Chapter 2: Social critical theory and the implications for teacher education at a distance

"Now, what I want is, Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else and root out everything else. You can only form the minds of reasoning animals upon Facts: nothing else will ever be of any service to them. This is the principle on which I bring up my own children, and this is the principle on which I bring up these children. Stick to Facts, sir!"

...

"Girl number twenty," said Mr Gradgrind, squarely pointing with his square forefinger, "I don't know that girl. Who is that girl?"

"Sissy Jupe, sir," explained number twenty, blushing, standing up, and curtseying.

"Sissy is not a name," said Mr Gradgrind. "Don't call yourself Sissy. Call yourself Cecilia."

"It's father as calls me Sissy, sir," returned the young girl in a trembling voice, and with another curtsey.

"Then he has no business to do it," said Mr Gradgrind. "Tell him he mustn't. Cecilia Jupe. Let me see. What is your father?"

"He belongs to the horse-riding, if you please, sir."

Mr Gradgrind frowned, and waved off the objectionable calling with his hand.

"We don't want to know anything about that, here. You mustn't tell us about that, here. Your father breaks horses, don't he?"

"If you please, sir, when they can get any to break, they do break horses in the ring, sir."

"You mustn't tell us about the ring, here. Very well, then. Describe your father as a horse-breaker. Give me your definition of a horse."

(Sissy Jupe thrown into the greatest alarm by this demand.)

"Girl number twenty unable to define a horse!" said Mr Gradgrind, for the general behoof of all the little pitchers. "Girl number twenty possessed of no facts, in reference to one of the commonest of animals! Some boy's definition of a horse. Bitzer, yours."

The square forefinger, moving here and there, lighted suddenly on Bitzer, perhaps because he chanced to sit in the same ray of sunlight which, darting in at one bare window of the intensely white-washed room, irradiated Sissy. For, the boys and girls sat on the face of the inclined plane in two compact bodies, divided up the centre by a narrow interval; and Sissy, being at the corner of a row on the sunny side, came in for the beginning of a sunbeam, of which Bitzer, being at the corner of a row on the other side, a few rows in advance, caught the end. But, whereas the girl was so dark-eyed and dark-haired that she seemed to receive a deeper and more lustrous colour from the sun, when it shone upon her, the boy was so light-eyed and light-haired that the self-same rays appeared to draw out of him what little colour he ever possessed. His cold eyes would hardly have been eyes, but for the short ends of lashes which, by bringing them into immediate contrast with something paler than themselves, expressed their form. His short-cropped hair might have been a mere continuation of the sandy freckles on his forehead and face. His skin was so unwholesomely deficient in the natural tinge, that he looked as though, if he were cut, he would bleed white.

"Bitzer," said Thomas Gradgrind. "Your definition of a horse."

"Quadruped. Graminivorous. Forty teeth, namely twenty-four grinders, four eye-teeth, and twelve incisive. Sheds coat in the spring; in marshy countries, sheds hoofs, too. Hoofs hard, but requiring to be shod with iron. Age known by marks in mouth." Thus (and much more) Bitzer.
"Now girl number twenty," said Mr Gradgrind, "you know what a horse is."

Charles Dickens, *Hard Times*, 1854

The extract quoted above, from Dickens' *Hard Times,* illustrates the way in which an underpinning philosophy, whether or not explicitly articulated, logically plays itself out in classroom practice. Dickens' satire seems extreme, and yet Gradgrind's pre-eminent concern with "Facts" and the transmission of such facts to children, who like empty "pitchers" passively wait to be filled with adult knowledge has proved a remarkably resilient doctrine. A key motivator for the South African Department of Education's embracing of Outcomes-Based Education and Curriculum 2005 has been to try to transform an education system in which teachers simply transmit uncontextualised knowledge which learners then rote learn and regurgitate in national exam papers. This intended paradigm shift is summarized in the following table taken from the South African Department of Education's *Curriculum 2005* support material (DoE 1996:6-7) for the schooling system (it has equal relevance for higher education practices for taught courses, especially with the establishment of a National Qualifications Framework based upon unit standards made up of demonstrable competence in the achievement of desired learning outcomes).

Table 4: Comparison of old and new teaching paradigms

Traditional SA approach	New SA approach
passive learners	active learners
exam-driven	learners are assessed on an ongoing basis
rote-learning	critical thinking, reasoning, reflection and action
syllabus is content-based and broken down into subjects	an integration of knowledge; learning relevant and connected to real-life situations
textbook/worksheet bound	learner-centred; educator is facilitator; educator constantly uses groupwork and teamwork to consolidate the new learning

sees syllabus as rigid and non-negotiable	learning programmes seen as guides that allow educators to be innovative and creative in designing programmes
educators responsible for learning; motivation dependent on the personality of the educator	learners take responsibility for their learning; learners motivated by constant feedback and affirmation of their worth
emphasis on what the educator hopes to achieve	emphasis on outcomes – what the learner becomes and understands
content placed into rigid time-frames	flexible time-frames allow learners to work at their own pace
curriculum development process not open to public comment	comment and input from the wider community is encouraged

It is somewhat problematic to present a clear cut dichotomy like this. The real world is rarely so neatly partitioned and each position outlined in the table requires discussion and substantiation and should not be accepted uncritically. However, the table, which has become a standard feature of Department of Education workshops and presentations on OBE, **does** testify to the resilience of the kinds of practices described by Dickens some 149 years ago.

Dickens was inspired by Carlyle's (1795 - 1881) philosophical radicalism in which he increasingly demonstrated his contempt for the teachings of political economy and democracy, calling for a return to medieval feudal systems and the rule of the "strong just man" (Harvey 1967:145). Carlyle's thinking finds synergy with the utilitarian school of thought of his day, expressed most clearly in the work of Jeremy Bentham and John Stuart Mill. Bentham (1748 - 1832) had argued that guidelines for law, politics and ethics could all be derived from a single guiding principle that would seem to underpin the later behavioural pedagogy. In his own words:

> *Nature has placed mankind under the governance of sovereign masters, pain and pleasure ... They govern us in all we do, in all we think: every effort we can make to throw off our subjection will serve but to demonstrate and confirm it. In words a man may pretend to abjure their empire, but in reality he will remain subject to it all the while. (In Stokes 2002:12).*

In 1683, Mill published his *Utilitarianism* in which he sought to refine Bentham's thinking but without casting doubt on the fundamental premise. As Stokes notes:

> *The utilitarian ethic has a strong intuitive appeal due to its simplicity, but it has nevertheless ... come in for wide-ranging and sustained criticism ... Critics of Mill have repeatedly overlooked that in the wider context of his philosophy he clearly distinguishes*

*between what is right and what is wrong. Mill nowhere suggests that we are at all times compelled to act for the good; **only that when questions of right and wrong arise, what is right is what is good, and what is good is that which promotes the greatest happiness of all**. (Stoke, 2002: 115 - own emphasis)*

Hard Times can be seen to be a reaction to a particular understanding of the writings of the utilitarian school of thought.

In subjugating the individual to the inculcation of learning seen as relevant to society and as already complete and incontrovertible, the reality and potential for the creativity of human life seems to have been lost. The descriptions of Gradgrind, and his protege, Bitzer, in contrast with the description of Sissy Jupe, represent a complete rejection of the utilitarian philosophy and its attendant fact-driven, behaviourist approach to teaching and learning as understood by Dickens. It is a rejection that the reader is compelled to identify with due to the writer's artistry and the consummate way in which his descriptions of Gradgrind and Bitzer contrast with that of Sissy, but it begs the questions of whether Dickens' viewpoint is shared; what beliefs about the nature and purpose of education appear to underpin the NPDE programme and hence, how it seeks to prepare people for their role as educators?

In undertaking an evaluation of any kind, it is inevitable to refer back to some kind of organising framework of beliefs and principles. It is the purpose of this chapter to explore the questions raised by the extract from *Hard Times*, with a view to identifying a philosophical framework within which to evaluate the Unisa NPDE programme.

With acknowledgement to the work of Barrow and Woods (1988), Higgs and Smith (2000) and Appelbaum and Thompson (2002), developing this necessary framework will be built around the following questions and the discussion that follows:

What is the nature and purpose of education?

How is education related to culture and to politics?

Should education be centred on the individual, or organized for the benefit of society?

Which takes priority in education, personal experience or received tradition?

What do the answers to the above questions imply about the nature of knowledge and

understanding?

How do human beings in fact learn things anyway?

A discussion of each of the above questions could involve the development of a complete thesis in its own right if it were to do justice to the question posed. However, without some kind of consideration of each of these questions, and the articulation of a perspective on such issues, there is no framework for the kind of evaluation judgements required for the purpose of the current exercise.

Having considered the above general questions, in an admittedly limited way, and given the specific nature of the Unisa NPDE programme, it will then be necessary to apply the emerging framework to two additional questions:

What are the implications for distance education practice?

What are the implications for teacher education at a distance?

2.1 What is the nature and purpose of education?

For Thomas Gradgrind, the purpose of education is to "Teach these boys and girls nothing but Facts" and the nature of the exercise would seem to involve an adult expert transmitting information to uninformed children who then, transformed from *tabula rasa* to Bitzer, regurgitate the information exactly on cue.

Gradgrind's philosophical perspective is problematic in numerous ways. It raises questions about:

- the nature of a "Fact"
- how and why certain "Facts" are selected and presented
- whether being able to memorise and repeat a "Fact" means that one has understood the concept(s) implied
- how "Facts" fit together to make an organising frame of reference
- whether gaining "Facts" is in fact education ...

In other words, Gradgrind's philosophy and practice require us to examine our own philosophical assumptions about the nature and purpose of education.

Thompson (in Appelbaum and Thompson 2002:230-237) notes that while few philosophers have written exclusively about education, it is in the nature of philosophy to be interested in educational matters. Thus issues in education link with many other areas of philosophy and it is therefore necessary to explore the implications of different philosophical perspectives.

One of the most influential thinkers in Western philosophy has been Plato (c. 427 - 437 BC). Plato was a student of Socrates (c. 470 - 399 BC) and founded the first reported institution of higher education – The Academy.

Plato's thinking, which is associated with a class of philosophers sometimes referred to as "The Academics", revolves around his theory of ideal forms. The world of experience is seen as merely a reflection of reality: the world of experience is governed by change and encounters with many different individual phenomena; reality, however, comprises the eternal and unchanging forms of these phenomena. This notion of ideal forms can be applied to more abstract issues as well. Thus in his seminal work, *The Republic*, Plato outlines his ideal society. Plato suggests that people should be educated in such a way as to bring about the perfect society; thus education should be concerned with meeting the needs of society rather than being concerned with individual likes and interests. Plato's ideal society would be led by people specifically educated for this purpose and who would need to be moulded to fit the needs of the state:

> *If we can find for this long course of training and study, men who are at all points sound of limb and sound of mind, then Justice herself will have no fault to find with us and we shall ensure the safety of our commonwealth and its institutions. We should only ruin it by choosing pupils of a different stamp ...*
>
> (Appelbaum and Thompson 2002:231)

As Thompson notes (ibid:231), the following interesting perspectives are inherent in Plato's philosophy of education:

- personal qualities are natural and not the result of education, thus selection happens before education not after it
- only males qualify
- the guiding principle for educational decision-making is the greater good of the state.

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In an interesting contrast with Plato's viewpoint, the key purpose and nature of education in Buddhist philosophy is individual awareness based on introspection. In the *Satipatthana Sutta*, Buddha outlines four areas in which this awareness should be cultivated in order to achieve the state of Nirvana: body, feelings, mental states and the objects of thought. Two key features of the Buddhist philosophy are that:

- knowledge comes from reflection upon experience

- the purpose of such knowledge is practical.

Thus, unlike Plato, the main thrust of Buddhist teaching is not to mould people to play a particular social function but rather to enable people to develop and integrate their own awareness.

Inherent in the Buddhist teaching is the conviction that it is possible to learn from the world of experience and this belief finds an echo in the western philosophical tradition of empiricism. John Locke (1632 - 1704) is generally considered to be the founder of the empiricist school of thought. According to Locke, in his *Essay Concerning Human Understanding* (1689), the mind at birth is like a blank piece of paper waiting to be written on by experience:

> *Let us suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store, by which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer in one word, from experience: in that all our knowledge is founded, and from that it ultimately derives itself.*
>
> (Appelbaum & Thompson 2002:32)

Locke departs from the thinking of Plato in several important respects:

- Locke suggests that all knowledge comes from experience; that we do not start life with any innate concepts as suggested by Plato's Theory of Forms

- All knowledge depends on education and since all people start life with a mind like an empty sheet of paper, everybody should enjoy the same opportunity to explore his/her potential

- One should not follow tradition unquestioningly – everything should be examined in the light of experience and reason.

In 1693, Locke wrote specifically on education in the document *Some Thoughts Concerning Education*. In this discussion he argued that:

- children should not be forced to learn things by rote but rather with understanding

- children should develop language skills through practice rather than only by studying grammar.

This was radical thinking for his day: and for some educators still radical thinking today!

Another Western philosopher who has had a profound (but delayed) effect on the nature of Western education is the French philosopher Jean-Jacques Rousseau (1712 - 1778).

In *Emile* (1762), Rousseau tells the story of a child brought up and educated in isolation from other children and uses this story to illustrate the way in which (according to Rousseau) a child's natural character and potential are warped by society and social institutions. Rousseau does not see children as unformed adults waiting to be moulded to meet the needs of society through the transmission of traditional wisdom (like Plato) but rather advocates a child-centred educational approach in which the child is allowed to develop his/her own natural ability to learn.

Emile has to be considered within the framework of Rousseau's *Discourse on the Origin of Inequality* (1755) and *The Social Contract* (1762). In the former he expresses his concern about the way in which social conditioning and reasoning corrupt man's basic nature (a line of thought echoed by Foucault 200 years later):

> *Reason engenders egocentrism, and reflection strengthens it. Reason is what turns man in upon himself. Reason is what separates him from all that troubles and afflicts him. Philosophy is what isolates him and what moves him to say in secret, at the sight of a suffering man, "Perish if you will; I am safe and sound." No longer can anything but danger to the entire society trouble the tranquil slumber of the philosopher and yank him from his bed. His fellow can be killed with impunity beneath his window. He has merely to place his hands over his ears and argue with himself a little in order to prevent nature, which rebels within him, from identifying him with the man being assassinated. Savage man does not have this admirable talent, and for lack of wisdom and reason he is always seen thoughtlessly giving in to the first sentiment of humanity.*
> *(Appelbaum & Thompson 2002:312-3)*

For such reasons, Rousseau saw it as necessary to enter into a social contract in which individual interest would be subordinated to the "General Will" (individual and collective interest would hopefully come together if everybody had sufficient information and willingness to consider the needs of others):

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The General Will is always right and always tends towards the public utility. However, it does not follow that the deliberations of the people always have the same rectitude. We always want what is good for us, but we do not always see what it is ... There is often a great deal of difference between the will of all and the general will. The latter considers only the general interest, whereas the former considers private interest and is merely the sum of private wills.

(Appelbaum & Thompson 2002:314)

Thus like Plato (and the later Utilitarian school of thought), Rousseau sees the individual will to some extent being subordinated to the greater good of society. However, unlike Plato he does not see it being the role of education to mould children to fit their society. Instead, children will develop naturally from their experience of life (as emphasised by both the Buddhist and Empiricist traditions) and being naturally good, will develop into naturally good adults – if not perverted by social institutions. Rousseau's ideal was that each child would be guided on the road to self-discovery by an individual tutor: an ideal which by its very nature would be attainable by only a few and therefore likely to result in an educated elite, to some extent as envisaged in Plato's *Republic*.

The American philosopher, John Dewey (1859 - 1952), often considered to be the father of a school of thought known as The Pragmatists, rejected the idea of educational elites however. He argued that all education was a social activity and ideally involved people learning together through communal projects (a form of education also advocated by Plato and seeming to be validated from a psychological perspective by the work of Vygotsky). Dewey also rejected the notion that people exist as isolated spectators of an external world in favour of an understanding of a human being as an integral part of its environment which it must either learn to adapt to or, alternatively, to adapt to meet its own needs. Dewey was keen to develop a new, more "appropriate" model for education in the United States based on 'learning by doing'.

Clearly, a key challenge raised by the discussion so far is the need to identify and nurture the kinds of personal qualities that will be of value to **both** the learner **and** his/her society. Thompson (in Appelbaum & Thompson 2002:236-237) explores this tension by contrasting the thinking of Confucius (K'ung Fu Tzu, 551 - 479 BCE) with that of Bertrand Russell (1872 - 1970).

Confucius argued that appropriate personal qualities could only be developed within a social and traditional framework which, in Confucius' case meant reference back to an idealised past. The key purpose of education is then to hand on tradition. In contrast, Russell (like Rousseau) saw the potential of learners being destroyed by bad education. He argued that education should be concerned with fostering the kind of qualities that would contribute to a positive future.

It seems clear that there is no easy answer to questions about the nature and purpose of education.

Indeed, the conception of the nature and purpose of education is influenced by responses to a number of related questions, so it will not yet be possible to provide a working definition for the purposes of this evaluation exercise.

2.2   How is education related to culture and to politics?

Gradgrind is the product of early 19th century England and a society in which men dominate, in which "facts" are revered and in which children are seen as empty vessels waiting to be filled with adult wisdom. Gradgrind probably has very little time for either cultural pursuits or politics, except in so far as they provide "Facts"to be memorised: a horse is a quadruped; Michelangelo painted the ceiling of the Sistine Chapel.

From the short discussion of educational purpose and nature outlined above, it is possible to see how each philosophical stance is partly a reaction to what has gone before and partly influenced by the thinker's current social milieu. Thus Plato, writing in a period of fractious small city-states, considers the ideal city state and wishes to educate an elite for sound governorship; Russell, writing in a period of great scientific discovery, is concerned to place the sciences and scientific methods at the heart of the curriculum. South Africa finds itself with the need to re-invent a society scarred by years of political (and hence educational – since national education policy and the experience of the majority who receive education at State-funded and State-run institutions derives from those who hold political power) division and repression.

Table 1 in section 1.1, taken from the South African Qualifications Authority (SAQA) document *The National Qualifications Framework and Quality Assurance* (2000:5- 6), outlines the principles on which development of the education system is based together with some reflection on the majority experience during the apartheid era when most Unisa NPDE students gained their initial teacher qualification.

The challenge for those involved in education is to decide whether they share the vision and concerns expressed in the above-mentioned table, and if they do whether they design and implement appropriate programmes to address the challenges outlined.

This leads to the next question.

2.3 Should education be centred on the individual, or organized for the benefit of society?

Gradgrind has an all-embracing philosophy in which the needs and interests of individual children are subordinated to his perceived needs of society (mastery of relevant Facts). Pursuing this line of reasoning leads to the conclusion that the purpose of education is to mould people to fit certain preconceived roles, as suggested by Plato. This would seem to be at odds with the need to prepare learners for social and workplace conditions characterised by increasing rates of change and innovation. In addition, in seeking to fit all people into a single process and mould, there is the risk of stifling individual potential and creativity, as so well illustrated by Reavis's 1948 fable of *The Animal School* in which an abnormal eel, which is not particularly good at anything, takes class honours for the highest average. On the other hand, pursuing the philosophy of Rousseau to its extreme, raises the danger of developing people whose creativity and original thinking could undermine the social fabric. Surely there is a need to find some middle ground in which educational practices seek to develop knowledge, skills and attitudes that can be seen to benefit **both** the individual **and** society?

2.4 Which takes priority in education, personal experience or received tradition?

For Gradgrind, the word is delimited by Facts. These "facts" represent the truth of the world: "Now girl number twenty, you know what a horse is." If as suggested by Confucius, the passing on of tradition is seen as the key purpose of education, then there is the risk of the kind of stagnation that can lead to extinction, as was so wittily illustrated in Benjamin's famous satire (1939) of the *Sabre-tooth Tiger Curriculum*. On the other hand, it is surely counter-productive to seek to reinvent all already existing knowledge or to seek to undermine core social values such as tolerance and democracy – promoting which values is emphasised in current Department of Education policy documents?

Again, it should be possible to find some kind of middle ground in which received tradition can be engaged with, in a constructively critical way, and modified continually as necessary to meet changing personal and social needs? One extreme of this approach is represented by the work of Paulo Freire. Freire was concerned to empower poor, rural people to question the social institutions from which they were excluded. His goal was emancipation from what he termed 'domestication' of thinking and he argued for a critical pedagogy to achieve this. However, as Clarke (2002:62-77) has noted, Freire recognised that the goals of such approaches would be subject to change:

> *Narratives of liberation are always tied to people's stories, and what stories we choose to tell, and the ways in which we decide to tell them, form the provisional basis of what a critical pedagogy of the future might mean* (Freire, 1993: xii)

Freire's concern to undo the 'domestication' of socially conditioned thinking has been seen as a cause for some concern in feminist circles (Clarke 2002) as seeming to imply a lesser value assigned to roles most frequently associated with the feminine gender. Given that education provision is by nature a care giving role and the profile of the Unisa NPDE learners indicates that the vast majority are rural females, it is necessary to be alert to the need to pose questions and explore issues that are affirming and value the reflection on the experiences of all those involved in the programme.

2.5   What do the answers to the above questions imply about the nature of knowledge and understanding?

One school of thought, of which Gradgrind is clearly a proponent, sees knowledge as fixed and objective. Extreme belief in such a position will naturally result in educational practices aimed at the uncritical transmission and inculcation of the perceived truths; a path that can result in indoctrination rather than education. At the other extreme, it could be argued that there is no such thing as an objective truth and everything is open to question. Taken to its extreme, such a position is likely to result in educational practices that comprise debates that can never be resolved because there is no agreement on what constitutes an acceptable conclusion to an argument or an acceptable proof of a hypothesis.

In order to make any progress at all, it is necessary to agree on fundamental values and forms of argument that are accepted *de facto*.

2.6   How do human beings in fact learn things anyway?

For Gradgrind, learning seems to involve a process of memorising information. He seems to assume that "knowledge" on its own will naturally form appropriate character. Such a position has come under great criticism.

People learn things all the time. They learn people's names and telephone numbers; they learn their way to and from different places; they learn not to repeat the same mistakes (or hopefully so anyway). However, it is surprisingly difficult to clearly delimit the nature of learning. Certainly, education involves learning. However, education and learning seem to differ, at least in the extent to which there is intention and plan. Learning is not necessarily planned.

Moll et al. (2001:22) offer the following useful guidelines:
- We all learn all time; we are 'sense-making' machines.
- However, everyday (spontaneous) learning and school (formal) learning are different in important

ways, and we need both.

- School learning requires that we break away from our concrete and familiar worlds. In order to do this we need to learn to think abstractly and conceptually.
- Learning isn't always fun. The best learning asks us to move out of our comfort zones – it is difficult, and it will cause some level of anxiety.
- One of the biggest hindrances to new learning is what we already know. Although this is sometimes a useful starting point for new learning, it can also block new understandings.
- In order to help learners 'unlearn' we need to create some conflict or contradiction in their thinking. We can't talk new ideas or understandings into people's heads; we can only provoke them through some form of action or activity.
- Conceptual learning is particularly difficult. Once one understands the *concept* of, for instance, a game, then the teaching of new *content*, like the rules of cricket, is relatively easy (one can link it back to the idea of a game). But if a learner has never played any kind of game and needs to learn this concept, then one can't draw on the familiar to teach it!
- Learning is paradoxical: those who *know* aren't challenged to learn further while those who *don't know* don't know that there is more to learn.

Thus for Moll et al, learning involves expanding learners' horizons through critical reflection and engagement with the ideas of others.

Pettigrew and Akhurst (1999) explore the way in which the nature of learning has been conceptualised over time. They begin by exploring the behaviourist school of thought that emerged from the work of Pavlov and, more importantly for education, that of BF Skinner (1904 - 1990). They identify three forms of behaviourist theory (1999:35-36):

- **Operant conditioning:** the idea of a learning process in which a behaviour or response becomes dependent on an event that occurs in the environment. For example, a learner who raises his/her hand to ask a question and is praised for this behaviour, is more likely again to raise their hand the next time they want to ask a question.

- **Classical conditioning:** the idea that who or what people become depends entirely on the environment they grow up in and the experiences they have. For example, a learner has a bad experience and comes to dislike the particular educator, subject, classroom or school with which the bad experience is associated.

- **Contiguity learning:** the kind of learning that happens when two or more sensations occur together long enough for them to become associated.

All three forms of behaviourist theory rest on the following assumptions:

• behaviour is shaped by external forces

• behaviour can change depending on the context

• behaviour is learned and can be observed (ibid:36).

Critics of the behaviourist school of thought have argued that whilst there is some evidence that positive reinforcement can influence behaviour, the use of punishment as negative reinforcement to curb undesirable behaviour often has only a short-term effect on a particular type of behaviour and sometimes long-term unintended consequences.

Critics also argue that behaviourist theory puts too little emphasis on what actually happens in a person's mind as they go through a learning process, that learning is often not immediate or observable and that learners are more likely to learn in a meaningful way where they actually actively engage with their learning rather than passively absorb information as in Gradgrind's classroom.

Moll et al. (2001:45-6) point to the seminal work of Jean Piaget (1896 - 1980) in this regard. Piaget developed a theory of knowledge and of the cognitive process whereby people learn about their world by actively engaging with it. They quote Piaget as follows:

> *Logical relationships are, first and above all, operational structures. Although their most advanced forms are certainly expressed by language, their origins are found in the co-ordination of (a person's) own actions. Even at the sensory-motor, pre-verbal level, a child is involved in activities that include uniting, ordering, introducing correspondences etc. These activities are the source of operations and logico-mathematical structures. (ibid:45) Knowledge is not determined strictly by the knower, or by the objects known, but by the exchanges or interactions between the knower **and** the objects (between organism and the environment). The fundamental relation is not one of simple association but of **assimilation** and **accommodation**. The knower assimilates objects to the structures of his actions (or of his operations), and at the same time he accommodates these structures in (by differentiating them) to the unforseen aspects of the reality which he encounters. (ibid:46)*

Increasingly, emphasis has been placed on learners actively constructing their own understandings with the help and support of more knowledgeable or more experienced others and on the cognitive processes that underpin learning. Thus the American psychologist, Albert Bandura, accepted most of the principles

of Behaviourist theory but focussed to a much greater degree on the thinking processes that affect a person's thought and action.

Bandura argued that it is possible to learn from observing others but this is not as passive a process as it might seem: as learners observe their role models, they are engaged in a cognitive process of relating what they observe to their own thoughts and experiences.

One of the most influential thinkers on how people learn, was the Soviet psychologist Lev Vygotsky (1896 - 1934).

Vygostky emphasises the nature of human beings as social animals and hence sees learning as, initially, a social experience:

> *Every function in the child's cultural development appears twice: first, on the social level, and later on the individual level; first, between people (interpsychologica), and then inside the child (intrapsychological). (in Stokes 2002:171)*

Vygotsky argues that to develop fully and most expediently, learners need to be able to interact with more skilled others (whether other learners or educators).

This co-operative or collaborative learning experience has been emphasised in the Department of Education's *Curriculum 2005* policy document cited earlier.

For Vygotsky, the key to effective learning was effective mediation of the learning experience. He argued that efficient learning takes place in a Zone of Proximal Development (ZPD) which he defined as follows:

> *It is the distance between the actual development level as determined by independent problem-solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky 1978 in Pettigrew and Akhurst 1999:149).*

Vygotsky's notion of the ZPD points to the enormous importance of knowing who the learners are and what they can and cannot yet do.

If the learning experience is pitched at too advanced a level, then it will confuse the learners. If it is set too low, or the learning is too familiar, learners will lose interest. Having identified an appropriate level

and focus, it is then imprtant to structure the learning experience and work out how best to mediate the process of learners expanding their horizons.

Mayes (2002) argues that in recent years there has been a growing consensus in pedagogical debates with theorists increasingly rejecting the notion that knowledge is acquired in favour of an understanding that suggests knowledge is **constructed**. He further notes a move away from a focus on how the individual constructs his/her learning and instead a growing emphasis on the impact of the **social contexts** in which learning happens. He concludes:

> *This theoretical consensus, then, emphasises the importance of learning through performing real tasks, made meaningful to the individual through the social context in which they are performed, and providing the learner with opportunity for feedback and reflection. (Mayes 2002:165)*

Mayes identifies three key components that inform a learning cycle: conceptualisation, construction, dialogue:

> *Conceptualisation is the process of coming to an initial understanding through contact with, and exploration of, a new exposition of some kind. Construction involves some activity in which the new understanding is brought to bear on a problem, and the required feedback about performance is gained. The third, consolidating, stage involves the full integration of the new understanding with the learners' general framework of knowledge ... This we have referred to as the dialogue stage, emphasising here the crucial role of discussion and reflection as the new understanding becomes applied to performance. ... possibly contextualisation ... (Mayes 2002:166).*

Rogers (1996) cautions, however, against an all-embracing theory of learning that implies exclusivity but also notes that various learning theories converge on learning as a **process**:

> *Learning is seen as the process by which our sense of discontent with the now and here and the search for transcendence expresses itself in a quest for perfectability. (Rogers 1996:8)*

Rogers identifies growing consensus on the central role of experience in the learning process and points to the work of Mezirow, Freire and Kolb in which critical reflection on experience is seen as a key meaning-making strategy in the learning cycle. Schön (1983) has also argued for the critical role of reflection in the learning cycle:

> *A practitioner's reflection can serve as a corrective to over-learning. Through reflection, he can surface and criticize the tacit understandings that have grown up around the*

*repetitive experiences of a specialized practice, and can make new sense of the situations
of uncertainty or uniqueness that he may allow himself to experience. (Schön 1983:56-7)*

*When a practitioner reflects in and on his practice, the possible objects of his reflection are
as varied as the kinds of phenomena before him and the systems of knowing-in-practice
that he brings to them. He may reflect on the tacit norms and appreciations that underlie
a judgement, or on the strategies and theories implicit in a pattern of behaviour.
He may reflect on the feeling for a situation that has led him to adopt a particular course of
action, or the way in which he has framed the problem he is trying to solve, or on the role he
has constructed for himself within a larger institutional context.*

    *Reflection-in-action, in these several modes, is central to the art through which
practitioners sometimes cope with the troublesome 'divergent' situations of practice.
(Schön 1983:57)*

Boud & Walker (1998) while affirming this central role of reflection caution that the reflection activity
needs to be carefully constructed if it is to avoid the following kinds of problems:

- recipe following

- reflection without learning: tension between guidelines that can lead to recipe following and lack that
  leads to loss of focus

- belief that reflection can be easily contained (within comfort zones)

- not designing for a formal learning context – editing response if assessor involved

- intellectualising reflection - ignore affective factors

- inappropriate disclosure

- uncritical acceptance of experience

- going beyond the expertise of the teacher

- excessive use of teacher power – based on the privileged information shared (Boud & Walker
  1998:92-96).

They argue that if reflection is to be a useful part of the learning experience, then care must be taken to
ensure that the learning context is conducive to reflection and that this will involve considerations
regarding the language being used, assumptions about oneself and others, agreement on what is
acceptable and what is not, clarity on the intended learning outcomes, realistic identification of the social
groups engaged in the process and the dominant and passive stakeholders, access to resources, and
consideration of the ways in which other political, economic, cultural and social issues may skew the

nature of the reflection experience.

Guile and Young (1999) link the notion of Vygotsksy's ZPD, with the debate on the central importance of reflection to argue for a transformatory perspective on the ZPD which requires learners to focus on contradictions between their current knowledge and their experience of current practice. They suggest:

> *Certain clues ... have been provided by Engeström. He has argued very persuasively that connecting ideas to practice involves using a learning cycle that explicitly incorporates context, cognition and contradiction (Engeström, 1995). The learning cycle Engeström proposes is based on the concept of 'expansive learning' (Engeström, 1987) and enables individuals and groups to connect the current level of their understanding to generate new knowledge about practice. ... Unlike Kolb's (1984) much better-known 'learning cycle', which emphasizes learning either as a process of natural reflection or formalized procedures and specifically directs participants to rely on 'everyday concepts', Engeström's 'learning cycle' adopts a transformatory perspective. This encourages 'communities of practice' to find ways of connecting 'scientific' and 'everyday' concepts to achieve changes in understanding and practice.* (Guile & Young 1999:157)

They argue for a consequent change in the way in which learning experiences are offered:

> *To this end, the chapter draws upon the twin notions of 'community of practice' and 'ideas-based constructivism' and suggests a transformatory approach to Vygotsky's idea of the zone of proximal development as the basis for a social theory of learning. Such a theory, it argues, could provide a way of linking work-based and school- and college-based learning together as changes in work and society become the ideas for reflecting on changes in pedagogic practice, and the disciplines of subject-based knowledge become the criteria for interrogating changes in work and society.* (Guile & Young 1999:159)

Boud & Walker (1998:105) argue that reflection should take place before, during and after a learning experience, not only at the end and this clearly has implications for the ways in which learning experiences are designed.

It is clear from the foregoing discussion, brief as it is, that conceptions of the nature and purpose of education are dynamic rather than static and tend to emerge from particular contexts. As a means of providing a broad working understanding for the purposes of the current exercise, the following working definition is proposed as an organising framework:

> *Education is an intentional process that influences people in a morally acceptable manner*

so they change in a worthwhile way that benefits both themselves as individuals and the society of which they form part. It is a process which involves helping learners to engage, in a critical way, with existing beliefs and systems and also fosters creative preparation for the future. In particular, education transforms the way people think about and engage with their world. [Influenced by: NCE 1997; Peters 1966; Holt 1969]

Hamilton (2000:183) argues that the nature of the 'knowing' that transforms the ways in which people think about and engage with their world, has itself been subject to a reconceptualisation:

> *[as] … part of a growing recognition that 'knowing' is not simply the product of individualised skills and understandings but a relational, social process. Neither is knowing simply a cognitive matter but it simultaneously involves other modes of engaging with the world. We can, for example, identify at least the following (adapted from Blackler, 1995):*
>
> - ***embodied*** *knowing, which is experiential and action-oriented, dependent on people's physical presence, on sensory processes, physical cues, and may be only partially explicit;*
> - ***symbolic*** *knowing, which is mediated by conceptual understandings that are explicit, propositional and encoded through a variety of semiotic technologies – spoken language and other symbol systems, print and electronic communications;*
> - ***embedded*** *knowledge, which is procedural, shaped or engrooved by practical routines that are configurations of material, technological and social symbolic resources through which knowing is accomplished;*
> - ***encultured*** *knowledge, which involves the shared understandings that are achieved through social relationships and initiation into communities of practice.* (Hamilton 2000:183)

Accumulating these kinds of knowledge is seen as part of a cyclical (or rather spiral) learning process which can be illustrated as shown below (Figure 1: adapted from Rogers 1996:19 in light of the foregoing discussion). The model suggests that prior to a planned learning experience, reflection can help learner to create expectations and hypotheses. Critical reflection during and after the learning experience, aimed particularly at looking for the ways in which expectation and experience converge or diverge, which will engage the learner in a quest for new knowledge and understandings, leads to the formation of a new working hypothesis, which they subsequently try out in further practice. Ongoing reflection enables learners continually to re-visit issues with increasing degrees of sophistication in their levels of understanding.
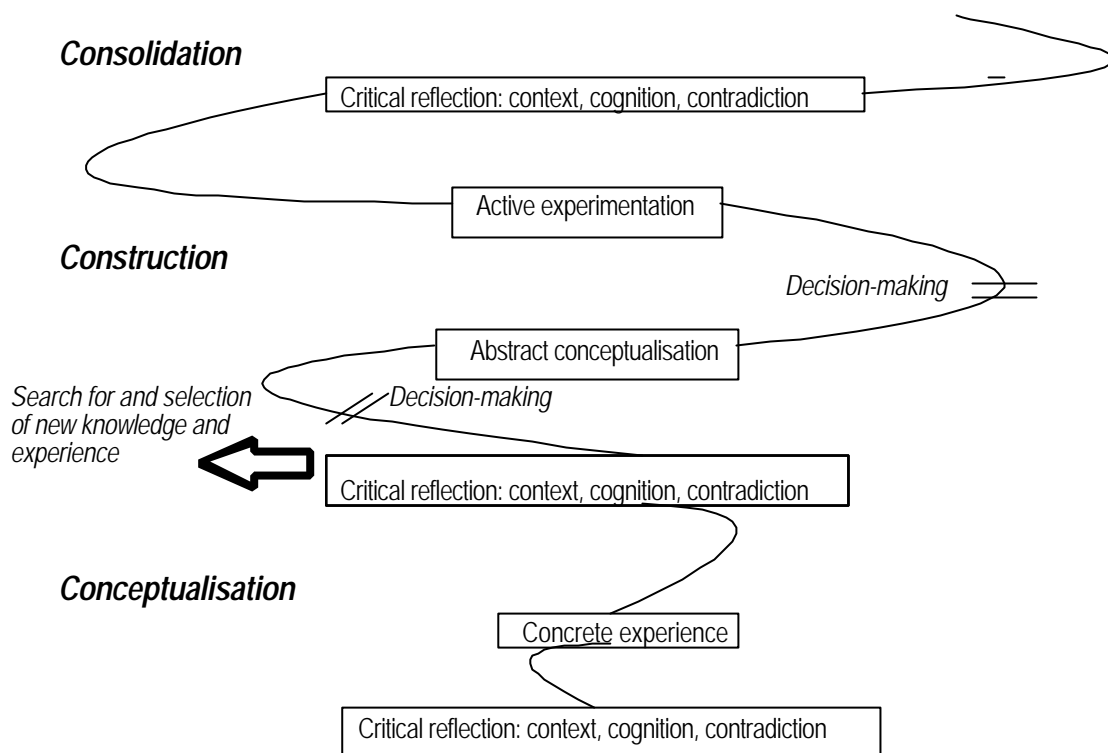
Consolidation

Critical reflection: context, cognition, contradiction

Active experimentation

Construction

Decision-making

Abstract conceptualisation

Search for and selection of new knowledge and experience

Decision-making

Critical reflection: context, cognition, contradiction

Conceptualisation

Concrete experience

Critical reflection: context, cognition, contradiction

Figure 1: The learning spiral and key decision-making points within an expanding network of new understandings

It is believed that each of the stages in this learning cycle requires different approaches to learning which are likely to appeal differently to different people:

> *Every individual develops through experience one or more preferred learning styles. It is important to stress that we all tend to use all of these styles, we do not confine our learning efforts to one only. But we prefer to use one or perhaps two modes of learning above the others; we feel stronger at learning through one approach rather than through any of the others. What is clear is that we all learn actively and that we do it in different ways ...*
> *This means that it is necessary for any teacher to adopt a wide range of teaching-learning activities in order to help those who prefer to learn through active engagement with experience, those who prefer to reflect critically, those who prefer to develop more generalised views, and those who prefer to experiment and test out people's theories.* (Rogers 1996:20)

Useful as it is, Figure 1 simplifies the learning experience which tends to be a much more messy process of finding links with under understandings, some of which may seem to have only a tenuous connection or a resonance that is meaningful only to a particular individual, as Moll (2003:17) notes:

> *Learning is about the way networks or webs of knowledge are established, built up*

and ultimately become the newly acquired understandings of an individual.

2.7   What are the implications for distance education practice?

As has been shown, education in any form involves a complex process of decision-making involving a range of teaching and learning strategies, contexts and needs. It is a dynamic process that must constantly respond to and even strive to pre-empt the changing needs of evolving societies.

In a presentation to South African education providers, Bates (1995) offered an overview of some of the broad challenges that providers increasingly needed to address. She identified these as follows:

- an increasingly diverse learner body
- an increase in the number of adult learners over the age of 25, often with work and family commitments
- an increasing importance in the contemporaneity of programme content
- an increase in the demand for upgrading and short courses as well as the recognition of partial credits
- an increasing emphasis on the ability to handle information rather than on the transmission of knowledge
- an increasing emphasis on the need for a network of providers allowing the transfer and recognition of credits so that qualifications are increasingly not institution-bound
- an increasing emphasis, for both learners and educators, on developing skills in the use of interactive technology.

Bernath (1996) points out that internationally, there have been changes in the nature and expectations of the education experience itself. He notes:

> *Relationships and interactions between teachers and students are evolving throughout higher education, with the most significant change being a breaking away from the pattern of the teacher as the primary source and the student as the dependent recipient of information. Furthermore, increased student demands and expectations and the high value placed on individual independence are putting new stress on our education institutions. (Bernath 1996:47)*

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Peters (1998) offers seven 'pointers' to a new understanding of education which programme developers need to respond to in light of these changing expectations:

1. The educational process is viewed as a whole. Education takes place in all phases of a person's life and under all circumstances. All stages and forms of learning are included with the aim of unifying the educational process.
2. *There is a change of pedagogical-didactical paradigms.* Education is no longer to be regarded as imparting and assimilating set contents but as a lifelong process that takes place within a person to aid personal development, to communicate with others, to question the world on the basis of personal experience and increasingly to bring self-realization (see Faure et al, 1973: 43).
3. *Several forms of education are integrated.* Formal education, non-formal education and informal education do not run alongside one another but must be related to one another. They complement and interpenetrate one another.
4. Education and training are subject to a general functional change. They no longer serve preparation for life and work but are themselves an integral part of life and work (see Skager and Dave, 1977: 6).
5. *Methods of experiencing and perceiving the educational process are mixed.* The previous unchangeable pattern of education and training, work, leisure time, and then retirement is broken down, and activities such as learning, working, recuperating and enjoying leisure interweave with one another (see OECD/CERI, 1973: 7 – 8).
6. *The role of traditional educational institutes is relativized.* Institutional and non-institutional education complement and embrace each other. This means that institutionalized education loses its monopoly position.
7. *The reform aim of egalitarian education is pursued.* In principle, everyone can take part in lifelong learning, and not just members of economically privileged or favoured classes. This contributes to the breakdown of educational privileges, the realignment of learning opportunities, and therefore to the democratization of education. *(Peters 1998:105-6 - his emphases)*

It is, by now, well documented that one of the key challenges facing South Africa in its period of social change is the need to transform an education and training system which were ravaged by many years of apartheid educational policy and international isolation.

At the same time as the country's education and training system is expected to deal with this difficult process of transformation, however, it is being exposed to many other pressures which it shares in common with all education and training systems all around the world, as outlined above. These pressures include: rapid development and convergence in functionality of information, communications, and broadcasting technologies; deteriorating boundaries of

nationality and national markets; growing pressure on traditional education and training to provide access to far larger numbers of learners, of all ages; a crisis of confidence in traditional approaches to education which have often confused education with transfer of information; and dwindling funding – in real terms – for education and training purposes in the public sector.

These pressures for change have necessitated a paradigm shift in educational thinking in general, which began to be more coherently articulated in South Africa from about 1994 with the National Training Strategy Initiative (NTSI).

The NTSI set out to achieve the following vision: "A human resources system in which there is an integrated approach to education and training and which meets the economic and social needs of the country and the development needs of the individual" (NTB NTSI 1995: 6). This vision is underpinned by twelve principles upon which all the NTSI recommendations are based: integration, relevance, credibility, coherence and flexibility, standards, legitimacy, access, articulation, progression, portability, recognition of prior learning and guidance of learners (see the SAQA table outlined in 1.1).

This vision and these principles cannot be attained by an education and training strategy premised on a single category of learner, but rather require an inclusive and flexible approach, which will enable any learner to enter, succeed and progress on a path of lifelong learning.

Complementing the above has been a redefinition of the roles of learners and educators as summarized in the table included at the start of this chapter.

As a logical outcome of the above paradigm shift in thinking about education in South Africa, the *Further Education and Training Bill 1998* outlined the following desired outcomes at FET level (own emphasis):

> "ESTABLISH a single, co-ordinated further education and training system which *promotes co-operative governance* and provides for *programme-based* further education and training;

RESTRUCTURE and TRANSFORM programmes and institutions to *respond better* to the human resource, economic and development *needs* of the Republic;

REDRESS past discrimination and ensure *representivity* and *equal access*;

PROVIDE *optimal opportunities for learning*, the creation of *knowledge* and the development of intermediate to high level *skills* in keeping with international standards of academic and technical quality;

PROMOTE the *values* which underlie an open and democratic society based on human dignity, equality and freedom;

RESPECT and encourage *democracy, academic freedom* and *freedom of speech* and expression;

PURSUE *excellence*, promote the full realization of the *potential* of every student and member of staff, *tolerance* of ideas and appreciation of diversity;

RESPOND to the needs of the Republic and of the communities served by the institutions …" (DoE 1998:preamble)

These broad goals are further refined in practice by the need to contextualise teaching practices and to address various learner development needs, which could include skills development, cognitive development and enhanced cultural awareness.

However, according to various theorists, learning may manifest itself through a variety of different processes. It can, for example, result from experience (Dewey), problem-solving (constructivists, building on the work of Piaget and Vygotsky), stimulus-response reactions (Skinner), conditioning (Pavlov), role-modelling (Bandura) or through passive reception (Ausubel).

A learning programme should therefore ideally offer opportunities for learners to experience these differing ways of learning in an eclectic manner, even though a programme may be centred on a particular guiding theory. This indicates the need for a variety of ways for learners to interact with the learning programme. Whatever the guiding theory, it is argued that meaningful learning results from a situation where freedom, autonomy, trust and self-directed learning

prevail (GDE 1999).

Nationally, the Department of Education has identified Outcomes-Based Education (OBE) as the future educational paradigm for South Africa. OBE represents a rejection of the traditionalist educator-authority centred approaches of the 19th century, which are manifested in content- and exam- based approaches to educational delivery, and a move instead towards approaches which encourage the development of knowledge, skills, values and feelings in an inter-related, holistic way. Synergy can be found between South Africa's notion of transformational OBE and various main stream educational theories of recent years, such as experientialism, behaviourism, cognitivism, multiculturalism, constructivism, post-modernism and brain-based theories of learning.

This means that programmes offered in South Africa, and recognized on the NQF, need not only to achieve outcomes specific to the programme, but should also contribute to enhancement of learners' achievement of nationally agreed critical cross-field learning outcomes, which include the ability to:

- Use different ways of learning
- Solve problems and make decisions using critical and creative thinking
- Work with others as part of a team, group, organization or community
- Collect, organize, examine and understand information
- Communicate using mathematical and language skills
- Make wise and safe choices for healthy living
- Use science and technology and show responsibility towards the environment and health.

These changes in perceptions of the aims of education, as well as recognition of the fact that different learners have different needs and respond to different approaches to learning in different ways, have led to considerable debate around the concepts of open and distance learning as seeming to provide the necessary kind of flexibility in facilitating meaningful learning. In fact, the terms open and distance learning are often used synonymously (as in the popular acronym ODL

– Open and Distance Learning) even though in fact they refer to quite different things.

Open Learning is an overarching philosophical approach to all education, the principles of which can continually inform educational practices in order to improve them. It is an approach to education that seeks to increase access to educational opportunities by removing all unnecessary barriers to learning. At the same time, it aims to provide learners with a reasonable chance of success in an education and training system centred on their specific needs and located in multiple arenas of learning. This approach constitutes an attempt to realize the 'equal opportunities' educational policy by creating a system that does not discriminate against those social groups generally excluded by traditional mass schooling systems. Open learning is a dynamic concept which, by pushing the limits of openness that institutions often set themselves, can effectively inform and transform all educational practice. The key principles are generally identified in the literature as follows:

- Learner-centredness
- Lifelong learning
- Flexibility in learning in terms of both mode and content
- The removal of all unnecessary barriers to access
- Recognition of prior learning experiences
- Learner support
- Expectations of success
- Quality learning
- Cost-effectiveness
- Portability of credits/qualifications gained.

There is a tension among these principles which requires very careful planning to address effectively: for example, removing barriers to access requires institutions to offer a much wider range of learner support options if all learners admitted to a programme are to have a reasonable chance of success, but this in turn has obvious budgetary implications. Similarly, providing support in the form of face-to-face contact sessions might contribute to the quality of learning that the programme nurtures but could also result in the programme becoming less flexible, if

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learners are now tied to specific times and venues.

Lewis (1996) talks about a continuum of openness/closedness from which it is clear that it is possible to have a face-to-face programme that is quite 'open' and a distance-learning programme that is quite 'closed'.

Accordingly, in common with other countries around the world, there is a definite shift in South African policy statements and research documents away from conceptualizing distance education as a separate form of provision. Rather they increasingly refer to a **continuum** of educational provision in which 'distance education' and 'face-to-face education' constitute imaginary poles between which all educational provision lies. This potentially frees South African educational planners, decision-makers and curriculum designers to draw from all methods of educational provision at their disposal, and increasingly enables them to combine these methods in ways most attuned to the needs of their learners and in pursuit of more 'open' practices.

Greyling (1996:103) offers the following diagrammatic overview of an open learning approach:
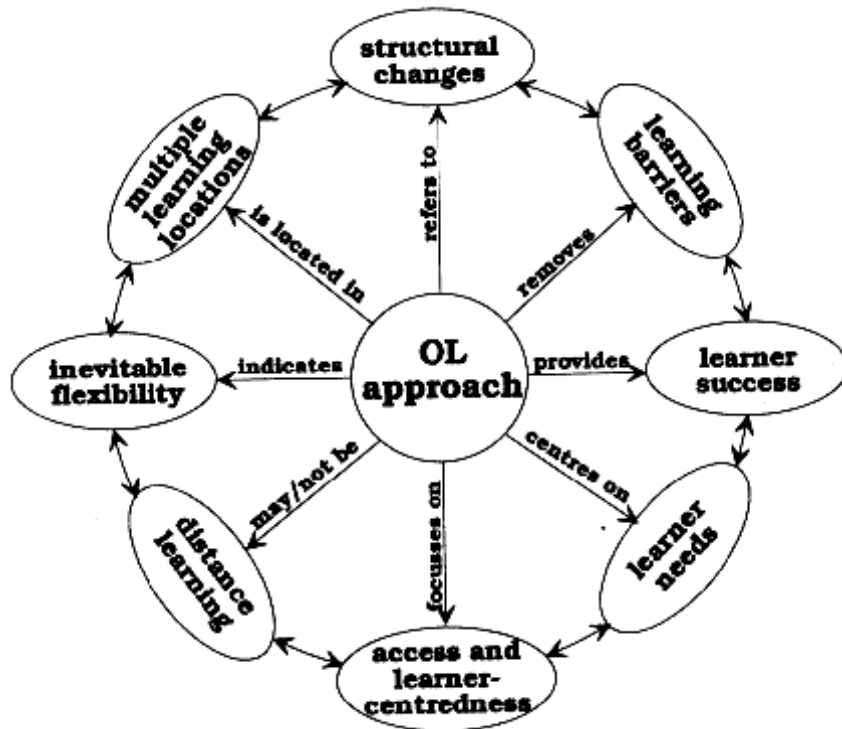
Figure 2: Open Learning

There is a clear synergy between the concept of open learning and the needs of South Africa outlined in the previous discussion. As indicated in the diagram, a programme based on an open learning approach may or may not be offered by distance education.

Distance education refers to a mode of education delivery rather than a philosophy. As the Global Distance Education Net points out on its website, learning and teaching at a distance is similar in many ways to learning in a classroom environment, but there are some significant differences. Educators of distance learners must accomplish the same general goals as those working in conventional environments, but separation from the learners means some of the educator's challenges take on special forms.

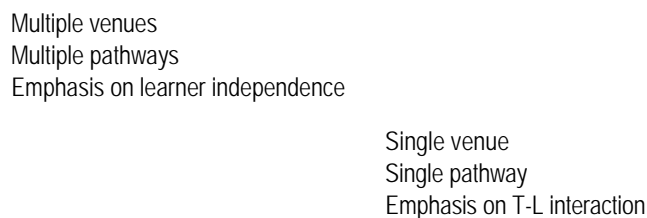### 2.7.1   Revisiting the nature of distance education

> *"Higher education programmes ... increasingly exist on a continuum spanning distance programmes on the one end and face-to-face*

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programmes on the other." (DoE 2001:6)

In the final version of its *National Plan for Higher Education* (NPHE), the Department of Education places distance education at the opposite end of a continuum from contact provision, suggesting a conceptualisation of distance education as either totally independent study or at best correspondence study.

Anecdotal evidence suggests that for many people there is indeed a clear distinction between distance and contact-based provision, with many people associating quality education with contact education in a classroom. The mention of distance education, on the other hand, often conjures up a picture of an individual learner struggling by candlelight late into the night to make sense of a pile of badly reproduced and obscure study material (SAIDE 2000a, Mays 2001a). However, internationally, as well as within South Africa, traditional contact-based providers are increasingly seeking means to offer their services to greater numbers of, more diverse, learners in an increasing variety of ways and to achieve economies of scale. On the other hand, traditional correspondence-type providers are increasingly concerned with finding ways to offer more and better learner support, including direct face-to-face interaction, in order to improve retention and pass rates (SAIDE 2000a and 2000b, DoE 2001, Glennie 2001).

Increasingly, therefore, the boundaries between distance and non-distance forms of provision are blurring. Under such conditions, it seems increasingly necessary to think in terms of education along a continuum of provision, rather like the following:

Multiple venues
Multiple pathways
Emphasis on learner independence

Single venue
Single pathway
Emphasis on T-L interaction

Mays 2001a, 2003

Figure 3: Distance education - a continuum of provision

At one extreme of the continuum are located programmes like the old London City and Guilds approach in which a syllabus, perhaps with a number of electives, was provided and the learner would organise his or her own study and simply indicate when he/she felt ready to write an examination. Even at this extreme, however, it is hard to imagine the average learner not seeking some kind of support from others, e.g. local librarians, past learners, people with related subject expertise etc., which is why the dividing line does not bisect the corner.

At the opposite extreme, the fairly traditional school classroom can be found. Even here, it is hard to imagine a realistic scenario in which all the learning takes place in the classroom. There will surely still be times when learners will be reading, thinking, using or talking about the learning outside of the classroom. In reality, most education provision falls somewhere along the continuum, rather than in a neat category of distance education or not distance education. Certainly, the design of the Unisa NPDE programme (Unisa 2001), responding to the emerging criteria from the Educators in Schooling SGB (finalised in October 2001: EiS SGB 2001), falls somewhere along the continuum in drawing on the legacy of traditional correspondence and distance practice in the provision of self-study material and assignments but also drawing on a contact-based tradition by insisting on the use of contact tutorials to support the learners on the programme.

The blurring of boundaries regarding contemporary distance education practice is captured in the following recent definition of the field:

> *.... a set of teaching and learning strategies (or educational methods) that can be used to overcome spatial and temporal separation between learners. These strategies or methods can be integrated in any educational programme and – potentially – used in any combination with any teaching and learning strategies in the provision of education (including those which demand that learners and educators be together at the same time and/or place. (SAIDE 2000b:52)*

It seems obvious that if a fundamental premise is that the majority, but not necessarily all, of the learning will happen in an asynchronous/ non-contiguous way, then it is necessary to think even more carefully about the kinds of distance education strategies available to maximise learning

opportunities. As Weedon (1997) argues, however, it is important not to rush too quickly into simply considering the HOWs of overcoming any perceived distance, as underpinning understandings of the nature and purposes of education will influence the kinds of decisions that are made. The following table, extrapolated from Weedon's thinking, recent material from Bertram et al. (2000) and COL (2001) and the author's own engagement with a variety of providers, is an attempt to summarise ways in which a dominant underpinning philosophy can influence the kinds of decisions made about provision within a distance education context:

Table 5: Analysis of educational decision-making

Analysis of educational decision-making			
Communicating the curriculum	• Outcomes and content finalised before programme. Apply to all learners. • All learners start and end at the same time and follow the same study sequence. • Emphasis on providing content through lectures/ printed materials/ multi media/ ICTs. • Use of generic tutorial letters offering assignment model answers/ provision of model answers to tasks. • In-course activities few or used to consolidate memorisation on content. • Tutor/materials developer seen as expert transmitting knowledge.	• Outcomes and content finalised before start but programme offers core and elective options. • Continuous enrolment, but same study sequence for all learners. • Emphasis on providing resources and scaffolding to enable learners to construct their own understandings, through tutorial in print; 1- 1 contact tutorials, emails, teletutoring. • Emphasis on individual formative feedback on assignments. • In course activities require learners to construct and demonstrate their own understanding. • Tutor/materials developer seen as scaffolding learning opportunities.	• Outcomes and content negotiated with learners before start of programme. • Continuous enrolment and modularisation allows multiple pathways. • Emphasis on providing resources that reflect multiple perspectives and inviting discussion in print, via email, via website, in small group contact tutorials. • Emphasis on formative feedback on both individual and group tasks; feedback as continuation of discussion. • In course activities favour discussion with others and examination of multiple viewpoints.
Engaging with the curriculum	• Assume that learners have appropriate study skills. • Learners expected to master content. • Emphasis on recall in activities, assignments and examinations.	• Enable reflection on and development of metacognitive skills. • Learners expected to construct own understanding; therefore concern with both product and process. • Emphasis on problem identification and problem solving in activities, assignments and examinations.	• Enable reflection on and development of metacognitive and social skills. • Learners expected to co-construct knowledge with others therefore emphasis on process. • Emphasis on critical analysis and open-ended discussion.
Applying what has been learned	• Assessment by tutors only. • Assessment tasks require recall. • Assessment tasks include assignment content tests; examinations	• Assessment by self and others. • Assessment tasks require application of knowledge to authentic situations. • Variety of individual assessment tasks, including portfolios.	• Assessment by self, peers, tutors. • Assessment tasks require critical reflection and application in congruent real-life contexts. • Variety of assessment tasks including group tasks.

Mays 2001b

In practice, distance education programmes are likely to reflect a range of features across the table. However, programme design which is influenced by an underpinning theory associated with behaviourist/ utilitarian thinking, is likely to be dominated by the kinds of characteristics outlined in column 1. Programme design which is influenced by constructivist thinking, drawing in particular on the work of Piaget, is likely to be dominated by characteristics from column 2. Programme design which is influenced by socio-constructivist thinking, drawing on the work of Vygotsky, is likely to display the kinds of characteristics outlined in column 3. Current thinking on what constitutes quality distance education practice, tends to favour the kinds of characteristics outlined in columns 2 and 3, as evidenced in the *Quality Criteria for Distance Education* which was published by the Centre for Education Technology and Distance Education (CETDE) in 1998. This document has been influential in defining quality standards generally, both internally (the CETDE criteria form the basis of SAQA's requirements for the registration and accreditation of ALL providers) and overseas (in 2001, the Association of Southern Asian Open Universities drew heavily on the CETDE document in developing their own quality criteria).

As indicated by the above discussion, an evaluation of the UNISA NPDE must be concerned not only with **what** methods and technologies are employed in the design and delivery of the programme but equally with **how** they are used in practice.

Over and above the usual concerns about temporal and spatial separation in a distance context, Moore (1993; 1996) observes that there is a degree of 'distance' in all forms of education provision:

> *The transaction that we call distance education occurs between teachers and learners in an environment having the special characteristic of separation of teachers from learners ... With separation there is a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner. It is this psychological space that is the transactional distance.*
> *Psychological and communications spaces between any one learner and that person's instructor are never exactly the same. In other words, transactional distance is a continuous rather than a discrete variable, a relative rather than an absolute term. It has been pointed out ... that in any educational programme there*

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is some transactional distance. (Moore 1996:200)

Moore goes on to suggest that the transactional distance between educators and learners is determined by the inter-related function of three sets of variables in learning and teaching processes:

- *Instructional dialogue* – this refers to the extent to which there is interaction between the learner and educator. For example, there is often less dialogue between learners and educators in a first year face-to-face lecture in a traditional contact university than between a distance learner and an educator offering detailed written feedback on assignments etc. Dialogue between distance learners and their educators may often be slower but may also often be more thoughtful than in an immediate, face-to-face context. However, with greater use of audio- and video-conferencing technology, this may increasingly not be the case. The essential concern is whether or not opportunities for such dialogue are built into a learning programme and whether or not they are mediated in the best possible way in the circumstances.
- *Programme structure* – this refers to the extent to which a programme cam accommodate or be responsive to each individual's needs and suggests the need for multi-disciplinary teams to design learning experiences in such a way that diverse needs are catered for and opportunities for learner-learner and learner-educator dialogue are maximised.
- *Learner autonomy* – this refers to the extent to which in the teaching/learning relationship it is the learner rather than the educator who determines the goals, the learning experiences, and the evaluation decisions of the learning programme. It raises questions about the extent to which a programme is delivered in such a way that it helps learners to reach a point at which they no longer need a third person to mediate their learning. At this stage, learners can cope with a high degree of spatial and temporal distance between themselves, their educators and their peers.

Thus for Moore, the degree of distance between learners and educators is a product of the underlying educational philosophy of a programme and how this philosophy is manifested in the

learning and teaching strategies employed. Moore therefore presents an additional set of criteria against which the Unisa NPDE programme might usefully be evaluated.

The notion of transactional distance also places what is usually perceived to be 'distance education' and what is usually perceived to be 'traditional, face-to-face education' on a continuum of educational practices rather than in two different spheres of activity. In fact, as noted previously, there is an increased blurring of the boundaries as more traditional 'face-to-face' institutions make use of resource-based learning and 'distance education' strategies and more traditionally 'correspondence' institutions build direct human contact into the delivery of their programmes. Another significant trend, observable at **both** ends of the continuum, is a growing desire to make greater use of different technologies – including the more recently developed information and communications technologies – in order to create learning environments that make use of an ever-wider range of media to support learners.

2.7.2 The centrality of learner support in distance education provision

Various policies converge on the centrality of learner support and it is broadly agreed that it is necessary to provide learner support in most educational programmes but in distance learning programmes in particular. It has consistently been argued that ensuring learners have access to educational opportunities will not promote equality of educational opportunity unless learner support is also offered.

Learner support must aim to counteract a variety of disadvantages and create optimum conditions for learner success. Such thinking is contextualised in South Africa by the broader drive to address imbalances and inequities created by apartheid and current socio-economic disparities.

Although politically and legally the scenario in South Africa has changed, a large number of South Africans are still under-prepared and disadvantaged in relation to educational attainment, and the throughput rate for learners in distance education institutions has been very low, particularly for African learners. Glennie (1996) sums up the reasons for the high failure and attrition rates by noting that:

Many learners undertaking distance education programmes at secondary and tertiary level do so on the basis of very negative experiences of education. Their schools have operated sporadically, their educators have often been alienated, unmotivated, and authoritarian, and rote learning will have been the norm. The prospective learners are likely to lack many essential learning skills, and, in general, are underprepared. (Mills & Tait 1996:25)

The term 'learner support' has been used very broadly and has been used in relation to a range of diverse activities. The following list (based on Siaciwena 1996; Nonyongo & Ngengebule 1998; Mills & Tait 1996; Lockwood 1995; Back, Cheng & Lam 1993; Sewart 1993) illustrates the broad range of activities which are offered to distance learners and which are listed under the broad rubric of learner / student support:

Related to learning and teaching processes/needs:
- pre-course study skills training
- learning and teaching contracts
- network of learner support centres
- compulsory residential schools
- practical sessions for professional training, e.g. nurses, educators; for artisan training, e.g. access to workshops, etc,; for natural scientists, access to laboratories, etc.
- academic advising, tutoring
- tutor marking and feedback and quick turnaround time on assignments
- orientation and ongoing training of tutors to ensure provision of quality support
- supply of high quality learning materials
- pre-examination counselling
- administration of examinations
- peer support/study groups
- technology enhanced learning, e.g.
  - N radio broadcasts to promote live discussion of issues and problems
  - N audio and/or video tapes
  - N telematics
  - N newspapers (internal and mass media)

Related to access and information processes/needs:
- record management
- information on admission and registration
- information on administrative procedures and regulations
- bookshop services
- library services
- personal timetables
- information on fees and financial support
- access to information technologies

- career guidance

Related to social and personal needs:
- pre-course registration counseling
- counseling in person and by letter, telephone and email
- internet and email support
- peer support/study groups
- disabilities support
- minorities support
- adult learners support
- ESOL and languages teaching unit
- multicultural education coordination
- social events.

The question then arises as to what extent the Unisa NPDE programme meets these kinds of needs.

2.8 What are the implications for teacher education at a distance?

Craig and Perraton (2003) note that distance education has been used extensively for the continuing professional development of teachers and seems to have the following advantages:

- the ability to reach teachers, who are often isolated, and provide them with professional development without taking them away from their home or their workplace

- providing teachers with learning and teaching resources

- providing a programme in which learning can immediately be integrated with day-to-day teaching

- the possibility of achieving economies of scale. (2003:91-111)

It is for reasons like the above that the NPDE has been premised as a distance education programme, albeit one with a lot of face-to-face contact support both to try to overcome lack of preparation for independent study as well as to model best practice. Various recent newspaper articles and two recent authoritative reports (Taylor & Vinjevold 1999; Chisholm 2000) testify to continuing problems with the implementation of the national policy on

Transformational Outcomes -Based Education (TOBE), which seeks to transform not only the nature of what happens in the classroom, but also the ways in which schools are managed and governed. The national department of education advocates a policy of holistic, participatory and democratic management which echoes at management level, the kind of transformation expected in the classroom (GDE, 1999). In seeking to bring about such fundamental change, programme choices need to be guided by advice such as the following by Fullan (1993):

- *You cannot mandate what matters – or the more complex the change, the less you can force it.*
- *Change is a journey not a blue print – change is non-linear, loaded with uncertainty and sometimes perverse. (*Bertram et al 2000:179–80)

Fullan's advice here confirms what many current general management textbooks have to say about successful change management and organisational behaviour: significant change is not a once-off event; it is a continuous process of false starts, sudden spurts, reversions, changes of direction and so on, which requires careful management and monitoring. Moreover, faced with fundamental change, managers should seek to break it down into smaller, more achievable steps, and seek to implement it in a consistent, continuous process of incremental adjustment. This maximises time for assimilation and acceptance (Promat 2001).

Fullan and Hargraves (1992 in Bertram et al 2000:264,266), identify three common approaches to bringing about change among educators:

- the development of a teacher's knowledge and skills

- the development of a teacher's self-understanding

- a focus on the context within which the teacher works.

They suggest that in practice, a successful approach to bringing about change is likely to draw on all three approaches.

However, the most motivating module or the most enlightening contact session will not on its own bring about the necessary changes in educators' thought and practice: personal experience suggests that the inspiration to change rarely outlasts the journey home from the workshop, and the pressures of day-to-day habits and routines tend to reassert themselves once educators are

back in the workplace.

This subjective viewpoint seems to have been corroborated by the work of Hopkins (1996 in Bertram et al 2000:183). Hopkins suggests that ideally a workshop involving facilitating understanding of key ideas and principles, modelling and demonstration and practice in non-threatening situations needs to be followed up by school-based support, to facilitate immediate and sustained practice, collaboration and peer coaching, as well as reflection and action research.

Hopkin's emphasis on a classroom focus and classroom-based support seems to be a recognition of the fact that what actually happens in the classroom is influenced by the educator's underlying beliefs about what constitutes good practice, and his/her value system. These influences are often innate rather than explicit and amount to what Gultig et al. (1999) refer to as the educator's 'theory in practice' or 'theory as practice'.

This, often unarticulated, theory in practice can create tensions in trying to bring about change, through conflict with existing ways of doing things. For example, an educator whose implicit assumption is that learners do not bring anything to the classroom and have nothing worthwhile to say (the Victorian idea that children should be seen but not heard perhaps), is likely to adopt a traditional, teacher-centred classroom style and be uncomfortable with, perhaps even actively resist, the move towards the activity-based learning and group work advocated in the national Curriculum 2005 policy documents.

Prabhu (1990 in Bertram et al 2000:311-2) suggests that this internalised set of assumptions, beliefs and values built up over a period of time through classroom experience, training and other factors contributes to the development of the educator's *sense of plausibility* about what amounts to good or bad practice. When faced with a new approach, method or activity, the educator will have a sense of whether or not this will work for him/her in his/her context, without necessarily being able to articulate or justify this position. Forced to implement the new approach, without the opportunity to try to understand the rationale for it and to reflect upon his/her own underlying assumptions, beliefs and values, the educator is likely to implement in an unmotivated and ill-thought through way. This is likely to result in a negative experience and

a self-fulfilling prophecy that will militate against any further attempts at innovation.

Prabhu argues (ibid):

The question to ask about a teacher's sense of plausibility is not whether it implies a good or bad method but, more basically, whether it is active, alive, or operational enough to create a sense of involvement for both the teacher and the student.

Prabhu's assertion seems to have been borne out by the findings of the President's Education Initiative (PEI) research regarding which:

Taylor and Vinjevold (1999, p. 144) conclude that what is more important than whether the 'right' (read learner-centred) methodology is being used is the content and nature of the interaction between teacher and learners, i.e. a sense of active, thoughtful teaching. (Bertram et al 2000:243-4)

Helping teachers to reflect on **why** they do the things that they do, what assumptions, beliefs and values inform their practice, would then seem to be a particularly important focus for teacher development.

It would seem useful for the Unisa NPDE programme to spend some time helping teachers to reflect upon what their practice reveals about their underlying values and assumptions. This could be done initially through group discussions based on scenarios and case studies, but would eventually need to lead to critical but constructive reflection on own practice.

The move towards team planning, team assessment, team teaching, and team support through observation and critical reflection should further help teachers articulate and question some of their taken-for-granted assumptions. As Tabulawa (1997) notes, educators may not be prepared to engage with educational change that:

would have a destabilising effect on their taken-for-granted classroom world, possibly leading to deskilling and cognitive dissonance …[In addition, as] Dalin predicted (and experience has vindicated him) … many … would … experience difficulties in implementing these very same innovations since their success or failure would be influenced by factors beyond the reach of the educational system – factors such as cultural traditions, traditional authority structures, parental expectation, etc. (Bertram et al 2000:297–309)

Thus, if the intention is to prepare educators adequately to embrace and implement change, then it is necessary to help them explore not only their own underlying values and beliefs, but also those of their learners and the community and society of which the school forms a part. In short, as Tabulawa (ibid) says: *teaching is not just a technical activity whose solutions require technical solutions.* A teacher development programme also needs to speak to the educators' beliefs and values.

2.9 Conclusion

This evaluation exercise proceeds from a belief that educational experiences, and the knowledge that is gained from them, are social constructs and, as such, subject to critical enquiry. It is believed that it is incumbent upon Unisa, as a provider of the NPDE, to empower educators on the programme with the ability to engage critically with their roles as classroom-based educators and with the legislative and policy framework within which they work. However, this needs to be done in ways which maximise the strengths of distance education and open learning within a context that increasingly emphasises the social nature of learning. Indeed, the current distance education and open learning (DEOL) debate is increasingly concerned with an emerging fifth generation of practice in which rigid distinctions between contact and distance education are increasingly blurred and where concern has been refocussed on the development of "Communities of learning and practice" (the broad theme of the Third Pan-Commonwealth Forum on Open Learning in 2004). As Moll (2003) notes:

In distance education, the central problem becomes one of how best to create a situation in which learners are able to engage in and be supported in a particular, unfamiliar activity – a knowledge practice – without having to be in the constant presence of practitioners of that activity. (2003:21)

[Hence:] The texts, learning guides and structured activities of a distance programme, together with judiciously spaced and used contact sessions, must provide a practice-in-itself. (2003:22)

It is also believed that the design and delivery of the programme should seek to model good educational practice both within the study materials and in the ways in which the educators are guided towards successful completion of the programme.

Whilst favouring a socially-constructivist approach and an inductive learning process in general, it is believed that learning can happen in a variety of ways and that Unisa should therefore demonstrate an eclectic approach to the design and delivery of the NPDE curriculum. The evaluation should also be looking for evidence that the various stakeholders in the programme are involved in an ongoing critical evaluation of the curriculum as plan and practice with a view to continuous improvement. This process must include and respond to constructive feedback from the teacher-learners themselves.