Visual Art learners portrayed their own representation to conceptualise visual ideas of a theme presented to them. At times the learners were frustrated, and felt they lacked the art skills, or made mistakes. It was noted that some 'good' ideas generated by the art learners at times were not fully developed into a visual rendition or grasp of the concept (particularly initially). This caused frustration and forced the learner to see alternative ways, either independently or with the support of the art educator.

4.9 IN CONCLUSION

When Eisner (2005:60-63) asked 'What do children learn when they paint?', he helps us to understand and describe the creative process and acumen attained from a pragmatic point of view, in which learners can create visual images with material so that those images can provide an intrinsic form of satisfaction. *Creativity acumen* does not refer to drawing or painting well. What is more importantly meant by creativity acumen is the effort extended to creatively draw or paint by exploring new ways and creating something that no-one, not even you, has made before (and may even have difficulty reproducing). The creative endeavour includes making your own choices and decisions, at least some of the time, with support or scaffolding. The Grade 11 adolescent learner needs both – independent choices and scaffolded support in the form of structured zones (Zone of Proximal Development). The structured zones are clearly seen as the art learner is guided through the constituents of the presented art assignment (see **Figure 2. 1**) The creative process of Visual Art creation grants the opportunity and time for the learners' to reflect and engage with the materials, their own ability, the changes needed with helpful input and then to evaluate the creative outcome. This may prepare the adolescent learner to interact with an unknown future in negotiating changes and learning from mistakes without fear of failure or trepidation, but rather with perseverance and the ability to minimise external frustrations.

This study focussed on the learners' attainment of creativity acumen during art creation from the initial response to the creative outcome. The creative approaches included freedom to explore and challenge and also planning. Here the researcher returns to the relationship between the creativity acumen of the Visual Art learner as an interaction or kinship between the art learner, the visual process of creation and the context of school to navigate and accept strategies to develop creativity-

relevant skills as the learner attains the ability to think and act creatively in understanding the conceptual world.

The range and complexity of creativity acumen occurring within classrooms are wider than what can be measured. Creativity acumen can only be rendered. But it is the accompanying exploration of new ideas, which may be related to learning to meet challenges throughout life. Art creation is capable of refinement and development. The current climate in the said secondary school is favourable for creativity, but courage is needed to promote creativity acumen and experiences require sustained support from educational role-players, policy makers and educators in order to have creativity uppermost in our minds when supporting learners' imaginative ideas and application. It will take even more to have the confidence to evaluate and develop their creativity acumen as a 21st century skill. Creativity acumen during Visual Art creation appears to be symbiotically related where both depend on:

- being receptive to new ideas and perspectives;
- planning and scheduling time so that goals are achieved in the most suitable way;
- learning from mistakes and wanting to improve and become better at tasks and skills;
- the importance of consistent evaluation and reflection on where you are and what you want to achieve as the best possible outcome.

Visual images flood our lives each day. Our thinking is based on some visio-relevance. Is it meaningful? The creative process unleashes possibility. In the researcher's opinion, the arts affords the opportunity to serve the adolescents own development via symbolic vision (imagination and perception) of concepts and ideas explored in a uniquely personal way. This self-expression and creative perception transcends the intelligible world of words and rational processes. It also affords new discovery and endless possibility in learning to grasp complexity and ambiguity (as occurs in the world) in art creation. The creativity-relevant processes of 'inspiration', 'clarification', 'evaluation', 'distillation', 'incubation' are included in the visual perception. Arnheim (1969) states in Eisner (2005:130) that no thought processes seem to exist that cannot be found to operate, as least in principle, in perception and that visual perception is visual thinking. Eisner (2005:130) re-iterates that the information held within images is "a cognitive event". Therefore, my argument remains, that Visual Art assists with visual thinking and visualisation of new concepts, in developing imagination and creativity acumen by making personal contact with and applying the creative process.

The two research questions ask what skills are needed to attain creativity acumen and how could this be achieved through creative processes. The answer from the findings of this inquiry appear to be that the domain skills; the art-relevant skills attained, are just as important as the relevant-creativity

processes used, which is enhanced by the training offered in Visual Art with the skills required in the generation of new ideas. Visual Art, from what the researcher observed and heard, definitely made the learner think about the next step, and 'where to from here?' when stumped. Creating art teaches an appreciation for the efforts to produce something new, meaningful or of value. According to Eisner (2005:65), knowledge of the arts shapes our capacity for expression and teaches us how to deal with ambiguity, entrenched in the understanding that in life there is always more than one answer. The creative behaviour was related to the initial deployment of images and the individual learner's response to the task. Those learners who started the art-works with a slight resignation were ultimately not enamoured with the final outcome (participant 2 and participant 6). The creative behaviour was most certainly related to the ability to make sound judgements to bring the ideas(s) and concepts to completion, within a timeframe and more importantly to the personal satisfaction of the Visual Art creator.

CHAPTER 5

RESEARCH SUMMARY AND RECOMMENDATIONS

5.1 INTRODUCTION

From the findings it became clear that what creativity acumen and art creation have in common is variability of outcome. This was due to the fact that each Visual Art participant selected their own approach and strategies to attain a creative outcome based on past experiences and latent knowledge. Variability in art denoted that the outcome was, like the adolescent, not consistent and was liable to change!. The unique nature of each learner's strengths and the manner in which they were inspired, worked and evaluated their efforts, was just as individual. The way learners visualise (conceptualise) and form (create and realise) visual images was indicative of their efforts to create something new. An idea is not the complete solution. The idea elicited and generated has to go through the journey of inquiry, perceiving, waiting, developing and finally producing an outcome worthy of either ones satisfaction or purpose. Sir Ken Robinson (2006) in a speech on 'Schools kill creativity' made a valid point when he said: *"Creativity in education is just as important as literacy and therefore should be given the same status"* (Robinson 2006).

In Visual Art, learning and imagination (the perception of such images) cannot be separated. Education, put tendentiously, is a process that awakens individuals to a kind of thought that enables them to imagine and visualise conditions other than those that exist or that have existed (Egan 1992:47). The 21st century thinker needs to unleash the ability to think of things as possibly being so, which implies originality and freedom of mental activity. Egan (1992:47) states that education fails such thinkers in "...imprisoning the mind by conventional ideas".

Visual Art is one vehicle towards enhancing the ability to learn how the creative process unfolds. This was the researcher's argument as to why the ability to create and compose in an imaginative way is of educational importance. Learning connects to previous knowledge and information, just as creating art-works relates to strategies of visual inquiry, perception and the non-verbal representation of the visual imagery. The learner identifies similarities and differences, including analogies, and hence restructures elements into his or her unique meaning-making of the world. When observing art learners create a visual art-work, it becomes clear that our minds function as a whole and not as compartmentalised parts. Csikszentmihalyi (1996) pointed out that opposite mind-sets and skills can be required to actually realise an idea in Visual Art form. This was verified in this study when the Visual art learner was observed as creatively destructive, when painting over what seemed a perfectly good visual element or part of the art-work. The fact remained that the Visual Art creator was not

satisfied with certain creative aspects and therefore took the initiative to change it suitable and to personal liking. The art creations included art-relevant skills such as motive, intention, previous knowledge and experiences drawn from the individuals own culture and world, which reflected their inner dialogue with the objective world. The ability to ‘follow’ the creative process in producing a visual rendition of a theme or idea can be argued to develop the flexible mental capacity in the ability to realise new possibilities. This open receptiveness to external stimuli and new ideas with reflective analysis is an essential skill for creativity acumen.

5.2 PURPOSE OF THE RESEARCH

The main aim was to explore the creation of Visual Art as a creative process-orientated intervention in relation to the display and attainment of creativity acumen. To achieve this, two research questions were posed:

Table 5. 1: Research Questions with related skills or acumen

Research Questions	What those skills are:
a) Which creativity-relevant processes are present and can be related to the attainment of creativity acumen while creating Visual Art?	Open-ended response and generating ideas, grasping complexity, seeing new perspectives and withholding judgement (and self-doubt) while taking risks in the creation of art-works, and something new.
b) What art-relevant skills and components relate to attaining creativity acumen in the Visual Art learner while applying the creative process? (application of the creative process)	Knowledge and use of own experiences, artistic expertise, motivation, eagerness, interest in the topic, willingness to learn from mistakes and improve, realistic view of prior knowledge

a) Which creativity-relevant processes are present and can be related to the attainment of creativity acumen while creating Visual Art?

The creativity-relevant processes of ‘inspiration’ and open-ended responses, ‘clarification’ with creative perception, ‘evaluation’ while generating ideas, ‘incubation’ and suspending judgement is included in visual perception. Perception of the world around us, requires visual inquiry. Arnheim (1969) in Eisner (2005:130) states no thought processes seem to exist that cannot be found to operate in perception and that visual *perception* is visual *thinking*. The creativity-relevant process of ‘incubation’, where the art learners detached and distanced themselves from the work to gain better

perspective, is necessary for true understanding (Eisner 2005:131). The creativity-relevant processes which are related to the attainment of creativity acumen, were found to be autonomy and personal visual realisation - with the intention and deliberate artistic actions to first realise and then conceptualise the idea or concept of 'deadly sins'. Persons, mostly pay attention to what interests or intrigues them. Learning to pay attention to the way in which visual form is configured is a mode of thought that can be applied to all things made, theoretical or practical with much perception being focal (Eisner 2005:209). Education in the Visual Art classroom required that the attention to the realisation of 'sin' as a visual message, which helped learners to conceptualise how the visual images have been constructed. The creations of Visual Art pieces took risk; by venturing into learning new concepts and techniques without a specific 'route' to attain task success. Creativity-relevant processes such as 'clarification', 'evaluation' and 'distillation' gave the learner the opportunity to have visual feedback of where they were in their learning, what alternative paths they needed to select and how they achieved the creative outcome. The learning through direct visual feedback was the recognition of what had been accomplished thus far and what still needed to be done. This included the learners' grasp or understanding of how they tackled the task. This in turn appeared to render an understanding of the complex ideas or concepts; thus creativity acumen helped the learners to form unique and original configurations when making something new and more importantly accomplishing a task or not. Reflecting on the creativity-relevant processes used lead to the next research question.

b) What art-relevant skills and components relate to attaining creativity acumen in the Visual Art learner while applying the creative process?

Visual Art fosters where attention is focused, in particular, to the way in which the environment is viewed or perceived. The attention to the creative art tasks in turn required art skills, task motivation and perseverance to complete the task. In the art-relevant skills, laid down by Amabile (1996) such as using one's own experiences and analogies and the willingness to improve while learning from mistakes, it was found in this study that the Visual Art learners embarked on continual meta-cognition (awareness of their thoughts) and judicial thinking (how appropriate response is in relation to the brief), as he or she evaluated their ideas and own representations of such ideas. The formative nature (how the art formed or developed) of assessment throughout the creative process ('clarification, 'evaluation', 'incubation') becomes profound. Creating Visual Art requires meta-cognition (awareness of their thoughts) in the form of creativity acumen (creative thinking and doing) as the learner continually assessed and evaluated their ideas and the visual representation thereof. The learner also asked themselves which art skills were required to improve the creative outcome. All six Visual Art participants throughout the classroom observation, photographs of their art-works and the interviews displayed the willingness to improve and the satisfaction when the art creation was a success almost

elevated what the learner could and wanted to achieve next. Success with an art creation seemed to be inter-related with the amount of receptiveness towards ideas (without judgement) and the perseverance and risk to 'play' and develop the ideas using visual analysis and heuristic strategies.

5.3 SUMMARY OF THE LITERATURE REVIEW AND STUDY

The literature review focused on the components of creative thinking and behaviour, and the construction and development of creativity acumen through the creation of visual art-work, as well as the creative process approach (Petty 1996) to Visual Art creation.

5.3.1 Components of creative thinking and behaviour (creativity acumen)

Amabile's Componential Theory (1996:123) clearly outlines the inter-relatedness of the work environment and the creative task. The creation of art depended on art-relevant skills (technical quality of drawing and painting), creativity-relevant processes (open-ended, spontaneous task response and fluency of idea-generation) and motivation (intrinsic or extrinsic). From the literature study, the relevance of creative thinking and behaviour was shown to be linked to the mind's ability to choose multiple pathways to construct new ideas. One of education's longstanding aims has been to enable learners to think for themselves, to become intellectually independent, make their own responsible choices, develop autonomy, and to think critically as to whether an idea or concept is appropriately represented or not (Eisner 2005:62). Creative behaviour was discovered to be dependent on the learner's willingness to explore new ideas and learn from mistakes. So if they find themselves in an environment which encourages new ideas and supports appropriate recognition for their creative efforts, they will more than likely be interested in working on grasping and strengthening new skills. The learners creativity acumen can therefore be understood as part fulfilment of their potential to think and behave creatively.

5.3.2 The construction and development of creativity acumen through Visual Art creation

The literature review highlighted the importance of creativity acumen as a 21st century issue and skill. Artistic thinking appears to be inherent in the human condition, but is also missing from many a learning venture (Eisner 2005:66). Visual expression in the form of a drawing, collage or painting, was shown to inspire learners through images in order explore the concept of sin and surrounding ideas. The learners appeared to attach meaning with the need to nourish and develop ideas into new existence. It is as if the need to confer form upon ideas and feelings is linked to aspects of the creativity-relevant processes used in art creation. Vygotskian view interrelates learning as mediated through the creative act of making something new and appropriate to the task brief. Visual Art creation it was found, comprises a process of 'idea generation' and 'conceptualisation' with 'clarification' and 'perseverance' to create Visual Art works.

5.3.3 The process approach to creating Visual Art

Ideas were developed in the art learners' minds as they constructed visual art-works of collages and paintings, for others to see. The creative process included the inter-convoluted twists and turns taken by the art learner as they created something that was not there before. Eisner (2005:187) states that the ability to represent form skilfully guides our perception, which includes freeing obstacles to make a visual inquiry (see § 2.5.2) and then express the ideas visually and externally. Visual Art was a creative act in which the creative process was applied to realise, perceive, communicate and evaluate ideas or concepts.

5.4 FINDINGS FROM THE EMPIRICAL STUDY

From the study of the literature, it was gleaned that the concept of *creativity acumen*, is, in its simplest form, the ability to establish something that was not there before; and is related to the ability to think and act creatively. The findings of this study concluded that if an art learner is in an environment which encourages new ideas (creative thinking) and supports appropriate recognition for creative efforts, the learners respond with the dialectical skills of creative behaviour, artistic acumen and their application of the creative process in the art classroom. *Learners learn best when relating the information to their interests and experiences in new ways.* Visual Art certainly forms a gateway for concepts to be experienced and grasped with intention. The learner's creativity acumen was found to be only a partial fulfilment of the potential to think and behave creatively. It was evident from the visual art-works created during this study, that all the participants translated the abstract theme of 'The Seven Deadly Sins' by using flexibility of thought to portray their own understanding of the concept of 'sin'. The questionnaires on creativity before and after the art creation activity indicated that while some of the participants were not initially open to new ideas, that there was a development to be more open and 'play' with ideas. The art participants all admitted to the willingness to surmount obstacles in their art-work (persistent behaviour) and the acceptance of open-ended, more spontaneous ideas by the time they had completed their art creations. This was evidence of the creativity-relevant process of open-ended responses to a heuristic task like Visual Art creation and perseverance to transcend artistic frustrations. One of the prevalent themes that came to the fore in the learner interview's, was to persevere through initial perceived limitations. This is key as creativity is moving beyond conventional ways into new ways of perceiving and looking at the world around us, and in wanting to improve.

Creativity acumen, as the inter-related actions between three 'parts' of creative behaviour, fluent and flexible thinking, the task motivation were observed between the art learner and the art creation in the art classroom. Creativity acumen was not automatic, but developed through deliberation of a learned set of complex abilities, that appeared to be influenced by the educational opportunities and feedback

from the art educator and environment. The educational environment of the Visual Art classroom in this study proved to be a teaching and learning opportunity, which included activity that produced not only a creative outcome, but afforded each participant the opportunity for creative thinking as well. In this study creativity acumen originated from these Grade 11 learners' experiences of creating Visual Art. It was an interaction between the art learner's inner dialogue and thoughts within the scaffolded and socio-cultural context of the school art classroom. The ultimate onus was on the learner to take ownership of how and what he or she would create visually when involved with new work that they had never done before.

5.4.1 The application of the creative process in Visual Art creation

All six the creative phases identified by Petty (1996) were clearly observed in this study. A number of major themes became apparent from the observations. There was an initial reticence to the art task as it was experienced as a new challenge by each participant. The art learners, in thinking about the concept of 'sin', generated ideas from their viewpoint. They decided what to portray by selecting a 'path to solution' with the visual pictures chosen in the collage, and then manipulated the visual elements chosen that related or 'fitted' together ('clarification' through visual inquiry) to be depicted visually in a painting. All of the art participants, during the conceptualisation of their visual ideas, used perception as part of visual inquiry, to be receptive to new perspectives, in selecting which images, in paying attention to certain details and portraying these images in their paintings. The participants' art-relevant skills, such as colour-blending and forms were put to the test as each participant displayed use of heuristic (selecting alternative paths) as all of the participants initial ideas were changed or abandoned. This conveyed a power to change how they initially viewed the topic and thus the alterations that might need to be made to improve or complete the final creative outcome. Risk-taking was observed and explained in the interviews, as the art learners explored the new concept of 'sin', with having to take a leap of faith at times. Most of the participants experienced gaining insight into a concept not dealt with before ('distillation'). This process of art creation was speckled with evaluation throughout their work. Only when the art learner was satisfied (or dissatisfied) with the art-work or visual elements created, did they start a new art piece, or hand the work in.

5.4.2 The Visual Art classroom environment

Vygotsky's (1931) paradigm affirms that *creativity acumen* is the construction and synthesis of experience-based meanings and cognitive symbols. Cognitive symbols translate into the individual's understanding and perspective of the situation as composed in the visual art-works (Moran 2010:84). The participants were observed wanting to make sense out of the concept of 'sin', even when initially they were reticent or doubted their initial ability. Themes from the interviews, which mirrored the observations and questionnaires, included:

- the need for personal preferences, self-expression and autonomy;
- the invaluable experience of making mistakes and learning from them, by exhibiting a willingness to improve on previous attempts;
- the visual communication of ideas and concepts;
- the fact that self-evaluation appeared to prompt autonomy and inner dialogue;
- the time and effort, with perseverance that was poured into the creation of these art-works, despite the obstacles faced.

As mentioned in chapter 1, the learner works both alone and together with peers in the art class. There is an interplay between art skills compared to other's work and the individual learner's personal history and emotions that affected the way in which the art-works were approached and executed.

5.5 SHORTCOMINGS AND LIMITATIONS OF THE STUDY

Specific limitations and shortcomings relevant to this study were identified. They included the following:

- Observation was problematic as it only include a sample of what the learners were doing, not the complete rendition of every thought, pencil-stroke or paint-splash.
- The definitions of creativity referred to only pertain to the context of this study and may not be universally accepted.
- Time restraints, in short lessons, posed an artistic or creative obstacle when the art learners struggled with technical issues such as colour matches or shading, which artificially limited the work for the art creators, as they took work home and for the researcher, as the art-work done at home was not captured.
- The photographs taken of the learners during the art creation process may not at all times do the learners' efforts justice, in that the photographs may have been taken in poor light or from a difficult angle. The photographs were also taken at different distances from the images and at times could have obscured certain visual elements.
- During the interviews the learners reflected on the culmination of their art creations, namely on how their creativity acumen and relevant skills were attained or developed as they moved through the creative process in preparation of the final presentation of their 'sin' painting. It was found that while the learners may not always be fully cognisant of the 'path to solution' they were aware of personal preferences and the intention to create and improve art-works.
- The observations and photographs were collected from one site only and therefore the findings cannot be generalised to other art classrooms or schools.

5.6 REFLEXIVITY

The art classroom as a socio-cultural environment had moments of palpable energy when the art learners were so engrossed in their paintings that one could hear a pin drop. The learners appeared for moments to “get lost in their work” and work for periods in complete silence. These moments were clearly when concentration levels were at their highest and it was generally noted to be approximately half way through a lesson. It was also at times when the Visual Art learners felt themselves to be under pressure to finish within the allotted times. Those were the times when the researcher felt it inappropriate to take photographs or to move among the learners for fear of ‘breaking their concentration’, and being a distraction. At such moments, even the art educator would also leave the learners in quiet and remain still. There was no ‘close monitoring’ but the art educator had an eagle’s view and seemed to instinctively make ‘blanket statements’, such as “be careful when you use black paint, as it is difficult to change”, that were adhered to by the learners. When the art educator noticed a learner struggling with an art skill or colours or not feeling motivated to continue, she made a statement that ‘scaffolded’ the group and did not draw attention to the single learner. The educator waited for the learner to ask for direction or guidance and did not approach an art learner without invitation unless she saw it was completely necessary. On the flip side of this creative process, the silence vacillated with moments of frustration where there were intermittent comments made such: “It is not working!” or “I am irritated”. This is noted in the observation grid (see **Addendum I**).

5.7 RECOMMENDATIONS FOR FURTHER STUDY

After doing this study, it has become apparent that cognition and awareness of the world around us through seeing, perceiving and recognizing require the creativity acumen to compose relationships between visual components (Eisner, 2005:77). Eisner also explains that we firstly need availability of sources and materials for experience and secondly the person’s ability (acumen) to bring awareness to the qualitative world. A dialectical relationship exists between Visual Art creation and creativity acumen. This dialect includes, but is not exclusive to, concept formation from sensory information that can be recalled and manipulated through imagination (Eisner 2005:78). It is therefore recommended that further study includes:

- The development of multiple forms of literacy in schools where there is variety in the ways in which learners respond to a task and display what they have learned (Eisner 2005:110). Learning based on visual conceptualisation could expand thinking processes when intervened with creative art expression across the curriculum.
- The promotion of understanding how creative learning and teaching can be enhanced.

- The exploration of the extent to which knowledge is rooted in culture-specific arts experiences such as hair weaving, wire work and other creative endeavours that require a form for their representation.
- An assessment of the integration of art skills and creativity-relevant processes into other learning areas and subjects at schools.
- An understanding of the reasons why school management can be reluctant to recognise the value of art and creativity processes which enrich learning and give rigour to creative practice.

5.8 CONCLUSION

The study has demonstrated a dialectical relationship between the creation of Visual Art and the development of creativity acumen. It outlined that to attain creativity acumen is not to have one particular set of highly developed skills but to have an ability in flexible thinking with related actions which allow the individual to execute and understand a new concept. This is where the creativity-relevant processes and the art-relevant skills interrelate with the six phases of the creative process. Creativity acumen included the application of the creative process. The creative process revealed the omnipresent experiences within the learners who developed their creative ideas or concepts into a Visual Art creation.

The creation of Visual Art required images from the ideas generated by the learners, which was observed, for example as a person enveloped by a mirror (see **Photo B14 - 2**), a 'brainless' man (see **Photo F14 - 2**) to denote *pride* and the sin of *gluttony* was depicted by two participants as food eaten from another's head (see **Photo E17 - 3**) and heard to be influenced by their own ubiquitous experiences and prior knowledge and required the skill to focus on the concepts or ideas they wished to communicate. The Visual Art learners generated ideas and grasped complexity while they used personally meaningful images to communicate visually. The images created were the important vehicle which carried the concept from the learner's mind to the viewer's mind (Egan 1992: 115). Art education was observed in this study as having an impact on the learning and teaching environment, by allowing the freedom to express one's own thinking and take risks with empathic critique (by the educator). Malaguzzi (1998:6), points out that creativity seems to emerge from multiple experiences, coupled with well-supported development...and a sense of freedom to venture beyond the known. Drew and Rankin (2004:2) are of the opinion that the goal of engaging in creative arts is to communicate, express thoughts and visual perception and representation through the process of discovery and play while creating art. Observations of the Visual Art creations and venturing into unknown art terrain, highlighted that art creation and creativity acumen both need time and supportive spaces to make progress with creative outcomes. According to the art educator, "Creativity acumen relies strongly on the learner being encouraged into considering different options".

The creative process was obvious within the experiences of all six participants who, all developed creative ideas around the concept of 'sin'. In the arts, evaluations are made in the absence of absolute rules. The art learner's inner dialogue and thinking in concepts allowed them to process and combine their experiences with creating art, in new ways through visual portrayal. Adolescence is a time of increasing autonomy and independence which is related to the ability to see different possibilities with the conceptualisation and exploration of various possibilities. The participants revealed their ability to manipulate abstract concepts such as 'sin' in flexible and novel ways.

In this study *creativity acumen* was defined as the ability to freely create something new that had not been done before, which each of the research participants certainly attained. *Creativity acumen* is also the motivation and willingness ('inspiration') to function at a higher cognitive level in establishing something new and original. This included risks, that the art creation may not be acceptable, of the best standard. To achieve creativity acumen in the 21st century, requires individuality and learning pertinent for each unique individual and an openness to the range of possibilities before us. Creativity acumen is one key requirement in today's world as it changes at an ever-increasing rate; the world has become an unpredictable playground. Although creativity may flourish in some schools, where principals have a strong vision of what education is really about, in general to serve a society and the world in the future. While arts appear in the educational curriculum of almost every country in the world, there appears to be a gulf between education and the opportunity to encourage creativity acumen. Dewey (1934) was already convinced so many years ago, that words could be easily manipulated in mechanical ways, and that effective art creation possibly demands more in order to think in terms of symbols and analogy (Eisner 2005:131). Creative processes such as incubation, where the art learner detaches and distances themselves from the work in order to gain better perspective, is necessary for true understanding (Eisner 2005:131). Art creation, is at the end of the day, a very special form of experiential learning. "*Imagination is no mere ornament; nor is art. Together they can help us restore decent purpose to our efforts and help us create the kind of schools our children deserve and our culture needs...those aspirations are worth stretching for*" (Eisner 2005:21)

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ADDENDUM A : PERMISSION LETTERS

- **University registration letter**
- **GDE research approval letter**
- **School principal's letter**
- **Teacher consent letter**
- **Parent Consent letter**
- **Learner Assent letter**

1034 M1RST

LAGESSE D MRS
P O BOX 1413
NORTH RIDING
2162

STUDENT NUMBER : 0748-303-1

ENQUIRIES NAME : POSTGRADUATE QUALIFICATIONS
ENQUIRIES TEL : (012) 441-5702

DATE : 2012-01-24

Dear Student

I wish to inform you that your registration has been accepted for the academic year indicated below. The relevant degree, the approved title for your projected dissertation/thesis, the name of the person appointed as your supervisor/promoter, etc appear below. Please check all the information carefully and let me know if you do not agree.

DEGREE : MED (SP IN GUID. & COUNS.) (98439)
TITLE : THE RELATIONSHIP BETWEEN CREATIVITY ACUMEN AND VISUAL ART CREATION IN GRADE 11
LEARNERS IN JOHANNESBURG, GAUTENG
SUPERVISOR : Prof D KRUGER
ACADEMIC YEAR : 2012
TYPE: LIMITED SCOPE
SUBJECTS REGISTERED: DLGDC95 M ED - WITH SPECIALISATION 1N GUIDANCE AND COUNSELLING

A statement of account will be posted to you shortly.

If you intend submitting your dissertation/thesis for examination, kindly note that notice of such intention must be given before 30 September (for the April/May graduation ceremony) or 15 April (for the September graduation ceremony). Submission must respectively take place BEFORE or on 30 November or 15 June. If submission takes place after 30 November, you will only graduate at the following September graduation ceremony and if submission takes place after 28 February, you will also have to reregister and pay the full tuition fees. Your supervisor's/promoter's written consent for submission must accompany your notice of intention to submit.

Yours faithfully,

Prof L Molamu
Registrar





GDE RESEARCH APPROVAL LETTER

Date:	13 November 2011
Validity of research Approval:	6 February 2012 to 30 September 2012
Name of Researcher:	Lagesse D.
Address of Researcher:	P.O. Box 1413
	Northriding
	Randburg
	2162
Telephone Number:	011 792 1462 / 082 412 6542
Fax Number:	011 792 1462
Email address:	daline.lagesse@gmail.com
Research Topic:	The relationship between creativity acumen and visual art creation in Grade 11 learners in Randburg, Gauteng
Number and type of schools:	ONE Secondary School
District/s/HO	Gauteng North

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. *The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*

Making education a societal priority

Office of the Director: Knowledge Management and Research


9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

David Makhado

2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
4. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year.
8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
12. On completion of the study the researcher must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



Dr David Makhado

Director: Knowledge Management and Research

2011/12/16

2

Making education a societal priority

Office of the Director: Knowledge Management and Research

9th Floor, 111 Commissioner Street, Johannesburg, 2001
 P.O. Box 7710, Johannesburg, 2010 Tel: (31) 355 3506
 Email: David.Makhado@jgse.gov.za
 Website: www.education.gpg.gov.za

14 November 2012

TO WHOM IT MAY CONCERN

This is to confirm that permission has been granted to Mrs. Daline Lagesse to conduct research on _____ High School Grade 11 students in 2012 on the relationship between creativity acumen and visual art creation.

This research is for her Masters Degree.

PRINCIPAL

Teacher Consent Form

I. Purpose

Ms Daline Lagesse has received permission from the Gauteng Education Department to conduct the research study entitled, **The Relationship between creativity acumen and Visual Art creation in Grade 11 learners in Johannesburg, Gauteng**. The purpose of this research is to: explore the relationship between creating Visual Art as a creative process-oriented intervention in relation to the display and attainment of creativity acumen, with two research questions being posed:

- Which creativity-relevant processes can be related to creativity acumen attainment while creating Visual Art?
- What art-relevant skills and components relate to attaining creativity acumen in Visual Art learner while applying the creative process?

II. Participation in the Study

You have been asked to participate in this research study in the first school term of 2012. The manner of your participation will include the following: Continued teaching of Visual Art classes as would normally occur in the school setting.

Participation in this study is voluntary and will attempt not to affect your teaching schedule in any way. If you decide to withdraw permission after the study begins, please notify the school of your decision.

III. Risks and Discomfort

Minimal risks are anticipated as a result of your participation. As a general rule, researchers are not permitted to conduct any studies that will disrupt the order of the typical instructional program found in any Gauteng School.

IV. Benefits

As a participant in this research study, the researcher believes that the information produced will improve and add to the quality of insight and understanding of Visual Art instruction and the creative process and what it may provide for all children in Gauteng District of Schools.

V. Confidentiality

All information is confidential and will only be used for research purposes. Anonymity is assured as neither you or your students' names will not appear in any written reports that stem from data collected from the researcher. A copy of the Information collected will be stored with UNISA and the Gauteng Department of Education, as well as a copy given to the school.

VI. More Information

If you have questions or concerns about this study, please contact Ms Daline Lagesse (researcher) at + 27 (0)82 412 6542 or Prof D Kruger (Study supervisor to the researcher) at + 27 (0)12 429 4520.

VII. Informed Consent

If you have read and understood the information above and agree to participate in this research, please print and sign your name below. Thanking you for your participation.

_____	<u>Daline Lagesse</u>
Teacher	Researcher

Date	

CONSENT LETTER

Dear Parent,

This letter is to give you information regarding the participation in a study as part of my Masters Dissertation, under the supervision of Prof. D. Kruger at the University of South Africa. My research is on the relationship between creativity acumen and visual art in grade 11 learners.

The study aims to provide information with respect to:

- The connection between creativity acumen and the creation of visual art.
- Examining the creative process involved from art design instruction to the final visual product.

This qualitative and interactional study will aim to highlight how creative endeavour i.e. drawing, painting, idea generation within the visual arts may be accompanied by creativity acumen.

Your child has been selected as a participant in the above-mentioned research study. I have also been granted permission for the afore-mentioned research by the school principal and the Department of Education (Gauteng Province).

- ◆ Your identity is protected and you will be given a different name in the final account of the findings and you will therefore remain anonymous.
- ◆ Participation in the study is voluntary, however the research participants co-operation is crucial.
- ◆ The duration of the research will span the first school term.
- ◆ Participation will involve two (2) questionnaires to be filled in before and after the art projects commencement and completion.
- ◆ Interviews of approximately 1 hour duration will be requested at the outset of the study and will be recorded for transcription. The interviews will take place as far as possible within the Art class and school breaks in order to cause the least inconvenience. The interviews will be personally transcribed by myself and the only other persons who will have access to the data will be my academic supervisor. The information gained from the interviews will be used for the above-mentioned objectives of the research.
- ◆ Photographs will be taken of the participants art process and notes made by the researcher for the purpose of documenting the manner of approach to art creation and perspectives to achieve an final product.
- ◆ There are no known or anticipated risks in taking part in this study, except for inconvenience caused if interviews take place after school and/or interfere with school work in any way. Every effort will be made to avoid such discomfort and inconvenience.
- ◆ There will be no direct benefits or compensation for your child's participation in this study. The information obtained, however, I would hope will assist in enhancing creativity and flexibility regarding the different approaches in art creation linked to the acceptance of ambiguity and flexibility.
- ◆ The summary of findings will be made available to the school principal and the Art department.

If you have any further questions regarding the study or would like additional information please do not hesitate to ask me before the interview and filling in of the questionnaires.

I have read the information presented in the information letter about the research being conducted by Daline Lagesse for her Masters Dissertation for UNISA.

I have had the opportunity to ask any questions related to the research and receive satisfactory answers to my questions and/or additional details requested.

I am aware that the photographs of my child's art work will be used in the presentation of the research dissertation and quotations provided by the participant could be used (with permission) as an anonymous quotation.

I have been informed that I may withdraw my consent at any time by advising the student researcher.

With full knowledge of all foregoing, I agree to my child's participation in this study.

Parent name: _____

Parent signature: _____

Researcher Name: Daline Lagesse

Researcher Signature, _____

Thank you for you most valued co-operation and assistance in this research.

Daline Lagesse

Tel: 0824126542

E-mail: daline.lagesse@gmail.com

ASSENT LETTER

Dear Research Participant,

A. Purpose and Background

Under the supervision of Prof. D. Kruger, at UNISA, I Daline Lagesse, a MEd student am conducting research on the relationship between creativity acumen and visual art creation in grade 11 learners. Before you decide to participate, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Please do not hesitate to ask the researcher if there is anything which is not clear to you or if you need more information.

B. Procedures

If your parents and you agree that you may participate in this study, the following procedures will take place:

1. You will be asked to fill out a questionnaire prior to commencing with the art project assigned in January 2012 and fill out a second questionnaire on completion of the art assignment (March 2012). Arrangements will be made with the Art teacher in order to take place during art lessons provided.
2. There will be one interview at the end of the visual art creation schedule. For the purpose of addressing the question: When creating or devising an artwork, what imaginative process and creative acumen does the visual artist employ to achieve the final result?
3. Photographs will be taken with a digital camera during the process of creating and completing the art assignment. Only the art work will appear in the research dissertation and your name will not be used.
4. There is no obligation to participate and there will be no consequences if you choose not to participate. You may withdraw at any stage.
5. The expected time commitment for this study is approximately 2 hours outside of normal art lessons, including the questionnaire and interview which will span over the first term art assignment.

C. Risks

The risks of this study are minimal. Risks will include possible discomfort at having art methods observed by an outsider and discomfort at conveying procedures followed when interviewed or filling in the questionnaire. There may be some inconvenience caused. Confidentiality: the information from interviews and questionnaires will be kept as confidential as possible. Please do not write any identifying information on your questionnaire. Your responses will remain anonymous. Your real name will not appear in the dissertation. All information and data (photographs, transcripts) will be stored in a locked cabinet in my home. Permission will be required for the art products to be photographed in lieu of being identified by such products later. There may be risks which were not anticipated, but every effort will be made to minimize all risks.

D. Direct Benefits

There may be no direct benefit to you for your participation in this study. However, I hope that the information obtained during this study will assist in enhancing creativity

and flexibility regarding the different problem approaches in art linked to the acceptance of ambiguity.

E. Alternative Procedures

If you do not want to be in the study, you may choose not to answer any of the questions in the interview or leave the questionnaire answers blank.

F. Costs Involved

There will be no costs to you for your participation in this study.

G. Person to contact

Should you have any questions about the research or any related matters, please contact Daline Lagesse on 062 412 6542 or daline.lagesse@gmail.com

H. Assent

You will be given a copy of this assent form to keep. By signing this assent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time. I voluntarily agree to take part in this research.

Signature _____ Date _____
Research participant(minor)

Signature _____ Date _____
Daline Lagesse (Researcher)

ADDENDUM B: CREATIVITY CONCEPTS EXPLAINED

In an attempt to clarify the many versions of creativity concepts utilized by various scholars, this table serves to elucidate such concepts further. These concepts will be incorporated into the research descriptions. Creativity acumen – the ability to generate new ideas and artifacts – requires more than just consciousness can provide. It also takes reasoning ability, skills, memory, language among other skills (Damasio 2001:68).

TABLE 2: CREATIVITY CONCEPT TABLE

CREATIVITY CONCEPT	DEFINITION/EXPLANATION	SYNONYMS USED
ACUMEN	A particular ability. The ability to make good judgements and quick decisions in a particular arena (Art).	Skillfulness, grasp, insight, ability, adept, expertise, dexterity, perception, keen discernment
AESTHETIC	Principles of art, study of beauty. Aesthetic creativity involves novel products with no functional purpose (relevance to a particular context).	Artistic, pleasing, beautiful
ATTENTION	Focus on stimulus (Woolfolk 2007:613). The process whereby a person concentrates on some aspect of the environment to the relative exclusion of others.	Focus, attend to, concentration
CLARIFICATION	To clear confusion, to make clear and easier to understand.	Freeing from obscurity or obstacles
CREATIVITY	Imaginative, original thinking which requires knowledge and flexibility (Woolfolk 2007:306).	Imagination, invention, ingenuity, originality,
CREATIVITY ACUMEN	The ability to freely present oneself without limitations and the willingness to function at the maximum level of competence (De Witt 2005). The ability to establish something that was not there before.	Creative ability, creative potential, creativity
CURIOSITY	An innate tendency to seek the novel or new.	Interest, inquisitiveness
DISTILLATION	Extracting the essence of a concept. The process by which 'impurities' are removed.	Purification, distinction
DOMAIN	A specified sphere of activity and knowledge.	Ambit, scope, arena

ELABORATION	Elaboration is the process of enhancing ideas by providing more detail. Additional detail and clarity improves interest in, and understanding of, the topic. Extending meaning by connecting new information to existing knowledge.	Finishing touches, add-ons
EVALUATION	Process of determining value, meaning or worth.	Judgement, assess
EVOLVE	Develop gradually, especially from simple to more complex.	Create by mental act, Change, develop
FLEXIBILITY	Flexibility refers to the production of ideas that show a variety of possibilities or realms of thought. It involves the ability to See things from different perspectives, to use many different approaches or strategies.	Change, interpret
FLUENCY	Fluency refers to the production of a great number of ideas or alternate solutions to a problem. Fluency implies understanding, not just remembering information that is learned.	Fluidity, facility, ability, artful, ease of flow of ideas
IMAGINATION	An internalization of 'play' (Smolucha & Smolucha 1986:3). Imagining is the capacity connected with one's ability to imagine a different future and to plan and to bring about the conditions for that different future (Egan 1992:58).	Inspiration, forming images
INCUBATION	After ceasing to consciously work on a challenge, there is an apparent flash of illumination, during which the solution appears unexpectedly (Amabile 1996:83).	Brooding, mulling over, sitting on for further development
INSIGHT	Sudden realisation of a solution, the ability to deal quickly with new situations (Woolfolk 2007:617).	Perceptiveness, understanding of complexities
INSPIRATION	Stimulation of the mind to a high level of activity. Being 'motivated' by an idea or person or object (work of art), that propels thinking or prompts action.	Influence, guidance, stimulus, encouragement
INTENTION	An act of determining mentally upon some action.	Motive, purpose, plan, goal
MOTIVATION	An internal state that arouses, directs and maintains behaviour (Woolfolk 2007:618). Intrinsic motivation is associated with activities that are their own reward.	Inspiration, interest, curiosity, desire, fervour
NOVELTY	Originality, newness.	Creation, fresh ideas

ORIGINALITY	Originality involves the production of ideas that are unique or new. It involves synthesis or putting information about a topic back together in a new way	Creativeness, boldness, creativity, novelty
PERCEPTION	The faculty of perceiving, an impression based on one's understanding. Perceive through sight, observe. Processes that collectively give coherence to sensory input (Dictionary of Psychology 1985:519)	Acumen, be perceptive
PERSEVERANCE	Admirable striving even against opposition. Persistent behaviour and processes which continue in time even after the initiated stimulus is no longer there (Dictionary of Psychology (2001:524).	Perspiration, persistence, exertion, effort, staying power
PREPARATION	A prerequisite for creative ability is knowledge and some understanding of the activities engaged in. Preparation is a process of getting ready over time.	Devise, plan, source
PROCESS	Use of learning materials, tools and techniques to motivate learning (Jensen 2006:213). A process is a series of actions which are carried out in order to achieve a particular result.	Action, course of actions, manner, means, practice, stage, phase, development, growth
SYMBOL	An image or visual quality that stands for an idea.	Image, representation, figure
VERIFICATION	Confirmation or proof that ideas or insight used is resolving the challenge or realizing the outcome successfully.	Confirmation, validation
VISUALIZATION	A mental image that is similar to a visual perception.	Visual image, mental image
VISUAL CULTURE Mitchell "Showing seeing: a critique of visual culture", Journal Of Visual Culture, 2002 1(2):171	The images and objects we encounter on a daily basis such billboards, television, film, advertisements, packaging. It is an increasing ability to distribute images through media that has changed society's visuality (Grubbs 2012:34).	A dialectical concept of visual culture as the social construction, <i>the visual construction of the social field</i> . It is not just that we see the way we do because we are social, but also that our social arrangements take the forms as we 'see'.
VISUAL INQUIRY	An act of looking for information in visual images.	Visual analysis, visual exploration

ADDENDUM C: GRADE 11 VISUAL ART ASSIGNMENT AS TASK PRESENTATION

Visual Art Assignment

Grade 11 Term 1 2012

"Seven Deadly Sins"



NB: While you are doing this project, please keep a good sense of humor and don't become too "dark" in your conclusions and your art.

THE SEVEN DEADLY SINS

The Seven Deadly Sins are those transgressions which are fatal to spiritual progress. You probably commit some of them every day without thinking about the rich tradition of eternal damnation in which you're participating.

[ENVY, SLOTH, GLUTTONY, WRATH, PRIDE, LUST, GREED](#)

Your art will be an interpretation of one of these sins, and the consequences of it. These sins are named in various religions as a moral compass and an indication of how to live and what to avoid



[Hieronymus Bosch's The Seven Deadly Sins and the Four Last Things](#)

The **7 Deadly Sins**, also known as the **Capital Vices** or **Cardinal Sins**, is a classification of objectionable [vices](#) that have been used since early [Christian](#) times to educate and instruct followers concerning fallen humanity's tendency to [sin](#). The currently recognized version of the sins are usually given as [wrath](#), [greed](#), [sloth](#), [pride](#), [lust](#), [envy](#), and [gluttony](#).

In the [Book of Proverbs](#) (Mishlai), [King Solomon](#) stated that the Lord specifically regards "six things the Lord hateth, and the seventh His soul detesteth." namely:

- A proud look.
- A lying tongue.
- Hands that shed innocent blood.
- A heart that devises wicked plots.
- Feet that is swift to run into mischief.
- A deceitful witness that uttereth lies.
- Him that soweth discord among brethren.

While there are seven of them, this list is considerably different from the traditional one, with only pride clearly being in both lists.

Another list, given this time by the [Epistle to the Galatians](#) (Galatians 5:19-21), includes more of the traditional seven sins, although the list is substantially longer: adultery, fornication, uncleanness, lasciviousness, idolatry, sorcery, hatred, variance, emulations, wrath, strife, seditions, heresies, envyings, murders, drunkenness, revellings, "and such like".

Historical and modern definitions of the deadly sins

Lust

Lust or **lechery** (carnal "*luxurid*") is usually thought of as excessive thoughts or desires of a [sexual](#) nature. In Dante's [Purgatorio](#), the penitent walks within flames to purge himself of lustful/sexual thoughts and feelings. In Dante's [Inferno](#), unforgiven souls of the sin of lust are blown about in restless hurricane-like winds symbolic of their own lack of self control to their lustful passions in earthly life.



Gluttony

"Excess" ([Albert Anker](#), 1896)

Derived from the Latin *gluttire*, meaning to gulp down or swallow, **gluttony** (Latin, *gula*) is the over-indulgence and [over-consumption](#) of anything to the point of waste. In the Christian religions, it is considered a sin because of the excessive desire for food or its withholding from the needy.

Depending on the culture, it can be seen as either a vice or a sign of status. Where food is relatively scarce, being able to eat well might be something to take pride in. But in an area where food is routinely plentiful, it may be considered a sign of self-control to resist the temptation to over-indulge.

Medieval church leaders (e.g., [Thomas Aquinas](#)) took a more expansive view of gluttony, arguing that it could also include an obsessive anticipation of meals, and the constant eating of delicacies and excessively costly foods. Aquinas went so far as to prepare a list of six ways to commit gluttony, including:

- *Praepropere* - eating too soon.
- *Laute* - eating too expensively.
- *Nimis* - eating too much.
- *Ardenter* - eating too eagerly (burningly).
- *Studiose* - eating too daintily (keenly).
- *Forente* - eating wildly (boringly).

Greed

Greed (Latin, *avaritia*), also known as **avarice** or **covetousness**, is, like lust and gluttony, a sin of excess. However, greed (as Seen by the church) is applied to a very excessive or rapacious desire and pursuit of [wealth](#), [status](#), and power. St. Thomas Aquinas wrote that greed was "a sin against God, just as all mortal sins, in as much as man condemns things eternal for the sake of temporal things." In Dante's Purgatory, the penitents were bound and laid face down on the ground for having concentrated too much on earthly thoughts. "Avarice" is more of a blanket term that can describe many other examples of greedy behavior. These include disloyalty, deliberate [betrayal](#), or [treason](#),[[] especially for personal gain, for example through [bribery](#). [Scavenging](#)[]] and [hoarding](#) of materials or objects, [theft](#) and [robbery](#), especially by means of [violence](#), [trickery](#), or [manipulation](#) of [authority](#) are all actions that may be inspired by greed. Such misdeeds can include [simony](#), where one attempts to purchase or sell [sacraments](#), including [Holy Orders](#) and, therefore, positions of authority in the Church hierarchy.

As defined outside of Christian writings, greed is an inordinate desire to acquire or possess more than one needs, especially with respect to [material wealth](#).

Sloth

Over time, the "acedia" in Pope Gregory's order has come to be closer in meaning to **sloth** (Latin, *Socordia*). The focus came to be on the consequences of acedia rather than the cause, and so, by the 17th century, the exact *deadly sin* referred to was believed to be the failure to utilize one's talents and gifts Even in Dante's time there were signs of this change; in his *Purgatorio* he had portrayed the penance for acedia as running continuously at top speed.

The modern view goes further, regarding laziness and indifference as the *sin* at the heart of the matter. Since this contrasts with a more willful failure to, for example, love God and his works, sloth is often Seen as being considerably less serious than the other sins, more a sin of omission than of commission.

Acedia

Acedia (Latin, *acedia*) (from Greek ακηδία) is the neglect to take care of something that one should do. It is translated to [apathetic](#) listlessness; depression without joy. It is similar to [melancholy](#), although *acedia* describes the behaviour, while *melancholy* suggests the emotion producing it. In early Christian thought, the lack of joy was

regarded as a willful refusal to enjoy the goodness of God and the world God created; by contrast, apathy was considered a refusal to help others in time of need.

When [Thomas Aquinas](#) described *acedia* in his interpretation of the list, he described it as an *uneasiness of the mind*, being a progenitor for lesser sins such as restlessness and instability. Dante refined this definition further, describing *acedia* as the *failure to love God with all one's heart, all one's mind and all one's soul*; to him it was the *middle sin*, the only one characterized by an absence or insufficiency of love.

Wrath

Wrath (Latin, *ira*), also known as "[rage](#)", may be described as inordinate and uncontrolled feelings of hatred and anger. Wrath, in its purest form, presents with self-destructiveness, violence, and hate that may provoke [feuds](#) that can go on for centuries. Wrath may persist long after the person who did another a grievous wrong is dead. Feelings of anger can manifest in different ways, including [impatience](#), [revenge](#), and [vigilantism](#).

Wrath is the only sin not necessarily associated with selfishness or self-interest (although one can of course be wrathful for selfish reasons, such as jealousy, (closely related to the sin of envy). [Dante](#) described vengeance as "love of [justice](#) perverted to [revenge](#) and [spite](#)". In its original form, the sin of anger also encompassed anger pointed internally rather than externally. Thus [suicide](#) was deemed as the ultimate, albeit tragic, expression of hatred directed inwardly, a final rejection of God's gifts

Envy

Like greed, **Envy** (Latin, *invidia*) may be characterized by an insatiable desire; they differ, however, for two main reasons:

- First, greed is largely associated with material goods, whereas envy may apply more generally.
- Second, those who commit the sin of envy not only resent that another person has something they perceive themselves as lacking, but also wish the other person to be deprived of it.

Dante defined this as "a desire to deprive other men of theirs." Envy can be directly related to the [Ten Commandments](#), specifically "Neither shall you desire... anything that belongs to your neighbour". In Dante's Purgatory, the punishment for the envious is to have their eyes sewn shut with wire because they have gained sinful pleasure from Seeing others brought low. Aquinas described envy as "sorrow for another's good".

Pride

In almost every list, **pride** (Latin, *superbia*), or **hubris**, is considered the original and most serious of the seven deadly sins, and the source of the others. It is identified as a desire to be more important or attractive than others, failing to acknowledge the good work of others, and excessive love of self (especially holding self out of proper position toward God). Dante's definition was "love of self perverted to hatred and contempt for one's neighbour." In perhaps the best-known example, the story of [Lucifer](#), pride (his desire to compete with God) was what caused his fall from Heaven, and his resultant transformation into [Satan](#). In Dante's *Divine Comedy*, the penitents

were forced to walk with stone slabs bearing down on their backs to induce feelings of humility.

Vainglory

Vainglory (Latin, *vanagloria*) is unjustified boasting. Pope Gregory viewed it as a form of pride, so he folded *vainglory* into pride for his listing of sins.¹

The Latin term *gloria* roughly means *boasting*, although its English cognate - *glory* - has come to have an exclusively positive meaning; historically, *vain* roughly meant *futile*, but by the 14th century had come to have the strong [narcissistic](#) undertones, of irrelevant accuracy, that it retains today. As a result of these semantic changes, *vainglory* has become a rarely used word in itself, and is now commonly interpreted as referring to *vanity* (in its modern narcissistic sense).

Assignment steps.

1. A3 drawing combination of drawings that was given to you on an A3 sheet. Pen or pencil. This is a formal drawing. (100)
(This drawing is there for them to loosen up, think randomly, have a good visual reference in front of them and be contained in their first drawing without being overwhelmed)
2. Write an introduction to your idea of the sin that you have chosen to portray. Remember it is the consequence of the sin that you will show. Included in this and pictures, poems, drawings and anything you can think of. (25)
(Verbalize their thoughts; start to make creative choices buy into the thinking process. They can now start to interpret.)
3. Experimental drawing with paint and pastels of main figure of your collage. Work in dark diluted colours first. Use a paintbrush to draw the object. Now highlight it afterwards in white. After this, fill in the background in white. A2 stained paper (100)
(Work very big and free, they will loosen up, use paint and thoughts freely. They are under pressure to produce a piece in +- 3 days. Speeds them up, breaks the preciousness of their art. They are now starting to fall in love with their art. Work in transparent layers. Instant success. They will realize that a good painting and art-work does not take forever. Working only on part of collage. Maybe a person or maybe an object.
4. Collage A3 for booklet Prepare the collage in an artistic way. If the pictures are not in proportion, make a line drawing to show the sizes and shapes. Presentation is very important (25)
Collage runs while they are doing experimental work. This is a formal process of solving art elements and principles of design in a composition and in a space. Learn to

present a thought process visually, to solve practical cutting, pasting and reference problems.

At this stage I am very critical of subject matter and how they resolve visual problems. They get cross with teacher and they feel blocked often. We want them to fight against the resistance we give them. They are overwhelmed with visuals every day, but now have to be decisive to make personal choices. We have magazines in classroom to help. They are forbidden to use images such as advertisements- Seen too often, faeries-someone else's art, kitsch- Seen too often, well-known people like Mandela- too easy to make a mistake and everyone can recognize it, models- faces were airbrushed.

5. Lined composition drawing. Back of this page (50)
Here they solve the sizes of objects visually. They reduce it to a simple line drawing in order to get all the visual pollution out of their minds. They solve all the shapes and also space problems.
6. A2 painting. As soon as your collage is Okayed, you may proceed with your painting. Remember to start on a coloured ground. (200)
Work on coloured ground- solves all harmony problems. Transparent layering creates pearl like effect. Work in loose strokes; don't forget character of paint-painterly approach. There are many requirements here, as the problems pop up. We will have a halfway due date and then maybe three quarters and then final before exam.

Total: 500 mark

Participant 4 – Sin of ‘Pride’ selected to portray in Visual Art

SAMANTHA

THE SEVEN DEADLY SINS

The Seven Deadly Sins

WRATH	GLUTTONY
GREED	ENVY
SLOTH	LUST
PRIDE	

There are seven different sins some with similar meanings. These sins are seen as the wrong things that people might fall into. The following is a list of the seven sins

- Greed
- Lust
- Envy
- Wrath
- Sloth
- Pride
- Gluttony

The sin I've chosen

The sin that I decide to do is pride and vanity. Pride and vanity is very similar to each other. Many define pride and vanity as a desire to be more important than the next person. It is being better and having more than that of others. Pride makes one feel more superior to the other person as you have something others want. Vanity is more of the obsession of oneself and pride is the desire to have more importance and be more attractive than the next person.

The reason I've chosen this sin

It is known that these sins are common expressed amongst many people. It is a possibility that the person doesn't even realize that they are committing one of these sins. I think that pride is common amongst a lot of people. This is why I've chosen pride, to make sense of the situation, to show my view on pride and how I may see it as a sin. Pride can have a bad meaning or arrogant means that someone has an exaggerated sense of self-esteem and who's overconfident. It could someone has no respect for what other people do, only respect for what he or she does. Everyone has experience pride at one stage of the lives, intentionally or not and this way I get to express my view on it.

How you plan on portraying the idea

I do plan on keeping an open mind of the topic. Pride could be a difficult sin to choose because of the different ways to interpret it. I hope to have this serious issue portrayed in a humorous way.

"Pride costs more than hunger, thirst and cold."
- Thomas Jefferson

Look at your pride. It has made you utterly helpless. When you say something. In a positive way. Out of nowhere pride appears. When you say something. In a negative way. Again out of nowhere pride appears. Alas, how helpless you are.

Participant 5 – Sin of ‘Gluttony’ selected to portray in Visual Art

DAN

Gluttony

In the Christian religions, it is considered a sin because of the excessive desire for food or its withholding from the need.

Is like lust and gluttony, a sin of excess. However, greed is applied to very excessive or Repacious desire and pursuit to be famous and have a lot of money and power.

St. Thomas Aquinas wrote that greed was a sin against god, just as mortal sins, in as much as man condemns things. Greed is an inordinate desire to acquire or possess more than ones needs, especially with respect to material wealth.

In Dante's purgatory, the penitents were bound and laid face down on the ground for having concentrated too much on earthly thoughts

Matthew 6:25-34

"Therefore I tell you, do not be anxious about your life, what you will eat or what you will drink, nor about your body, what you will put on. Is not life more than food, and the body more than clothing? Look at the birds of the air: they neither sow nor reap nor gather into barns, and yet your heavenly Father feeds them. Are you not of more value than they?" And which of you by being anxious can add a single hour to his span of life? And why are you anxious about clothing? Consider the lilies of the field, how they grow: they neither toil nor spin, yet I tell you, even Solomon in all his glory was not arrayed like one of these. But if God so clothes the grass of the field, which today is alive and tomorrow is thrown into the oven, will he not much more clothe you, O you of little faith? Therefore do not be anxious, saying, 'What shall we eat?' or 'What shall we drink?' or 'What shall we wear?' For the Gentiles seek after all these things."

Participant 6 – Sin of ‘Pride’ selected to portray in Visual Art

LEO

THE SEVEN DEADLY SINS

Have chosen greed because it is easier to make control lives should be in all of the governments, in our country, in our continent and all globally.

It is a huge issue not only with Africa, but all over the world.

As not only the governments, but most people become greedy after receiving the right kind of power, being money of money.

Like I think there are not as many things out there that become people for and greed sets in at our minds, and it really only fit our lives.

Having control all about it is a good way to get people to think about this serious topic.





MOCK UP ILLUSTRATION OF THE SEVEN DEADLY SINS

and I have also chosen vanity, as people get so caught up in their appearance, they start to develop an obsession the way they do every thing in their lives. Kids limit themselves for example, not playing a sport you really love because you aren't good at it, or because you are slightly over weight and are afraid the kids will laugh at you, these kids are pushed down through out their lives and are made to believe they aren't good enough and don't have the right to do what they really want to do... they get so carried away that many children resort to perming and bleaches.

ADDENDUM E: KEY FOR OBSERVATION GRID OF CREATIVITY PROCESSES & ART CREATION

CREATIVITY COMPONENTS (Amabile 1996)	CREATIVE PHASES (Petty 1996)	
Creativity-Relevant Processes	ICEDIP MODEL	CAPS
Open-ended response to creative stimulus	Inspiration: The learner responds with spontaneity and piqued interest by being motivated by an idea or theme. This influences the way in which responses will proceed.	Conceptualising
Perception is creative to being receptive to new ideas and different perceptions	Clarification: The learner frees obstacles by thinking about the concept or task presented. The learner may think about how the elements relate to each other (visual inquiry). New perspectives can come from any knowledge or experience.	
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation: The learner processes the information and the task at hand by calling up own knowledge and reflecting on the value and appropriateness of the task. The learner is willing to take stock.	
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation: The learner finds meaning or an essence of the art task. The learner displays insight into the concept by turning it into a visual message.	Making and Management
Suspending judgement and keeping idea options open for as long as possible	Incubation: The learner at times detaches from his/her work in order to allow unconscious flow of ideas.	
Art-Relevant Skills	ICEDIP MODEL	
Keeness to make use of heuristics(trial-and-error) and select alternative paths	Inspiration: The learner displays ability to play with ideas first rather than choosing the first idea.	Making and Management
Analogies and own knowledge or experience are called upon in realizing and developing creative ideas	Clarification: The learner uses analogies and accounts for exceptions in making artistic decisions.	
Willing to learn from mistakes and improve work	Evaluation: Learner grasps the skills and 'parts' needed for Visual Art creation and reflects on progress and to maximize competence	Presentation
Autonomy and self-expression through own representation of creative ideas	Distillation: The learner freely presents own creative ideas, which may include risk-taking and originality.	
Ability to concentrate for long periods of time with effort	Incubation: The learner does expect some difficulties, but is trusting of creative perception and paces him- or herself to deal with obstacles	
Perseverance to do task despite challenges faced/Task Motivation	Perspiration: The learner persists and is committed to the art task/Learners art decisions are based on personal willingness	

ADDENDUM F: COMPOSITE OBSERVATION GRID OF CREATIVITY ACUMEN DURING ART CREATION

TABLE OF OBSERVATION OF ART CREATION PARTICIPANT 1: BETTY					
CREATIVITY COMPONENTS (Amabile 1996)	Participant 1: Theme: "The Seven Deadly Sins" Betty decided to depict the sin of Gluttony.				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Exemplars of finished art pieces					
Creativity-Relevant Processes					
Response to creative stimulus (open-ended)	Inspiration	The participant responds with reticence to the task. The elements chosen are the globe, people and books in that order. The 'nested eye' is originally copied standing on the book, is erased and replaced by 2 more books.	The learner prepares the background by flicking paint (art skill) to give a speckled look. The learner eagerly finds many images as sources of inspiration to portray gluttony.	The first and second experimental drawing were 'drawn' with paint (see Photo A10 - 1). The response is calculated and deliberate. The second painting is retained as the participant questioned the look and texture. The second painting is the development of a man's face being stuffed with food (see Photo A11 - 2).	Betty combines elements of first and second paintings and additions from collage were included in the final painting. The ideas that the learner 'played' with was the eating man (from a second painting) (see Photo A12 - 3).
		** Moderate open-ended response	*** High open-ended response	** Moderate open-ended response	** Moderate to low open-ended response
Perception is creative by being receptive to new ideas and different perceptions and Seeing the interactions between visual parts and concept/idea	Clarification	Betty creates her own elements by adding turned page corners and 'clouds' floating with different sins portrayed on each one (see Photo A 1 and Photo A 2). The elements are all placed off-centre and then developed with shading.	The learner views gluttony from a perspective of how gluttony is served, by plates and cups. The learner connects the elements of a chair, cake as related to gluttony as a consequence (see Photo A 7).	The learner generates ideas by portraying gluttony with a large cake (see Photo A11 - 1) wine bottles and ice-cream. The person in the centre is drinking a slush puppy, depicting "falling into temptation by sweet pleasures" (according to participant 1).	Betty's depiction of gluttony is linked with the combination of over-eating and laziness. The learner perceives the idea (gluttony) visually by painting the eating man, wine bottles from 1 st painting and the chair from the collage.

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 1: BETTY**

Response Generation		*** High level of creative perception	***High level of creative perception	***High creativity-relevant acumen?	*Low creative perception
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation	The participant includes own knowledge by adding in slogan such as 'hidden in the shadows' (see Photo A 2). The clouds are used to symbolize sins floating all around us.	The learner elaborates on the idea of gluttony through visual ideas of food, kitchen utensils and words such as 'comes dine with us' and 'Have mercy'.	The participant 1 says the following: "Personally it is important to be happy with your art before and after the process. If you don't like your art it is as if you almost lose interesting it and from there it flops".	Once pencil marks are made onto canvas from projection, participant 1 uses paint brush to 'draw' the visual elements onto canvas in blue paint (see Photo A13 - 3)
		*** High acumen	**Moderate image conception	***High level of reflection	**Moderate use of own knowledge
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation	Betty embarks on this task with caution (little risk-taking) but added the words of the all the sins which indicated thought given to the theme and grasping complexity.	Risk-taking not observed. Learner appears optimistic as to where these ideas will lead and does grasp the essence of idea chosen.	Betty was observed as referring to the collage as a starting point and painted the 3-tiered cake as the first element in painting (See Photo A10-1).	Betty adds and changes colour as well as certain visual elements like a 'chandelier' which she removes completely (see Photo A15 - 3 to Photo A17 - 3).
		*Low risk-taking	* Low Risk -taking	*Low risk-taking and low grasp of complexity?	* Low risk-taking
Suspending judgement and keeping idea options open for as long as possible and deferring uncertainty	Incubation	Mulling over the elements and ideas is apparent in this learner, as he/she begins to decide on the sin he/she would like to depict.	The participant generally stuck to first ideas decided on and pasted sourced images that he/she showed preference for to depict gluttony.	The participant displayed some fear and uncertainty in changing the 1 st painting 'too much' and therefore opted to gingerly add faint colour and some layering as her preferred changes (see Photo A15 - 3).	Betty made creative decisions with caution and seemed uncertain as to 'dimensions' of visual elements and questions elements and composition in paintings (see Photo A13 - 3).
		** Moderate	*Low judgement suspension	* Low acumen for deferring uncertainty	* Low judgement suspension
Art-Relevant Skills		The Art-relevant Skills will determine what pathway will be available to the learner during his/her search for a creative response			





**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 1: BETTY**

<p>Keeness to make use of heuristics (trial-and-error) and select alternative paths and bringing about changes</p>	<p align="center">Inspiration</p>	<p>Visual elements are strategically selected and changed, replaced by books(see Photo A 2). The additions, contrasting and shading are privy to changes to show the facial features on some heads. Certain details are darkened, while wispy lines give movement.</p>	<p>She displays keen interest in task and purposeful choices of visual pictures in various magazines. The participant makes choices with ease and takes little time in placement of images onto background.</p>	<p>The first experimental drawing (practice painting) is prepared with similar art technique as the collage background. The learner first brushes paint on with tissue, then splatters paint on. The participant states the speckles are done in <i>"cool tones to connect all the colours"</i> (see Photo A8 - 1).</p>	<p>The elements chosen for final composition are projected onto the final canvas from overhead projector (see Photo A9 - 3). Projection is to get the correct dimensions from A4 to A3 canvas. Note: Only 2 participants project a line drawing onto final canvas (P 1 & 2).</p>
		<p>*** High acumen</p>	<p>***High level of use of heuristics</p>	<p>**Moderate use of heuristics</p>	<p>**Moderate use of heuristics</p>
<p>Analogies and own knowledge or experience are called upon in realizing, interpreting and developing creative ideas</p>	<p align="center">Clarification</p>	<p>The analogies drawn with the globe (earth) with clouds floating around it with 'sins' on them as the people who commit these sins and the knowledge of such sins (in books).</p>	<p>Betty's depiction included a thin girl who could fall into temptation. The temptations include candy, cakes and sweets.</p>	<p>The learner calls on the art skill of the 'triangle method' (used by Leonardo Da Vinci) as explained in class by the art educator, by placing the wine bottles and other elements in 'a visual triangle' (see Photo A12 - 1).</p>	<p>Betty is observed as frustrated and struggled with visual elements in her art. Betty was observed removing the 'chandelier' from the final painting after seeing a chandelier in participant 4's painting (see Photo A17 - 3), with the realisation that the art development had not gone as planned.</p>
		<p>***High level of creative analogy</p>	<p>**Moderate realisation of visual ideas</p>	<p>**Moderate realisation of creative ideas</p>	<p>**Moderate realisation of creative visual ideas</p>
<p>Willing to learn from mistakes and improve work</p>	<p align="center">Evaluation</p>	<p>The learner makes and manages changes by erasing and shading areas (following art educators guidance) to use shading for contrast.</p>	<p>Betty is positively critical of her collage and steps back every now and again to assess placement and spacing (see Photo A 7).</p>	<p>Betty had a breakthrough with the 2nd painting (with scaffolding from educator) by applying a new art technique, pastels and adding colours (see Photo A15 - 2). The learner says the following: <i>"By taking time out and looking at your art process, it helps you to correct the mistakes you have made"</i>.</p>	<p>She is evaluating obstacles in her art-work. The participant says: <i>"When I started I thought this assignment wouldn't be difficult. Now I am really struggling, ... it is certainly not as easy as I thought it was going to be"</i>.</p>

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 1: BETTY**

		Moderate level of evaluation	*High evaluation against ease of execution	***High level of reflection of 'where to from here'	***High level of evaluation
Autonomy and self-expression through own representation of creative and visual ideas	Distillation	Independence displayed by working within the time allotted and self-expression displayed by own creative additions (see Photo A 1 and Photo A 2).	Participant displays originality by how 'relevant' the ideas are. The idea of plates and cups 'serving' gluttony is original and ingenious (see Photo A 6).	Participant says she ' <i>likes the background</i> ' and therefore did not feel the need to paint over it. The learner allowed the background to be 'a part of the painting' (see Photo A17 - 1)	Betty was observed as disgruntled with painting (see Photo A15 - 3). She asks for colour advice from educator. Art teacher guides the learner by saying: "Learn to like the textures of the paint in what you are saying visually". "I can see you are not happy with it, but learn to like it".
		Moderate self-expression	* High self-expression	**Moderate self-expression	* Low self-expression
Ability to concentrate for long periods of time with effort	Incubation	The learner worked relatively quickly, not much time was spent pondering. Elements were chosen relatively quickly.	Participant was observed as 'just getting on with it'. Betty displayed a moderate amount of task commitment.	The learner was observed taking intermittent breaks and walking around the classroom. Betty used this as an opportunity to evaluate and compare her own work against others.	The learner was observed taking breaks when an obstacle appeared in the development of the painting (see Photo A17 - 3). It appeared to be important to detach from the work and compare to her peers.
		*Low level of task effort	**Moderate concentration	**Moderate concentration	***High concentration levels with breaks
Perseverance to do task despite challenges faced	Perspiration	The learner did not display any frustration with this task.	Betty put her head down and completed the task efficiently.	Participant is engrossed in painting and unaware of any movement around her (see Photo A14 - 2)	The learner mentions time constraints and feels she 'is running out of time'
Task Motivation	Perspiration	Participant 1 appears more motivated at the end of the formal drawing task than at the start.	Participant 1 displays being focused on the next art task in line- appears 'fired up'.	The learner is satisfied with the two paintings and appears motivated to begin with the final painting. Participant is observed 'mulling over ideas'.	Participant 1 has made an effort through artistic challenges but states her disappointment with the end result.

TABLE OF OBSERVATION OF ART CREATION PARTICIPANT 1: BETTY					
		Moderate Perspiration motivation task	**Moderate task perseverance	*High task perseverance	***High task perseverance

TABLE OF OBSERVATION OF ART CREATION PARTICIPANT 2: CHARLES					
CREATIVITY COMPONENTS (Amabile 1996)	Participant 2: Theme: "The Seven Deadly Sins" Charles decided to depict the sin of Pride				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Exemplars of finished art pieces					
Creativity-Relevant Processes					
Open-ended response to creative stimulus	Inspiration	Charles vacillated to start. He spent much time in the lesson contemplating which elements to choose. His creative response included choosing a relatively 'hidden' element of the fish and worked on that for an entire lesson, adding shading and contrasts. The second element decided on was the charioteer which was changed (see Photo B 1).	Charles prepared the background by freely applying orange paint onto canvas with his hands. Circular marks are drawn in with fingers (see Photo B 5).	Charles is observed not starting with the task straight away. The learner stated that he was not sure what to do initially and had the following to say: "Whenever I begin doing art, I never really have an idea about what I will draw or paint, so before I start with anything, my thoughts are completely open to anything that will be appropriate for that certain art task". This learner displays spontaneity and open-ended response to creating art (see Photo B9 - 1).	The art learner has started the painting at home 9 due to time spent on 2 nd painting) and arrives to class with the outlined painting (see Photo B8 - 3).
		Moderate level of openness to task	**Moderate open-ended response	*High level of openness to task	*Low level of spontaneity

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 2: CHARLES**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 2: Theme: "The Seven Deadly Sins" Charles decided to depict the sin of Pride				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Perception is creative by being receptive to new ideas and different perceptions	Clarification	Participant 2 displayed open response by changing the angle of the fish, picking only one or two elements from each composition, conveying visual inquiry as to how to place the elements.	Charles perceived pride from many angles: Pride can consume you, pride of place, posing with confidence that can be interpreted as pride, A pride of lions, country pride.	He perceived pride visually as the girl in the mirror from his collage (see Photo B9 - 2). This was his perception of 'pride' and hence how he visually depicted the sin.	He was observed transferring previous knowledge to the final painting by manipulating the visual image of the girl in the mirror and refining a visual message.
		***High level of creative perception	***High level creative perception	***High creative perception	**Moderate creative perception
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation	Charles conceptualised the 'wispy' figures in more solid form and paid attention to a girl in the foreground carrying a bucket. One man was depicted with a disc over his mouth (See Photo B 2).	Charles elaborated on the sin of pride by manipulating the word and interpretation of the idea. His visual ideas included 'arrogant pose', 'Lion is known as the king of beasts and collectively as a pride of lions' (see Photo B 7)	The participant conceives the idea of the body-builder man which according to him: " <i>The pose shows confidence in oneself, but can be interpreted as pride</i> ". As observed, he mainly worked alone and did not evaluate himself against other art learners.	The participant conceptualises the idea of pride because he said " <i>It one I understand and am drawn to</i> ". The art learner has started the painting at home and arrives to class with the outlined painting (see Photo B8 - 3).
		Strong Evaluation	***High level of elaboration of ideas	**Moderate level of generating ideas	*Low level of new idea generation
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation	The participant embarks on task with open mind and displays appropriate grasp of complexity by his juxtaposition of elements and clear representation (see Photo B 2).	Originality is observed through the continuity of essence or meaning of pride as a complex concept within varying contexts.	The participant spends a large amount of time on the 2 nd painting and says: " <i>I wanted to put as much detail in as possible so that later I had a good basis to work from</i> ". The 2 nd painting included his grasp of complexity by the display of the way the mirror 'consumes' the girl.	This participant was observed 'getting lost in the details' and spent time changing the colours (see Photo B10 - 3).
		Moderate Distillation	**Moderate exploration & risk	***High level of risk-taking	**Moderate level of risk

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 2: CHARLES**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 2: Theme: "The Seven Deadly Sins" Charles decided to depict the sin of Pride				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Suspending judgement and keeping idea options open for as long as possible	Incubation	The participant suspends judgement by not overtly deciding on a 'sin' to depict yet. Charles verbalizes he does not know yet which sin he will portray at this time.	The participant keeps his/her mind open to new ideas, evident by new additions of visuals such as statue of liberty, posing girl (see Photo B 7).	The participant includes the main visual images that he wanted to portray as pride. This included the 'posing man' who is juxtaposed to a dice, which symbolizes pride as taking a chance.	The learner says; " I wanted to get the main parts done first and then fill in the detail- for me it feels easier to do the rest once that is done".
		** Moderate level of incubation	**Moderate	**High judgement suspension	** Moderate Judgement suspension
Art-Relevant Skills	The Art-relevant Skills will determine what pathway will be available to the learner during his/her search for a creative response				
Keeness to make use of heuristics (trial-and-error) and select alternative paths	Inspiration	The initial 'wispy – lined' drawings is initially drawn as three women (but the participant did not like it) and so changed it to one girl on the left to more solid lines and shades. The face covers this previous attempt (see Photo B 2).	Participant 2 works in a linear and logical way. All pictures are pasted separately and cut into straight lines. Once position chosen, picture is not moved around (see Photo B 8).	The background which is prepared for the first experimental drawing by washing the sheet of paper under a tap of water (see Photo B8 - 1). The learner rubs black paint in with his hands and adds 'splotches of red' (see Photo B8 - 1, Photo B9 - 1 and Photo B10 - 1). It is noted that the preparation of the backgrounds for the other 2 paintings are not observed in class but done at home.	Participant works slowly and completed one visual element at a time (see Photo B13 - 2). The skin one is changed as well as the final background once all detail filled in.
		Moderate heuristics	**Moderate use of heuristics	**Moderate use of heuristics	*High use of trial and error
Analogies and own knowledge or experience are called upon in realizing and developing creative ideas	Clarification	Charles drew the background as a "corner of the room with cracked walls and then saw it as finished' (participant 2) (see Photo B 2). The analogy depicted the visual realisation of 'a fish out of water'?	The learner displays continuity with previous knowledge and displays it in visual pictures decided on to depict and represent 'pride' as a sin, through the analogy of a pride of lions and pride in country.	The learner calls on the idea of pride from his collage, in depicting the bodybuilder in his 1 st painting (see Photo B12 - 1) and the lady in the mirror in his 2 nd painting (see Photo B9 - 2). He refers to the collage for the outline of the pictures (see Photo B10 - 2).	The development of the final painting is slow and no new ideas are introduced.



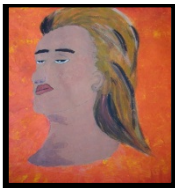
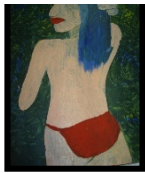

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 2: CHARLES**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 2: Theme: "The Seven Deadly Sins" Charles decided to depict the sin of Pride				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
		Moderate analogy	*High level creative analogy	***High level of developing ideas using visual symbols	**Moderate analogy
Willing to learn from mistakes and improve work	Evaluation	The learner managed to make changes by erasing and shading areas (following art educators guidance) to use shading for contrast.	The participant positively evaluates his/her collage and purposefully chooses and sets visual pictures onto background.	Charles displayed no planning (no outlines or projection) with the first experimental drawing but paints directly onto dried background (see Photo B11 - 1). With the 2 nd painting, he projects onto background (see Photo B11 - 2).	There is no referral to collage. Changes are made to skin, dress, mirror and hand details. He made small incremental changes painstakingly (see Photo B13 - 3).
		Moderate Evaluation	***High level of reflection	***High level of willing to learn from mistakes	**moderate level of willingness to improve
Autonomy and self-expression through own representation of creative and visual ideas	Distillation	The learner freely expresses novelty by picking only certain elements and then changing them to his/her own preference (example wispy lines to solid).	Art learner freely represents own expression and interpretation of the theme chosen by working independently and strategically.	The participant layered red and orange colours over and over the 1 st painting and eventually 'gives up' upon realizing the black paint keeps 'bleeding through'(see Photo B12 - 1). He then leaves the 1 st painting and starts the 2 nd one (see Photo B8 - 2).	Charles worked slowly (as observed in the class). He represented the visual elements from his collage and displayed originality of thought by placing his unique flair on it.
		Moderate Distillation	*** High level of autonomy/ expression	***High autonomy and self-expression	***High level of autonomy and self-expression
Ability to concentrate for long periods of time with effort	Incubation	Charles drew outlines first and worked strategically in class. He filled in much detail with shading and erasing with an eraser to give light areas.	Participant observed as working slowly and purposefully by cutting straight lines and linear placement.	Charles is observed working slowly in class. However a percentage of work is also done at home (see interview). He was absent for some classes.	He faced an artistic obstacle with the painting of the hands (see Photo B14 - 3). The participant complains that class-time is too little.
		* Low level of concentration	**Moderate attention to task	** Moderate level of concentration	**Moderate effort

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 2: CHARLES**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 2: Theme: "The Seven Deadly Sins" Charles decided to depict the sin of Pride				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Perseverance to do task despite challenges faced	Perspiration	Charles displayed some frustration with this initial task in search of replacement elements. He is observed working as if 'on remote control'.	Participant 2 worked slowly and methodically to complete this task. He is observed as being unhurried.	This participant sat right in the front of the class, and rarely left his seat. This learner worked very independently and did not ask for assistance from the educator during my visits to the class.	The learner did not 'complete' the final painting as he did not paint the reflection in the mirror (see Photo B15 - 3).
Task Motivation		Participant 2 was satisfied with the outcome of the formal drawing: "I feel happy with my art".	Charles was observed wanting to move on to the 'next phase' of art assignment.	He worked slowly at times and spent more time on the 2 nd painting and was observed to be more motivated with the 2 nd painting.	Charles was not phased that he did not complete the final painting as he knew he had spent too much time on 2 nd painting.
		Moderate Perspiration task motivation	***High motivation	**Moderate motivation	**Moderate motivation

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 3: NKOSI**

CREATIVITY COMPONENTS (Amabile 1996)						
Participant 3: Theme: "The Seven Deadly Sins" Nkosi decided to depict the sin of Lust						
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting	
Exemplars of the finished art pieces						
Creativity-Relevant Processes						
Open-ended response to creative stimulus	Inspiration	The participant takes this first task up as a challenge. She started by lightly drawing out the forms/shapes and developed it through placement of eyes (note the initial lines (see Photo C 1)).	Participant uses prepared dark brown background (see Photo C 3). Nkosi decided to select a myriad of pictures from many magazines as her inspiration. This was indicative of an open-response.	The first experimental drawing was started with the outline of a women's face onto the orange background (see Photo C9 - 1). The participant verbalizes that; " <i>I am excited about this assignment as I am looking forward to doing something which I will enjoy</i> ".	Nkosi wanted 'to tell a story through the painting'(see Photo C9 - 3). The learner is observed 'planning' the dimensions of the final painting by drawing grid lines onto collage to transfer the ratio correctly to the painting canvas.	
		Moderate open-ended response	*High open response	***High level of open-ended response	***High level of openness	
Perception is creative by being receptive to new ideas and different perceptions	Clarification	Nkosi chose four faces as the focal point and the bird and written letter in the background. Nkosi displayed grasp of clarifying the spatial relationship of the elements through visual inquiry.	She perceived lust from the view of many naked people, sexy appearances, perfumes and seductive clothing (see Photo C 6).	The learner generates ideas of lust by visually depict two of the women from the collage elements (see Photo C 7). The choice is originally a dark women (in the left hand corner) and lands up being the white lady next to her. The 2 nd painting is of the girl in a green bikini bottom in the centre of the collage.	This learner felt that the idea of depicting lust visually will catch peoples attention. She perceives lust by making use of imagery that shows a sex show in view of others (see Photo C15 - 3). It portrays a fantasy aspect.	
		Strong Clarification	***High creative perception	**Moderate creative perception	**Moderate creative perception	

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 3: NKOSI**

Participant 3: Theme: "The Seven Deadly Sins" Nkosi decided to depict the sin of Lust					
CREATIVITY COMPONENTS (Amabile 1996)					
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation	The participant is observed taking stock by standing up and looking at the drawing from further away.	Participants elaboration of the idea of lust is a central couple that will 'be the main attraction' of a show which others are watching. The visual images portray many naked and semi-naked people, also acts of lust and visual symbols emblematic of being sexy or sex-driven (see Photo C 5).	The participant made art decisions to depict two singular people in the first 2 experimental drawings (see Photo C9 - 2). The participant verbalises the following: <i>"I just draw things off the top of my head ...I am really excited about this art-piece as it is a challenge but I am determined to do well"</i> .	This participant envisioned <i>"using colours that will make the whole art-work interesting"</i> . The conceptualization for the art-work was a group of people in a room with a big window that people are peeping through to watch lewd acts (see Photo B9 - 3). The learner first draws a line drawing of what she will paint.
		Strong Evaluation	*** High level of conceptualisation	**Moderate manipulation of images	***High elaboration of images
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation	The participant does not display apparent insight into the concepts at this stage.	Participant 3 is observed taking a risk by choosing risqué pictures of lewd acts in her collage.	The learner had the following to say; <i>"It is not an easy task for me, if I may admit, but I am willing to take risks on doing these pieces"</i> . The artistic decision is made to paint the woman (1 st painting) as she <i>"liked the way she was posing"</i> (see Photo C11 - 1).	Nkosi wanted 'to tell a story through the painting' and says: <i>" When I started with this painting I was a bit nervous because I didn't really know where to start, but now I am slowly finding my way..."</i>
		Moderate exploration and risk	*High acceptance of ambiguity	**Moderate risk-taking	***High risk-taking and complexity of concept

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 3: NKOSI**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 3: Theme: "The Seven Deadly Sins" Nkosi decided to depict the sin of Lust				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Suspending judgement and keeping idea options open for as long as possible	Incubation	Nkosi decided on the elements and outlined them and did not deviate from her first choice.	She was observed suspending judgement by her choice of risqué ideas. This indicated risk-taking and lower fear of external judgement.	Nkosi displayed some uncertainty in changing the painting 'too much' and therefore opted to gingerly and painstakingly add faint colour and some layering. This indicates giving her time to make changes and develop new ideas.	Nkosi was observed changing her ideas a number of times. She first decided on the 'central couple' for final painting and then decided it was too big a risk, so stayed with the idea of a peep show.
		Mild Incubation	**Moderate level of judgement	***High level of open opinion	**Moderate ability to suspend judgement
Art-Relevant Skills	The Art-relevant Skills will determine what pathway will be available to the learner during his/her search for a creative response				
Keenness to make use of heuristics (trial-and-error) and select alternative paths	Inspiration	The changes that were executed are to the form and shading but no changes made to art elements chosen.	The learner does not change placements of pictures once decided. Little use of trial and error observed.	The first experimental painting of the women's face, Nkosi was observed as continuously changing the skin tone and battled to find the right match (skin colour) on resuming the work after a day or two (see Photo C13 - 1).	Nkosi was observed 'planning' the dimensions of the final painting by drawing grid lines onto the collage to transfer the ratios correctly to the painting canvas. She did not use projection.
		Strong Inspiration	* Low level of heuristics	***High use of heuristics	**Moderate use of heuristics
Analogies and own knowledge or experience are called upon in realizing and developing creative ideas	Clarification	Nkosi recombined the selected elements with no obvious analogy displayed or observed.	Analogies observed are pertinent and appropriate to task at hand. Nkosi used the analogy of sex-appeal with perfume and dress to depict lust.	Analogy in the 1 st painting is not immediately observed as obvious. The analogy depicts a beautiful/sexy lady to represent seduction through the sultry look in her eyes (see Photo C11 - 1).	She was observed adding and removing visual elements to assist her art outcome. <i>"I tend to change my art a lot while I am working on it"</i> .
		Low level of creative analogy	** Low level of creative analogy	**Moderate creative analogy	***High creative analogy






**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 3: NKOSI**

<p align="center">CREATIVITY COMPONENTS (Amabile 1996)</p>					
<p align="center">Participant 3: Theme: "The Seven Deadly Sins" Nkosi decided to depict the sin of Lust</p>					
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Willing to learn from mistakes and improve work	Evaluation	Nkosi made and managed changes and transition by using different art media and skills to gain 'a darker appearance' (see Photo C 2)	She was observed adding golden koki written words in spaces and used specific placement of her visual pictures (see Photo C 6).	Nkosi displayed an inability to surmount obstacles of the skin tone (on dark green background). At this juncture the learner asks for guidance (see Photo C11 - 1). Nkosi corrected the skin tone, but when she struggled with the hair (see Photo C12 - 1), she abandoned this task to start with the final painting.	Nkosi was aware that she had made many changes and taken many artistic 'turns'. She was observed paying attention to details (see Photo C11 - 3). Nkosi executed colour changes and faced obstacles with details like the bricks.
		Moderate Evaluation	**Moderate level of willingness to improve	***High willingness to improve	***High willingness to improve
Autonomy and self-expression through own representation of creative ideas	Distillation	The learner freely expressed her own representational ideas of concept from initial task presentation.	Nkosi was observed working independently and using own representation of lust. She cut out many more pictures from the magazines than she selected for the collage.	Note: Only 2 learners out of the entire art class chose to portray the sin of lust. Participant 3 verbalized the following: <i>'For me art is a way I express myself and it is part of who I am, it builds me and encourages me to do better, although it isn't as easy as it looks'</i> .	She was observed work independently and represented the visual images in her own way. Nkosi did not compare her work to others.
		Moderate Distillation	***High level of autonomy, expression	***High level of autonomy and self-expression	***High level of autonomy
Ability to concentrate for long periods of time with effort	Incubation	Nkosi drew outlines first and was observed to work strategically in class. She then filled in much detail with shading.	She was observed as working slowly and purposefully by taking her time to place pictures onto the background.	Nkosi is not observed 'moving away from her work' physically, but she did detach from the work by listening to music and spent much time with colour changes, with the 1 st painting (see Photo C12 - 1 to Photo C14 - 1).	Nkosi was observed working steadily and never 'getting ruffled'. This participant worked doggedly on her final painting to completion. This indicated her effort.
		Moderate concentration	**Moderate concentration	*Higher level of concentration	***High concentration

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 3: NKOSI**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 3: Theme: "The Seven Deadly Sins" Nkosi decided to depict the sin of Lust				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Perseverance to do task despite challenges faced	Perspiration	Nkosi displayed no frustration with this task. It was executed with ease.	Nkosi worked slowly. She took time to complete task to own satisfaction.	Nkosi painstakingly worked on the 1 st painting as changes were made to overcome the challenges of form and colour.	She was observed persevering with and surmounting creative obstacles in final painting.
Task Motivation		Nkosi was very satisfied with the outcome of the formal drawing.	Personal expectations were high observed form participant 3.	Nkosi was observed as motivated to 'keep at it' until satisfied with the results of the 1 st painting. The 2 nd painting was cast aside as idea did not go as planned.	Nkosi was observed working doggedly and being motivated to work hard and put the effort in.
		Moderate perseverance	**Moderate perseverance	**Moderate level of perseverance	***high task motivation & efforts

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 4: SAMANTHA**

CREATIVITY COMPONENTS (Amabile 1996)		Participant 4: Theme: "The Seven Deadly Sins" Samantha decided to depict the sin of Pride and Vanity				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting	
Exemplars of finished artworks						
Creativity-Relevant Processes						
Open-ended response to creative stimulus	Inspiration	Samantha was receptive to the new task but a little confused as to which concepts to choose. Visual inquiry included the charioteer, horse as a free drawing, where lines are not clear.	She responded by adding pictures to a prepared background. The first picture chosen is a 'proud' woman on a settee (see D6).	Samantha was observed tackling the art task of painting with enthusiasm and pencil drew the preparation for the 1 st painting (see Photo D8 - 1). In the 2 nd painting the theme of 'pride' is elaborated	She 'drew' the final painting by 'free-hand' with paint and did not project the images onto her prepared background (see Photo D8 - 3).	
		Moderate open response	*High open-ended response	**Moderate openness	***High open-ended response	
Perception is creative by being receptive to new ideas and different perceptions	Clarification	Samantha placed the bird in flight above the elements as if 'watching over them' (according to participant 4). She created emphasis with lines to create depth and dimension (see Photo D 2).	Samantha manipulated visual elements by changing the top half of the girl chosen for another 'half' (see Photo D 6). This girl is pouting and has her arms folded depicting pride.	The learner generates ideas by portraying pride with women depicting pride and vanity. The manipulation of images translates to the proud women being the focal point in the foreground with an open window (perception is look at what I have) (see Photo D15 - 2).	The attention to detail is observed with the combination of visual images purposefully and appropriately placed in the final composition (see Photo D15 - 3).	
		***High level of creative perception	***High level of different perceptions	***High level of different perceptions	***High creative clarification by visual inquiry & manipulation	

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 4: SAMANTHA**

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Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation	Samantha conceptualised her selection of different pictures from the visual reference that would meld to form one style of idea. The conceived idea was to add details to unify the images and make an expressive drawing (see Photo D 2)	She conceived pride and vanity through visual ideas of "the person who has everything they want". The ideas generated here visually were crystal glasses, mirror, chandeliers that portrayed wealth and pride.	Samantha elaborated on the idea of pride in her 1 st painting with women who represent pride through their demeanour (see Photo D15 - 1). The participant has the following to say when she reflected on her art work: <i>"I feel that I get a bit critical towards what I do, example I may paint something into my picture and then later I would have to take it out"</i> .	The participant elaborated on the initially conceived idea by visually depicting pride with a lady on a chaise lounge, crystal glasses and a chandelier depicting a person who 'has everything'(see Photo D9 - 3).
		***High level of elaboration	***High level of generating ideas	***High level of image elaboration	***High level of elaboration
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation	Samantha displayed insight into the complexity of the concepts by attempting to place the visual elements in a way that depicted a visual narrative or message.	The learner is observed searching for pictures to explore the concept of pride. Samantha used mirrors to depict self-image (see Photo D 5)	Samantha was observed not being inclined to want to risk failure or not be clear on the pathway to choose. The participant said this: <i>"After the research (collage) and actually getting 'into the work' it becomes more clear because you know where you are headed"</i> .	She was observed as not taking too many artistic risks after two practice runs and decisions to use the same images tried and tested before and recombine them.
		Moderate Distillation	***High originality & complexity	**Moderate level of risk-taking	**Moderate risk
Suspending judgement and keeping idea options open for as long as possible	Incubation	Samantha did not change any of the reference art elements initially selected.	She was observed finding it difficult to defer certainty while exploring doubts. Samantha preferred to find purpose in the task.	In the 2 nd painting, she painted another women, a black chandelier and a faint image of a mirror. The learner was going to remove the mirror but decided 'to keep it that way' and said: <i>"I have allowed myself to just accept it"</i> . (See Photo D14 - 2).	Samantha was observed struggling to allow for the fluency of new ideas. She had elaborated on previous ideas and improved on them.
		*Low level of detachment from ideas	*Low ability to suspend judgement	**Moderate ability to suspend judgement	*Low ability to suspend judgement

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PARTICIPANT 4: SAMANTHA**

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Art-Relevant Skills	The Art-relevant Skills will determine what pathway will be available to the learner during his/her search for a creative response				
Keeness to make use of heuristics (trial-and-error) and select alternative paths	Inspiration	Selection of different Visual elements are from the 'clearer' symbols which the participant is observed as clarifying and developing further.	It is observed when participant did not find the exact picture he/she was looking for, an alternative choice was made (A glass door as a mirror) (see D6). The placement remained 'a work in progress'.	The learner is unsure of the theme assigned in the beginning and verbalizes her uncertainty. It was observed that the participant moves from one visual element to another throughout the paintings. She said; <i>"I paint one object then another – not necessarily painting one object for a long time"</i> . (see Photo D 12 - 1 to Photo D14 - 1) which shows this progression.	She recombined visual images from collage, and paintings (see D13-3), and was observed as 'playing' with blue undertones and layering the colours. At this point the learner says: <i>"My painting is a little stiff and it needed something 'extra'"</i> (see Photo D14 - 3).
		Moderate level of creative heuristics	*High level of creative heuristics	***High level of creative heuristics	***High level of use of heuristics
Analogies and own knowledge or experience are called upon in realizing and developing creative ideas	Clarification	The participant reflects the elements in a precise way. The charioteer and horse although lightly shaded form the focal point. The bird and shaded faces with the 'nested eye' completing the composition.	Participant uses the analogy of mirrors for inflated self-image, two women at a window are envious of what others have (Photo D11 - 3).	Participant chooses many analogies in depicting pride and vanity. In the 1 st painting an analogy is drawn between an arrogantly proud women with a swan hanging above her which is emblematic of 'good pride' (according to participant 4). <i>"The single orchid in the vase represents 'being noticed and standing out'"</i> .	Samantha added mobiles for 'movement' into the final painting according to the direction given from art educator (see Photo D15 - 3).
		*Mild Clarification	***High level of creative analogy	***High creative analogy	***High level of developing creative ideas






**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 4: SAMANTHA**

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Willing to learn from mistakes and improve work	Evaluation	The learner takes stock of the aesthetic placement, the amount of detail (as in the faces in right hand corner). She added in her own background to unify her presentation (see Photo D 4).	Samantha was observed as willing to improve by moving the visual elements around and making adjustments/changes to those art elements. She was also observed as battling to find the 'right' pictures.	She feels frustrated when the art work is not going well. It was observed physically in this learner, she becomes very quiet and serious. She had the following to say when she reflected on her art work: <i>"I feel that I get a bit critical towards what I do, example I may paint something into my picture and then later I would have to take it out"</i> .	This learner questioned the visual components and how they relate to each other and was observed making changes to the colours (making lighter) (see Photo D13 - 3, Photo D14 - 3).
		Moderate level of willing to improve	*High level of willingness to learn	***High willingness to improve	***High level of willingness to improve
Autonomy and self-expression through own representation of creative ideas	Distillation	The learner freely expresses own representation of the elements chosen from initial task presentation (see Photo D 2).	She is observed working independently and asking for guidance from the art educator regarding the person chosen to depict pride (see Photo D 4).	Samantha was observed having times of self-doubt, as she gets frustrated with getting a visual element wrong (See Photo D 12 - 2, Photo D 12 - 3 and Photo D13 - 3). Samantha was observed freely expressing her own representation of images selected.	She asked the educator for guidance on additions for final painting (see Photo D15 - 3). The art educator said: <i>"the painting must connect with your idea of pride, it is too precise"</i> .
		Moderate autonomy	**Moderate autonomy & self-expression	*High self-expression and moderate autonomy	Moderate autonomy and self-expression
Ability to concentrate for long periods of time with effort	Incubation	The learner worked relatively quickly and once started, worked steadily to completion.	Samantha was observed focussing all her attention on the task at hand and avoiding external distractions (see Photo D 5).	The learner was observed not taking any breaks in the classroom setting. She worked doggedly in all art sessions. On two occasions she was observed not having her art work at school. This suggested the need to take a break from the work.	The learner is observed putting her head down and using the class time very efficiently to complete most of the art work in the class setting (see Photo D15 - 3).

**TABLE OF OBSERVATION OF ART CREATION
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CREATIVITY COMPONENTS (Amabile 1996)	Participant 4: Theme: "The Seven Deadly Sins" Samantha decided to depict the sin of Pride and Vanity				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
		moderate effort	*High level of concentration,effort	***High level of concentration and effort	***High level of effort
Perseverance to do task despite challenges faced	Perspiration	No frustration observed with this task.	Samantha was observed feeling frustrated with not finding the correct visuals for her collage (see Photo D 4).	She worked solidly during art lessons. She says: " <i>I don't usually like my work in the beginning but as it progresses I begin to like it and grow fond of it</i> " (see Photo D15 - 2).	She states: " <i>I had to keep pushing myself when doing the painting as I felt I was only covering small areas in the beginning</i> ".
Task Motivation		Samantha was very satisfied with the outcome of the formal drawing (see Photo D 2) .	She was fully engaged with task throughout creative execution (see Photo D 6).	She was observed as giving 100% effort to the art task in front of her (see Photo D16 - 1).	She was observed handing in her final painting to the educator, saying " <i>I'm done – I cannot look at it anymore!</i> " (see Photo D16 - 1).
		Moderate Perspiration task motivation	*High level of task motivation	***High level of task commitment	***High level of task commitment

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 5: DAN**

Participant 5: Theme: "The Seven Deadly Sins" Dan decided to depict the sin of Pride and Vanity						
CREATIVITY COMPONENTS (Amabile 1996)						
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting	
Exemplars of finished artworks						
Creativity-Relevant Processes						
Open-ended response to creative stimulus	Inspiration	Dan was observed as receptive to the new task. He re-combined the initial elements in an unusual and original way (see Photo E 3). Visual inquiry included an abstract rendition of the man's face and the only participant to depict the ogre (see Photo E 4).	He was observed as approaching the collage task with trepidation and uncertainty. He selected and pasted visual pictures of various forms of food in excess (see Photo E 5).	Dan was aware of what he wanted to create visually, but was observed as painting directly on to the background with the first two paintings, without much planning. He errs on the creative dimensions and became visibly frustrated quickly (see Photo E9 - 1).	He generated completely different images than from his experimental drawings (see Photo E8 - 3). Dan made the decision to 'play with the gluttony concept' by depicting a man eating out of a human head (see Photo E9 - 3).	
		**Moderate level of creative response	*Low level of spontaneity and openness	*Low level of open-ended response	**higher levels of creative images deployed	
Perception is creative by being receptive to new ideas and different perceptions	Clarification	Dan perceived hidden elements in his composition that others might overlook (such as the all-seeing eye over the pyramid below the bird in the reference sheet) (see Figure 3. 2).	He perceived the concept of gluttony as a food-laden table, a fat man and an overflowing fridge (see Photo E 6).	The first obstacle for Dan was trouble with the background (see Photo E8 - 1). He received some guidance from the art educator as to being open to exploration.	The manipulation of the visual images rendered a new and different perception of the initial idea and images deployed to depict the sin of gluttony (see Photo E16 - 3).	
		Strong Clarification	*Low level of clarifying concept	**Moderate creative perception	***High level of creative receptiveness	

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 5: DAN**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 5: Theme: "The Seven Deadly Sins" Dan decided to depict the sin of Pride and Vanity				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation	Dan used visual symbols of the fish, bird, ogre and face and blended these elements given with abstract ideas of his own.	He was observed as generating few visual ideas and did not elaborate on the idea of gluttony with wording or other overt reflection of the concept.	Dan conceived the visual imagery for 'gluttony' in both experimental paintings as a man sitting at a table (see Photo E10 - 1 and Photo E10 - 2).	Dan's 'new' visual imagery and ideas were an indication of greater reflection and review of previous efforts (see Photo E15 - 3, Photo E16 - 3).
		Strong Evaluation	**Moderate conceptualisation	*Low level of elaboration of visual concepts	***High level of imagery review
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation	Dan displayed moderate risk-taking by not always referring to the reference in front of him. He made his own additions.	He pasted very few images to guide his experimental paintings (see Photo E 6).	He was observed approaching this new task of painting gingerly. He said: <i>"My 1st painting didn't come out right so I added colour (green) and then used pastels for some shading"</i> (See Photo E12 - 1).	He was observed as taking bigger risks through exploring new images (even shocking or unusual images) (see Photo E12 - 3).
		Moderate risk or exploration	* Low level of exploration	**Moderate level of exploration/risk-taking low	*Higher level of exploration and grasp of complexity
Suspending judgement and keeping idea options open for as long as possible	Incubation	Dan did not change any of the reference art elements selected. He simply made choices and ran with them.	He took time in making decisions, sourcing and placing the visual images.	Suspension of judgement was not observed as Dan judged his own work harshly and thus appeared 'blocked' to keeping his idea options open. The similar first two paintings indicates this (see Photo E9 - 2).	He made use of abstract symbols in the background, that represented added ideas and creative fluency (see Photo E16 - 3).
		** Moderate level of explored new possibilities	*Low level of fluency	*Low level of idea fluency	***High fluency
Art-Relevant Skills	The Art-relevant Skills will determine what pathway will be available to the learner during his/her search for a creative response				


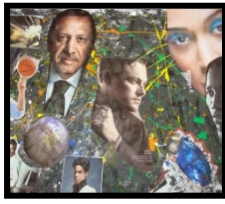


**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 5: DAN**

Participant 5: Theme: "The Seven Deadly Sins" Dan decided to depict the sin of Pride and Vanity					
CREATIVITY COMPONENTS (Amabile 1996)					
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Keeness to make use of heuristics (trial-and-error) and select alternative paths	Inspiration	Participant 5 made few changes and left visual 'spaces' in his drawing. He/she added the ogre in once completing the fish, bird and face. The participant draws in such a way as to blend the animals into one another completely.	Dan only pasted a few visual pictures. He was observed struggling with choices, being uncertain as to placement by moving pictures around and removing images. Placement was finally haphazard and separated (see Photo E 6).	Participant 5 shares the following: " <i>I am not a good painter</i> ". He is observed as visibly frustrated with the art medium and skills of painting. Dan started the 1 st painting by 'drawing' with yellow paint then layered the white over (see Photo E9 - 1).In the 2 nd painting he added blue to the red "as it was missing something" (according to participant 5).(see Photo E10 - 2).	Dan was observed starting with the small visual elements and details first (see Photo E10 - 3). He said: " <i>I could not paint in my two practice paintings so I had to find 'bigger' elements</i> ".
		Moderate level of heuristics	*Low level of creative heuristics	**moderate level of creative heuristics	*Higher level of use of heuristics
Analogies and own knowledge or experience are called upon in realising and developing creative ideas	Clarification	Dan made use of art skills and strategies learned before in art, to shade and draw forms by calling on knowledge from Grade 10.	Dan's attention was observed as directed towards obvious aspects of gluttony. The analogy of food tumbling out of a fridge was centrally placed in the collage (see Photo E 5).	He called on the analogy of a green man with small horns on his head, depicting feeling sick from too much food and being 'devilsome' while partaking in such sinful behaviour (see Photo E14 - 1).	Dan used the imagery of a man eating food out of a girls head, while another girl covers her eyes (representing being unable to watch) (see Photo E14 - 3).
		* Low creative analogy	**Moderate creative approach	***Moderate creative perception	***High creative perception
Willing to learn from mistakes and improve work	Evaluation	Dan grasped the placement of art elements and the way the shading developed or changed the end result.	The participant is observed as taking time to decide on where to place pictures and appropriateness to gluttony.	The participant says: " I started the 2 nd painting with just red (see E9-2) and then added in lights and darks by adding white and red, I then made it half red half blue, to make it eye-catching" (See E13-2, E14-2). The changes are made to improve his art-work.	" <i>I had to change my final painting completely, so I looked for other pictures</i> " indicated Dan's willingness to improve on his prior art-work.
		Moderate Evaluation	*Low willingness to improve	**Moderate Evaluation	*High Evaluation

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 5: DAN**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 5: Theme: "The Seven Deadly Sins" Dan decided to depict the sin of Pride and Vanity				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Autonomy and self-expression through own representation of creative ideas	Distillation	He expressed his own, original visual representation of the elements selected from initial task presentation in Figure 3. 2 (see Photo E 4).	Dan expressed his own understanding and grasp of the concept of gluttony. He grappled with sourcing the 'correct' visuals' to be represented in his paintings .	The participant was observed to work independently and grudgingly received assistance with the first background from the educator (see Photo E8 - 1). As a general observation, he is observed to not trust his own ability or convictions at times.	Dan started with the 'small bits' and was observed initially working all over the place, not coherently (see Photo E11 - 3). He worked according to the colours mixed.
		***High level of autonomy	**Moderate self-expression	**moderate self-expression	***High self-expression
Ability to concentrate for long periods of time with effort	Incubation	Dan displayed enjoyment of this creative task and spent time making small changes to shading and lines.	The learner was dissatisfied with outcome of his collage. He alluded to not knowing what to select visually.	He was observed taking no breaks and pushed himself quite harshly. He did concentrate for long periods, but appeared to tire. He said: <i>'Nothing is complementing the work I am doing'</i> .	Dan did not leave his desk and was not observed 'detaching' or leaving work to reflect on his overall progress.
		Mild Incubation	*Low ability to concentrate	**Moderate concentration levels	***High concentration
Perseverance to do task despite challenges faced	Perspiration	No frustration was observed with or during this task.	Some frustration was noted in non-verbal pouting by participant 5.	Dan was frustrated with: the many changes he had to make, the way the background wasn't working, the way he couldn't find the contrasts and correct techniques.	He was observed as not satisfied even with big improvements and efforts, he appeared to get despondent.
Task Motivation		Dan was very pleased with the outcome of the formal drawing.	He was partially satisfied with outcome of collage.	He was not satisfied with the creative outcome of the two experimental drawings.	Dan was a little satisfied with the outcome of final painting.
		Moderate task motivation	*Low level of task motivation	**Moderate task commitment	**Moderate motivation

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 6:LEO**

CREATIVITY COMPONENTS (Amabile 1996)		Participant 6: Theme: "The Seven Deadly Sins" Leo decided to depict the sin of Pride and Vanity (and jealousy)			
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
					
Creativity-Relevant Processes					
Open-ended response to creative stimulus	Inspiration	Leo was observed as tackling the task with spontaneity. He immediately started with the world globe (see Photo F 3).	He was observed as tearing whole pages out of magazines before making final choices (see Photo F 4).	The first and second experimental drawing were 'drawn' with white paint to outline the elements that he wanted to represent (see Photo F9 - 1). Leo said: " <i>I prefer spontaneity</i> ". This indicated a willingness to explore new ideas.	Leo combined the two main figures from the 1 st and 2 nd paintings to create the final painting (see Photo F13 - 3).
		Moderate level of open response	*High open-ended response	***High openness and spontaneity	***High level of spontaneity
Perception is creative by being receptive to new ideas and different perceptions	Clarification	Leo's creative perception was to re-combine the reference elements by placing the 'nested eye' on the boat bird on the ground and ghost in the left corner (see Photo F 2).	He was observed tagging onto the idea of status symbols and pasted male celebrities, jewellery, well-groomed people onto his background (see Photo F 7).	Leo's ideas were generated by his analysis of the visual symbols in the collage. He was observed 'drawing in the air with the paint brush' before actually drawing with paint onto the prepared background. He manipulated the visual images by overlapping faces portrayed in white paint (see Photo F9 - 1) with another face in blue on top (see Photo F11 - 1). Leo asked: " <i>Why are they called the seven deadly sins, what makes them deadly?</i> ". The reply was because they inevitably lead to destruction of the person who partakes in excess or is out of control. They are destructive to life (according to art educator).	Leo perceived how to 'fit' and relate these two people who depict pride and vanity for his final composition. The decisions he made were stuck to throughout his development of the final painting.

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 6:LEO**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 6: Theme: "The Seven Deadly Sins" Leo decided to depict the sin of Pride and Vanity (and jealousy)				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
		***Moderate receptiveness to new ideas	***High creative elaboration	***High creative receptiveness	***High level of creative perspective
Conceptualise visual ideas by use of own ubiquitous knowledge or experiences in generating ideas	Evaluation	Leo conceptualised the visual symbols of the world globe, fisherman, bird, book, ogre and nested eye. He was observed doing light shading and paying attention to detail.	He elaborated on the concept of 'pride' and 'vanity' with commercial people and commodities that these people acquire (see Photo F 6) .	The participant was observed still trying to decide which visual images to keep and which elements to leave out (see Photo F14 - 1). Leo had this to say: <i>"In Visual Art someone should ask themselves what should I add and what should I take away, what should I change and what should stay the same?"</i>	He elaborated on visual imagery by combining the 2 central figures from 2 experimental drawings (see Photo F11 - 3). He used virtually the identical background in his paintings.
		Moderate level of evaluation	*High level of reflection	**Moderate level of reflection	**Moderate evaluation
Risk-taking through exploring new unknown terrain and displaying originality and grasping complexity.	Distillation	Leo's melding of art elements suggested a thinking style that can adequately deal with complexities. His combinations were ambiguous.	He was observed as displaying originality by his choice of visual symbols to portray pride/vanity and the placement of pictures.	Participant 6 is observed to work extremely fast, once he has the paint brush in his hand and an idea in his head, he is like a runaway train. He works forcefully, making bold strokes (See Photo F10 - 3). He was observed to paint fearlessly and not mind making mistakes.	Leo displayed insight into the concept of vanity through his unusual selection of visual imagery and relationship between visual elements.
		Moderate Distillation	***High level of exploration & risk	***High level of risk-taking and grasping of contradiction.	***High level of distillation

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 6:LEO**

CREATIVITY COMPONENTS (Amabile 1996)		Participant 6: Theme: "The Seven Deadly Sins" Leo decided to depict the sin of Pride and Vanity (and jealousy)			
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Suspending judgement and keeping idea options open for as long as possible	Incubation	The participant stuck to his/her choices and made few changes to initial conceptualisation.	The participant sourced many ideas and then selected the ideas he/she deemed appropriate to task.	The learner was observed also unpacking his art onto his desk, but not touching it for the entire art lesson (see Photo F12 - 2). This learner is observed taking a long break (3 lessons) before starting with the final painting. Leo was observed to work quickly and erratically, he was hurried with the first background of blue and yellow and added streaks of dark blue with 'wispy lines'(see background in Photo F9 - 1). He explained that he wanted the effect of "distant fading – like you could reach into the picture and grab the wisps" (according to participant 6).	He was observed as sitting back for a while (see.F9-3) and then working quickly once he started (see Photo F12 - 3). Leo said: "If I think too long about one topic, I suddenly get doubts that I shouldn't have had...it is good to think about your options, but if you ponder for too long, then it can become almost like I am too worried about it".
		Mild Incubation	***High ability to detach	***High level of suspending judgement	***High level of incubation
Art-Relevant Skills		The Art-relevant Skills will determine what pathway will be available to the learner during his/her search for a creative response			
Keenness to make use of heuristics (trial-and-error) and select alternative paths	Inspiration	Good command of art-relevant skills and use of shading, contrast.	In the participant's words: 'I put my collage together in a rushed order'. The learner wanted the pictures to look like the people were 'floating' on the background (see Photo F 4).	Leo used the 'impressionistic art technique'. [It is a style where the artist captures the image of an object as someone would see it if they just caught a glimpse of it]. The 1 st painting Leo outlined 4 people and the sapphire ring(from collage) (see Photo F10 - 1), which was changed by trial and error with additions of blue outline of another man and a set of eyes (see Photo F14 - 1) that transformed into the figure and two 'jealous' faces flanking on either side (see Photo F16 - 1).	He used the 2 nd painting as a reference and made the decision to 'copy' the one face from the 2 nd painting (see Photo F10 - 3). He showed confidence in his own convictions by painting directly onto prepared surface without projection.

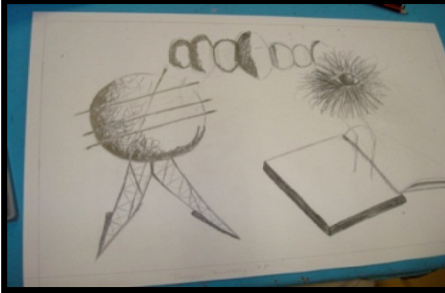

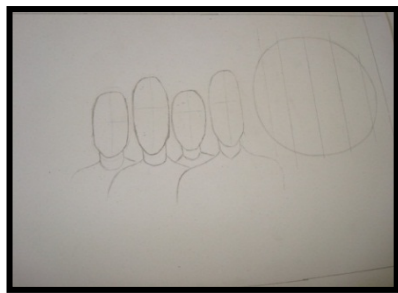




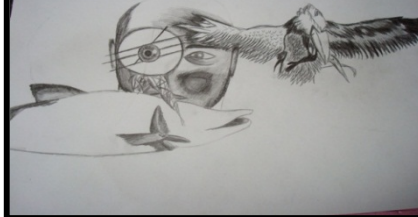




**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 6:LEO**

CREATIVITY COMPONENTS (Amabile 1996)		Participant 6: Theme: "The Seven Deadly Sins" Leo decided to depict the sin of Pride and Vanity (and jealousy)			
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
		Moderate heuristics used	*High level of heuristics used	***High level of use of heuristics creatively	**Moderate level of trial-and-error
Analogies and own knowledge or experience are called upon in realising and developing creative ideas	Clarification	Leo was observed displaying the ability to develop ideas efficiently with visual inquiry and recombination of presented visual stimulus.	He aligned famous people and sport stars and diamond jewellery with the idea/concept of pride and vanity (also jealousy).	He called on the knowledge he had attained and was observed to not refer back to the collage for reference. The analogies he was observed representing was the status of a celebrity that 'is allowed to be vain' and other persons want to be like him (according to participant 6). He stated that the eyes in the painting reflect: "beauty...with pain in them" (see Photo F12 - 1).	Leo asks for direction from the art educator regarding the 'black' in his artwork. The educator advises for him to add another colour if he so wishes (see Photo F16 - 3 1).
		*Low level of developing ideas	***High level of creative analogy	***High level of creative analogy (grasping complexity)	**Moderate analogy
Willing to learn from mistakes and improve work	Evaluation	The learner uses sketchy shading by criss cross lines and swirled lines for water around boat (see Photo F 2).	The participant is positively critical of his collage and steps back every now and again to assess placement and spacing.	Learner is observed wanting to try and improve visual elements such as the hands and nose in 2 nd painting (See F13-2).He said: <i>'If I can't get something right I just keep trying'</i> . Participant reflects on his own evaluation of the work by saying: <i>"To me looking back at your art is about your current mindset and you think, now why did I do that?"</i>	Leo indicated he was unhappy with the 'eyes' in the final painting as they have not turned out as well as in the 2 nd painting (see Photo F15 - 3).He asked for direction to improve the eyes.
		Moderate Evaluation	***High reflection	***High level of evaluation	***High level of evaluation

**TABLE OF OBSERVATION OF ART CREATION
PARTICIPANT 6:LEO**

CREATIVITY COMPONENTS (Amabile 1996)	Participant 6: Theme: "The Seven Deadly Sins" Leo decided to depict the sin of Pride and Vanity (and jealousy)				
Criteria	ICEDIP MODEL	Formal Drawing To introduce concept and allow for re-combination of art components	Collage Presenting a thought process visually, making choices	Experimental Drawings (2) [Practice paintings] Abstracting visual elements from collage into paintings	Final Painting Using elements from practice paintings to create a final painting
Autonomy and self-expression through own representation of creative ideas	Distillation	Leo represented his own rendition of the presented visual reference. He was observed drawing in fast strokes, with little patience, but with attention to detail shown.	He was observed working independently.	Leo educator for guidance – but chooses not to take the direction and do it 'his way' (see Photo F15 - 1). The art educator has instructed the learner to be careful with using black as it is difficult to rectify). Leo paints with black (see Photo F12 - 2)	Leo worked independently and referred to his 2 nd painting when composing the final painting (see Photo F10 - 3). He said: <i>"That's what I like about art - it's finding your own way"</i> .
		Moderate autonomy	*High autonomy and self-expression	***High level of independence and autonomy	***High autonomy
Ability to concentrate for long periods of time with effort	Incubation	He displayed deep engagement with task and completed this task quickly.	He was observed working quickly and selecting what to concentrate attention on to make collage. He leaves the bottle of alcohol out.	Leo was observed taking intermittent breaks more often than the other participant's or art learners. He was observed doing art-work quickly, than stepping back to evaluate, and then come back to it later. He detached from his work and resumed when he was ready.	He was not observed being able to concentrate for long stretches. He showed preference for working standing up at times while painting.
		**Moderate level of effort	**Moderate level of concentration	**Moderate level of concentration	**Moderate level of effort
Perseverance to do task despite challenges faced	Perspiration	Leo did not show frustration with this task.	He persisted with this task. Once he selected the visual pictures, he stuck to a plan.	Impatient with the creative process was observed. While he drew a line drawing for the 1 st painting (see Photo F8 - 1), he did not plan like that for the 2 nd or final painting.	He was observed facing challenges in his art and the persistence to stick with his original plan.
Task Motivation		Leo is very satisfied with the outcome of the formal drawing.	He was observed as committed to task to completion.	He was motivated as long as things went according to plan. He was also observed in a 'bad mood' several times in the class setting with no motivation to work.	He was motivated to do the art work, but frustrations hindered his commitment too.
		Moderate task motivation	**Moderate task motivation	**Moderate task commitment	***High task commitment

ADDENDUM G: PHOTO SHEET OF PARTICIPANTS' FORMAL DRAWINGS

Participant 1: Betty	Participant 2: Charles	Participant 3: Nkosi
		
<p align="center">Photo A 3</p>	<p align="center">Photo B 3</p>	<p align="center">Photo C 3</p>
		
<p align="center">Photo A 4</p>	<p align="center">Photo B 4</p>	<p align="center">Photo C 4</p>
Participant 4: Samantha	Participant 5: Dan	Participant 6: Leo
		
<p align="center">Photo D 3</p>	<p align="center">Photo E 3</p>	<p align="center">Photo F 3</p>
		
<p align="center">Photo D 4</p>	<p align="center">Photo E 4</p>	<p align="center">Photo F 4</p>

ADDENDUM H: PHOTO SHEET OF PARTICIPANTS' CREATION OF COLLAGES

PHOTO SHEET 1 OF COLLAGE CREATIONS		
Participant 1: Betty	Participant 2: Charles	Participant 3: Nkosi
 Photo A 5	 Photo B 5	 Photo C 5
 Photo A 6	 Photo B 6	 Photo C 6
 Photo A 7	 Photo B 7	 Photo C 7
 Photo A 8	 Photo B 8	 Photo C 8
 Photo A 9	 Photo B 9	 Photo C 9

PHOTO SHEET 2 OF COLLAGE CREATIONS

Participant 4: Samantha

Participant 5: Dan

Participant 6: Leo



Photo D 3



Photo E 3



Photo F 3



Photo D 4



Photo E 4



Photo F 4



Photo D 5



Photo E 5



Photo F 5



Photo D 6



Photo E 6



Photo F 6



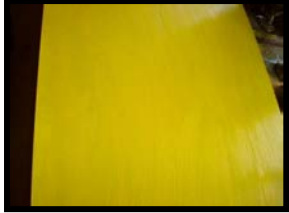
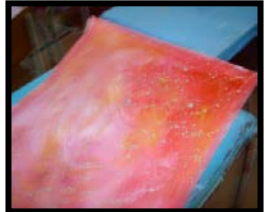

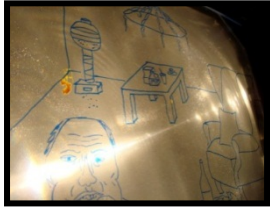









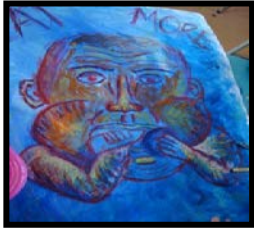













Photo D 7







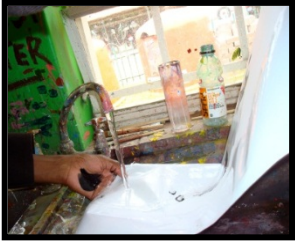





Photo F 7

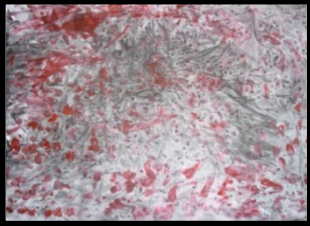














ADDENDUM I: PHOTO SHEETS OF PARTICIPANTS' VISUAL ART PAINTINGS

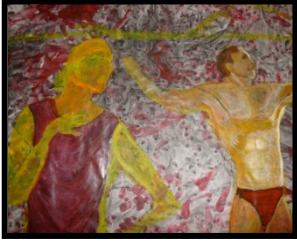

TABLE OF VISUAL ART PAINTING CREATIVE PROCESS			
Creative phases	1st experimental painting (drawing)	2nd experimental Painting (drawing)	Final painting
PHOTO SHEET 1 OF PAINTING CREATIONS			
Participant 1 Betty			
<p>Task presentation (Inspiration): Includes internal thinking and external strategies</p>	 <p style="text-align: center;">Photo A8 - 1</p>	 <p style="text-align: center;">Photo A8 - 2</p>	 <p style="text-align: center;">Photo A8 - 3</p>
<p>Preparation: Realisation of ideas through keen observations to build a response</p>	 <p style="text-align: center;">Photo A9 - 1</p>	 <p style="text-align: center;">Photo A9 - 2</p>	 <p style="text-align: center;">Photo A9 - 3</p>
<p>Response Generation (Clarification & Distillation): Searching of memory and environment to generate possible ideas</p>	 <p style="text-align: center;">Photo A10 - 1</p>	 <p style="text-align: center;">Photo A10 - 1</p>	 <p style="text-align: center;">Photo A10 - 2</p>
<p>Analogies and connections used to convey a visual art-work</p>	 <p style="text-align: center;">Photo A11 - 1</p>	 <p style="text-align: center;">Photo A11 - 2</p>	 <p style="text-align: center;">Photo A11 - 3</p>


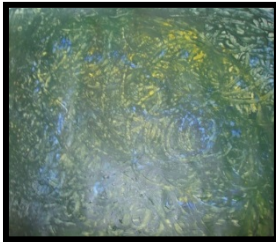
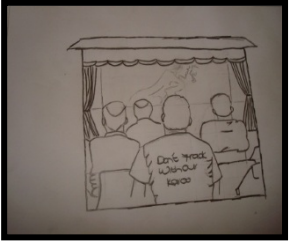


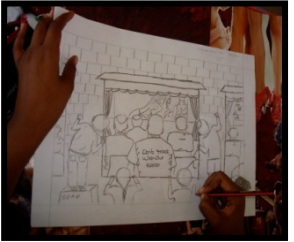

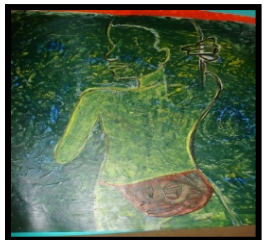

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 1 OF PAINTING CREATIONS			
	 <p style="text-align: center;">Photo A12 - 1</p>	 <p style="text-align: center;">Photo A12 - 2</p>	 <p style="text-align: center;">Photo A12 - 3</p>
	 <p style="text-align: center;">Photo A13 - 1</p>	 <p style="text-align: center;">Photo A13 - 2</p>	 <p style="text-align: center;">Photo A13 - 3</p>
<p>Response Validation (Evaluation):</p> <p>Includes testing responses by re-working ideas and evaluating where learner is</p>	 <p style="text-align: center;">Photo A14 - 1</p>	 <p style="text-align: center;">Photo A14 - 2</p>	 <p style="text-align: center;">Photo A14 - 3</p>
<p>-Breaking with perceptual set -keeping response options open -moving off in new directions</p>	 <p style="text-align: center;">Photo A15 - 1</p>	 <p style="text-align: center;">Photo A15 - 2</p>	 <p style="text-align: center;">Photo A15 - 3</p>
	 <p style="text-align: center;">Photo A16 - 1</p>	 <p style="text-align: center;">Photo A16 - 2</p>	 <p style="text-align: center;">Photo A16 - 3</p>











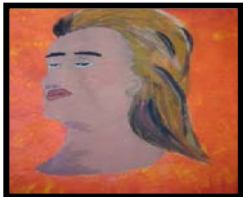

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 1 OF PAINTING CREATIONS			
Perseverance: Motivation to finish	 Photo A17 - 1	 Photo A17 - 2	 Photo A17 - 3
Creative Outcome			 Photo A18 - 3

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 2 OF PAINTING CREATIONS			
Participant 2 Charles			
Task presentation (Inspiration): Includes internal thinking and external strategies	 Photo B8 - 1	 Photo B8 - 2	 Photo B8 - 3
Preparation: Realisation of ideas through keen observations to build a response	 Photo B9 - 1	 Photo B9 - 2	 Photo B9 - 3


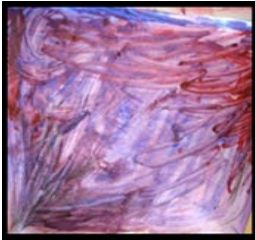







Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 2 OF PAINTING CREATIONS			
<p>Response Generation (Clarification & Distillation): Searching of memory and environment to generate possible ideas</p>	 <p style="text-align: center;">Photo B10 - 1</p>	 <p style="text-align: center;">Photo B10 - 2</p>	 <p style="text-align: center;">Photo B10 - 3</p>
	 <p style="text-align: center;">Photo B11 - 1</p>	 <p style="text-align: center;">Photo B11 - 2</p>	 <p style="text-align: center;">Photo B11 - 3</p>
	 <p style="text-align: center;">Photo B12 - 1</p>	 <p style="text-align: center;">Photo B12 - 2</p>	 <p style="text-align: center;">Photo B12 - 3</p>
<p>Response Validation (Evaluation): Includes testing responses by re-working ideas and evaluating where learner is</p>	 <p style="text-align: center;">Photo B13 - 1</p>	 <p style="text-align: center;">Photo B13 - 2</p>	 <p style="text-align: center;">Photo B13 - 3</p>
<p>-Breaking with perceptual set -keeping response options open -moving off in new directions</p>	 <p style="text-align: center;">Photo B14 - 1</p>	 <p style="text-align: center;">Photo B14 - 2</p>	 <p style="text-align: center;">Photo B14 - 3</p>





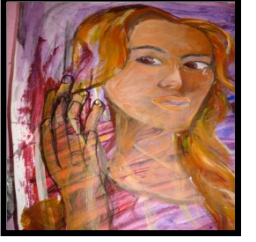

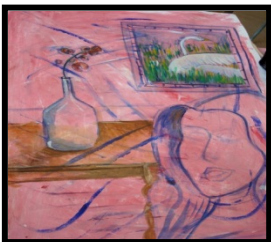
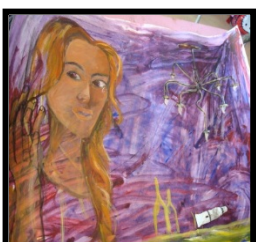

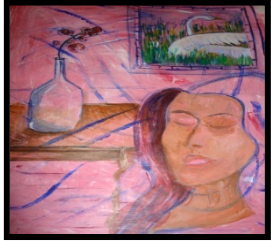


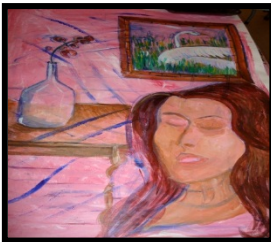


Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 2 OF PAINTING CREATIONS			
Creative Outcome	 <p style="text-align: center;">Photo B15 - 1</p>		 <p style="text-align: center;">Photo B15 - 3</p>



Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 3 OF PAINTING CREATIONS			
Participant 3 Nkosi			
<p>Task presentation (Inspiration): Includes internal thinking and external strategies</p>	 <p style="text-align: center;">Photo C8 - 1</p>	 <p style="text-align: center;">Photo C8 - 2</p>	 <p style="text-align: center;">Photo C8 - 3</p>
<p>Preparation: Realisation of ideas through keen observations to build a response</p>	 <p style="text-align: center;">Photo C9 - 1</p>	 <p style="text-align: center;">Photo C9 - 2</p>	 <p style="text-align: center;">Photo C9 - 3</p>
<p>Response Generation (Clarification & Distillation): Searching of memory and environment to generate possible ideas</p>	 <p style="text-align: center;">Photo C10 - 1</p>	 <p style="text-align: center;">Photo C10 - 2</p>	 <p style="text-align: center;">Photo C10 - 3</p>

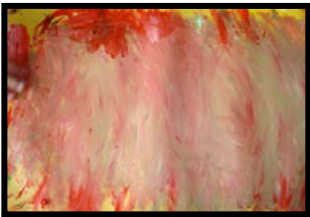





Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 3 OF PAINTING CREATIONS			
	 <p style="text-align: center;">Photo C11 - 1</p>	 <p style="text-align: center;">Photo C11 - 2</p>	 <p style="text-align: center;">Photo C11 - 3</p>
<p>Response Validation (Evaluation):</p> <p>Includes testing responses by re-working ideas and evaluating where learner is</p>	 <p style="text-align: center;">Photo C12 - 1</p>	 <p style="text-align: center;">Photo C12 - 2</p>	 <p style="text-align: center;">Photo C12 - 3</p>
<p>Dealing with artistic obstacles during paintings</p>	 <p style="text-align: center;">Photo C13 - 1</p>		 <p style="text-align: center;">Photo C13 - 3</p>
<p>Perseverance and Task motivation</p>	 <p style="text-align: center;">Photo C14 - 1</p>		 <p style="text-align: center;">Photo C14 - 3</p>
<p>Creative Outcome</p>			
















Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 3 OF PAINTING CREATIONS			
	Photo C15 - 1		Photo C15 - 3



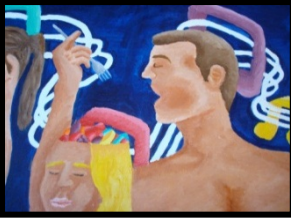


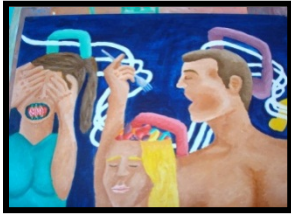
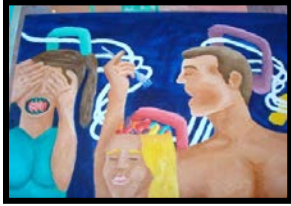
Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 4 OF PAINTING CREATIONS			
Participant 4 Samantha			
Preparation	 Photo D8 - 1	 Photo D8 - 2	 Photo D8 - 3
Response Generation (Clarification & Distillation): Searching of memory and environment to generate possible ideas.	 Photo D9 - 1	 Photo D9 - 2	 Photo D9 - 3
Distillation The reason for my choice is to 'make sense of the situation'.	 Photo D10 - 1	 Photo D10 - 2	 Photo D10 - 3




Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 4 OF PAINTING CREATIONS			
<p>Response Validation (Evaluation): Includes testing responses by re-working ideas and evaluating where learner is</p>	 <p style="text-align: center;">Photo D11 - 1</p>	 <p style="text-align: center;">Photo D11 - 2</p>	 <p style="text-align: center;">Photo D11 - 3</p>
<p>-Breaking with perceptual set -keeping response options open -moving off in new directions</p>	 <p style="text-align: center;">Photo D12 - 1</p>	 <p style="text-align: center;">Photo D12 - 2</p>	 <p style="text-align: center;">Photo D12 - 3</p>
	 <p style="text-align: center;">Photo D13 - 1</p>	 <p style="text-align: center;">Photo D13 - 2</p>	 <p style="text-align: center;">Photo D13 - 3</p>
<p>Evaluation</p>	 <p style="text-align: center;">Photo D14 - 1</p>	 <p style="text-align: center;">Photo D14 - 2</p>	 <p style="text-align: center;">Photo D14 - 3</p>
<p>Perseverance/ perspiration</p>	 <p style="text-align: center;">Photo D15 - 1</p>		
















Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 4 OF PAINTING CREATIONS			
		Photo D15 - 2	Photo D15 - 3
Creative Outcome	 <p style="text-align: center;">Photo D16 - 1</p>		 <p style="text-align: center;">Photo D16 -3</p>










Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 5 OF PAINTING CREATIONS			
Participant 5 Dan			
Task presentation (Inspiration): Includes internal thinking and external strategies	 <p style="text-align: center;">Photo E8 - 1</p>	 <p style="text-align: center;">Photo E8 - 2</p>	 <p style="text-align: center;">Photo E8 - 3</p>
Preparation: Realisation of ideas through keen observations to build a response	 <p style="text-align: center;">Photo E9 - 1</p>	 <p style="text-align: center;">Photo E9 - 2</p>	 <p style="text-align: center;">Photo E9 - 3</p>

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 5 OF PAINTING CREATIONS			
<p>Response Generation (Clarification & Distillation): Searching of memory and environment to generate possible ideas.</p>	 <p style="text-align: center;">Photo E10 - 1</p>	 <p style="text-align: center;">Photo E10 - 2</p>	 <p style="text-align: center;">Photo E10 - 3</p>
<p>Response Validation (Evaluation): Includes testing responses by re-working ideas and evaluating where learner is</p>	 <p style="text-align: center;">Photo E11 - 1</p>	 <p style="text-align: center;">Photo E11 - 2</p>	 <p style="text-align: center;">Photo E11 - 3</p>
<p>-Breaking with perceptual set -keeping response options open -moving off in new directions</p>	 <p style="text-align: center;">Photo E12 - 1</p>	 <p style="text-align: center;">Photo E12 - 2</p>	 <p style="text-align: center;">Photo E12 - 3</p>
	 <p style="text-align: center;">Photo E13 - 1</p>	 <p style="text-align: center;">Photo E13 - 2</p>	 <p style="text-align: center;">Photo E13 - 3</p>
<p>Evaluation</p>	 <p style="text-align: center;">Photo E14 - 1</p>	 <p style="text-align: center;">Photo E14 - 2</p>	 <p style="text-align: center;">Photo E14 - 3</p>

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 5 OF PAINTING CREATIONS			
	 Photo E15 - 1	 Photo E15 - 2	 Photo E15 - 3
Perseverance	 Photo E16 - 1	 Photo E16 - 2	 Photo E16 - 3
Creative Outcome			 Photo E17 - 3

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 6 OF PAINTING CREATIONS			
Participant 6 Leo			
Task presentation (Inspiration): Includes internal thinking and external strategies	 Photo F8 - 1	 Photo F8 - 2	 Photo F8 - 3

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 6 OF PAINTING CREATIONS			
<p>Preparation: Realisation of ideas through keen observations to build a response</p>	 <p style="text-align: center;">Photo F9 - 1</p>	 <p style="text-align: center;">Photo F9 - 2</p>	 <p style="text-align: center;">Photo F9 - 3</p>
<p>Response Generation (Clarification & Distillation): Searching of memory and environment to generate possible ideas.</p>	 <p style="text-align: center;">Photo F10 - 1</p>	 <p style="text-align: center;">Photo F10 - 2</p>	 <p style="text-align: center;">Photo F10 - 3</p>
<p>Response Generation</p>	 <p style="text-align: center;">Photo F11 - 1</p>	 <p style="text-align: center;">Photo F11 - 2</p>	 <p style="text-align: center;">Photo F11 - 3</p>
<p>-Breaking with perceptual set -keeping response options open -moving off in new directions</p>	 <p style="text-align: center;">Photo F12 - 1</p>	 <p style="text-align: center;">Photo F12 - 2</p>	 <p style="text-align: center;">Photo F12 - 3</p>
<p>Response Validation (Evaluation): Includes testing responses by re-working ideas and evaluating where learner is</p>	 <p style="text-align: center;">Photo F13 - 1</p>	 <p style="text-align: center;">Photo F13 - 2</p>	 <p style="text-align: center;">Photo F13 - 3</p>

Creative phases	1 st experimental painting (drawing)	2 nd experimental Painting (drawing)	Final painting
PHOTO SHEET 6 OF PAINTING CREATIONS			
Response Validation	 <p style="text-align: center;">Photo F14 - 1</p>	 <p style="text-align: center;">Photo F14 - 2</p>	 <p style="text-align: center;">Photo F14 - 3</p>
Perseverance	 <p style="text-align: center;">Photo F15 - 1</p>	 <p style="text-align: center;">Photo F15 - 2</p>	 <p style="text-align: center;">Photo F15 - 3</p>
Evaluation	 <p style="text-align: center;">Photo F16 - 1</p>		 <p style="text-align: center;">Photo F16 - 3 1</p>
Creative Outcome			

ADDENDUM J: CREATIVITY QUESTIONNAIRE

This questionnaire tries to discover how effectively you use the creative process during idea generation and artistic expression, or other creative work while producing art-work. It is based on the *ICEDIP* model of the creative process. Think about your creative work, ideas, art work, Visual Art expression while answering these questions. Show how much you agree or disagree with the statements by circling a relevant number. '3' means you strongly agree, and '0' means you strongly disagree. Be truthful! There are no right answers, just different styles or approaches.

INSPIRATION {ART-RELEVANT ITEMS=3,5,6} {CREATIVITY-RELEVANT ITEMS=1,2,4}		Strongly agree	Agree	Disagree	Strongly Disagree
1.	I can brainstorm ideas in an intuitive*, experimental and spontaneous way without being too self-critical <small>*intuition n. The act or faculty of knowing or sensing without the use of rational processes; immediate cognition.</small>	3	2	1	0
2.	Not all my ideas are predictable, and /or workable. Some of them are odd, original, or even innovative	3	2	1	0
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas	3	2	1	0
4.	I'm not alarmed by unusual or 'off-the-wall' ideas	3	2	1	0
5.	I don't leap headlong into the first idea I get, I prefer to play with the ideas first	3	2	1	0
6.	I like to take my time in researching for ideas	3	2	1	0
Total score for inspiration					

EVALUATION {ART-RELEVANT ITEMS=8,10,11} {CREATIVITY-RELEVANT ITEMS=7,9,12}		Strongly agree	Agree	Disagree	Strongly Disagree
7.	I am self-critical about what I do, and check all tasks carefully.	3	2	1	0
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	3	2	1	0
9.	When I look at a work-piece in progress I look mainly at how to improve it, not just how bad or good it is.	3	2	1	0
10.	On the whole I have sound judgement or taste about my work I know what I like, and am led by that.	3	2	1	0
11.	I am prepared to ignore other people's opinions if I think my work is good.	3	2	1	0
12.	I often manage to learn from my mistakes	3	2	1	0
Total score for evaluation					

CLARIFICATION {ART-RELEVANT ITEMS=13,14,16} {CREATIVITY-RELEVANT ITEMS=15,17,18}		Strongly agree	Agree	Disagree	Strongly Disagree
13.	I am interested in the meaning or purpose of what I am doing, so I am always asking myself 'what am I trying to do here?'	3	2	1	0
14.	I don't mind much if it takes time to get an answer to the above question.	3	2	1	0
15.	I like to think about how each part of the work relates to others, and to the whole.	3	2	1	0
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work	3	2	1	0
17.	If I get stuck or blocked I step back from what I am doing, and go back to my main purposes/goals.	3	2	1	0
18.	The true meaning or purpose of a piece of work often evolves as I work on it.	3	2	1	0
Total score for clarification					

DISTILLATION {ART-RELEVANT ITEMS=19,21,24} {CREATIVITY-RELEVANT ITEMS=20,22,23}		Strongly agree	Agree	Disagree	Strongly Disagree
19.	I am happy to give a unusual idea some time	3	2	1	0
20.	I like ideas which are not quite like those people are expecting	3	2	1	0
21.	I don't mind if an idea is a bit of a challenge to get right	3	2	1	0
22.	Picasso said "I never made a painting as a work of art, its all research". I try to work like that.	3	2	1	0
23.	I am fairly clear on what criteria to use when choosing which idea to work on.	3	2	1	0
24.	I don't reject an idea with a fault out of hand. Good ideas sometimes come with weaknesses that need working on.	3	2	1	0
Total score for distillation					

INCUBATION {ART-RELEVANT ITEMS=26,27,28} {CREATIVITY-RELEVANT=25,29,30}		Strongly agree	Agree	Disagree	Disagree
25.	I don't just keep working until its finished. I like to leave time between work sessions.	3	2	1	0
26.	Between work sessions I am often thinking about the work	3	2	1	0
27.	I think there is often a real benefit to 'sleeping on' creative work.	3	2	1	0
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.	3	2	1	0
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.	3	2	1	0
30.	I sometimes find that my subconscious has solved a problem while I have been away from my work.	3	2	1	0
Total score for incubation					

PERSPIRATION/ PERSEVERANCE {ART-RELEVANT ITEMS=31,32,35} {CREATIVITY-RELEVANT ITEMS=33,34,36}		Strongly agree	Agree	Disagree	Strongly Disagree
31.	I really enjoy rolling my sleeves up and getting down to it.	3	2	1	0
32.	I usually feel pretty positive and enthusiastic while I am working.	3	2	1	0
33.	I do drafts and redrafts until I get things right.	3	2	1	0
34.	I'm not very critical while I work. If things don't work out first time, I know I can just fix it later or do it again.	3	2	1	0
35.	When I do drafts and redrafts I respond to any previous evaluations	3	2	1	0
36.	If I try hard enough for long enough I will get there in the end.	3	2	1	0
Total score for perspiration					

This questionnaire is based on the ICEDIP model of the creative process. See "How to be Better at Creativity" Geoffrey Petty (Kogan Page1997). www.greenfields.u-net.com

ADDENDUM K: CREATIVITY QUESTIONNAIRE RESPONSES

The art-participant responses to the creativity questionnaire of each individual's experience of the creative process during idea-generation and artistic expression while creating art-work.

Participant 1: **Betty**

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Inspiration				
1.	I can brainstorm ideas in an intuitive, experimental and spontaneous way without being too self-critical.	X		X	
2.	Not all my ideas are predictable, and/or workable. Some of them are odd, original, or even innovative.	X		X	
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas.	X		X	
4.	I'm not alarmed by unusual or 'off-the-wall' ideas.		X	X	
5.	I don't leap headlong into the first idea I get, I prefer to play around first.	X			X
6.	I like to take my time in researching for ideas.	X		X	
	Evaluation				
7.	I am self-critical about what I do, and check all tasks carefully.	X		X	
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	X		X	
9.	When I look at a work-piece in progress I look mainly at how to improve it, not just how bad or good it is.	X			X
10.	On the whole I have sound judgment or taste about my work. I know what I like, and am led by that.	X		X	
11.	I am prepared to ignore other people's opinions if I think my work is good.		X		X
12.	I often manage to learn from my mistakes	X		X	
	Clarification				
13.	I am interested in the meaning or purpose of what I am doing, so I am always asking myself 'What am I trying to do here?'	X		X	
14.	I don't mind much if it takes time to get an answer to the above question.		X		X
15.	I like to think about how each part of the work relates to others, and to the whole.	X		X	
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work.	X		X	
17.	If I get stuck or blocked, I step back from what I am doing, and go back to my main purposes.	X		X	
18.	The true meaning or purpose of a piece of work often evolves as I work on it.	X		X	

Distillation					
19.	I am happy to give a crazy idea some time.		X		X
20.	I like ideas which are not quite like those people are expecting.	X			X
21.	I don't mind if an idea is a bit of a challenge to get right.		X		X
22.	Picasso said, "I never made a painting as a work of art, it's all research". I try to work like that.	X			X
23.	I am fairly clear on what criteria to use when choosing which idea to work on.		X		X
24.	I don't reject an idea with a fault out-of-hand. Good ideas sometimes come with weaknesses that need working on.	X			X
Incubation					
25.	I don't just keep working until it's finished. I like to leave time between work-sessions.	X			X
26.	Between work-sessions I often think about the work.	X			X
27.	I think there is often a real benefit to 'sleeping on' creative work.	X			X
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.		X		X
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.		X		X
30.	I sometimes find that my subconscious has solved a problem while I have been away from my work.	X			X
Perspiration					
31.	I really enjoy rolling my sleeves up and getting down to it.	X			X
32.	I usually feel pretty positive and enthusiastic while I am working.	X			X
33.	I do drafts and redrafts until I get things right.	X			X
34.	I'm not very critical while I work. If things don't work out the first time, I know I can just fix it later, or do it again.	X			X
35.	When I do drafts and redrafts I respond to any previous evaluations.	X			X
36.	If I try hard enough for long enough I will get there in the end.	X			X

Participant 2: **Charles**

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
Inspiration					
1.	I can brainstorm ideas in an intuitive, experimental and spontaneous way without being too self-critical.	X			X
2.	Not all my ideas are predictable, and/or workable. Some of them are odd, original, or even innovative.	X			X
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas.	X			X

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
4.	I'm not alarmed by unusual or 'off-the-wall' ideas.	X		X	
5.	I don't leap headlong into the first idea I get, I prefer to play around first.		X		X
6.	I like to take my time in researching for ideas.	X			X
	Evaluation				
7.	I am self-critical about what I do, and check all tasks carefully.		X		X
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	X		X	
9.	When I look at a work-piece in progress I look mainly at how to improve it, not just how bad or good it is.	X			X
10.	On the whole I have a sound judgment or taste about my work. I know what I like, and am led by that.		X		X
11.	I am prepared to ignore other people's opinions if I think my work is good.		X		X
12.	I often manage to learn from my mistakes.	X		X	
	Clarification				
13.	I am interested in the meaning or purpose of what I am doing. So I am always asking myself 'What am I trying to do here?'		X		X
14.	I don't mind much if it takes time to get an answer to the above question.	X		X	
15.	I like to think about how each part of the work relates to others, and to the whole.		X		X
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work.		X		X
17.	If I get stuck or blocked, I step back from what I am doing, and go back to my main purposes.		X		X
18.	The true meaning or purpose of a piece of work often evolves as I work on it.		X	X	
	Distillation				
19.	I am happy to give a crazy idea some time.	X		X	
20.	I like ideas which are not quite like those people are expecting.	X		X	
21.	I don't mind if an idea is a bit of a challenge to get right.	X			X
22.	Picasso said "I never made a painting as a work of art, it's all research". I try to work like that.		X		X
23.	I am fairly clear on what criteria to use when choosing which idea to work on.		X		X
24.	I don't reject an idea with a fault out-of-hand. Good ideas sometimes come with weaknesses that need working on.	X		X	
	Incubation				
25.	I don't just keep working until it's finished. I like to leave time between work-sessions.	X		X	

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
26.	Between work-sessions I often think about the work.		X		X
27.	I think there is often a real benefit to 'sleeping on' creative work.	X		X	
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.	X			X
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.	X		X	
30.	I sometimes find that my subconscious has solved a problem while I have been away from my work.	X		X	
	Perspiration				
31.	I really enjoy rolling my sleeves up and getting down to it.	X		X	
32.	I usually feel pretty positive and enthusiastic while I am working.	X			X
33.	I do drafts and redrafts until I get things right.		X		X
34.	I'm not very critical while I work. If things don't work out the first time, I know I can just fix it later, or do it again.	X			X
35.	When I do drafts and redrafts I respond to any previous evaluations.		X		X
36.	If I try hard enough for long enough I will get there in the end.	X		X	

Participant 3: **Nkosi**

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Inspiration				
1.	I can brainstorm ideas in an intuitive, experimental and spontaneous way without being too self-critical.	X			X
2.	Not all my ideas are predictable, and/or workable. Some of them are odd, original, or even innovative.	X		X	
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas.	X		X	
4.	I'm not alarmed by unusual or 'off-the-wall' ideas	X		X	
5.	I don't leap headlong into the first idea I get, I prefer to play around first.	X		X	
6.	I like to take my time in researching for ideas.	X			X
	Evaluation				
7.	I am self-critical about what I do, and check all tasks carefully.	X		X	

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	X		X	
9.	When I look at a work-piece in progress, I look mainly at how to improve it, not just how bad or good it is.		X		X
10.	On the whole I have sound judgment or taste about my work. I know what I like, and am led by that.	X		X	
11.	I am prepared to ignore other people's opinions if I think my work is good.		X		X
12.	I often manage to learn from my mistakes.		X	X	
Clarification					
13.	I am interested in the meaning or purpose of what I am doing, so I am always asking myself 'What am I trying to do here?'	X			X
14.	I don't mind much if it takes time to get an answer to the above question.		X	X	
15.	I like to think about how each part of the work relates to the others, and to the whole.		X		X
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work.		X	X	
17.	If I get stuck or blocked, I step back from what I am doing, and go back to my main purposes.		X	X	
18.	The true meaning or purpose of a piece of work often evolves as I work on it.	X		X	
Distillation					
19.	I am happy to give a crazy idea some time.	X		X	
20.	I like ideas which are not quite like those people are expecting.	X		X	
21.	I don't mind if an idea is a bit of a challenge to get right.	X		X	
22.	Picasso said "I never made a painting as a work of art, it's all research". I try to work like that.		X		X
23.	I am fairly clear on what criteria to use when choosing which idea to work on.		X		X
24.	I don't reject an idea with a fault out-of-hand. Good ideas sometimes come with weaknesses that need working on.		X	X	
Incubation					
25.	I don't just keep working until it's finished. I like to leave time between work-sessions.	X		X	
26.	Between work-sessions I often think about the work.		X		X
27.	I think there is often a real benefit to 'sleeping on' creative work.	X			X
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.	X		X	
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.		X	X	
30.	I sometimes find that my subconscious has solved a problem while I		X		X

Item Number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	have been away from my work.				
	Perspiration				
31.	I really enjoy rolling my sleeves up and getting down to it.	X		X	
32.	I usually feel pretty positive and enthusiastic while I am working.	X			X
33.	I do drafts and redrafts until I get things right.	X			X
34.	I'm not very critical while I work. If things don't work out first time, I know I can just fix it later, or do it again.	X		X	
35.	When I do drafts and redrafts I respond to any previous evaluations.		X		X
36.	If I try hard enough for long enough I will get there in the end.	X		X	

Participant 4: **SAMANTHA**

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Inspiration				
1.	I can brainstorm ideas in an intuitive, experimental and spontaneous way without being too self-critical.	X		X	
2.	Not all my ideas are predictable, and/or workable. Some of them are odd, original, or even innovative.	X		X	
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas.	X		X	
4.	I'm not alarmed by unusual or 'off-the-wall' ideas.	X		X	
5.	I don't leap headlong into the first idea I get. I prefer to play around first.	X		X	
6.	I like to take my time in researching for ideas.	X		X	
	Evaluation				
7.	I am self-critical about what I do, and check all tasks carefully.	X		X	
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	X		X	
9.	When I look at a work-piece in progress, I look mainly at how to improve it, not just how bad or good it is.	X		X	
10.	On the whole I have sound judgment or taste about my work. I know what I like, and am led by that.	X		X	
11.	I am prepared to ignore other people's opinions if I think my work is good.	X		X	
12.	I often manage to learn from my mistakes.	X		X	

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Clarification				
13.	I am interested in the meaning or purpose of what I am doing. So I am always asking myself 'What am I trying to do here?'	X		X	
14.	I don't mind much if it takes time to get an answer to the above question.	X		X	
15.	I like to think about how each part of the work relates to the others, and to the whole.	X		X	
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work.	X		X	
17.	If I get stuck or blocked, I step back from what I am doing, and go back to my main purposes.	X		X	
18.	The true meaning or purpose of a piece of work often evolves as I work on it.	X		X	
	Distillation				
19.	I am happy to give a crazy idea some time.	X		X	
20.	I like ideas which are not quite like those people are expecting.	X		X	
21.	I don't mind if an idea is a bit of a challenge to get right.	X		X	
22.	Picasso said "I never made a painting as a work of art, it's all research". I try to work like that.		X		X
23.	I am fairly clear on what criteria to use when choosing which idea to work on.	X		X	
24.	I don't reject an idea with a fault out of hand. Good ideas sometimes come with weaknesses that need working on.	X		X	
	Incubation				
25.	I don't just keep working until it's finished. I like to leave time between work-sessions.	X		X	
26.	Between work-sessions I often think about the work	X		X	
27.	I think there is often a real benefit to 'sleeping on' creative work.	X		X	
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.	X		X	
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.		X	X	
30.	I sometimes find that my subconscious has solved a problem while I have been away from my work.	X		X	
	Perspiration				
31.	I really enjoy rolling my sleeves up and getting down to it.	X		X	
32.	I usually feel pretty positive and enthusiastic while I am working.	X		X	
33.	I do drafts and redrafts until I get things right.	X		X	
34.	I'm not very critical while I work. If things don't work out first time, I know I can just fix it later, or do it again.	X		X	

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
35.	When I do drafts and redrafts, I respond to any previous evaluations.	X		X	
36.	If I try hard enough for long enough I will get there in the end.	X		X	

Participant 5: **Dan**

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Inspiration				
1.	I can brainstorm ideas in an intuitive, experimental and spontaneous way without being too self-critical	X		X	
2.	Not all my ideas are predictable, and/or workable. Some of them are odd, original, or even innovative	X		X	
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas.	X		X	
4.	I'm not alarmed by unusual or 'off-the-wall' ideas.	X		X	
5.	I don't leap headlong into the first idea I get, I prefer to play around first.	X		X	
6.	I like to take my time in researching for ideas.	X		X	
	Evaluation				
7.	I am self-critical about what I do, and check all tasks carefully.	X		X	
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	X			X
9.	When I look at a work-piece in progress, I look mainly at how to improve it, not just how bad or good it is.	X		X	
10.	On the whole I have sound judgment or taste about my work. I know what I like, and am led by that.	X			X
11.	I am prepared to ignore other people's opinions if I think my work is good.	X		X	
12.	I often manage to learn from my mistakes.	X		X	
	Clarification				

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
13.	I am interested in the meaning or purpose of what I am doing. So I am always asking myself 'What am I trying to do here?'	X			X
14.	I don't mind much if it takes time to get an answer to the above question.	X			X
15.	I like to think about how each part of the work relates to others, and to the whole.	X		X	
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work.	X		X	
17.	If I get stuck or blocked I step back from what I am doing, and go back to my main purposes.	X		X	
18.	The true meaning or purpose of a piece of work often evolves as I work on it.		X	X	
	Distillation				
19.	I am happy to give a crazy idea some time.	X		X	
20.	I like ideas which are not quite like those people are expecting.	X			X
21.	I don't mind if an idea is a bit of a challenge to get right.	X		X	
22.	Picasso said "I never made a painting as a work of art, it's all research". I try to work like that.		X	X	
23.	I am fairly clear on what criteria to use when choosing which idea to work on.	X		X	
24.	I don't reject an idea with a fault out-of-hand. Good ideas sometimes come with weaknesses that need working on.	X			X
	Incubation				
25.	I don't just keep working until it's finished. I like to leave time between work-sessions.	X		X	
26.	Between work-sessions I often think about the work.		X	X	
27.	I think there is often a real benefit to 'sleeping on' creative work.	X			X
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.	X			X
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.		X	X	
30.	I sometimes find that my subconscious has solved a problem while I have been away from my work.		X	X	

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Perspiration				
31.	I really enjoy rolling my sleeves up and getting down to it.	X		X	
32.	I usually feel pretty positive and enthusiastic while I am working.	X			X
33.	I do drafts and redrafts until I get things right.	X		X	
34.	I'm not very critical while I work. If things don't work out first time, I know I can just fix it later, or do it again.	X		X	
35.	When I do drafts and redrafts, I respond to any previous evaluations.		X		X
36.	If I try hard enough for long enough I will get there in the end.	X			X

Participant 6: **Leo**

Item number	Creative phase/process/thinking	Pre-art creation		Post art-creation	
		Agree	Disagree	Agree	Disagree
	Inspiration				
1.	I can brainstorm ideas in an intuitive, experimental and spontaneous way without being too self-critical.	X		X	
2.	Not all my ideas are predictable, and /or workable. Some of them are odd, original, or even innovative.	X		X	
3.	I can become deeply engrossed in what I am doing when I am dreaming up ideas.	X		X	
4.	I'm not alarmed by unusual or 'off-the-wall' ideas.	X		X	
5.	I don't leap headlong into the first idea I get. I prefer to play around first.	X			X
6.	I like to take my time in researching for ideas.	X			X
	Evaluation				
7.	I am self-critical about what I do, and check all tasks carefully.	X			X
8.	It takes time to get things right, so I don't get too despondent if things aren't working out. I'll get there in the end.	X		X	
9.	When I look at a work-piece in progress, I look mainly at how to improve it, not just how bad or good it is.	X		X	
10.	On the whole I have sound judgment or taste about my work. I know what I like, and am led by that.	X		X	

11.	I am prepared to ignore other people's opinions if I think my work is good.		X		X	
12.	I often manage to learn from my mistakes.	X			X	
Clarification						
13.	I am interested in the meaning or purpose of what I am doing. So I am always asking myself 'What am I trying to do here?'	X				X
14.	I don't mind much if it takes time to get an answer to the above question.		X			X
15.	I like to think about how each part of the work relates to the others, and to the whole.		X		X	
16.	If I am given a written brief, title, or theme I think hard about this, and often refer back to it as I work.	X			X	
17.	If I get stuck or blocked, I step back from what I am doing, and go back to my main purposes.		X			X
18.	The true meaning or purpose of a piece of work often evolves as I work on it.	X			X	
Distillation						
19.	I am happy to give a crazy idea some time.	X			X	
20.	I like ideas which are not quite like those people are expecting.	X			X	
21.	I don't mind if an idea is a bit of a challenge to get right.	X			X	
22.	Picasso said "I never made a painting as a work of art, it's all research". I try to work like that.	X			X	
23.	I am fairly clear on what criteria to use when choosing which idea to work on.	X				X
24.	I don't reject an idea with a fault out-of-hand. Good ideas sometimes come with weaknesses that need working on.	X			X	
Incubation						
25.	I don't just keep working until it's finished. I like to leave time between work-sessions.		X		X	
26.	Between work-sessions I often think about the work	X				X
27.	I think there is often a real benefit to 'sleeping on' creative work.	X			X	
28.	I like to think about my work when I am relaxed, and/or when I am walking/cycling/doing something else.	X				X
29.	I don't evaluate what I am doing the moment I have finished it. I leave it for a day or two, and then go back to it.		X			X
30.	I sometimes find that my subconscious has solved a problem while I have been away from my work.	X			X	
Perspiration						
31.	I really enjoy rolling my sleeves up and getting down to it.	X			X	
32.	I usually feel pretty positive and enthusiastic while I am working.	X			X	
33.	I do drafts and redrafts, until I get things right.	X				X
34.	I'm not very critical while I work. If things don't work out first time, I know I can just fix it later, or do it again.		X			X
35.	When I do drafts and redrafts, I respond to any previous evaluations.	X				X
36.	If I try hard enough for long enough I will get there in the end.	X			X	

ADDENDUM L: SEMI-STRUCTURED INTERVIEW SCHEDULE

- 1) How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?
- 2) Do you utilise any information which you may have learned before or experienced to assist you at all with the art task? Can you explain more?
- 3) What ideas come to mind when you are first issued with an art assignment? Do you develop those ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result?
- 4) What is your understanding of the creative process?
- 5) How would you describe what being creative is?
- 6) How do you deal with an 'artistic problem' in your art work, if any?
- 7) Are there times when you feel frustrated with the 'creative process'? If so, what do you do?
- 8) In your opinion, do you think it is important to have knowledge of art materials and techniques in order to be creative or show creativity? Can you explain what you mean?
- 9) In Grade 11, you are required to maintain visual journals and document your own developing artistic and creative ability. Do you do this? If you do, do you find it helpful and if so, why?
- 10) How do you experience planning and finishing the art tasks assigned within the times given?
- 11) When things have not turned out as planned during an art creation, what is your reaction or response?
- 12) Do you reflect on what you are busy doing or have completed? How and when do you do this?
- 13) When do you believe your art work is 'complete'? if at all?
- 14) What have you learned from creating Visual Art tasks?
- 15) What would assist you to become more creative, do you think?

ADDENDUM M: INTERVIEW TRANSCRIPTION AND ANALYSIS PER PARTICIPANT'S RESPONSES

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
Daline:	How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?	Task presentation and Inspiration	
Participant 1:	I was listening to how the teacher explained it and her explanation of the different sins. There was one of the sins, it was my intention to do gluttony. She explained how fat people stuff their faces and that intrigued me, and I started researching and putting my ideas onto paper.	Betty described auditory visualisation. Conveyed being inspired (intrigued) to generate new ideas. Researched ideas with the intention to portray gluttony visually.	There was a selection of visual cues (as a source of inspiration) to portray ideas onto paper in visual form.
Daline:	What information or experience do you use to assist you with the art task? Can you explain more?	Preparation and building response of creative algorithms	
Participant 1:	<i>I incorporated techniques that I learned before.</i> In Grade 10 we learnt how to start projects by making collages and <i>finding visual references and I used that to help me.</i> I use the Internet and magazines to find pictures. I also use my phone to access the Internet or use the Internet at home. I did that with the collage.	New skills used that were learned before Use of visual inquiry by finding visual references to assist her for conceptualisation of the concept.	Her own prior knowledge and experiences was used. Trial-and-error approach – use of heuristics.
Daline:	What ideas come to mind when you are first issued with an art assignment? Do you develop those ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result?	Response Generation and searching memory and the environment to generate possible ideas	
Participant 1:	I really liked the picture of the world dancing. You can see that they are people I don't know who they are, but they are superficial and I incorporated them. I saw the book. I didn't like the 'fuzzy', so I incorporated more books. When given an assignment, firstly <i>I look at what personally attracts me.</i> If it attracts me it will attract someone else. As I go along and I don't like something that I am doing, and <i>I was able to do something else,</i> I will incorporate something else. That was standing on a book (see Photo A 1). I liked the way I had drawn the	Betty broke with cognitive set to change the initial drawing (replaced 'fuzzy' visual element with books). There was managing changes in her work by doing something else.	Betty used different strategies to research and investigate visual stimuli in order to generate a newly created visual idea.

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
	<p>book but not the ‘fuzzy thing’. Because our task was the seven deadly sins, I just added the words of the sins all around it so that wherever you looked you could See one of the sins. In the first one (see Photo A 2), I basically used images from references given. I then combined and added. I found the world to be interesting. These are clouds that are floating. This was the first time that I had used stained papers properly. I like purple, so I stained with different colours of purple. I started spraying with green, yellow and blue. I then looked through magazines for pictures of food representing gluttony. I found some pictures on the internet. I put all the pictures together for my references. I used the cake, the wine, the girl, and a picture of a guy on the side (see Photo A 5). I found something for extra information. It said something about the demons eating snakes, ...and other rodents. I had to pull the elements through. There was a picture of a chair on my collage so I used the chair as well (see Photo A16 - 3).</p>	<p>Own additions and self-expression through own representation of art-work (Originality). Betty conveyed an understanding of complexity of a concept like gluttony via combinations and additions of concrete visual symbolism to place in her Visual Art.</p>	<p>Use of trial-and-error (heuristics) by combining and adding visual elements. The first time trying new skills like staining paper.</p>
Daline:	What is your personal understanding of the creative process?	Response Validation when the response is evaluated	
Participant 1:	<p>It is what you take and find interesting or weird. What captivates you. Taking it and producing it into something greater, something final. Taking those elements and things that you have learnt, as well as your effort, and putting it into another art work. By combining what interests you, and the techniques and processes, and mixing it all together.</p>	<p>Creativity includes personal interest and what captivates her. Componential learning that different processes are required in different situations.</p>	<p>She selected different paths (heuristics) to combine the Visual Art elements and using certain art skills. Aware that effort is needed.</p>
Daline:	How would you describe what being creative is?	Creativity acumen development	
Participant 1:	<p>It is being able to let go. Being able to do what you feel is nice and looks good and putting that into any work art whether that is a sculpture, painting, or drawing, and taking those inner feelings and putting them into an art-work and <i>making something better</i>. Because when you are doing an art-work your morals and views of life come through in your art work. Even a small thing that you think is right you will put in. It is very personal.</p>	<p>Avoiding foreclosure of alternatives by keeping response options open long enough to allow for fluent thinking and development. Discovery of</p>	<p>Exploring new pathways by wanting to make something better (improvement). Visual conceptualisation of ideas through</p>

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
		possible human experiences (views of life) through personal visual representation.	putting inner feelings into external form.
Daline:	How do you deal with an ‘artistic problem’ in your art work?	Task motivation as the ability to overcome challenges and obstacles faced during Visual Art creation	
Participant 1:	I come across artistic problems all the time. If you have drawn something and it doesn’t work out, you can try again. But you are going to <i>keep on trying</i> even if eventually it just doesn’t work out. You have to <i>overcome</i> that and find something better or different to put in its place. You have to <i>move on</i> . If you are going to try and fix something it will just frustrate you and you won’t want to carry on. <i>I try and overcome</i> , then if I see it is not working I <i>replace it</i> .	Art challenges occur frequently. There is opportunity to try again. Task motivation to keep trying by overcoming problems and trying to improve visual impact when drawing and painting. Managing changes by replacing elements.	Persistence to keep on trying despite challenges. Finding alternative ways by ‘ <i>moving on, finding something better or replacement</i> ’.
Daline:	There was a point when the teacher said that you had made a breakthrough...	Response Validation – breaking cognitive set occurred with task motivation and application of creativity relevant processes	
Participant 1:	Yes. I want to get good marks and do the best that I possibly can. This is the one that I had the breakthrough with (see Photo A14 - 2, Photo A15 - 2).	Willingness to improve and learn from mistakes. Clarification and response validation by evaluating detailed difficulties in the creative tasks.	Using alternative possibilities to break with perceptual set.
Daline:	What was your breakthrough?	A sudden discovery or development	
Participant 1:	My technique. I am basically using every colour but over here (See Photo A14 - 2) the colours are the same but over here (see Photo A15 - 2) I started highlighting. I	Knowledge of art techniques and exploring materials	Art relevant skills such as persistence even

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
	was basically just using a whole lot of colours. Then I used the same technique using all the colours and ended up using pastels.	(pastels).	when not successful were used to develop art-work.
Daline:	Are there times when you feel frustrated while you create art? Can you explain more?	Art creation as unforeseeable	
Participant 1:	Yes. Especially with this one (see Photo A13 - 3). The first one you had an idea (See photo sheet A14-1) but the second one (See Photo A14 - 3), what do I do! What do I do to overcome it? I tried to use the same techniques as in this one[first painting] (See Photo A13 - 3 compared to Photo A14 - 1). I liked my background more, because there wasn't as much detail [referring to the first painting]. I let the background come through and not cover it all up. I personally liked the background.	Evaluation of how the idea has been developed and elaborated upon, with the question "what do I do?". Clarification of ideas by realizing how the tasks have been resolved or formed?. What worked and what did not work. (Inner voice of personal preference).	Use of heuristics. Inability to keep response options open for as long as possible, which lead to similar strategic choices and working with preferential visual elements (background).
Daline:	What did you do with this frustration?	Response Validation through evaluation of analogies and connections made	
Participant 1:	I try and see what is good about what I have, and then use it to my advantage. I let it come through. As with the background, I liked it, I thought it was good. I let it help me. I did not have to do that much because the background was so strong.	Betty used re-visiting and re-working of ideas in her art-work by constructing visual elements which were good and developed on those strengths in her art.	She used analogies & art elements to advance the art creations. She described the acumen/ability to be willing to improve her art.
Daline:	In your opinion, do you think that it is important to have knowledge of art materials and techniques in order to be creative or show that creativity? Can you explain what you mean?	Learning in art requires discovery of concepts through visual forms and art techniques when creating Visual Art	
Participant 1:	Yes, I do think that it is very important. If you don't have	Knowledge of	The same thing

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
	the knowledge of different techniques and processes, you are going to know something, but you are going to do <i>the same thing over and over again</i> , and eventually your paintings will have no contrast at all and they will all look the same and it will become boring. It is important to learn your processes and techniques. You can do more than one in a painting.	different techniques and processes assisted in grasping complexity of concepts being realized in her paintings.	will be done over again with no contrast in art-works without knowledge of different techniques.
Daline:	In Grade 11 you are required to maintain visual journals, document your own developing artistic ability. Do you do this? If you do, do you find it helpful and if so, why?	Developing creativity acumen through application of the creative process as expected in the curriculum outline. It includes response validation.	
Participant 1:	We are required to do this with all our paintings. I only found documenting the collage helpful. When documenting references and ideas onto one big paper it is helpful because you refer back to it all the time. I don't think writing contributed much to my art-work. If I had to do images like this (see Photo A 5) it would contribute to my art-work, but not writing.	Referring to visual cues within the collage was found to be helpful to generating new ideas. Written ideas did not contribute as much as imagery did to her art-work. Imagery assisted art expressed.	The use of analogies when ideas were generated visually occurred with visual inquiry and referral to the collage.
Daline:	How do you experience planning and finishing the art tasks assigned within the times given?	Preparation through keen observation, finding algorithms and realizing ideas	
Participant 1:	I am quite a procrastinator, to be honest. I work better under pressure. I never have an issue with finishing but I leave it to the last minute. Then I have a build - up of pressure with time. If I planned properly, I would finish with ease. I always rush but I always finish.	Betty delayed actions in her art-work to discover she was pressed for time later. Inefficient planning caused anxiety and time pressure to complete. She did rush some work.	Willing to learn from mistakes through task engagement. More creative responses will occur relatively late in any given process of task engagement (Amabile1996:96)
Daline:	In the creative process, where would you say you spend most of your time? In which phase?	Application of the creative process	
Participant 1:	I spend time trying to execute it. I spend most of my time	Most of her time was	Concentration on

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
	in the distillation phase.	spent <i>doing and practising</i> the art tasks.	the art-work for long periods of time.
Daline:	In the times allotted, did you find any constraints?	Task motivation within timeframes	
Participant 1:	You have to do some work at home to improve, but you can do most of the work in class if you focus. This one I did mostly at home (see Photo A18 - 3), this one barely at home (see Photo A14 - 2). I did about 20% at home.	Independent work alone is required at times indicating autonomy. Aware of need to focus on tasks.	Internal motivation to do some work independently and willingness to improve.
Daline:	When things have not turned out as planned during an art creation, what is your reaction or response?	Response generation with the search of memory and environment to persevere or abandon tasks	
Participant 1:	I had the chandelier but it didn't work so I changed it for something new. If something is not working, change it. The idea was to have food coming off it to include gluttony, then I took it out and put food in the picture frames.	Certain tasks left and replaced with other visual elements when <i>something was not working. Changes made.</i>	Alternative pathways chosen and persistence when facing artistic challenges.
Daline:	Do you evaluate your work just against your own work or against others as well?	Response validation and evaluation of creative outcomes	
Participant 1:	You have to evaluate against others. I was walking around and I saw that my composition was not as great as the others. So I thought I should stop and start something new and improve it. It is very important to evaluate your work.	Evaluation of own work against others(peers). Then changes were made to improve art.	The ability to evaluate work in order to improve or develop it seen as important.
Daline:	Do you reflect on what you are busy doing or have completed? How and when do you do this?	Response Validation and evaluation during application of the creative process	
Participant 1	I look and see what is working and what is not. For example, I am using the chandelier again and as you can see it did not work. Sometimes you get very involved and can't see mistakes, and you need to take a step back or get someone else's opinion and then your mistakes become clear. You have to remove yourself from the art-work to see what is working or not. You have to See what you can do to improve it. It is a difficult process. You have to realize what is working or not.	Evaluation of interaction between created forms and how they turned out in visual practice. Seeing complexity and clarifying by <i>stepping back from the work.</i>	Concentration for long periods when <i>getting involved</i> with the art-work. Willing to improve on artistic <i>mistakes.</i>

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
Daline	When do you believe that your art work is 'complete'? if at all? If you look at your final painting evaluate on a scale from 1-10?	Task presentation with the opportunity to self-evaluate and comment on and justify choices for further work, can be a powerful source of learning	
Participant 1	This is complete, but not the other two (see Photo A17 - 2). About 7.5. It is not the best that I have done.	Art-work not completed	Willing to improve work.
Daline:	What are you not happy with?	Self-evaluation	
Participant 1	I would have liked to have done my composition differently, better. I feel it is boring and plain. I want to change it to improve it. The teacher was doing an activity with us and looking at our skin tones and saying to someone that they had a blue under-tone. When you look at anything you can see colours coming through.	Self-evaluation in order to improve earlier work	Willing to improve Colour blending as an art skill
Daline	Do you take risks? Percentage wise are you happy with your art?	Response validation through evaluation by testing creative response against curriculum criteria	
Participant 1	Yes. I did with this one (see.Photo A17 - 2). I tried doing something that I have never done before and it ended up being quite good. It is sometimes worth the risk. Not very often. I am very critical of myself. I don't often find my art-work great. Last term I liked my pen drawing. I would love to work in pen again. Painting is very hard. I would definitely work in pen again.	Indication of cautious response and little risk-taking in breaking with perceptual set when trying new things. Conveyed harsh self-judgement.	More comfortable with previously used and tried and tested methods.
Daline	What have you learnt from creating any Visual Art tasks?	Relationship between creating Visual Art and learning at school	
Participant 1	It has taught me perseverance, and to never give up. You must keep working at it. It won't be so bad at the end. She (teacher) showed me how to use all the different colours and that led me to carry on. I used that technique further and that was my breakthrough. Yes. You learn a lot from art especially to persevere, and never give up.	She avoided foreclosure of alternatives, and kept looking for an 'answer' by carrying on (from art educator).	Perseverance and never give up. Mistakes were seen as opportunities.
Daline:	What would assist you to become more creative, do you think?	Relationship between creating art and attaining creativity acumen	
Participant 1:	I should take more time in doing what I am doing. Just sit down for longer and get it perfect. I am a	She conveyed being committed to the	Strategic pacing Willing to

Name/ Participant Betty / 1	Question / Response	Creativity-relevant processes	Art –relevant skill
	perfectionist. I don't sit down and say, evaluate. I evaluate as I am going along. I spend a lot of time evaluating art-work and improving.	task to spend time on it. Being Continuous evaluation of the outcome.	improve.

Name/Participant Charles / 2	Question / Response	Creativity-relevant processes	Art-relevant Skills
Daline:	How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?	Task presentation and Inspiration	
Participant 2:	I approached it by trying to make it as detailed as possible. I went for pictures with a lot of shading, and very dark and light areas that contrasted.	Creative approach included open-ended visual inquiry by attending to details in art-work.	Charles used art techniques and skills for visual contrast.
Daline:	What information or experience did you use to assist you with the art task? Can you explain more? I observed and saw that your interest was waning.	Preparation and building response of creative algorithms	
Participant 2:	It was basically on the same theme, especially the girl looking in the mirror. The image in the mirror was complex to paint and draw. I did struggle, but I finally got it right. I was a bit nervous. I do not consider myself as a good painter. I tried to work to the best of my ability on that.	He grasped complexities in the concept to be portrayed. Initial anxiety towards creative task.	Persistence to get the art-work right. Willing to improve.
Daline:	What ideas come to mind when you are first issued with an art assignment? Do you develop those ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result? How do you see the development of your ideas from visual to collage to paintings?	Response Generation and searching memory and the environment to generate possible ideas	
Participant 2:	I saw the pictures but realized that the pictures were not my sort of drawings. Like the fish, so I drew the fish here (See Photo B 2), and the girl, you See a girl here (See Photo B 2). She derived from one of this group of women. I am not very good at lines. I approached it from what I prefer to draw with contrasting and shading	He was not initially inspired by the initial visual stimulus presented. His response generation was to	Judgement of art skills and techniques as Conveyed

Name/Participant Charles / 2	Question / Response	Creativity-relevant processes	Art-relevant Skills
	<p>as opposed to wispy lines. The poem was on pride, which was the topic. It had the letters of “pride” with what each letter stood for. The topic of pride did not really appeal to me. I wanted to be more creative, more individualistic and not so confined, but I tried my best. I wanted a beautiful painting in terms of imagery not just the images. There was one where I started to do a sunset background but it did not appeal to me as it was not good enough, so I started again and that was the one that I did the majority of at home. The ideas developed from the pictures that I chose. Most of the pictures revolved around humans as pride is affiliated to human beings, hence my choice of pictures. Pride relates to someone in love with themselves and we can see someone looking in a mirror. Pride can consume and the man with the tie was a professional athlete, and that pose of his could be arrogance, however, arrogance is pride. The dice came in as ‘chancing’, as if you are playing with emotions. It is very complex to understand.</p> <p>I kept the element in terms of pride and, therefore kept human beings. I felt that the finished [final] painting wasn’t done and I was not happy with my time management. But I kept the elements that I originally wanted, and let go of the sunset one. Where would you have put it in if you had kept it?</p> <p>I would have put it just after the collage to see what my thinking was.</p> <p>How have you developed? My main worry was that my painting would not be that good. I still did well even though I did not complete it. This tells me that I can do better than I think. I will take this forward into the next art project.</p>	<p>be individualistic and not confined to a theme.</p> <p>His intention was to create a beautiful imagery as a whole.</p> <p>Personal appeal in selection of images and pictures.</p> <p>Development of ideas from images chosen as elements of pride to be depicted visually.</p> <p>Abandoned visual elements which he did not prefer.</p> <p>Grasp of complexities and management of changes.</p> <p>Evaluation and justification to plan for further work.</p>	<p>willingness to improve.</p> <p>Selection of alternative paths/use of heuristics</p> <p>Inefficient time-management.</p> <p>Kept the elements originally chosen (stuck with decisions)</p> <p>Artistic lessons learned taken into the next project.</p>
Daline:	What is your personal understanding of the creative process?	Response Validation when the response is evaluated	
Participant 2:	Being creative is not limited to artistic people. It is the way you express creativity. Do you express it in a manner known to others, or do you do something new with it. That is all creativity.	Creativity is open to everyone It is a way of expression of ideas or do something	

Name/Participant Charles / 2	Question / Response	Creativity-relevant processes	Art-relevant Skills
		new with ideas.	
Daline:	How would you describe what being creative is?	Creativity acumen	
Participant 2:	I feel I was creative in that I represented an idea and sought / created a new style. I believe everyone is creative in their own way.	Ideas are represented in a new way.	Everyone can create.
Daline:	How do you deal with an 'artistic problem' in your art work?	Task motivation as the ability to overcome challenges and obstacles faced during Visual Art creation	
Participant 2:	There is a stage that I try something and if it doesn't work I almost give up, but then I try again. When I give up, I take a new piece of paper....	Creative response is to start anew.	Perseverance to try again when facing art 'problems'.
Daline:	Are there times when you feel frustrated while you create art? Can you explain more?	Art creation as unforeseeable	
Participant 2:	Yes very much. I liked this one (See Photo B15 - 1), before it got damaged. I found it was difficult to get the black colours away in the images. I tried going over it numerous times but reddish colours were coming through. I was moving slowly and running out of time.	There are times of frustration in art creation. He managed changes to rectify creative issues (colour-bleeding). Time considerations.	Selection of different paths to resolve visual problems. Artistic background posed a technical/visual problem.
Daline:	What would you do when you are that frustrated?	Response Validation through evaluation of analogies and connections made	
Participant 2:	Sometimes, like here (see Photo B10 - 2), I just start again. I wasn't getting the hands right. My time management skills were not good. In contrast are there times when things are flowing easily? Particularly with this one [the final painting] (See Photo B13 - 3). The moment I put the white in, I knew that this painting was going well.	Declared inefficient time management. Evaluation of form (hands) and what was going right or what needed to be left.	Validated that colour blending was correct and painting was developing well.
Daline:	In your opinion, do you think that it is important to have knowledge of art materials and techniques in order to be creative or show that creativity? Can you explain what you mean?	Learning in art requires discovery of concepts through visual forms and art techniques when creating Visual Art	
Participant 2:	Yes. Don't be afraid to represent how you feel. It is called self-belief.	Don't be afraid to express yourself. Have self-belief.	Discover new ways.

Name/Participant Charles / 2	Question / Response	Creativity-relevant processes	Art-relevant Skills
Daline:	In Grade 11 you are required to maintain visual journals, document your own developing artistic acumen. Do you do this? If you do, do you find it helpful and if so, why?	Developing creativity acumen through application of the creative process as expected in the curriculum outline. It includes response validation.	
Participant 2:	I did, but not very well. What you did do, how did you do it? I was not very good at putting my thought processes on paper. Did you find it helpful to document the process? Yes, because it made me reflect on my thought process and how I have developed through the course of the art project.	Evaluation of own progress. The use of written ideas not as helpful as images. Writing thoughts did assist with seeing how creative work developed.	Written ideas assisted with seeing whether ideas were realized as intended or not.
Daline:	How do you experience planning and finishing the art tasks assigned within the times given?	Preparation through keen observation, finding the creative process in realizing ideas	
Participant 2:	I am not good with planning. Nearer the due date I tend to be more productive and then pick up the pace. It was a lot of work. The contour lines and pencil drawing were new to me, and we had to do a large amount of work in a short time. I was not prepared for it, and the final product was not as good as it could have been.	Planning was lacking. Worked more productively closer to deadlines. Large amount of work in a short time. Dissatisfaction with the final creative outcome.	Willingness to improve conveyed.
Daline:	In the creative process, where would you say you spend most of your time? In which phase?	Application of the creative process	
Participant 2:	In evaluating. I tend to look at my paintings for a while and think of how I can better them.	Evaluation of ideas as they developed in terms of how they can be improved.	Willing to learn from mistakes and improve o art-work.
Daline:	When things have not turned out as planned during an art creation, what is your reaction or response?	Response generation with the search of memory and environment to persevere or abandon tasks	
Participant 2:	I tend to give up. I was getting irritated and the work was going too slowly. The project was not working out like I wanted it to, and there was carelessness on my part.	Personal ineptitude with realisation of conceived idea. Carelessness in clarifying which path to follow.	Tendency to give in due to ineffective strategies used. Inefficient perseverance.

Name/Participant Charles / 2	Question / Response	Creativity-relevant processes	Art-relevant Skills
Daline:	Do you evaluate your work just against your own work or against others as well?	Response validation and evaluation of creative outcomes	
Participant 2:	I tend to work the same at home as I do at school. The time at school seems to go quickly and I work slower. I also evaluate the work of my fellow students.	Too little class time to complete work. Judges work against peers.	Inability to concentrate for long periods.
Daline:	Do you reflect on what you are busy doing or have completed? How and when do you do this?	Response Validation and evaluation during application of the creative process	
Participant 2:	Yes, I know not to make the same mistakes again.	Expectations of difficulties with the insight to managing changes.	Willing to learn from mistakes to improve.
Daline:	When do you believe that your art work is 'complete'? if at all? If you look at your final painting evaluate on a scale from 1-10?	Task presentation with the opportunity to self-evaluate and comment on and justify choices for further work, as a powerful source of learning	
Participant 2:	I have never thought that my art-work was complete. I have always felt that there is room for improvement. (no response to scale for work)	Art creations not complete, with room for improvement.	Described a willingness to improve.
Daline:	What have you learnt from creating any Visual Art Tasks?	Relationship between creating Visual Art and learning at school	
Participant 2:	To be patient and organized with it and not expect too much or too little of yourself. The biggest lesson learnt was not to underestimate myself. When I started with this, I thought that it was not as bad as I thought it would be.	To be patient and organized. Not underestimate own ability.	Persist through obstacles.
Daline:	What would assist you to become more creative, do you think?	Relationship between creating art and attaining creativity acumen	
Participant 2:	I have to go back to the painting. It is important for me in that I can do better than I thought I could do. It [Visual Art] teaches you to plan and be organized and just enjoy yourself.	Belief that you can do better. Planning and organization is key.	Planning and organization.
Daline:	In terms of your accomplishments in Visual Art – would you take those creative accomplishments and utilise them?	Using Visual Art accomplishments to evaluate creativity acumen.	
Participant 2:	Yes. I have acquired a new skill. I am a better painter.	Improved artist as a painter.	Acquisition of new art skills.

Name/Participant Nkosi / 3	Question / Response	Creativity-relevant Processes	Art-relevant Skills
Daline:	How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?	Task presentation and Inspiration	
Participant 3:	It was my first time doing a sin because we hardly ever talk about sins. So it was new to me and I was a bit scared as to how to approach it, but as I continued, it got easier.	A new concept required being open to a new response.	Exploration of new ways and paths initially felt scared but persevered.
Daline:	What information or experience do you use to assist you with the art task? Can you explain more?	Preparation and building response of creative algorithms	
Participant 3:	I use information that I have learnt before. The things that we usually talk about in class. The teacher would explain the sins and then I would incorporate those, for example, in the painting I did and how little children would be watching and be curious of what other people were doing.	Nkosi called on previous knowledge to conceptualise 'sin'. She described auditory visualization from the art educator's explanation.	Nkosi used the analogy of curious children watching what people were doing.
Daline:	What ideas come to mind when you are first issued with an art assignment? Do you develop those ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result? How do you see the development of your ideas from visual to collage to paintings?	Response Generation and searching memory and the environment to generate possible ideas	
Participant 3:	I just imagined how little children would be watching and be curious of what other people were watching and why they were so interested in what they were watching, and this I used in the final painting. My wanted my drawing to have a meaning or a story behind it, and I just drew and used the elements I liked. I used these men here (See Photo C 2) and then I used the eagle as well, and a book with a fuzzy man standing on top of it. I had a lot of ideas but I wasn't sure how to incorporate them. I would draw something then at a later stage I wanted to change it if I wasn't sure about it. This one [2ND painting] (see.Photo C10 - 2) you	Nkosi displayed creative perception by being able to see new perspectives through imagining what she wanted to create a visual narrative through her drawings and paintings. She generated ideas and used visual	She used her own analogy of the concept of 'lust', with a peep show. The use of finding alternate paths to follow by adding elements and making visual analogies.

Name/Participant Nkosi / 3	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	<p>abandoned quite quickly, explain?</p> <p>I didn't really like it. The whole idea. I used this lady here (see Photo C10 - 2 to Photo C12 - 2 originally from collage) for the painting. Yes, and the make-up and perfume to look and smell good. To show the sexiness. I used the two people. When I first started with it I thought it would look nice, but when I continued I did not like the idea of the woman there (see Photo C12 - 2). I would have made a different one but I didn't have time to change it. What didn't you like about this lady? (see Photo C12 - 2). The shape and the colour.</p>	<p>elements of personal appeal.</p> <p>She made changes when she did not like the visual realisation of her ideas or if it was not visually aesthetic.</p>	<p>She conveyed the acumen to execute visual inquiry through the use of art techniques.</p>
Daline:	What is your personal understanding of the creative process?	Response Validation when the response is evaluated	
Participant 3:	When you can generate ideas and draw anything you like as long as it is pleasing to the eye.	The ability to produce ideas and create something aesthetically pleasing.	Acumen to be able to visually realize the perceived ideas.
Daline:	How would you describe what being creative is?	Creativity acumen development	
Participant 3:	Being creative is just being yourself and drawing what you like and what you think people would like. To get people talking.	Authentic self-representation. Pleasing to others.	Personal expression of work.
Daline:	How do you deal with an 'artistic problem' in your art work?	Task motivation as the ability to overcome challenges and obstacles faced during Visual Art creation	
Participant 3:	<p>I usually just paint over the mistake and start again or I incorporate another idea. I did it a lot with this woman (See Photo C12 - 1, Photo C13 - 1 and Photo C14 - 1) as in finding the right skin colour. Did you ask for any guidance at that time? No I did not. I thought that if I carried on I would find the right colour eventually.</p> <p>Any artistic problems here? (See Photo C12 - 3)</p> <p>The bricks were a problem but I found the colour, but I did not know how to shape them.</p>	Nkosi made and managed changes by starting over, or adding new visual elements.	Learning from mistakes made. Nkosi did not ask for assistance from the educator.
Daline:	Are there times when you feel frustrated while you create art? Can you explain more?	Art creation as unforeseeable	
Participant 3:	Yes, I do get frustrated a lot and usually I just leave it for a while and distance myself and think of ideas to	Evaluation when facing detailed	Learning to cope with obstacles.

Name/Participant Nkosi / 3	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	continue and to cope with the frustration.	difficulties in work and what direction to take. Incubation by distancing from art-work.	Perseverance when facing frustrations and how to continue.
Daline:	What would you do when you are that frustrated? I observed that you moved from one element to the other.	Response Validation through evaluation of analogies and connections made	
Participant 3:	[When I distance myself] - If I was painting a man for example, I would leave that man and go to another object [of attention] on the painting and just start to use another colour or technique.	Felt a need to disengage from one element and change to another.	Use of alternate techniques and skills. Attention to related parts.
Daline:	In your opinion, do you think that it is important to have knowledge of art materials and techniques in order to be creative or show that creativity? Can you explain what you mean?	Learning in art requires discovery of concepts through visual forms and art techniques when creating Visual Art	
Participant 3:	Yes, I think that it is very important to have knowledge of different techniques of painting such as strokes, dabs, textures, colours, and water wash. I think that will benefit you in creating something new.	Knowledge of skills is beneficial when creating something new.	Exploration of new art skills and techniques assists creativity.
Daline:	In Grade 11 you are required to maintain visual journals, document your own developing artistic acumen. Do you do this? If you do, do you find it helpful and if so, why?	Developing creativity acumen through application of the creative process as expected in the curriculum outline. It includes response validation.	
Participant 3:	Not all the time. I don't really find it helpful. I think that not taking things seriously also helps.	Written ideas not found helpful with imagery and art creation.	Willing to be spontaneous.
Daline:	How do you experience planning and finishing the art tasks assigned within the times given?	Preparation through keen observation, finding the creative process in realizing ideas	
Participant 3:	It is very difficult. It is very hard to finish on time. If you rush, it won't look good. I try to go at a steady pace when painting. For each lesson I will try to complete a certain area for that lesson and keep a pace going. It was 10x10cm per lesson. We had to layer and do the shading. There was not enough time and I was rushing it.	She found it difficult to complete on time. Time pressures were experienced with different creative tasks.	She practiced a strategic pace to paint a certain area per lesson. Concentration for long periods.
Daline:	When things have not turned out as planned during	Response generation with the search	

Name/Participant Nkosi / 3	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	an art creation, what is your reaction or response?	of memory and environment to persevere or abandon tasks	
Participant 3:	It is kind of disappointing, but then there is no time to change so I have to accept it and like it.	Disappointment when not completely satisfied with creative outcome.	Acceptance of mistakes with no time to change.
Daline:	Do you evaluate your work just against your own work or against others as well?	Response validation and evaluation of creative outcomes	
Participant 3:	No response.	Evaluation lacking	
Daline:	Do you reflect on what you are busy doing or have completed? How and when do you do this?	Response Validation and evaluation during application of the creative process	
Participant 3:	Not really. I just go with the flow.	Spontaneous response validation.	Evaluation of art skills used limited at times.
Daline:	When do you believe that your art work is 'complete'? if at all?If you look at your final painting evaluate on a scale from 1-10?	Task presentation with the opportunity to self-evaluate and comment on and justify choices for further work, can be a powerful source of learning	
Participant 3:	They are not complete. At certain times they are, but to other people they are not. When the whole board is full with the layering and different colours then it looks complete. I would say a 6 (on a scale from 1 to 10).	Creative tasks not complete.	Art techniques used to layer and correct colour adds to 'completion'.
Daline:	What have you learnt from creating any Visual Art tasks?	Relationship between creating Visual Art and learning at school	
Participant 3:	Not that much. I learnt how to paint. I like sketching and drawing. Painting is new to me but I am getting used to it.	Learned how to paint.	Art skills attained by painting and drawing.
Daline:	What would assist you to become more creative, do you think?	Relationship between creating art and attaining creativity acumen	
Participant 3:	Observing other people's art and how they use their techniques, maybe I could learn from them.	Evaluation of others art-work could assist with creative development.	Willing to learn from others (peers) and how they use art skills.
Daline:	In terms of your accomplishments in Visual Art – would you take those creative accomplishments and utilise them?	Using Visual Art accomplishments to evaluate creative techniques and processes used.	
Participant 3:	How do you see where you are now?	Realisation of the	Improved work

Name/Participant Nkosi / 3	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	I think that I have improved. My development of ideas has improved as my development of the idea just happened as I was going through the process.	developmental process of creating something new.	through developmental learning.

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
Daline:	How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?	Task presentation and Inspiration	
Participant 4:	For my starting point, I was not sure about the seven sins as I was still a beginner. When I took the references I saw <i>what interested and attracted me</i> . I really liked the free, flowing drawings. Like the Lady with the horse so I used it as my focal point (See Photo D 2), even though it was busy. Then I interpreted it as pride. Most of the stuff that I saw was on pride and I liked that because it was something strong and a bold statement.	Initial response was uncertainty. Personal interest and attraction to visual reference. Spontaneous response with the intention of portraying pride.	Use of heuristics in establishing a focal point. Analogies related from visual cues of a horse to strength and pride.
Daline:	What information or experience do you use to assist you with the art task? Can you explain more? What knowledge, your own, or experiences did you use to assist you with the art task?	Preparation and building response of creative algorithms	
Participant 4:	Firstly I usually research and go onto the internet often, refer to books, and ask the teacher if I am on the right track. I also speak to other people doing the project to pick up on similarities that I can differ from or pull away from. I am not always creating a new way that is brand new. I am <i>always interpreting and always involving other things to develop something new</i> . Yes, and it is a bit scary for me to take something absolutely new to me, so I like that security.	Research done for new ideas and visual deployment of imagery. Re-working of ideas with own personal rendition and development of ideas. Asked for guidance when uncertain.	Analogies clarified through similarities as well as evaluation from others. Looking for alternative pathways.
Daline:	What ideas come to mind when you are first issued with an art assignment? Do you develop those ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result? How do you See the development of your ideas from visual to collage to paintings?	Response Generation and searching memory and the environment to generate possible ideas	
Participant 4:	I personally like birds and the thing that I like about	Personal preference	Use of heuristics.

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
	<p>them is maybe it is an animal that describes me as it is free, strong, and independent. I referred back to this (see Photo D 2) and I liked the birds, so I decided to add something. I thought about what I had first researched and when I paint at home, I paint birds.</p> <p>If I like the assignment but I am not sure of it, then I do research. With this (see Photo D 4), this was the collage, and there (see Photo D 5) I looked in magazines and went onto the internet. I was also writing down ideas and drawing what I wanted so even before I found the pictures I thought of pride like a lady who represents the rich the fabulous, the famous and that is how I decided to mix and match. I was really confused by the concept of the seven deadly sins at first and because it was new it confused me. In our daily lives pride is everywhere no matter where you go or what you do. It <i>can be personal to you</i>, but you see it every day and people ignore it, but you should see it.</p> <p>And the symbolism in terms of pride and vanity? You said “pride makes one feel more superior to another person as you have something that others want and vanity is more of an obsession of oneself”. That is something that I looked at often with the beginning topic. I would have chosen gluttony or one of the others, but <i>they did not appeal to me</i> as they happen every single day. The way you express yourself in terms of pride can be how people see you, how you see yourself. It is very different because you see yourself as being so nice, but you tend to overdo it. We are all locked in to worldly things as opposed to reconnecting with nature. I think so. It breaks away from the pressures. Over here (see Photo D10 - 3) there are two people looking inside a window. People are always watching what you are doing, and what if the bird on the side was saying “I don’t care!”.</p>	<p>and own representation of visuals that were familiar.</p> <p>Initial response generated was uncertainty of the concept of ‘sin’.</p> <p>Grasped the complexity of the concepts through visual inquiry.</p> <p>Personal preference in selecting depiction of ‘pride’.</p> <p>Visual Symbolism used to portray the concept of ‘pride’.</p> <p>Samantha called on the creative mindset of distillation to select particular ideas for further development.</p> <p>Personal interpretation of ‘pride’.</p>	<p>Selection of alternative paths related to prior knowledge and artistic experience.</p> <p>Pictures of rich and famous used as analogies for ‘pride’ to be depicted visually in her art-work.</p>
Daline:	What is your personal understanding of the creative process?	Response Validation when the response is evaluated	
Participant 4:	I don’t know, more about expressing yourself because you want to be creative in your own way, express yourself and make your own statement and do anything	Personal statement and rendition in art-work.	Analogies used to creative expression of the

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
	you want. You want to find a deeper feeling.	Freedom of self-expression and emotional perception.	concept of 'sin'.
Daline:	How would you describe what being creative is?	Creativity acumen development	
Participant 4:	I have said it before, expression, self-expression. It is a lot of similarities [in art] and I like similar - like the chandeliers and the windows. You want to find a deeper meaning and you interpret it in your own way.	Self-expression and personal interpretation to convey a personal message or rendition.	Analogies and similarities in making connections.
Daline:	How do you deal with an 'artistic problem' in your art work?	Task motivation as the ability to overcome challenges and obstacles faced during Visual Art creation	
Participant 4:	I ask people for direction, but when you have been working on something for so long you get tired. There was one point, you will see with this table (see Photo D14 - 3), that I straightened it out and changed things like colours. You also don't always have the same view as the other person but when the teacher said words like "movement", you already start getting your own ideas and I started thinking what it is that I can do. She was just giving me more ideas, not telling me what to do. Once you hear what someone else is saying, then you realise that <i>you can better your work</i> .	Samantha requested assistance and scaffolding from the art educator when she felt 'stuck' and faced challenges. She made changes to visual elements as new ideas were sought. Autonomy and appropriate work style	Concentrating for long periods of time. Willing to learn from mistakes and improve.
Daline:	Are there times when you feel frustrated while you create art? Can you explain more?	Art creation as unforeseeable	
Participant 4:	Yes, a lot of the time because I am searching for something deeper, something more meaningful and I get frustrated when that statement doesn't come through. Sometimes I want to give up but all your <i>peers are telling you that you should carry on and boosting you</i> and your parents tell you to keep working on it, this all motivates you. So that external critique in that constructive way is very good? It motivates you so much and sometimes you need it.	She is searching to make a meaningful statement through her art-work. Obstacles lead to wanting to give up at times. Input from peers and external environment can be	Perseverance when facing frustrations in art-work. Task motivation through external environment.

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
		a motivation to continue.	
Daline:	In your opinion, do you think that it is important to have knowledge of art materials and techniques in order to be creative or show that creativity? Can you explain what you mean?	Learning in art requires discovery of concepts through visual forms and art techniques when creating Visual Art	
Participant 4:	<p>Yes. I strongly believe that because you can do so much. If you only have a paint brush, you can only do one thing, but if you use other materials such as tiles, you can do beautiful mosaics or use sand stone and make a sculpture. Did you use other materials, such as pastels, besides paint ?</p> <p>Only in my experimental drawing a little bit, but I like to paint. I like the paint effect because I feel that is my safety zone as I can control it more.</p> <p>What techniques did you put into play? What expertise skills did you use?</p> <p>I learnt a lot in Grade 8 and I went to art classes. We were asked to make a sketch which was obviously a process, but I would draw something else on another piece of paper, just small pieces. I would draw a bird about 300 times to try and figure out angles and I made different sketches.</p>	<p>Creative exploration limited by foreclosing on alternative skills and materials.</p> <p>Samantha stays within her creative 'safety-zone' by using same painting skills.</p>	<p>Knowledge of art-skills and materials essential to new exploration of creating something new.</p> <p>Use of previous knowledge and art experiences.</p> <p>Use heuristics by drawing things many times to discover what works well.</p>
Daline:	In Grade 11 you are required to maintain visual journals, document your own developing artistic acumen. Do you do this? If you do, do you find it helpful and if so, why?	Developing creativity acumen through application of the creative process as expected in the curriculum outline. It includes response validation.	
Participant 4:	I do that, but sometimes I might not know that I am using that process. Just say that I want some help on the side, so I take a piece of paper and draw, but I am not making a folder of my own. When you take a step back to do side-line things, it helps with your ideas, clears your mind and gives you another view.	<p>Unaware that the creative process is being applied.</p> <p>Perceiving creatively by clearing mind for new ideas and another perspective or 'a new view' of the art-work.</p>	Searching for alternative pathways.
Daline:	How do you experience planning and finishing the art tasks assigned within the times given?	Preparation through keen observation, finding the creative process in realizing ideas	

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
Participant 4:	I think I take a lot more time with the planning. There was more planning with the first one because I had more time (see Photo D10 - 2). You think you have enough time but then as time goes on and you get to the end product, you wonder what more you can do because you are feeling the pressure. You are lazy in the beginning and then towards the end product, you start <i>thinking what you could do to improve it</i> and you start feeling the pressure. It is difficult planning and finishing. The whole process can get difficult and frustrating, but it is rewarding at the end.	Much time spent on planning. Pressure of time constraints felt as the deadlines loom. There is difficulty experienced with both planning and completion.	Willing to work hard and improve to develop art creation even when creative process proves difficult. Persistent effort pays dividends in the end.
Daline:	In the creative process, where would you say you spend most of your time? In which phase?	Application of the creative process	
Participant 4:	I probably spend most of my time in research. I feel that you have to back up your story and I think that every painting has a meaning. You have to take that meaning of words and put it into a picture. I spend a lot of time evaluating my work and because I judge myself horribly sometimes, I move back and forth. I think I evaluated the final one [painting] most harshly, because it is for marks and your final composition is the end product. The first trials and experiments means that you are experimenting, but the final composition is what you are judged on. If you were not judged on it, what would you have done, if you were not evaluated for marks would you have followed the same process? I am sure I would have followed the same process and I would have let my process be slower instead of being pressurised.	Most time spent researching ideas with skill conveyed in generating and re-working ideas. Much time is spent evaluating her work with harsh self-judgement. Felt that she would have worked at a slower pace if there was no academic judgement of her art.	Ability to concentrate for long periods Select alternative paths to resolve visual problems Determined and persistent effort towards goals
Daline:	When things have not turned out as planned during an art creation, what is your reaction or response?	Response generation with the search of memory and environment to persevere or abandon tasks	
Participant 4:	My reaction is frustration. I think everybody would say frustrated. You also get aggravated, confused, and experience mixed emotions. You did not show the frustration openly. If I was being very honest, the school environment is different to home. I am more relaxed at home because when I feel frustrated I can get up and walk around, find ideas and find ways to relax. In the classroom I stop for	Frustration and confusion when art creation did not go as planned. School environment differs from other environment as being more 'rigid'	Perseverance when facing frustration is conveyed.

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
	5 minutes, sketch something else and just move away from the task that is important.	and structured.	
Daline:	Do you reflect on what you are busy doing or have completed? How and when do you do this?	Response Validation and evaluation during application of the creative process and evaluation of creative outcomes	
Participant 4:	I actually reflect often. As with the bird, I looked at my first sketch and saw ideas. Even before I put the bird in, I went back and I saw that it was a good idea because I had a space and wanted to fill it with something, so I filled it with something I knew. I chose the white bird to represent freedom and care. In life, if you refer to nature to get away, that is what I would do.	Evaluation of own work done throughout the creative work. Personal selection of ideas chosen to pursue. Personal interpretation of 'pride'.	Analogy of bird as representative of 'freedom to get away'.
Daline:	When do you believe that your art work is 'complete'? if at all? If you look at your final painting evaluate on a scale from 1-10?	Task presentation with the opportunity to self-evaluate and comment on and justify choices for further work, can be a powerful source of learning	
Participant 4:	I don't think my work is ever complete, but once I am satisfied that the statement is clear than I am basically satisfied. You can always build on your art-work, forever. I would probably give myself an 8. I think that the 20% that was lacking was something that I could have done differently. You lose it through your process. You can't always go back because you change your whole idea, your perspective. So the 20% is what you lost through the whole process, and not what you could have just added at the end.	The realisation of the developmental process of art creation. Contentment with her creative outcome as long as the artistic 'statement' is clear. Management of the creative process through personal high expectations.	The willingness to improve.
Daline:	What have you learnt from creating any Visual Art tasks?	Relationship between creating Visual Art and creative acumen	
Participant 4:	It has taught me development (of an idea). It is a whole new way to see life, and not just art in its beauty, but a whole different perspective. You can explain things as with this project that has a lot of symbolism which was important to me. It was my first project in Grade 11 and <i>being afraid of it I thought of speaking through my art.</i>	Insight into the creative process as constantly evolving which has far-reaching implications to other	Willing to work hard and improve on skills and push her limits to do better work.

Name/Participant Samantha / 4	Question / Response	Creativity relevant Processes	Art-relevant Skills
	While I was not 100% satisfied but did not regret it, I could have improved. In all my subjects I am always trying to push myself to that 100%, it is a personality trait of mine, but I was satisfied.	arenas of learning. Find a voice through her art.	
Daline:	What would assist you to become more creative, do you think?	Relationship between creating art and attaining creativity acumen	
Participant 4:	Always a wider knowledge. Knowledge is your greatest gift. Everything that you do in life is because of what you know and experience. So if you have wider knowledge you have more wisdom to express yourself.	A wide knowledge base determines one's creative expression. Expression hails from personal experiences and environment.	

Name/Participant Dan / 5	Question / Response	Creativity-relevant Processes	Art-relevant Skills
Daline:	How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?	Task presentation and Inspiration	
Participant 5:	I get very nervous. Drawing has always been easy, but not painting. I had no idea how it would happen and I thought about what help I could get. It was very hard.	Becomes anxious with unknown task presentation.	Determines he will rely on help as he is more comfortable with pencil drawing then he is with the art skill of painting.
Daline:	What information or experience do you use to assist you with the art task? Can you explain more?	Preparation and building response of creative algorithms	
Participant 5:	All this was new. I had an image of a person and then saw this drawing, the teacher told me it was too compact, so I changed that to the eye (see Photo E 3) I had to improvise with the bird. I saw a shape and drew what I saw. I couldn't get it right so I went my own way. The fish turned out nicely and I like sketching. At this stage [formal drawing] (see Photo E 3), I had no idea yet of the sin I was going to portray. So I had to <i>put it together myself and think about it</i> . But <i>when it came to the painting I had to learn from my mistakes</i> . I	Prepares for new task with changes recommended by art educator and improvisation. Personal conceptualisation of ideas into visual form.	Use of heuristics (trial-and-error) response with breaking cognitive set by moving off in a new direction. Willing to learn from mistakes in

Name/Participant Dan / 5	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	<p>knew that I would not get 80%. I watched a show where a guy ate too much and I thought of that and thought of gluttony. I went straight into that and looked for food. I tried to research from the movie, like him sitting at the table. Are you drawing from your own life or from the environment around you? A bit of both. I do bring personal experiences into it. You always have that uncle who eats a lot and that is personal, and then there is what is going on around you.</p>	<p>Personal grasp and rendition which lead to own visual expression and depiction of the sin 'gluttony' in his art-work. Drew from personal environment for creative response.</p>	<p>the use of a new art technique. He used analogy from a film and own life experiences too.</p>
<p>Daline:</p>	<p>What ideas come to mind when you are first issued with an art assignment? Do you develop those ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result? How do you see the development of your ideas from visual to collage to paintings?</p>	<p>Response Generation and searching memory and the environment to generate possible ideas</p>	
<p>Participant 5:</p>	<p>The pictures and how they will flow together because it has to tell a story. Everyone's view is going to be different to yours so you always try to intrigue people. When I started this project, I had the idea of the guy in the movie and then I saw how much I was struggling with it, so I had to think of a different idea and I then went through magazines and found things to help make it flow. I tried to stick with one part at a time. I saw the man eating then I found the woman with the fruit on her head (I saw these all in a magazine. Then I saw this girl who couldn't watch the man eating out of her head. The music in the background threaded through the background by means of musical notes. <i>I think that is part of the creative process. When we look at the development here (see Photo E12 - 1) this was very monochromatic so I used mainly one colour then moved to dichromatic and used the two colours in a checkered way (see Photo E12 - 2) and by the time you got here it was all colourful and blending. Did you see the development at the time?</i> Not really. I was going with what I thought would get me marks. I saw that it wasn't working.</p>	<p>Visual Imagery used to depict a visual narrative. Visual perception was his awareness of unique personal views. Dan understood and grasped complexity of the selected sin he chose to depict as his perceived idea of the integrated process as 'flow of images'. Creative process not necessarily seen as developmental.</p>	<p>Different ideas were called upon to find alternative ways to represent Visual Art of selected sin of 'gluttony'.</p>
<p>Daline:</p>	<p>What is your personal understanding of the</p>	<p>Response Validation when the</p>	

Name/Participant Dan / 5	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	creative process?	response is evaluated	
Participant 5:	I always try and make it my own. I think that is mainly what I look for and not to use someone else's idea. I want to be unique.	Self-expression as a unique representation by giving himself permission to make mistakes.	Original visual inquiry.
Daline:	How would you describe what being creative is?	Creativity acumen development	
Participant 5:	Doing your own work and having your own idea. You cannot take someone else's work and use it. You must have your own idea.	Autonomous workstyle. Development of individualistic ideas.	Individualistic execution of art skills.
Daline:	How do you deal with an 'artistic problem' in your art work?	Task motivation as the ability to overcome challenges and obstacles faced during Visual Art creation	
Participant 5:	You <i>better yourself and learn from your mistakes</i> . As with my other art, I didn't know what to expect because in Grade 8 and 9 and you don't work on it as hard as now, so I did not know what to expect from my paintings until Grade 10. Now I am struggling. So those are techniques coming up that you are learning that you did not take very seriously? Yes. But I should have. But there are people who can paint and draw naturally. I used the paint and pastel contrast.	Evaluation of previous art learning with the underestimation of the challenges he would face when applying the creative process during art creation.	He is willing to learn from mistakes and the need to make improvements.
Daline:	Are there times when you feel frustrated while you create art? Can you explain more? Where did you experience the greatest artistic problem?	Art creation as unforeseeable	
Participant 5:	It started off around here (See Photo E11 - 1). I was caught in-between the two. I did try and do one at a time but the background was a frustration. I honestly saw that paint would not work here, so I used pastel but having the image of paint for my final composition. The whole process was worrying.	Dan used clarification to ask himself what he wanted the finished work to look like?. The background was a creative challenge.	He used heuristics in finding alternative ways to test art techniques and materials of pastels and paint.
Daline:	What would you do when you are that frustrated?	Response Validation through evaluation of analogies and connections made	
Participant 5:	Yes, I am harsh on myself, it is part of my character. That can be a problem because I do try and improve,	His evaluation was overly critical due to	Willingness to improve and work

Name/Participant Dan / 5	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	and if it does not work, that is bad. If I am tired then I am tired, but the next day I <i>will know how to improve the composition</i> . I was only thinking about how I can change it. I thought that it was the worst topic that I have ever had to work with and I didn't know how to make it work, and then everyone seemed to go their own way with it, so I eventually went my own way too.	personal high expectations. He thought about how to implement changes. The theme did not personally appeal to Dan.	hard.
Daline:	In your opinion, do you think that it is important to have knowledge of art materials and techniques in order to be creative or show that creativity? Can you explain what you mean?	Learning in art requires discovery of concepts through visual forms and art techniques when creating Visual Art	
Participant 5:	With techniques I don't use contrast, I just use dark or light shades to assist with my art. I go through the creative process.	Dan executed and applied the creative process.	Selection of various art skills and techniques to assist with shading.
Daline:	In Grade 11 you are required to maintain visual journals, document your own developing artistic acumen. Do you do this? If you do, do you find it helpful and if so, why?	Developing creativity acumen through application of the creative process as expected in the curriculum outline. It includes response validation.	
Participant 5:	I did find it helpful, because now I can see what I need to do to get better marks. I never thought of it that way but it opens you up to think outside the box to do stuff I never thought that I could do.	Written form of ideas was found to be helpful to Dan as it made him aware of his thinking.	Written ideas assisted with opening up alternative thinking and behaviour.
Daline:	How do you experience planning and finishing the art tasks assigned within the times given?	Preparation through keen observation, finding algorithms and realizing ideas	
Participant 5:	I struggled with planning and finishing of art tasks. Like with this (see Photo E12 - 2). I wanted to change it completely, but I only had a week and a half left so I could not plan for that. Time is a factor. I was worried that I would not finish my painting. I was struggling with art this term, it was just too much.	Planning and completion found to be difficult. Time pressure due to level of the quality that Dan wanted to deliver.	Concentrated for long periods and willingness to improve.
Daline:	In the creative process, where would you say you spend most of your time? In which phase?	Application of the creative process	
Participant 5:	I think that I realized that I do have enough time, but I did rush at certain times. I could have done more with the background but I thought that I was going to run out	Time becomes an issue towards completion.	The hands in final painting posed as an artistic and

Name/Participant Dan / 5	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	of time. If you have too much [visual elements], small details becomes a problem and I spent a lot of time on the hands.	He spent time on detailed work.	visual challenge which he resolved.
Daline:	When things have not turned out as planned during an art creation, what is your reaction or response?	Response generation with the search of memory and environment to persevere or abandon tasks	
Participant 5:	My reaction is irritation. If I am irritated I take it out on other people. I don't mean to do it, it just comes naturally. Looking back, it was not necessary, and could have been avoided.	Impatient with the creative process which impacted on his perseverance.	Grasps unnecessary irritation and was willing to learn from mistakes.
Daline:	When you reflected on others work and your own work did that help you from there to there?	Response validation and evaluation of creative outcomes	
Participant 5:	Yes, I saw with the green what Malcolm was doing and the effect of the green and I realised that I did not need to use three different colours.	Evaluation against peers work lends insight into where he is in the creative process.	Willing to learn and improve.
Daline:	Do you reflect on what you are busy doing or have completed? How and when do you do this?	Response Validation and evaluation during application of the creative process	
Participant 5:	I try to do it after doing "a bit of everything". I started with him (see Photo E12 - 3) , took a step back and became irritated, so I started on something new. I first started here with the fruits and then I was missing a bit there. I jumped around. In the art class you have to be open to criticism, but at home you have to criticize yourself a bit. At school they won't tell you to you face that something is not good, but at home you have to criticize yourself.	Dan evaluated he ideas against the feedback within different environments. He disengaged with his creative work when he faced detailed challenges and broke cognitive set by moving in a new direction.	Ability to concentrate attention on details in art-work. He used trial-and-error approach to use alternative pathways.
Daline:	When do you believe that your art work is 'complete'? if at all? If you look at your final painting evaluate on a scale from 1-10?	Task presentation with the opportunity to self-evaluate and comment on and justify choices for further work, can be a powerful source of learning	
Participant 5:	My art work is never complete. A month later, I look at it and think that's something I could have put in. When you are done you think, finally I have done it. I would	Art-work is not fully completed. He re-evaluated what he	He used a time lapse to re-assess his work, with the

Name/Participant Dan / 5	Question / Response	Creativity-relevant Processes	Art-relevant Skills
	give myself a 6.	had attained.	will to improve.
Daline:	What have you learnt from creating any Visual Art tasks?	Relationship between creating Visual Art and creative learning	
Participant 5:	I learned a little, I just picked up certain habits.	Dan felt he did not attain creativity acumen.	He indicated attaining regular practice of skills.
Daline:	What would assist you to become more creative, do you think?	Relationship between creating art and attaining creativity acumen	
Participant 5:	In doing this as often as I can. With drawing, I don't need help, but more often with painting.	Autonomous workstyle.	With practice skills will improve.

Name/Participant Leo / 6	Question / Response	Creativity-relevant Process	Art –relevant Skills
Daline:	How do you personally approach or respond to an art assignment given to you for the first time, i.e. something that you have not done before?	Task presentation and Inspiration	
Participant 6:	I look at what we have to do. I apply my mind, come up with my own themes and ideas, and the different ways I can approach it be it canvas, media, themes, and what it is going to represent to me and what it stands for.	Spontaneous, open approach to a series of possibilities. Individual visual representation through self-expression.	Use of heuristics and selection of alternative pathways for art creation.
Daline:	What information or experience do you use to assist you with the art task? Can you explain more?	Preparation and building response of creative algorithms	
Participant 6:	Yes, it might be things that I have gone through. Everything people have gone through is summed up in one reaction. Whatever I have gone through, been through and learnt, makes this happen. I have learnt about vanity, jealousy and pride and those three interest me as there is a connection between two people. Whereas greed involves one person and is too simple to think about. Vanity is when someone is thinking about themselves, so it creates a one person topic, but if you have jealousy combined with it, it involves more than one person and is therefore more complex.	Leo called on his own ubiquitous knowledge and past experiences. Leo indicated acumen in grasping the complexity of the concept of 'vanity' and 'pride'.	
Daline:	What ideas come to mind when you are first issued with an art assignment? Do you develop those	Response Generation and searching memory and the environment to	

Name/Participant Leo / 6	Question / Response	Creativity-relevant Process	Art –relevant Skills
	<p>ideas, and if so, can you explain how? How did the initial idea differ or relate to your final result? How do you See the development of your ideas from visual to collage to paintings?</p>	<p>generate possible ideas</p>	
<p>Participant 6:</p>	<p>I chose the element of carrying the world on its back (see Photo F 2) [formal drawing]. That is how I have felt with a lot of things. These last few years of my life, except for the end of last year, I had a lot of burdens on my back. So it is important to me and hits close to home. I saw a book in the picture, and drew the fuzzy thing towards the top of the page (see Photo F 2). To be honest, anything else beside the world was just filling up space. I also chose to do some shading with it. At this time did you know what theme you were going to follow in terms of the seven deadly sins? No, I was just focusing on the task at hand. If you go to your collage, explain why you chose your pictures? The first original pictures were things I like to do or like to view. For example, the big shiny ring. I really like sapphires or plain diamonds, they interest me. The bottle reminded me of Jack Daniels because my dad drinks it. I thought it was cool. All of the pictures I found, I thought were cool. I had a broad idea of what I was doing and then had to make a selection. In that picture (see Photo F 6 [man wearing tie]) I liked the tie, it is classy and a status symbol. When someone puts on a tie they mean business. The watch points to glamour and I guess jewels and money [do too]. I also liked the outfit as it is high class. With Leonardo Di Caprio, I couldn't get his face right but it was a picture of pride and maybe a bit of vanity. Just good self-confidence. When I drew the picture it started changing and became jealousy (see Photo F14 - 1). This first idea was just me messing around. It is a work in progress not a piece of art. I started drawing the ring in the white and then decided it was not working out but I left it, it was just work in progress. <i>I have learned that if you make a huge mistake, you still have to make it work. Sometimes mistakes are valuable.</i> The dark lines are the ones people look at, and not the two light ones behind it. The background came from someone else's</p>	<p>Conceptualisation of visual ideas with visual images that depict his Personalisation of concept of 'pride'. Inner personal dialogue related to external visual perception of the world.</p> <p>Leo understood and grasped complexity of the selected sin he chose to depict as his perceived idea of the integrated process as classy status symbols such as jewellery.</p> <p>Personal preference for self-expression.</p> <p>Symbolism used to conceptualise visual idea of 'pride' and glamour. He</p>	<p>Attention paid to task at hand Perceptions for task engagement</p> <p>Use of heuristics He selected alternative paths from a broad idea to more specific visual components.</p> <p>Focus and perseverance on creative tasks.</p> <p>Art skills and techniques through trial-and-error (heuristics) Learned to use mistakes in art as opportunities and valuable for improvement.</p>

Name/Participant Leo / 6	Question / Response	Creativity-relevant Process	Art –relevant Skills
	<p>art. I saw Kyla's and I thought it looked cool. I decided to do it, but instead of using a paint brush and tissue for a smooth effect, I used paper for a rougher look. In my opinion, if it is jagged, it gives the idea of not just two people standing against a wall but an endless environment, as if space had to be that colour, representing infinity. The one thing that I did not like about the final art work, is that I was made to put pink in his hair and so I preferred the second last picture to the last one (see Photo F11 - 2). I get that you could not put that on a white wall because the background and the pictures stands out too much, and the eyes battle to see it as one picture. I get that, but if it was in an art museum, it could be put up. What were you envisaging there with the ring and the eyes?(see Photo F12 - 1). They had no connection whatsoever, absolutely nothing. I was just arranging them and then I started off with the ring, and then decided to leave it for tomorrow. Then I painted the eyes and did not like them and next day worked on the diamond and it didn't work out, so I just left the whole thing and left the space. For me there was no problem. If I looked at the picture that would not be obvious to me as you were explaining the significance of your art to me. Yes it is important. People can look at it and see no meaning. I looked on the Internet at Willem de Kock's art, it had no meaning until I read about the art-work, and so, I had an epiphany with art in that it is not what you see but what it represents.</p>	<p>selected personally meaningful symbols.</p> <p>The ideas changed and developed into something else.</p> <p>Leo made changes and 'played' with initial ideas spontaneously and openly.</p> <p>Self-confidence /self-belief</p> <p>Evaluation of own work against peers.</p> <p>Self-evaluation of satisfaction with final outcome after being 'made' to add colour to hair.</p> <p>Visual perception must be representative to be meaningful.</p>	<p>Analogies not made between visual symbols and</p>
<p>Daline:</p>	<p>What is your personal understanding of the creative process?</p>	<p>Response Validation when the response is evaluated</p>	
<p>Participant 6:</p>	<p>The teacher gave us a broad theme and we chose one. Whatever we chose was our own decision. A lot of it is spontaneous. An idea comes to my head that is meaningful to me. It could be something in the past and my subconscious registers that. That is then my decision and I go from there. That is Step 1 and then for Step 2 I ask myself what more I can do, and so on. Random things come to my head, for example, these are my options and that I can do, that one is really out</p>	<p>Autonomous workstyle with own selection of paths to solution.</p> <p>He used past knowledge and experiences that he can use to</p>	<p>Evaluation of options and alternative routes to take.</p>

Name/Participant Leo / 6	Question / Response	Creativity-relevant Process	Art –relevant Skills
	there and goes really well with the picture and then I am sorted.	determine decisions.	
Daline:	How would you describe what being creative is?	Creativity acumen development	
Participant 6:	In my opinion that is a hard one. I don't know because for me to be creative is what pops out of the head. "My mind is never still, it is a wondrous flower that just keeps blossoming".	Being creative is 'churning out ideas'. Renewal of ideas.	Analogy used of a blossoming flower to describe creativity.
Daline:	How do you deal with an 'artistic problem' in your art work?	Task motivation as the ability to overcome challenges and obstacles faced during Visual Art creation	
Participant 6:	Yes, I moved around a lot and left my painting. Sometimes, the reason I left my painting was to give myself some space, and to relax and hopefully then an idea would pop up, otherwise, I was just being lazy. Within the next 24 hours painting might have been on my mind but then I have new ideas and a whole new range to choose from.	Leo detached from his creative work to deal with challenges. He avoided foreclosure of alternatives or new ideas to work with.	Leo kept his response options open for as long as possible. Task motivation low indicated by 'lazy'.
Daline:	Are there times when you feel frustrated while you create art? Can you explain more?	Art creation as unforeseeable	
Participant 6:	Yes I do get frustrated. In drawing the prototype for the re-shape of Leonardo Di Caprio's face (see Photo F14 - 2) and comparing that to how I had done it on the final (see Photo F15 - 3), I think the first face was better than the second one because the second one was more animated and I did not like it. I had put the paint down and it was too late to repaint the face. However, people told me that they liked the second one more.	Leo felt frustrated Self-evaluation of own work with input from peers and external environment can be a motivation to continue. Time pressure experienced.	Willing to make improvements when comparing two paintings with one another.
Daline:	What would you do when you are that frustrated?	Response Validation through evaluation of analogies and connections made	
Participant 6:	When it comes to one mess up in an art project. I have to accept that I have made a mistake. I can go through all the effort to paint over it and leave a flat patch where the rest of background is not flat at all, or leave it and accept the mistake because that is one of the stepping stones to making progress and hopefully, to achieving my goal.	Willing to take risks Realisation that the creative process is developmental.	Learn from and accept mistakes in art-work. Effort and perseverance to attain goal and surmount mistakes and

Name/Participant Leo / 6	Question / Response	Creativity-relevant Process	Art –relevant Skills
			obstacles.
Daline:	In your opinion, do you think that it is important to have knowledge of art materials and techniques in order to be creative or show that creativity? Can you explain what you mean?	Learning in art requires discovery of concepts through visual forms and art techniques when creating Visual Art	
Participant 6:	Yes. Very much so. For example, my best way of painting is impressionistic. It is like sketching with a paint brush making it easy to blend and layering the whole time. You land up with different shades and 3D texture.	Important to have knowledge of processes and skills in art creativity.	Knowledge displayed through art skills and techniques used in work.
Daline:	In Grade 11 you are required to maintain visual journals, document your own developing artistic acumen. Do you do this? If you do, do you find it helpful and if so, why?	Developing creativity acumen through application of the creative process as expected in the curriculum outline. It includes response validation.	
Participant 6:	I think it is important for the study of how other people work with art to know how they arrive at this, instead of looking at this emotionlessly and without <i>going through what they went through to achieve what they have done</i> . It doesn't work like that. You are not them, you are not the same.	Leo felt it was helpful to discover how you had reached your goal.	Art has an expressive and emotional aspect. It takes effort to create art-works.
Daline:	How do you experience planning and finishing the art tasks assigned within the times given?	Preparation through keen observation, finding algorithms and realizing ideas	
Participant 6:	I think that I planned the task pretty well and worked quickly. However, I was not consistent and I don't evaluate ideas beforehand.	Leo indicated his planning was good, but he did not apply the process consistently. Evaluation was a weak phase for Leo.	Inconsistent task effort and motivation vascillated.
Daline:	In the creative process, where would you say you spend most of your time? In which phase?	Application of the creative process	
Participant 6:	I think it is thinking through ideas.	He incubated ideas.	
Daline:	When things have not turned out as planned during an art creation, what is your reaction or response?	Response generation with the search of memory and environment to persevere or abandon tasks	
Participant 6:	Either I leave it as it and accept it as a mistake, or if it is too dramatic, I paint over it or use pencil. Sometimes I erase it.	Leo made changes in his art-work, left some 'constructive mistakes' as part of the outcome.	Leo accepted some mistakes and abandoned other tasks.

Name/Participant Leo / 6	Question / Response	Creativity-relevant Process	Art –relevant Skills
Daline:	Do you reflect on what you are busy doing or have completed? How and when do you do this?	Response validation and evaluation of creative outcomes / during application of the creative process	
Participant 6:	When you are given the topic you have to start immediately. I immediately started on the world as it was important to me, and I made it the focal point. I then filled up the space.	He tackles task immediately. He did not implement re-visiting/re-assessing ideas.	He only paid attention to what was important to him.
Daline:	When do you believe that your art work is 'complete'? if at all? If you look at your final painting evaluate on a scale from 1-10?	Task presentation with the opportunity to self-evaluate and comment on and justify choices for further work, can be a powerful source of learning	
Participant 6:	I don't think your art work is ever truly complete. I just think that there is nothing more I can do with this. I do think that more work could have been done to the picture. I could have done the top of the first person better. At this age, unless you have been proclaimed the King of Art, you are never truly finished. You can always do more to improve it. It is only finished when you are satisfied with how much you have done. I would give myself 7, maybe 7.5 or maybe 8.	Art-work is never complete. Leo justifies choices that his art-work is only truly complete when the creator is satisfied with the efforts.	Willingness to improve.
Daline:	What have you learnt from creating any Visual Art tasks?	Relationship between creating Visual Art and creatively learning	
Participant 6:	The best time to create is when I am very emotional. When I am feeling bubbly and relaxed I do not do my best work. The best time for me to paint is when I am angry and emotional. To be honest, it was to keep going and to trust myself. I felt that I did not need to impress someone. Whatever I come up with is not necessarily wrong. It helped me to persevere with myself and deal with my emotions. It only had a positive effect on me. The photos made me feel famous and my art has allowed me to be open-minded.	Harnessing the present moment Task motivation through self-belief. External opinion is secondary importance to his creativity acumen. Suspends judgement in order to keep response options open for as long as possible.	Art is about emotions. Perseverance when facing frustrations.
Daline:	What would assist you to become more creative, do you think?	Relationship between creating art and attaining creativity acumen	
Participant 6:	Listening to music while I create my art.	External stimulus assists art creation.	

