CHAPTER 3

Action research: Change through reflection and collaboration

3.1 Introduction

The Unisa print-based context demands from the instructional designer to follow a very different, active and evolving methodology when introducing a new learning experience. Such a methodology has to be practice-based, with the aim of eventually achieving structural and organisational change in the educational workplace through introspection and self-criticism:

> Paramount is the claim that action research brings to a research program an enquiry strategy which enables practitioners to develop reflective attitudes and increasing autonomy as professional educators. Action research aims to emancipate teachers … (Henry 1990, p. 5)

This chapter aims to explore the potential of action research as an appropriate methodology to promote change through self-criticism and involvement. More information are provided on the procedures that were followed during the research project. The action research cycles are presented as the research process, and the ethical issues anticipated within such a research environment, are also addressed. The course selection, development and delivery, as part of the reconnaissance and planning phase of the first cycle, are presented as the sub-context within which change was to originate.

The 'moments' are presented during which data was collected. It tells the story of the implementation of the online learning community in the Unisa correspondence context in the sequence that it was carried out — the action research spiral. The essence of the story will inform the wider implementation of change and in practice and systems at Unisa. This chapter will only provide

a summary of aspects and tendencies and the following chapters will discuss the data in more detail.

3.2 An overview of the methodology

The methodology and research design was aimed not only at a successful implementation of the OLC, but also at making those teaching and support staff critical about teaching practice and institutional policies and structures. Support staff and other central units at the institution were provided with experience and information from the pilot delivery of this course in order to inform the institution and its management of the elements and need for change. This section will provide more information on action research and its appropriateness to address the problem at hand.

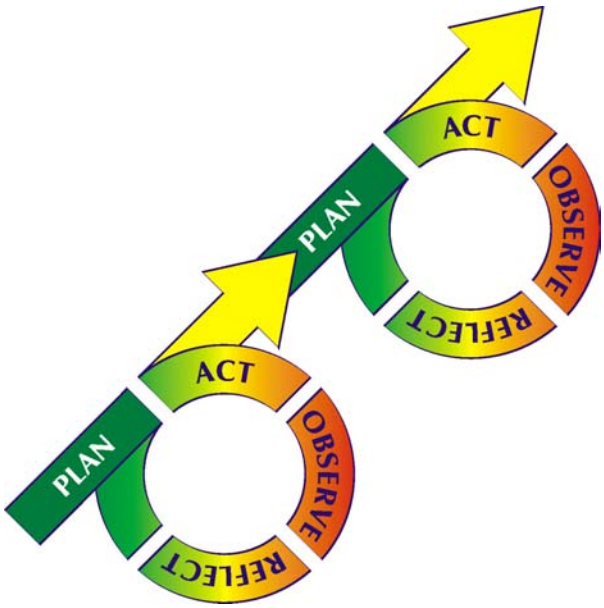
3.2.1 Defining action research

The concept of action research (AR) seems to be open to many interpretations. Kemmis and McTaggart (1988, p. 21) provide a number of characteristics that action research should not be associated with. Action research is not the usual thing that teachers do when they think about their teaching — in other words it does not resemble day-to-day work life. It is also not simply about solving problems, but about making practice, that has been accepted as justified, problematic. It is motivated by a drive for continuous understanding and change.

Self-reflective cycles

Action research (AR) is conducted in self-reflective cycles of planning, acting, observing, reflecting… and replanning, further implementation, observing and reflecting. As the spiral develops, understanding and practice evolve through the process of group critique and collaborative action. This process helps to obtain a reasoned justification of educational work. Through the self-critical

activity and constructive action a rationale is developed, tested and critically examined for what is being done. In the process there is empowerment to question discourse, practice and organisation, and emancipation from restrictive systems and false consciousness governing capabilities to question and to initiate change. It is a long term commitment of a dynamic nature toward improvement of practice. The following figure displays AR as a dynamic spiral of cycles:



A definition

For the purposes of excluding certain characteristics of traditional research and including the unique opportunity with which action research provides educators, it was useful to integrate two complementary opinions. The one was that preferred by numerous authors, and formulated by Stephen Kemmis and Robin McTaggart (in Henry and Kemmis 1985, p. 1; Kemmis and McTaggart 1988, p. 5): 'Action research is a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social and educational practices, as well as their understanding of these practices and the situations in which these practices are carried out.'

Although this definition should be sufficient, Gloria Bravette (1996, pp. 4–6) sees AR as a deliberate, systematic, critical, emancipatory process carried out in collaboration with others sharing a common concern. Her view of the value of action research is closely related to the concept of 'conscientisation' as used by Paulo Freire (1972). Through the action research process, participants develop from believing that their socio-cultural reality is a given, to a state where they become emancipated and empowered to understand and write their own socio-cultural reality.

In response to these two views of AR the following definition is suggested:

Action research is a deliberate, critical, and emancipatory enquiry undertaken systematically and collaboratively in order to understand and improve the rationality and justice of educational practice.

3.2.2 The emancipated practitioner

A number of authors support the classification of action research into three types (Mezirow 1981, pp. 3–24; Masters, 1995; Zuber-Skerrit, 1996; Kemmis, 1993; Hatten, Knapp and Salonga, 1997):

- *Scientific*-technical (instrumental)
- Practical-*deliberative*
- *Critical*-emancipatory

This classification is based on the critical theory of Jurgen Habermas (Mezirow 1981, pp. 3–24). According to Habermas all theories, especially the ones which present themselves as neutral and objective, are ideologies concealing their own vested interests. They are dressed up in the guise of a historical rationalisation. Critical theory has the task to disclose these vested interests

which Habermas classifies into technical (instrumental), practical and emancipatory.

Technical knowledge is based on empirical knowledge and is governed by technical rules. Hypothetical-deductive theories are aimed at controlling the environment though controlled observation and experimentation. Action research in this category was mostly practiced by traditional university researchers as outside experts entering the context through co-option. Kemmis (1993) goes on to describe this category as amateur action research. Cognitive interests are behind practical knowledge. It is concerned with the learning domain and based on interaction or communicative interaction. This action is governed by binding consensual norms, 'which define reciprocal expectations about behaviour and which must be understood and recognised by at least two acting subjects' (Mezirow 1981, pp. 3–24).The methods of empirical analytical social sciences are not appropriate here, but systematic understanding which seeks to understand meaning rather than to establish causality. The methods of the historical-hermeneutic sciences are more appropriate as they refer to interpretation and explanation. Facts are constituted by understanding of meaning and not through observation. The researcher has more or less a Socratic role in encouraging consensual understanding and meaning formed in a cooperative environment (Zuber-Skerrit 1996).

Emancipatory knowledge embodies the aim of self-knowledge. Through self-reflection a person's history has to be explored in order to see how it expresses itself in the way a person sees himself or herself, and roles and expectations (Mezirow 1981, pp. 3–24). Emancipation is to be obtained from institutional and environmental forces which limit options and rational control over lives — these were accepted as beyond control. For Habermas the critical social sciences, with the goal of critique, are more appropriate for this aim. An initial non-reflective consciousness is transformed into a self-reflective one where the subject is released from the dependence of hypothesised powers (Mezirow 1981, p. 3–24). Emancipatory action research is always social in that it

understands itself as a concrete and practical expression of the aspiration to change the social or educational world for the better by improving shared social practices (Kemmis 1993).

The researcher has no role in a hierarchy and is normally, at least as an educator, just as much a learner or participant as the so-called subjects in the research. Educators will be enabled to understand themselves as agents as well as products of the history of education and society. Educators would therefore be empowered, and emancipated from their learned incapacity. By gaining the skills of action research they would become critical towards their own practice and relations. In terms of the nature of the Unisa context it was necessary to employ a research approach that could empower participants to become critical about their practice, and about the systems that affect them.

3.2.3 Action research as alternative research for educators

Action research can be regarded as an appropriate and useful method of research for educators. Huberman (1996, p 130) detects an aggressiveness or militancy in the teacher-research literature due to the misrecognition of their work and the lack of official legitimacy of this kind of work. He (Huberman 1996, p 125) refers to an almost constructivist element in the research that teachers can initiate – 'there is something exciting in the idea that teachers ask questions that researchers may not think to ask, that teachers see patterns that others might not discern unless they altered their frames of looking'.

Zeichner (1994) wants an improved status in power, privilege and voice for educational research in general. This could be achieved in part by bridging the separation that currently exists between the worlds of teacher research and academic research. The theme of educational study is the educational situation and what such a situation should consist of namely a free dialogue between teacher and learners. However, authoritarian approaches to research and change, related to power relations of society in general, obstructs this dialogue.

Paulo Freire's work illustrates consciousness raising based on rational reflection and dialogic relations. Freirian educators are committed to emancipation through conscientisation which is about development of critical consciousness in order to break patterns of dominance and support teacher-initiated enquiry develop a common language and shared meanings (Henry and Rodostianos 1993, p. 7).

Linking theory, practice and action

Education as a critical discipline is interested in revealing what obstructs educational dialogue in order to set it free. The goals of educational research is to facilitate the development of reflective teachers, ones who are capable of making both the ends and means of education problematic, and who can act on the basis of such deliberations (Noffke 1994, p. 15). Through such an effort the gap between research and practice is narrowed.

There has been a perception that action research or teacher practitioner research 'stood in opposition to a dominant tradition of positivistic social science in which the study of casual relationships was pursued by testing hypotheses, controlling variables through sampling procedures, and interpreting the concept of evidence as the statistical processing of data' (Weiner 1989, p. 47). For Kemmis and McTaggart (1988, p. 6) and Hatten, Knapp, and Salonga (1997) action research as an alternative social science approach aims to link theory and practice in solving practical problems for practitioners in the field. In fact, the very linking of action with research is the crux of the action research approach. By trying out ideas in practice as a means of increasing knowledge about the curriculum, teaching and learning, teachers can improve what happens in the classroom. They can systematically address the improvement of the rationales for their practice and in this way they link theory and practice into the one whole as ideas-in-action.

The status of the researcher and the subjects

Social research should seek rational self-clarity, collective autonomy, and happiness – this is opposed to procedures that demand increased control (Henry and Rodostianos 1993, p. 7). Educators work with humans and the laws of human nature are important. They are involved in a reciprocal relationship that is in fact a subject-subject relationship (not a subject-object relationship as with fundamental scientific approaches). Huberman (1996, p. 126) and Brock-Utne (1980) argued that because the action research process is embedded in practice, the relationship between the knower and known is significantly altered and the distance decreased. Educational action research attempts to remove intentionally the division between researchers/scientists on the one hand and educational practitioners on the other (Brock-Utne, 1980; Klafki, 1975). This is conducive to a shared process of learning. Action research demands direct cooperation between researchers and educational practitioners in the field of action as well as in the process of research. The research design and research instruments are negotiated by all participants. The critical inquiry process in action research is meant to be transformational (Huberman 1996, p. 130). Teachers and participants are enabled to change their situations through reflection and deeper understanding. This is followed by empowered action.

3.2.4 Taking control through self-actualisation

The context of this type of research was not always perceived as an enabling environment. It was therefore crucial that the research methodology and approach would empower participants to take control in order to effect a critical disposition and a commitment to change. Teachers should take control of their research as it is embedded in their practice. The idea that the more abstract one's work the higher one's status in the academy, tends towards the mystification of academic research on education that prevents teachers from gaining access. Zeichner (1994) quotes a teacher as saying: 'It seems to me that someone else is having the discussion that we need to have for ourselves and

that someone else benefits in an economy that rewards their making sense of our work.'

Self-actualisation in the workplace

Pateman (in Welton 1991, p. 30) holds the work environment as a place where a professional person spends most of his or her time. It follows that the workplace experience can have a tremendous impact on the rest of a person's life. If a participatory society is possible, it must be instituted at work, for the workplace is the most political of all areas. The current situation is such that human efficacy can develop outside the workplace rather than inside. Staff members may give up — their input does not make a difference and they start falling into a continuous state of apathetic indolence and emptiness. People have little ability towards self-actualisation that is important for re-establishing professional practice. People will have to learn to be of worth to themselves by identifying and taking up their professional ideals. For Welton (1991, p. 37) people have to move from learned helplessness to empowered action.

Systems may blind a person and provide a false consciousness regarding a role within an education system. As an educator a person may be fulfilling the self-interested objectives of external parties. In practice her or she may be just the perfect educator, but may not be engaging in the best practice. Oberg (1990, p. 219) quotes a teacher in this regard:

> Mr T would enter, distribute books or papers and settle down to another day of stultifying routine. I guess I was the classic Tylorian teacher; my previews were detailed and comprehensive, my objectives beautifully laid out. I gave huge examinations and kept a tight daybook. The Superintendent and the Principal were both very pleased. I wasn't. The proper research approach into practice will allow me to admit defeat on occasion, and see a beginning of true praxis as described by Paulo

> Freire – my freedom stems from the realisation that the fraud squad came for me at last.

The cyclical praxis-based nature of action research will lead educators to take stock of their teaching practice, and will guide practitioners to look at themselves as professionals and human beings.

3.2.5 Collaborative work

Brooks-Cathcart (n.d.) makes the following recommendations for prospective action researchers who are interested in improving their professional practice:

> 'Look in your own backyard. Look at the institution where you practise and the people with whom you interrelate. A myriad of possibilities is waiting for you! But you must first know your backyard, you must know how you exist in your backyard, and who lives there with you. But, most importantly, think about how you arrived in this back yard, the person you were then, and who you have become. This may help illuminate for you those practices that do not reflect your values.'

Elliott (1993, p. 175) and Molly Lynn Watt (n.d.) saw the problems of educational change addressed in a group of professional peers where they can collaboratively enhance their practice. Teaching practice cannot be enhanced by an individualistic attitude. In this regard Somekh and Davies (1991, pp. 154-155) are of the opinion that pedagogical competencies of learners and teachers form an integrated reality: learning is about active engagement of the learner, both teachers and learners get cognitively active roles, and assessment of competence depends on listening, observing and responding to learners and reflecting on their products. With a coherent and explicit value system teachers are involved in a lively reciprocal practice situation. Their continuous commitment to improvement should be supported by a research approach that support these values.

3.2.6 Lifelong professional development

What will exemplify excellence in practice is a recognition of its complexities, and a commitment to lifelong professional development. Should educators adapt the action research approach, the spiral is promising never to end — teachers will have the commitment to continuously assess themselves and their practice. Borgia and Schuler (1996) report practitioners for whom action research has become a way of life. This methodology constitutes a positive, supportive, and proactive resource for change.

In justifying action research as a solution for educators to make impact on their profession, Beverly Johnson (1994) quotes Wolfe: 'Teachers often leave a mark on their learners, but they seldom leave a mark on their profession.' Oberg (1990, p. 217) supports Roger's motto: 'What I am is what I teach.' And he goes on the state that the life of practice is not discovered by searching for theories, but by probing one's own practice and to questioning the values governing practice.

3.2.7 Dealing with critique

Relativism

Huberman (1996, p. 130) points out that postmodernism rejects the deliberate abuse of power adopted by researchers of all kinds, while it may support a relativist epistemological territory where findings are illusory. They are in essence the projections of their authors' states of mind. All research relationships between researchers and their informants are 'mutable, negotiable, and inseparable from researchers' instruments, observations and findings'. This may even make the official recognition of teacher research more difficult. This is because it is not just a technical enterprise: it is inextricably linked to personal experience, emotional life, interpersonal dynamics and to self-disclosure. Huberman (1996, p. 124) saw teacher research

moving in several streams from critical theory to hermeneutics or, for the less conceptually defined streams, from self-discovery to emancipation, through to interpersonal disclosure and radical institutional change.

Objectivity, rigour and theory

Not all discussion on action research is positive, in fact Hodgekinson (1975) lodged a scathing attack on action research. It is understandable that, in an era where most research is still fundamentally scientific in nature, action research would be attacked in this way. He agrees that cooperation in the form of group interaction has become one of the most important characteristics of action research, but warned that these techniques may suffer procedural problems due to a lack of familiarity with the basic techniques of research. Action researchers may claim the banner of research while they have insufficient statistical knowledge. In true aloof style, Hodgekinson suggest that research is no place for the amateur. The scientific method of research was adopted by professional learners of education and not by practitioners. It can be expected as action researchers work from an intersubjective perspective towards change in practice, they should expect to get the following comment from traditional researchers: 'The information wasn't objective… They had discussed it in a group so they biased each other… It wasn't scientifically collected.' (Maguire 1993, p. 170).

Maclure and Bassey (1991, p 205) point out that another point of criticism exists because participative action research selection criteria are not so 'clear-cut'. Although the criteria of clarity and rigour should be retained, standards used to assess conventional research proposals are not likely to illuminate all the relative merits of prospective participative action research projects. Grundy and Kemmis (1981) and Dick (1993) state that theory building in action research is not an immediate aim. Some critics are therefore highlighting the lack of theory building in action research. There are also complaints of a lack of rigour with action research, but Grundy and Kemmis (1981) see rigour

assured by the close and careful interrelation of the four moments in the cycle of activities.

Participation as ambiguous

Maclure and Bassey (1991, p. 202) sound a warning, based on their experience in Africa, regarding the issue of participation. From an African perspective, there is a cultural ambiguity around participation. From a Western perspective, participation involves the open exchange of ideas, sanctions the right to question, and legitimates the prerogative to be different, to conduct experiments and to make mistakes. But in many rural regions of sub-Saharan Africa direct questioning and open dialogue amongst different subgroups are shunned. Deciding on participation in a community improvement project may involve negotiating involvement from the very start.

Although 'scientific research' claims that intricate and complex procedures are the only solution to solve research problems, enough evidence has been provided by action researchers to indicate that positivistic social science has not done enough to improve the situation for the majority of its subjects — even worse, these subjects (in action research they are participants) have remained untouched by the research. Action research can be considered an enabling science as this methodology creates trust, openness, and willingness to inquire into and reach joint solutions through the development of co-appreciative relationships (Pasmore and Friedlander 1982, p. 347).

3.3 Committing to action research

For Henry and Kemmis (1985, p. 3) and McTaggart (1991, p. 179) undertaking action research aims at giving a reasoned justification of our educational work to others – 'to create a developed, tested and critically-examined rationale for what we are doing'. Action research is, in essence, a systematic learning process (Henry and Kemmis 1985, p. 3). When doing action research there

should be constant questioning of whether the action research project is helping to improve the extent to which educational values are lived. The action research process is committed to understanding and improvement towards change (Brock-Utne 1980, p. 10 – 15), and strives not to become stagnated in 'things that work'.

This aim was relevant within the boundaries of this course research project, that also aimed to establish a general critical predisposition in practitioners and staff to equip them to challenge the system in future projects. From this view the process is political in the sense that all group members take control, gain ownership, and attempt change. Within the collaborative environment the aim was to collect data that reflected the qualitative changes that had taken place rather than a quantity of information that had been collected.

3.3.1 The research approach

Understanding social action, in this case the practice of the educator, is linked to investigating the following:

- How current language establishes itself in discourse;
- How activities relate to established practice;
- How organisational structures are supported by institutional relationships Kemmis and McTaggart 1988, p. 41).

These three dyads are interrelated in the world of practice and the world of work. For Kemmis and McTaggart (1988, p. 43) 'a critical analysis of our work involves seeing these relationships as changing over time (through history) and as elements in the dialectic of institutionalisation and contestation. We need to be able to describe these changes and contests, to describe the evolution of our work.'

Although only one online learning community-based course was introduced in this context, and the success of this single introduction may not be a sufficient sign of long-term success with online learning, the aim was to disturb patterns of apathy and to start preparing avenues to facilitate future development. Within the group, staff members would not only be able to provide constructive critique, but would also receive critique in order to transform themselves and, therefore, the institution. Using AR could be the start of a different approach to teamwork, and the role of the instructional designer, in order to plant the small seeds of institutional change. The challenge of this project was to synchronise the action research process together with current production and delivery cycles in order to assure the desired outcomes:

- to assess the success of this particular implementation of the online learning community at Unisa in terms of a quality learning experience;
- to determine the needs generated by the introduction of the OLC in the correspondence-based organisational environment of Unisa in terms of the development process, delivery system and support services;
- to determine the need for change in supporting and facilitating learning and community in the OLC as compared with current correspondence-based tutoring.

The approach aimed at inspiring participants to critically assess their roles in a group context, while developing, delivering and supporting the pilot course. Current practice and organisation had to be reformed towards ensuring the successful employment of the online learning community as a new delivery mode (it was expected to also effect change in correspondence DE practice, even though in the process the OLC may also be rejected as a future option). All participants were regarded as equal contributors to the research. The research coordinator had no superior top-down role to fulfil, and the role of course coordinator was created in order to provide for participant observer status.

Research was conducted over a period of 12 months that allowed for two successive deliveries of the course. The research developed through a spiral of two cycles. Sub-issues and other concerns were identified by participants. No hypothesis could be tested as sufficient grounds (or not) for change in practice needed to be identified during the process. Procedures and commitments could not be accurately outlined in advance due to the fact that it was a collective effort and participants had the right to insist on making changes.

3.3.2 The role of the researcher (instructional designer)

The aim of the research therefore also included giving new meaning to the role of the instructional designer. The learning development, or instructional design process, became a continuous process as professional and personal development of participants was stimulated, leading to the innovative design of the learning experience. The experience did not necessarily conform to prescriptions and system limitations, and in future may lead towards a unique and appropriate design for every course, including the facilitation and support that the learning experience deserves. Teaching and administrative staff should be able to provide rationales for their practice, and should continuously revisit these rationales as the reality of the institution changes.

The introduction of the OLC with its own conventions and commitments of engaged teaching led to tension with the long established practice of non-involved print teaching. It challenged the commitment of teachers and support staff. The implementation of teaching and learning with new technologies may be a traumatic experience for all teaching staff, and profound effects on the systems and organisation can be expected, especially in print-based distance education institutions like Unisa.

3.3.3 Participation and collaboration

It is recommended that before the research process starts, the philosophy and methods of action research be explained to the first core group of participants. Should any data gathering techniques be used later on during observation phases, it would be advantageous to explain these techniques and provide proper training (Passmore and Friedlander 1982, p. 348; Brock-Utne 1980, pp. 10–15). Participants should also be prepared to operate in groups and trust should be established. For this to be possible the researcher's position needs to be properly explained, and his commitment towards the well-being of all participants should be clear (Maclure and Bassey 1991, p. 206).

As the research process progresses it is recommended that supportive work-in-progress discussions be maintained. Educational change is a slow process and may require individual change and group change which can be very difficult to integrate. The aim should be to involve everybody towards shared responsibility. All participants need to share responsibility for the process and they should become critical friends in the process. All stakeholders need to be aware of the progress being made, so it is recommended that progress be communicated to everybody on a regular basis as this may legitimise the process up to that point.

Participation

For the purpose of this project, participants were categorised as:

- Tutoring, support, and instructional design staff;
- Self-selected learners enrolled for the course.

All tutoring staff, support staff, educational development staff, and selected learners involved in this course project were formally invited to participate in the research project focussed on the pilot delivery of the online learning

community-based course. Two teams of support staff were formed — a development group which was a larger team consisting of all teaching, support and administrative staff, and a smaller group, the 'core team', consisting only of teaching and support staff. The latter could meet more frequently in order to share observations on developments in the course environment.

Ethics procedures

All participants had some research background and understood research conditions and requirements – professional and support staff had this experience by way of their job requirements, and learners had already passed a second level course in research.

Consent from participants

Support staff volunteered to make online delivery part of their job descriptions and were therefore involved in this project by nature of their work obligations. Learners had in principle agreed to take part in principle when they elected to take the course and it was clear that an action research approach was to be used for its development and trailing. Learners were also explicitly asked to allow the data from the research to be used as part of the researcher's D Ed studies. Hence, they were provided with a plain language statement (attached as Appendix C), and a consent form (attached as Appendix D) was signed after the project was discussed with them to clear all possible misunderstandings. They were made aware of the fact that their text contributions in the form of e-mail and discussion forum contributions may be used as part of this research project to improve delivery.

Learners who did not feel comfortable either with the course or with being research subjects, had the option to leave the course immediately and to join the print-based delivery of the same course without being penalised in any way. No performance history, academic or research based, was carried over to

the alternative mode and learners were given unconditional admission to the venue-based examination. If the learners did not wish their participation in the Unisa project to be used for this project, then their data was not used and no other involvement was expected of them.

Group interaction

The informal group discussion approach was adopted as there was less of a hierarchy, and all participants contributed on the same level. The research coordinator (also participant observer and instructional designer) avoided acting in an authoritative and disinterested manner. Discussions were therefore not based on authoritative researcher-based questions, but issues presented by the data and the participants themselves. The number of sessions was determined by participants. The duration was limited to a maximum of two hours to prevent stress resulting from interruptions of routine job requirements and to assure maximum productivity. In this environment multiple perspectives could inform the action research cycle. Group members were fully informed about procedures as they were involved in them and in the analysis of the data recorded in note form during sessions. Group interaction consisted of verbal communication (informed by other text contributions such as records of electronic communication and journal content). An interplay between the different perceptions and opinions of the participants informed and educated towards planning and modifying or changing the practice of participating individuals. Participants were the collaborative developers of procedure and executioners of analysis. Ownership of the project rested with the group.

Personal interviews

The researcher was the interviewer, and he accepted that introducing the unstructured interview as a data-gathering method may present some ethical requirements to be addressed. First the interviewer informed the respondent of the purpose of the research and in particular the interview. In this case there

was no information regarding this course project or the uses of the data that needed to be withheld from respondents that could affect the outcomes of the interviews in any way. Secondly the respondents were informed of interview procedure, and requirements. The aim was to assist the respondent to relate his or her journey through the OLC in comparison to previous print-based experience. All respondents had access to their data and the final interpretation. Interviews were limited to a maximum of one hour.

Consensus, identity and storage

Support staff and learners actively participated in this research project and were informed of the results and conclusions. Participants were also invited to check results and conclusions that were relative to their position to assure consensus before they were made public or published. For research purposes the identities of participants were removed from physical data, they were encoded and the names of participants were stored separately. The identifiable consents, required from everybody who agreed to participate, were also stored separately from encoded data. Data (print-outs, electronic records of message content, interview transcriptions) were stored in locked filing cabinets and only the researcher had access. Data will be disposed of in six years time.

Collective analysis

The research was initiated through meetings with the development team to do reconnaissance in order to facilitate the initial planning of the sample course and the research process. The course structure and presentation, as well as facilitation and support was planned before each delivery in response to feedback from the development team consisting of tutoring, support, and administrative staff. This group also analysed and reflected on the observations after each delivery in order to plan new action for the next delivery. It was expected that changes in working relationships between different units,

structural change and recommendations towards change would come from this group.

The core teaching team consisted of only teaching and support staff who collaboratively assessed teaching and support. They met at least once every two weeks. Observations and feelings were noted, collaboratively reflected upon and changes in teaching practice were effected immediately. The reflections and action on this level fed into the development team meetings for discussion.

3.4 Collection of data

Brock-Utne (1980, pp.10-15) recommends that any research instrument used must be the object of the critical evaluation of all who come into contact with it. Such instruments should be evaluated according to their capacity to increase self-knowledge and should not be the cause of division between the researcher and the participants. Phases in action research cycles demand quick feedback to participants and instruments need to be able to fulfil this requirement.

3.4.1 Data sources

Support staff, who were all volunteers, were requested to keep record of all their emotions, fears, needs and actions. Staff were advised to keep professional journals for the duration of course in order to keep record of the reflections on events and practice. The course coordinator (also the research coordinator and instructional designer) kept a journal that documented his observations and feelings about developments on a continuous basis.

All data were collected in text or note form. This data was integrated and analysed in group sessions (conversations with a purpose) with all the staff involved. Plans for improvement and action (implementation) were devised, staff were required to observe their performances, and the whole group were

required once again to reflect and replan their support strategies for every successive delivery. Unplanned unstructured interviews were conducted with involved staff individually on a continuous basis in order to inform the development group. The input of learners, used to print-based learning and support, was seen as vital for the refinement of the practice of support staff and the content and structure of the course. Learners were invited to grant permission for the use of e-mail and discussion forum content to be recorded, integrated and analysed in the above group setting. The unstructured interview was also used with learner respondents. This 'open' and unstructured interview was not based on a series of guiding questions. Respondents were simply asked to relate their experiences as OLC members with reference to their experience as correspondence learners. Each learner respondent was only involved in one interview at the end of a particular course delivery. Such an interview did not exceed one hour.

In summary, the following sources of data were used during the research process:

- Core team and development team meetings;
- Contents of discussion forums;
- Development team reports;
- Institutional documents;
- E-mail message contents;
- Interviews with staff and students;
- Research journal.

The research journal

Time should be set aside to write up all possible details of the process (Bonser and Grundy 1988, p. 43). Oberg (1990, p. 214) recommends that action researchers keep a journal as it can be a handy tool for uncovering the facts of

the situation. As the research progresses the action researcher will reflect continuously and ask himself questions (eg Who am I?) that can be addressed in the journal. Essentially the journal should contain descriptions from daily practice, analyses of decisions and reasoning, assumptions revealed and reconsideration of practice. Journal writers in this process can express the story of their professional lives in their journals (Oberg 1990, p. 218).

The research journal developed from the personal journal of the action researcher. Although staff were requested to keep journals of their own thoughts, they were very hesitant to do so, and ultimately did not produce journals, citing personal reasons and workload. The researcher decided to keep a research journal where all telephone conversations and informal conversations on this project were noted down, the contents of meetings, reflections on these notes and the feedback to group members on these thoughts, and his own reactions were continuously noted and dated. In a sense the research journal was a running log of the AR cycles and the project as a whole. It has proved to be the most valuable of all sources of data because it recorded all discussions and conversations and contains reflections and feedback from all participants.

E-mail communication

All team members were encouraged to keep record of e-mail communication during the evolvement of the project. However, this did however not materialise in many cases. E-mail communication available for analysis consists mostly of messages between the course co-ordinator, other team members and students.

Discussion forums

During the first delivery of the course, 4 support forums were set up which were open continuously throughout the course. Six course forums were set up,

but unfortunately last one was cancelled because students complained about the workload. For the second delivery, 4 support forums were set up and 4 compulsory course forums. The content of these forums were used to strengthen data from discussions and interviews.

Support forums for the first delivery:

Date	Topic	Description
17/2/2001 – 7/5/2001	Student Info	Social area for students
17/2/2001 – 7/5/2001	Announcements	Announcing important events during the course
17/2/2001 – 7/5/2001	Technical assistance	Seeking help and providing answers regarding technical issues
17/2/2001 – 7/5/2001	Course feedback	Providing feedback on the course

Course forums for the first delivery:

Date	Topic	Description
5/3/2001 – 18/3/2001	The competent human being	Related to similar content
19/3/2001 – 1/4/2001	Change and globalisation	Related to similar content
2/4/2001 – 8/4/2001	Brainstorming	Identifying issues for discussion
9/4/2001 – 15/4/2001	Discussion of issues	Discussing issues identified
23/4/2001 – 6/5/2001	Group presentations	Groups presenting arguments
7/5/2001 – 13/5/2001	Human capacity building	Related to similar content

Support forums for the second delivery:

Date	Topic	Description
6/8/2001 – 25/11/2001	Student Café	Social area for students
6/8/2001 – 25/11/2001	Announcements	Announcing important events during the course
6/8/2001 – 25/11/2001	Technical assistance	Seeking help and providing answers regarding technical issues
6/8/2001 – 27/11/2001	Course feedback	Providing feedback on the course

Course forums for the second delivery:

Date	Topic	Description
20/8/2001 – 2/9/2001	Change and globalisation	Related to similar content
17/9/2001 – 30/9/2001	Brainstorming	Identifying and discussing issues
15/10/2001 – 28/10/2001	Group presentations	Groups presenting arguments
29/10/2001 – 4/11/2001	Human capacity building	Related to similar content

Scheduled meetings

Discussions concerning the possibility of initiating such a project and the scope of the project, were conducted on a frequent basis before the project was launched officially during October 2000. Informal conversations about this project and relevant activities took place on a regular basis during the project (the content of these were integrated into the research journal.

Schedule of formal meetings (total 25):

Date	Description	Topic
26/10/2000	Full team	Senate approval and student system
30/11/2000	Core development team	Presentation and discussion of the project at Senate
7/12/2000	Core development team	Representation and discussion of the project at Senate Executive Committee
2/2/2001	Support team	Discussion of selected texts
15/2/2001	Support team	Discussion of selected texts
5/3/2001	Support team	Discussion of selected texts, progress, support and motivation
9/3/2001	Support team, ICT and CS	Problems with technology
27/4/2001	Support team, Exams and Assignments	Understanding the project and future relationships
21/5/2001	Support team, Exams and Assignments	Progress, understanding the project and future relationships
9/7/2001	Full team	Evaluation of our practices and roles within the wider Unisa context – end of first cycle
31/7/2001	Support team	Evaluation of practice and motivation of team members
20/8/2001	Support team and ICT	This project and the ICT strategy
1/9/2001	Support team	Progress, support and motivation
3/9/2001	Support team	Progress, support and motivation
5/9/2001	Support team	Progress, support and motivation
11/10/2001	Support team and Library	Library support
19/10/2001	Support team and e-counsellor	Future role of the e-counsellor
29/10/2001	Support team and BUT	Development and delivery process
29/10/2001	Support team, Exams and Assignments	Evaluation of practice and motivation of team members
31/10/2001	Support team and CS	Technical support
5/11/2001	Support team	Evaluation of practice and motivation of team members
7/11/2001	Support team and CS	Establishment of this project within the institution
15/11/2001	Support team, ICT, CS and	Establishment of boundaries of practice

Date	Description	Topic
	Computer Science	
15/11/2001	Support team	Evaluation of practice and motivation of team members
29/11/2001	Full team	Evaluation of our practices and roles within the wider context - end of second cycle

Interviews

Students and some support staff were interviewed in order to obtain their 'stories' about being involved in the online learning community. All students were interviewed at least once during every delivery and preferably towards the end of the course at which point it was assumed that they would have experienced the online learning community environment sufficiently (they were given pseudonyms to protect their identity).

Schedule of interviews (total 19):

Date	Person	Topic
23/6/2001	Nomsa (1)	Online learning community
23/6/2001	Esther (2)	Online learning community
23/6/2001	Gwen (3)	Online learning community
23/6/2001	Neville (4)	Online learning community
28/6/2001	Lea (5)	Online learning community
28/6/2001	Jolene (6)	Online learning community
28/6/2001	Magda (7)	Online learning community
28/6/2001	Vanessa (8)	Online learning community
13/11/2001	Elaine (9)	Online learning community
13/11/2001	Diana (10)	Online learning community
14/11/2001	Gay (11)	Online learning community
14/11/2001	Jenny (12)	Online learning community
15/11/2001	Mary (13)	Online learning community
15/11/2001	Shane (14)	Online learning community
16/11/2001	Zeta (15)	Online learning community
19/11/2001	Arney (16)	Online learning community
19/11/2001	Alex (17)	Online learning community
22/11/2001	Facilitator: Vasi (18)	Facilitation and teaching
28/11/2001	Facilitator: Rian (19)	Facilitation and teaching

3.5 Presentation of data

Action research is a dynamic process in which the four moments are to be understood not as static steps, complete in themselves, but rather as moments in the action research spiral of planning, action, observing and reflecting (Kemmis and McTaggart 1988, p. 15). This section will briefly list plans, action, observations and recommendations by the development group according to the two cycles. The date will be discussed in detail in the following chapters.

3.5.1 Reconnaissance

The first cycle was preceded by a reconnaissance phase during which the whole project and the development and delivery of the course was explored. The challenge to the core group was to think about how this course should be delivered online. Participants had to explore what they saw as knowledge, how learners would browse and navigate online content, how an online community could be established, and what the role of the teacher or facilitator would be.

Pedagogical issues

Epistemological framework

Adult learners should be seen as having a wealth of knowledge and experience. Therefore, the transmission of content through didactic means (an objectivist notion) had to be a less prominent part of this course. Instead, a design which stemmed from a subjectivist tradition was adopted and learners had to be encouraged to reflectively assimilate knowledge in the field through personal interpretation (Bednar et al. 1992, p. 24).

The learning theory, forming the foundation of the learning experience, had to encourage a commitment to knowledge construction. Social constructivism as a learning philosophy is based on the assumption that learning occurs more effectively through interpersonal interactions in a cooperative context. The learning experience therefore had to be made meaningful through interaction with various sources such as the WWW, experts and fellow learners. Learners were challenged to confront, understand and apply new concepts (Garrison 1995, p. 201).

The social constructivist learning theory that was adopted also demanded a different position for the tutor or facilitator of the course. Tutors had to facilitate the construction of learners' knowledge in a way that would be relevant to their professional needs and contexts. Discussion was generated and guided, while various forms of support were provided publicly to the group and privately to individual learners.

Different learning styles

Some online learners may prefer a linear learning style (builders or sequential), while others may prefer a non-linear style (browsers or random). The content and activities of this course were broken up into manageable and logical chunks. Although these subdivisions formed part of a coherent whole (a sequence of topics and scheduled activities that contribute towards certain objectives and outcomes), it was possible for learners to enter and exit content at any point. The learning was largely independent of time and place due to the asynchronous technologies used.

The online learning community (OLC)

The course environment selected is that of the OLC. Online learning communities can be defined as "small subgroups of learners characterized by a common sense of purpose that can be used to build a sense of group identity,

cohesiveness, and uniqueness that encourage continuity and the integration of diverse curricular and co-curricular experiences" (Kellogg 1999). It was believed that this environment would be the most beneficial for maintaining social constructivist learning. The OLC structure provided sufficient opportunities and support to maintain learner participation and collaborative knowledge construction (the evolution of this learning environment was addressed in detail in Chapter 2).

Selecting the course

After initial reconnaissance, a third year module presented by the Department of Industrial Psychology, *Human Capacity Development,* was selected for this pilot research project. The selected course (a 16 week module) deals with the topic of human capacity development, addressing issues such as the competent human being, regionalism, globalisation and the need for lifelong learning. It is assumed that this new course would open the door to an exciting, new experience in human capacity development. The aim of the course was not to reproduce the given theory. Learners had the opportunity to develop their own theory, based on the meaning that they give to concepts. They could apply these concepts in a personal or an organisational context. Such a topic is of transdisciplinary value and would be of relevance to everybody in the labour market, thus assuring a wider audience. Learners were expected to gain competence in applying their knowledge, skills, values and attitudes on an academic, contextual, and general level.

The selected course was a well-designed and structured print-based course that had to be converted for the online learning community. It was then facilitated by its author who was also a very motivated teacher in the print environment. The course was delivered twice (corresponding with two AR cycles) over 12 months as a pilot in order to provide time for support staff to adapt and grow in this capacity, and for the system to change.

A commitment to teamwork

A large number of people from different support departments and the academic department constituting the development team were prepared to accommodate the needs of this project to ensure that mechanisms were in place for the successful delivery of the course.

The Bureau for Learning Development

The Bureau for Learning Development is responsible for the development of quality DE learning experiences at Unisa. Staff from the Bureau's online learning development component collaboratively developed the course, the support services and delivery. Before the start of the project, workshops were presented to all teaching and support staff involved in this course to facilitate their introduction into the world of online teaching and support.

Computer Services

Key staff from Computer Services committed themselves to addressing the initial changes to their systems and to assisting with the provision of communication facilities where needed.

Undergraduate Student Affairs

The Department of Undergraduate Student Affairs agreed that no major changes needed to be made to their systems. Learners were only able to register upon production of a letter of admission from the Department of Industrial Psychology. The course was not initially listed for the general learner population. A new course code was assigned as the course was seen as significantly different from the print-based equivalent.

Examinations and assignments

No major changes were expected. The relevant sections were to be informed and requested to register the five assignments for the course, and to register the non-venue linked examination. Staff agreed to accommodate the exceptions that could possibly occur.

Bureau for Student Counselling and Career Development

The Bureau provided a counsellor specifically for this course. She received training with the core project group on online delivery and undertook research and provided unique online counselling to learners in the community.

Library Services

Library Services were prepared to accommodate the e-resources and e-training support sections for this course in a unique online course library. A database with relevant articles was set up for learner research.

Industrial Psychology

The Department of Industrial Psychology agreed to involve the facilitator and original course author in this pilot project.

3.5.2 First cycle: planning and action

The course was collectively converted according to guidelines derived from the literature. Teaching and support staff were introduced to the requirements for online facilitation. The course was scheduled to run from mid-February to the end of May 2001, and then again from mid-August to the end of November 2001. The marketing and selection strategy is discussed in the next chapter.

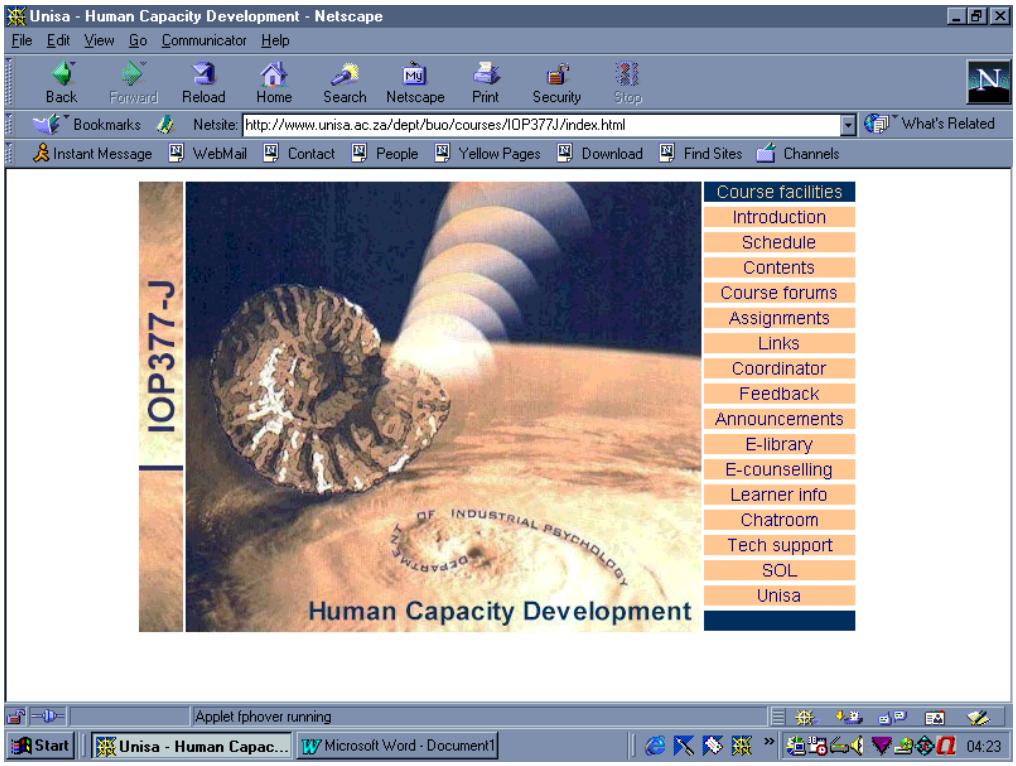
Constructing the learning experience

It was clear that the Unisa system could not be changed in such a short time to accommodate all the technical requirements of the course. The development group were forced to make use of available technical facilities that excluded an online teaching management system. The whole course was constructed with the aid of a popular *html* editor using frames pages. Communication was added using central discussion forum and chat facilities linked to the course pages.

- **The course home page**

For continuity purposes the course home page reproduced the cover page image of the print-based study guide and navigation was added to all information, forums and services.

The following image captures the course home page:



- **Resources**

Providing content

The course content was reworked into manageable chunks according to the course units and Web navigation was added accordingly. A specific course facility opened on the right side of the screen with standard access buttons to all other facilities available on the left. The course index or contents page could also be used as a sitemap.

Since there was no suitable prescribed book available, learners needed to visit the content frequently and access the resources recommended. The content comprised seven study units subdivided into three parts. It addressed topics such as the competent human being, change, regionalism and globalisation, and lifelong learning. It also contained numerous activities and self-evaluation exercises to help learners acquaint themselves with the theoretical aspects of this module as contained in the content part of this course.

An additional unit (Unit 1) was added which addressed the orientation of learners to the course environment, online participation, support staff and the working of the forums.

Adding opportunity for communication and collaboration

Two important categories of communication had to be addressed:

- online support
- communication and collaboration

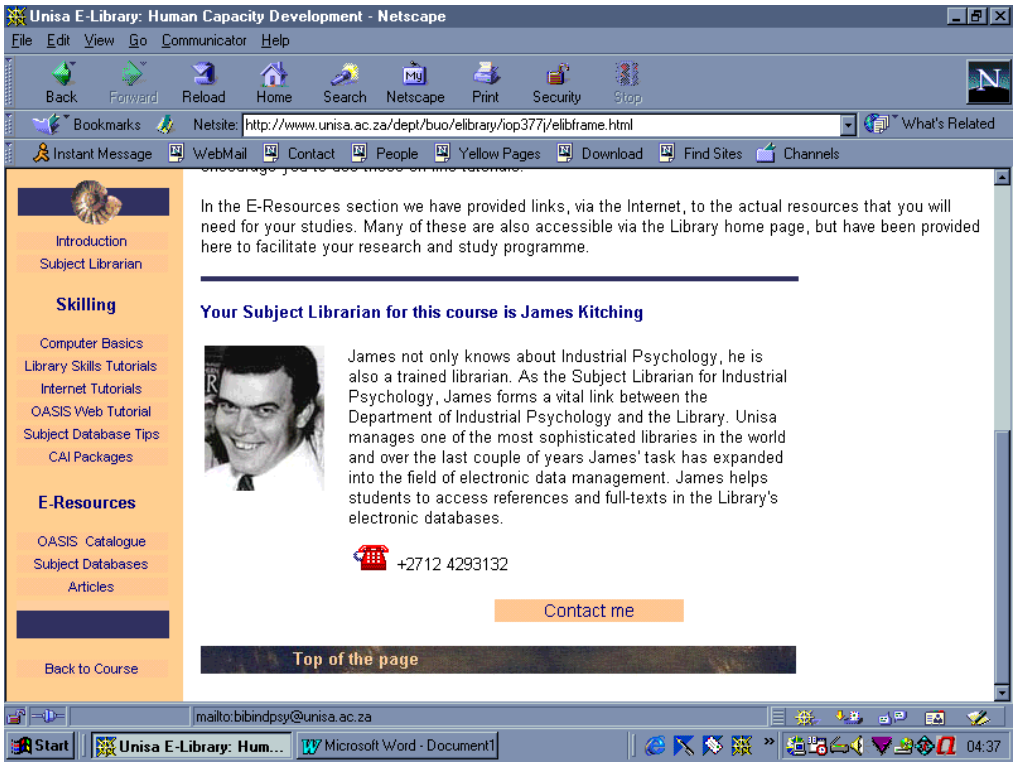
In order to enable the first, forums were established for personal information about learners (to get to know one another and the staff – Learner Info), and for a social space (Learner square), technical support, announcements, and course feedback. The Learner Info and Learner Square forums were combined early during the first delivery of the course in order to avoid confusion.

The E-library

The E-library concept was invented during collaborative work sessions and was aimed at addressing the resource needs of learners electronically. It was considered not worthwhile to deliver the course as a whole via Internet CMC (computer mediated communication) and then send out photocopies of articles by mail to learners on request. The mail system is too slow compared to the speed of CMC. The staff were also concerned that learners may not have sufficient knowledge to search the Internet for resources. The e-library therefore consisted of two branches: available online training and full text electronic resources. A subject librarian was designated to assist learners on this course.

This following image shows the e-library homepage:

Links to additional resources



The course authors provided some links to resources on the WWW. These were only a few of the numerous resources available. Learners were encouraged to search the Web and find their own.

- **The collaborative nature of this course**

Learners were required to be active in the discussions, as well as to work collaboratively with fellow learners. This was necessary, as they needed exposure to several other views on the same topic under discussion in order to construct their knowledge. Learners, as participants, had to be open to criticism. Learners were also required to work in teams as teamwork skills are an essential competency in the workplace of today. Regular communication and discussion were an important part of the course. Learners received 10% of their total mark for taking part regularly in course forums by posting quality and constructive contributions. In evaluating their contributions, the tutor had

to assess the successful integration of course content, individual research and fellow learners' opinions. Learners were able to obtain valuable information in these forums to help them with their assignments.

The chatroom was created to provide the opportunity for learners to communicate directly (synchronously) if they wished to do so. Instructions were provided. The chatroom was hosted from a different server but it was not frequently used before this course was introduced.

Support forums

An important facet of this course is that its success depended on participation, and the extent to which learners felt part of this learning community. If anything about this course proved to be an obstacle preventing learners from benefiting optimally from the course, learners were encouraged to send comments and concerns to the course coordinator or to post a message in the relevant forum. A number of forums were set up to provide support (in addition to the services of the course coordinator and the e-counsellor). The following forums were open and available throughout the course:

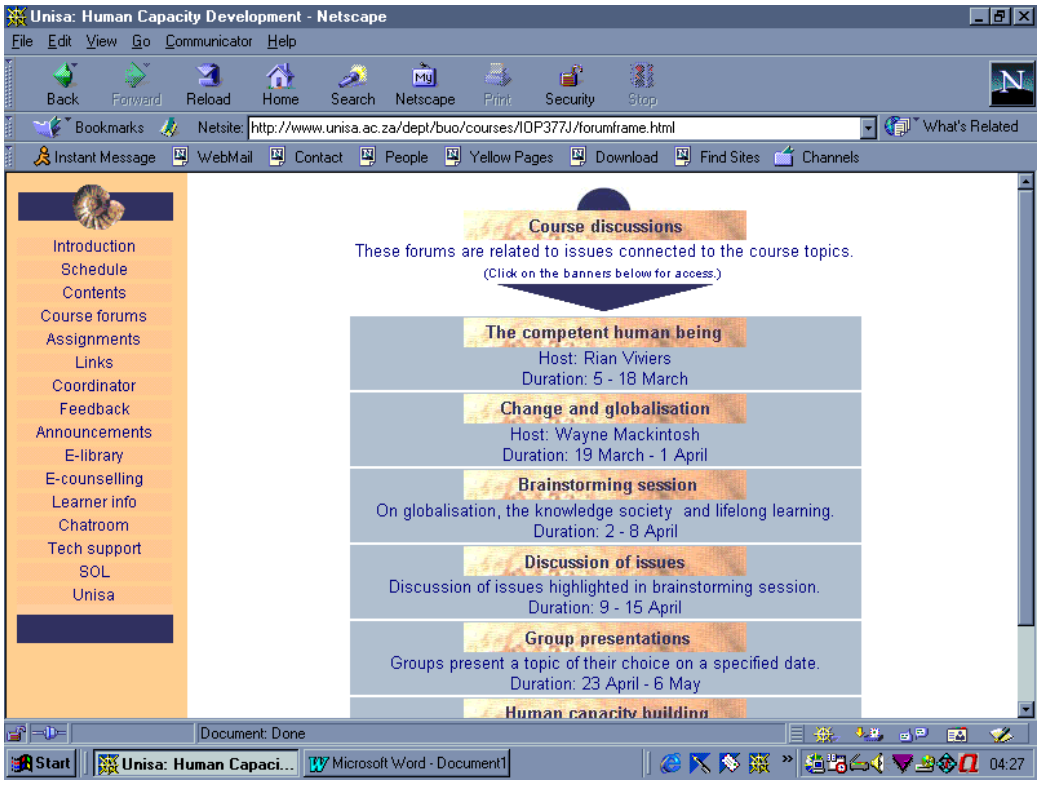
- Learners had to introduce themselves to other learners and the tutoring staff by posting short résumés and e-mail addresses on the *Learner Info* forum. This was essential during the orientation so that learners could get to know one another, which in turn would better facilitate group work. In this forum learners could discuss, post or advertise anything they liked (staying within accepted rules of online conduct). The facility was not provided for official course purposes and was the social domain of the learners.
- Announcements were to be posted in the *Announcements* forum. They were also e-mailed to learners individually. If learners had problems with certain announcements, they could go to this forum and post their comment for tutoring staff to react to, and for fellow learners to read.

- Learners could pose questions and receive answers on technical problems in the *Tech support* forum. This responsibility was shared by tutoring and support staff, with the commitment that replies would be available within 48 hours.
- In the *Feedback* forum tutoring staff provided feedback on course participation, course adjustments and other quality issues. Feedback on assignments was provided to individual learners via e-mail and common problems were discussed in this forum.

Course forums

Six course forums were set up to allow the whole course community to discuss topics and issues related to course themes. Participation in these forums, as well as related activities and assignments, was compulsory. A significant part of the final mark was the result of participation in these discussions and presentations. Course forums (with compulsory participation and continuous assessment) consisted of 6 forums of which 4 were hosted by the facilitator, and 2 by an external host.

The following image displays the course forums access page:



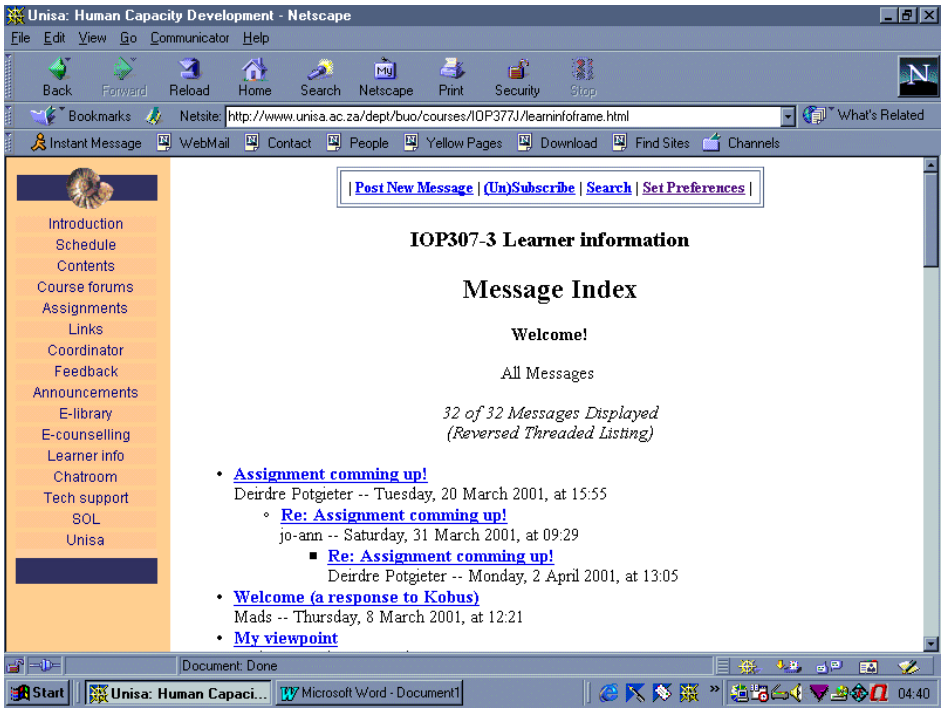
Group presentations

Group work was preceded by a brainstorming and discussion session. These activities were added to help learners identify suitable topics for their presentations. Learners were grouped in threes to prepare, present and host a topic of their choice. In their small groups learners had to identify an issue that they saw as important, do research on this issue, and present their argument, as a group, to the rest of the learning community. They had to make use of all the available resources. Fesh innovative contributions were highly valued. Learners were free to use any form of communication to prepare this presentation. If they felt they needed their own private forum for this purpose, they had to inform the course coordinator. Each group member had a specific role to fulfil - the responsibilities of presenter, moderator and summariser were assigned by the course facilitator. These roles were described as follows:

- The presenter had to introduce the small group members to the bigger group, outline the issue under discussion and then describe how it linked up with the presentation. He or she was then expected to take part in the discussion of the presentation.
- The moderator had to make sure that the discussion was kept on track. He or she had to periodically synthesise contributions up to a point, and then stimulate discussion if it begin to flag. The discussion had to be terminated (just before the official closing date) by the moderator. The summariser was then asked to summarise the content of the discussion.
- The summariser had to summarise the key points of the discussion and the major direction of the argument in no more than 150 words. An overall conclusion on the argument also had to be included.

The discussion forum facilities allowed for preference settings with standard settings allowing threaded discussions.

The following image captures the look and feel of a discussion forum from within the course environment:



Support and facilitation

Direct support staff consisted of an e-counsellor to address learning problems and other distance learning difficulties. This appeared to be a first in an online course environment. The course coordinator position was instituted because the researcher was the only one with sufficient experience in the online environment to assist other support staff during a pilot delivery in a unique institutional environment.

It was also expected that, because the system may not be ready for such an innovation, extensive administration and management duties would have to be undertaken by the course coordinator. It was his task to make sure that the course was successfully coordinated in terms of new responsibilities. Learners on such a pilot delivery should not suffer at the hands of inexperienced staff. Learners were invited to share their concerns with the coordinator and the facilitator on a regular basis.

Accommodating small groups of learners

Ideally, a maximum of 25 learners per facilitator should be allowed on such a course as it was very labour intensive compared to print-based delivery. For the pilot deliveries, only 10 learners were selected. Learners were only allowed to register for this course if they had a basic knowledge of CMC, the WWW, Internet communication, and word processing, and they had to have sufficient Internet access. Prospective learners were thoroughly informed about the requirements for and their duties on such a course (e.g. aspects like workload, regular Internet access, and continuous participation).

An outside host as an additional resource

An outside host was contracted to host two forums – this person was a scholar in the field of change and globalisation, as well as the knowledge society. His knowledge and experience proved to be an additional resource for learners.

- **Assessment**

Assessment, towards a final mark, involved:

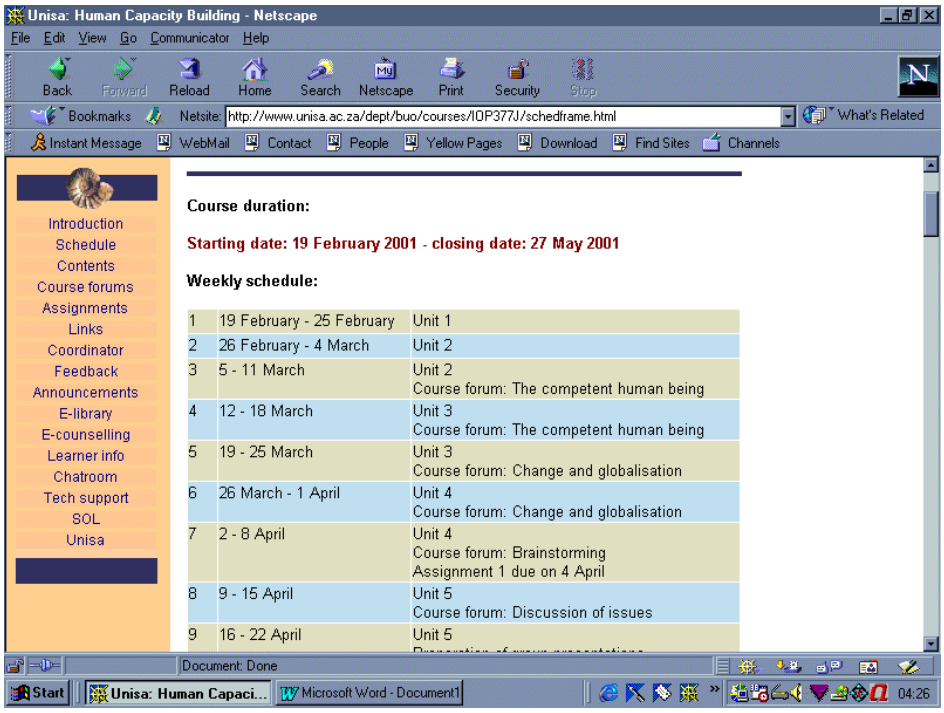
- one online presentation by learners (teamwork)
- 3 essay assignments
- continuous assessment of online participation

No venue-linked examination was to be taken as this would not adequately test the competencies and skills that had been acquired.

- **Scheduling course activities**

All stakeholders in this learning experience had a number of activities to do as well as roles and responsibilities to fulfil. Scheduling these activities seemed to be very essential to the successful running of the course, especially if the normal work and study commitments of support staff and learners were to be taken into account.

The following image shows the course schedule:



- **Technical requirements for learners**

<u>Computer skills</u>

Learners had to have moderate Internet literacy, and had to have basic computer skills, such as word-processing (e.g. MS Word), in order to be successful on this course. Because they had to attach assignments and contributions to e-mail messages they had to ensure that they knew how to attach and send documents successfully.

<u>Internet access</u>

Learners were expected to have Internet access with the latest browser software (Netscape 4.7 or Internet Explorer 5). An e-mail account had to be active to facilitate communication with course staff and fellow learners. Learners were expected to surf the WWW frequently to find additional sources and

information to contribute to the course. All this meant that a considerable amount of time had to be spent online, which could increase connection costs.

3.5.3 First cycle: Observations and recommendations

Collaborative analysis strategy

For the purposes of collaborative analysis, the development group decided to concentrate mainly on the following four categories of data:

- Group discussions and informal conversations (summaries and reflections contained in the research journal kept by the research coordinator)
- Student interview feedback
- Discussion forum activities
- E-mail communication with the course coordinator

The participants concentrated on identifying themes and tendencies in the observations made. During the delivery of the course the research group (including all support, teaching and administrative members) and the core facilitation group (facilitators and the course coordinator) met frequently to discuss developments. Student and staff feedback fed into these discussions continuously. At the end of each delivery, the group analysed observation data in the above four categories into a summary, and devised a plan to proceed and an implementation strategy. Although all participants from the institutional context were used to research procedures to some degree, work commitments prevented the complete development group from meeting as often as planned. The core facilitation group met at least every second week.

Summary of observations and recommendations

Positive learning outcomes

The first delivery provided very positive feedback from learners regarding the learning experience. Learners felt more empowered and could take control of their learning. They could make their ideas and experience part of their learning. Having to take part in groupwork forced them to be better prepared and to do independent research. Some of the aspects highlighted during the interviews with the learners are as follows:

- Learner-centredness (students appreciated to opportunity to contribute to the learning experience in various ways)
- Learner empowerment (they became confident to post their opinions in public)
- Transformative learning (the learner as a person changed during the course)
- Critical reflection and self-reflection (learners reported having to reflect on their actions and contributions)
- Engaged learning (they reacted positively to being involved as compared to print isolation and passivity)
- An improved learning experience (learners wanted to do more of their degree requirements via this mode)
- Self-imposed pressure and commitment was needed (learners reported feeling the pressure and making the commitment in order to be successful)
- Discussions worthwhile (learners gained from the opinions of others and could make their own contributions)
- Doing independent research (they reported doing a lot of independent research in order to contribute to discussions and do assignments)
- Exercising style and layout for academic writing (learners were able to exercise their writing skills for the academic environment)

- Facilitation and immediate support (learners appreciated receiving almost immediate reaction to their inquiries).

Facilitation

This was the first online teaching experience of the facilitator. It was a personal struggle to accommodate the new responsibilities in the online learning environment which demanded much more support than the teaching of print-based courses. Learners also required motivation and support to contribute regularly and keep up with the scheduled learning experience. The following recommendations were made by the core support team:

- Very thorough training was needed by all future OLC facilitators. This would have to include full online hands-on experience. This responsibility was extremely complex compared to that in the print environment. In addition the facilitator would have to be provided with proper guidelines and expectations of what he was to do.
- Before the start of the second delivery, the facilitator and instructional designer devised a strategy on facilitation in online forums. For example, the forums could be started off with 3 to 5 key questions which would become threads as students started to contribute. Students would be informed to stay within the threads to keep the forums organised and readable. They would only be allowed to start new threads if they really had a very interesting argument to present. It was recommended that contributions, especially by the facilitator, should be appropriately described in the subject field.
- The facilitator should react on most contributions and redirect and question to generate in depth discussion.
- Personal comments by the facilitator should be done by e-mail.

- If students became aggressive and personal online they should be addressed via e-mail and the group should be carefully mentored in order to restore the spirit.
- The facilitator should take care that all students should have a good start. Setting the right tone to create a relaxed atmosphere was important as students were in a totally different learning environment.
- Some good examples of assignments from the first delivery should be posted to help learners find their way.
- A suitable time management schedule would have to be agreed upon by the head of the host department. Facilitation would not improve unless more time was invested, and the facilitation became part of a scheduled workload. The Vice-principal: Tuition had to be informed regarding the structuring of the workload of lecturers who pilot and eventually teach in the online environment. Provision would have to be made for appropriate rewards and recognition of the workload of such a course**.**
- It appeared that especially print-based students were not used to be in a facilitated environment and they were often unable to recognise the value of the facilitator. Students needed to be introduced properly to this environment.
- The adding on of an expert in student writing skills should be considered. Students would be referred to this person should they experience problems with writing in general. Because of the way the host faculty had currently structured the learning experience, it was expected that students coming from a print-based environment may not have sufficient writing skills.
- Very early on in the course students should very early on in the course be put through an exercise where they had to search for at least one WWW resource related to the course work. These could help them with future assignments. The use of WWW resources should be stressed in the information provided with the assignments.

Addressing the workload of learners

All learners complained about the workload. Although a number of them accepted the workload, the core group was of the opinion that there were too many assignments that required some activities to be completed at the same time. Learners also needed a writing exercise as some assignment writing was not up to standard. The following recommendations were made:

- One of the initial assignments would be scrapped and the remaining one would be emphasised as a writing exercise.
- The content should remain part of the learning experience. Should students not be able to do all the activities, they would be required to do all the reading very thoroughly.

Assessment

In general learners were satisfied with the assignment questions and the criteria, but they were concerned about the accent on theoretical content for assignments. The criteria for assignments were regarded as sufficient. Students needed to depart from a sound theoretical basis to construct their own arguments, and they needed to learn to write in a more formal way. Some students have positively reacted on this aspect. Assignment 3 should be better explained and a case study should be provided. Students wanted to depart from a sound theoretical basis.

Participation

The forums were not very functional during the first delivery. The most prominent problem was the way learners contributed to threaded discussions in the forums. They did not follow the protocol of threading – this was compounded by the fact that the facilitator did not start the discussions with

key questions which could lead to threaded arguments. The core group made the following suggestions:

- The support forums could be valuable for all kinds of reference, support and social purposes. In future fewer e-mails regarding relevant aspects should be sent, and students should rather be directed to the support forums for FAQs and other needed information. Students and staff should be made aware of the functions of these forums in order to avoid inappropriate postings. The purpose of all forums should be better explained.
- Students should be requested to remove inappropriate postings with the password facility and they should repost.
- Forums should be rationalised. There should be fewer and their purpose should be better explained (two forums should be scrapped and the workload distributed more evenly).
- Posting and replying should be very well explained and the implications of contributing online should be clear.
- Students should be properly informed on the length (200–300 words) of contributions in the discussion forums, and this should be followed up.
- The students should be informed that very personal issues did not have a place in the assignments or in the forums. These could be addressed via e-mail.

<u>Online presentations and groupwork</u>

Learners struggled with the online groupwork. The groupwork schedule was too tight and learners expressed a need for more guidance in order to work more efficiently in these groups. The following suggestions were put forward:

- More roles could be created for the online group presentations. Four groups were suggested of which two had to do the presenting while the other two should offer critique.

- Students should be provided with proper information for online presentations.
- Groups could be provided with their own planning forums to facilitate the construction of online presentations.
- Their presentations could be converted to *html* and added to the forum site. This way graphics could be included as part of their presentations and the length could be increased.
- The online group presentation preparation should be scheduled to help students to organise and integrate information.
- Students needed more clarity concerning their respective roles in the online presentation.

Technical issues and administration

The communication in the chatroom was the outstanding technical issue that had to be addressed. Although the chatroom was an optional facility, most learners experimented with it, but when it did not work properly they were dissatisfied and demotivated. The Examinations department treated this course as a normal print-based course on the system and sent out examination dates for the course. This also caused confusion with the learners. The core group recommended the following steps:

- Computer Services should be requested to sort out their problems with Groupwise Webaccess (the groupware), and the chatroom.
- The Department of Examinations should be requested to stop notices regarding exam dates for these courses.

3.5.4 Second cycle: Planning and action

The development group decided to take action according to the observations and recommendations made in the previous cycle.

Adapting the learning experience

The course coordinator and facilitator worked together to implement strategies to improve facilitation on a continuous basis. Relevant changes in the course design and structure were also made. Students were provided with additional guidance in the orientation unit on how to participate in threaded discussions. The threads tended to be ignored in the majority of cases. The first assignment was converted into a mastering excise. Students were allowed to submit this assignment for comments as many times as they wished before a final product was submitted to be graded. It was reasoned that students could improve their writing skills this way and gain confidence for future assignments. Advice was also added to the orientation unit regarding planning and preparation for the group presentations. The roles of students during such presentations were also better described and they were provided with a sample schedule to conduct their collaborative work:

> Coordinator
>
> The coordinator will be responsible for organising activities during the preparation phase. Here are some suggestions toward a schedule:
>
> - Have discussions and select a topic that you want to address (3 - 4 days)
> - Divide the topic into sub-themes and assign themes to participants to research and to write up - graphics can be added (5 - 7 days)
> - Collate contributions (2 - 3 days)
> - Check for logical presentation of argument (1 - 2 days)
> - Check for presentation format (see the criteria for Assignment 1, eg Introduction, Conclusion, References, etc) (1 day)
> - Forward presentation to heydejf@unisa.ac.za

Presenter

The presenter should introduce the group members, the issue under discussion and then provide the presentation. Thereafter he/she should take part in the discussion making sure to react where appropriate in the unfolding discussion of the presentation.

Moderator

The moderator should make sure that the discussion is kept on track. He/she should periodically synthesise contributions up to a point, and discussion should be stimulated if it begins to decrease. The discussion has to be terminated (just before the official closing date) by the moderator, and the summariser asked to summarise the content of the discussion.

Summariser

The summariser should summarise the key points of the discussion and the major direction of the argument in no more than 150 words.

The core tuition group also briefly discussed the workload on this course with the head of the host department in order to enhance understanding of the labour intensive nature of these courses (the central Tuition Committee was requested to inform their respective departments about this aspect and to prepare them for the needs of such deliveries). During this conversation the department agreed to remove restrictions for this course. It would therefore be able for students from any discipline and level to enrol. The argument centred on the relevance of the learning experience to anybody who wanted to improve his or her capacity in the field of work and in society.

The students' workload was reduced to four assignments, and two forums were also scrapped in order to allow more time in between activities for research and preparation. Technical needs and improvements were discussed with Computer Services and renewed commitments were given towards improving the stability of Groupwise Webaccess (enabling staff to access their mailboxes from outside the institution) and chat facilities on the course.

3.5.5 Second cycle: Observations and recommendations

During the second opportunity for collective observation it was evident to the development team that certain tendencies and patterns remained or repeated themselves no matter which actions were instituted. There were certainly constraints in the Unisa DE reality that could not necessarily be foreseen, and the nature of which was such that they could not necessarily be changed as a result of a single project or effort.

Summary of observations and recommendations

Positive learning outcomes

The learning experience remained positive and successful for most learners. It was evident that the online learning community was a very intense experience for all stakeholders in the Unisa environment. The following additional points were highlighted:

- A successful social and community-based learning environment (all students reported that they have benefited form others' experience and ideas, that they formed friendships outside the course and that they received support).
- A scheduled learning environment (this helped them to organise their studies and other commitments).
- Metacognitive development (they were thinking differently about how they wanted to learn – content provision and venue-linked examinations were not the preferred mode).
- Transcending the subject field and course topics (the boundaries of the course expanded through student discussions, contributions and assignments).

Orienting students

Although an orientation section was provided on the course, there was still room to better inform and guide learners regarding the content provided and the resources available via the e-library. The tasks at hand were listed as follows:

- The role of content for stimulation and the use of theory to underpin arguments should be better explained to students in the introduction to this course.
- Students should be better informed by the Library staff in a separate announcement via e- mail about the training and guidance offered in the e-library regarding Internet searching and finding resources for participation and assignment work.

Course design and development

Learners and support staff struggled with the position of content and theory in such an online course environment. Learners had the opportunity to integrate and share ideas and experience relevant to their own needs. This challenged academic content provision and questioned the issue of situated learning and relevant practical application. Some forums were not used as planned and their existence needed to be assessed. The following issues were identified:

- Practical application should receive as much attention as theory in the criteria for and assessment of assignments.
- Student groups could be bigger to accommodate a maximum of 25 learners at full implementation. This may change the course administration workload in future.

- The Announcements forum was not used. Most announcements were sent via e-mail and it appeared as if it was a more efficient way of alerting or reminding students.

Student fees

Some learners were upset with the payment policies for online courses. As a number of production and dispatch costs were not incurred when an online course was delivered, they were not always applicable. It was suggested that Registration be informed that OLC-based courses do not incur the same kind of costs and procedures as correspondence/print studies. International students are therefore not different from local students when they are online.

Facilitation

Teaching or facilitating remained the most challenging aspect of the online learning community. Facilitation remained a serious problem. The various points highlighted by the students were evidence of that and the core facilitation team should study these points and devise a strategy for the next delivery. Having to teach online changed the workload of the staff involved and forced them to become engaged with learning on various levels which contributed to a very intense experience. Some aspects that needed attention were highlighted by the team:

- The facilitator was still overwhelmed by the amount of work that had to go in to successfully facilitating the course. His responsibilities should be addressed by a better workload distribution by the head of department.
- Students could be overzealous and should be carefully redirected as their performance could influence that of fellow students.
- Feedback on assignments should be more substantial in order to provide the students with sufficient guidelines to improve future work.

- The possibility of removing the brainstorming forum, which students did not really use, to allow for more presentation time for collaborative presentations, should be considered. The final forum can also be rescheduled to the very end of the course.
- The help provided in the course on how to go about preparing and coordinating collaborative presentations, should be made more prominent as students had trouble understanding their responsibilities.
- Facilitation should aim at more frequently weaving arguments together in order to direct the discussions. There were numerous arguments going at the same time in the first forum and they were difficult to follow.
- Inactive students could be assisted through 'scaffolding' – they could be assisted in the production of contributions until they are confident to take part on their own.
- The e-mail mode of communication seemed to be more effective than in-text announcements or support forums. It should be considered to drop some of these forums as they might no longer be relevant.

Examinations, Assignments and Registration

The systems operated by the Examinations, Assignments and Registration sections of Unisa accommodated this course, but it was problematic in certain areas (eg continuous assessment, examination dates, and online registration procedures). They were however willing to adapt their systems to accommodate new products like this fully delivered online course.

Technical support

The chatroom remained a problem in the second delivery. This forced the team to revisit the planning for and maintenance of the central infrastructure for online learning:

- More stable and easy to maintain facilities should be investigated to maintain the chatroom.
- Central computer systems, especially those using the Internet to facilitate CMC, should be made a priority by the department responsible. These systems are crucial after hours when most students log on.
- The support from Computer Services staff, especially the Web support team, has been excellent. Their service can only be improved if they are *au fait* with the development of new products from the beginning of a project.

Resource provision by the Library

The Library should to be supported in finalising the issue of copyright and electronic provision of resources in collaboration with Unisa Press. Their attempts to reduce long downloads on low bandwidth should be lauded.

E-counselling

The e-counsellor has avidly studied her online responsibilities in terms of the OLC and produced an academic paper on her experience. Her services were discontinued for the second delivery but would become a part of the standard online learning environment planned for all courses in future.

Informing the Unisa community

The development team was of the opinion that this project identified important tendencies and produced successes that had to be communicated to policy making bodies and decision makers at Unisa:

- The development, delivery and evaluation of this course project should serve as an example to inspire the University to change its print-based delivery to a more accepted quality. Support and admininistrative staff were unanimous in their concern about the state of teaching and support at the University.
- The Unisa central Tuition Committee should be informed regarding student opinions on print-based delivery as this should be of grave concern.
- Positive outcomes and achievements of this course should be communicated to University management (Senate) and the Tuition Committee in order to demonstrate successful learning via this delivery mode.

3.5.6 Final collaborative assessment and recommendations

There was no doubt that this course, and similar projects, should continue. Print-based delivery mode appears to be in crisis. This course's print-based equivalent (which has well-designed materials) was an indication. Students and facilitators also compared their print-based experience with the online requirements and feedback in this regard provided support for the above statement. The group made a final collection of observations and recommendations:

The learning experience

Unisa's print-based delivery was made problematic by students and staff. The achievements and challenges from the implementation of the online learning community forced all involved to assess their roles and practice. Learners and staff felt empowered to provide constructive criticism of the collaborative environment of the team. The following issues were highlighted:

- Anonymity and alienation of print-based study at Unisa was problematic from both the teaching and learning perspectives.
- Students experienced print-based study as being about a textbook, a rush to study and an exam. This provided for a shallow learning experience.
- Students did not see venue-linked written exams as a challenge, and multiple choice exams were viewed in the same light.
- According to students compulsory assignments should be brought back into print study in order to provide more opportunity for communication and feedback.
- The varying course quality in one faculty was a point of concern. Students can take this course and with other courses of inferior quality in the same faculty. There is inconsistency regarding the commitment to quality.
- Enquiring prospective students found Unisa distant and inaccessible.

Students who experienced print-based study at Unisa were of the opinion that in general this mode of study did not provide quality learning compared with the online learning community. The retention rates and academic statistics supported this view. In addition, student feedback was about a very positive and powerful learning experience. Students experienced the online learning community as a very intense and enriching learning environment. They were content as they were able to express their opinions and wanted to learn more. Students experienced personal transformation as they became more confident 'in public', they reported viewing learning differently after they had completed

the course, and they were able to use the communication skills they gained in their own work contexts. They had to do reflection and research before they could make contributions. This made the workload heavier, but they preferred this way of learning above the print-based experience.

The development group was of the opinion that it was crucial that influential structures of Unisa, like the Tuition Committee, should be informed of students' opinions about the print-based learning experience. Positive outcomes and achievements of this course should be communicated to University management (Senate) and the Tuition Committee in order to demonstrate successful learning via this delivery mode.

Support and facilitation

Although some students reported sufficient support and feedback, there still was a strong indication that the facilitation did not meet the standards required by this type of learning environment. In general the communicative environment of the course was experienced as very supportive and helpful. Students saw the support staff as the outer boundaries of the group as they could call for assistance at any moment.

Teaching or facilitating the online learning community remained a challenge and teaching and support staff had to critically analyse practice. The current print-based teaching and support culture did not serve as a proper foundation for facilitating and supporting the online learning community.

Content and design

Students found the content relevant for proper participation in the course. The course content was well structured as it moved from the competence of the individual to the learning organisation. But due the constructivist ideals of the learning experience, content provision came into conflict with student input

and application. In a resource-based and knowledge construction environment the role of content provision may not be that important. Practical application should receive as much attention as theoretical application in the criteria for and assessment of assignments.

Some learners still experienced problems with compulsory participation in discussions. Learners still ended up registering for the course although they did not have the necessary Internet connectivity. Prospective learners should be provided with sufficient information in order to make proper decisions. But this information should be better highlighted in the marketing and selection notices. They also needed more information during the selection procedure about the workload. Some learners did not exploit the library facilities to the fullest. Students should be informed by the Library staff in a separate announcement about the training and guidance offered in the e-library on Internet searching and finding resources for participation and assignment work.

Technical problems

Technical problems were mainly related to synchronous communication through Unisa and to student access to the Internet. The group recommended that a more stable CMC environment be developed or investigated for use with future online course delivery. The chatroom was problematic during the first and the second deliveries. More stable and easy to maintain facilities should be investigated. A proper learning environment, or management system, has to be investigated for stability.

Internet access from work and home could present problems if not properly organised. Supervisors at work may not allow students sufficient access, and access from home can be expensive due to local call costs. Some students found themselves not sufficiently Internet literate for general navigation, and finding of appropriate resources for research.

Student administration

Although most administration departments were committed and accommodated the requirements of this course in every possible way some aspects deserve mention:

- The online registration process for new students was unnecessarily slow. Students also complained about registering in person as they found it an unpleasant experience.
- International student fees should not be applicable to this type of course as no printed matter is sent out and no venue-linked examination is taken.
- The Unisa examination system does not truly recognise continuous assessment as it still reminded students of a final examination date.

3.6 Summary and conclusion

The action research methodology was highly appropriate for the challenge contained in this research project. The action research spiral, consisting initially of two cycles, and coinciding with the two pilot deliveries of the course, allowed for sufficient rigour. The researcher, with an active role in the research context, became a participant observer who fed his observations back into the process on a continuous basis. The repeated collective analysis (reflection) of data, as part of the cycles, assured at least internal validity. Staff members were empowered to critically assess their practice and the University system in general, and to make suggestions in particular towards improvement and change.

The research process sufficiently addressed the research objectives in that it confirmed the success of the online learning community in the Unisa context. The online learning community as a very engaged experience forced staff to comment on their roles and commitments in this learning environment. They

also commented on teaching and learning at Unisa in general which could inform the reform of teaching and learning. In order for such enrichment and change to continue from learning development projects, the team established a standard of collaboration that proved to be essential for development teams. The principles of inclusivity, a shared understanding and empowerment were essential to become critical about practice and systems.

The initial results of this research project were submitted to the Unisa Tuition Committee (Appendix A) and the University Senate (Appendix B) as part of the action research commitment to effect change. The next three chapters will discuss and integrate the data in detail when the learners' experience, the teacher's commitment and the learning development (instructional design) process are addressed.