A model for facilitation of critical reflective practice:

Part I - introductory discussion and explanation of the phases followed to construct the model.

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Abstract

The purpose of this inquiry was to **construct a model for facilitation of critical reflective practice,** based on thorough **analysis of the main concepts** (critical thinking and reflection), related viewpoints, models and theories; and the data gathered and analyzed during, the **naturalistic inquiry.** The constructed model evolved from empirical observations, intuitive insights of the inquirer and from deductions combining ideas from several fields of inquiry.

The model for facilitation of critical reflective practice postualates that practitioners have the inherent potential to change from *auto-pilot practice* to *critical reflective practice.* The purpose of the model is the facilitation of heightened awarenss of *the self,* to enable health care professionals to *consciously* meet community needs and expectations. The desired outcome is **transformative intellectuals** who will strive to **empower** others to become critical reflective learners and practitioners themselves.

The process followed during the construction of the model and the constructed model will be discussed in three (3) articles, namely:

• A model for facilitation of critical reflective practice: Part I - Introductory discussion and explanation of the phases followed to construct the model.

• A model for facilitation of critical reflective practice: Part II - Conceptual analysis within the context of constructing the model.

• A model for facilitation of critical reflective practice: Part III - Description of the model.

Uittreksel

Die doel van hierdie studie was om 'n model te ontwikkel vir fasilitering van kríties reflektiewe praktyk.
Die proses van model konstruksie was gebaseer op konseptuele analise, bestudering van die literatuur, 'n empiriese studie, intuitiewe insig en deduksie. Die model vir fasilitering van kríties reflektiewe praktyk het as uitgangspunt die oortuiging dat praktisyns die vermoë het om te verander van 'auto-pilot' praktisyns, na kríties reflektiewe en kreatiewe praktisyns.

Introduction

The overall purpose of this inquiry, within the **naturalistic paradigm,** was to construct a model for facilitation of critical reflective practice (see figure 2). The model evolved from empirical observations, intuitive insights of the inquirer and from deductions combining ideas from various disciplines. The model provides a specific frame of reference for members of 'caring' disciplines, telling them what to look at and to speculate about. The utility of this conceptual model comes from the organization it provides for thinking, for observations and for interpreting critical reflective practice. The model for facilitation of critical reflective practice is only a general guideline and requires further specification by relevant and logically congruent theory.

Naturalistic Inquiry

Naturalistic inquiry for the purpose of this inquiry is defined not at the level of *method* but at the level of a *paradigm,* as research is seen as "more a craft than a slavish adherence to methodological rules" (Miles & Huberman, 1994:5). However, some recurring features can be stated for this inquiry: (1) the inquiry was conducted through an intense and prolonged engagement with the field of study, (2) the inquirer attempted to gain an encompassing, integrating and systemic overview of the main concept under study, (3) the data lead to new integrations as it enabled the inquirer to get beyond initial conceptions and to construct a conceptual framework, (4) the inquirer explicitly stated personal assumptions, (5) the inquirer opted for thoroughness, explicitness, data *richness* and *holism,* (6) the inquirer, during data collection, revised the preliminary framework to make it more precise and meaningful.

Figure 1 : Phases and flow of the inquiry
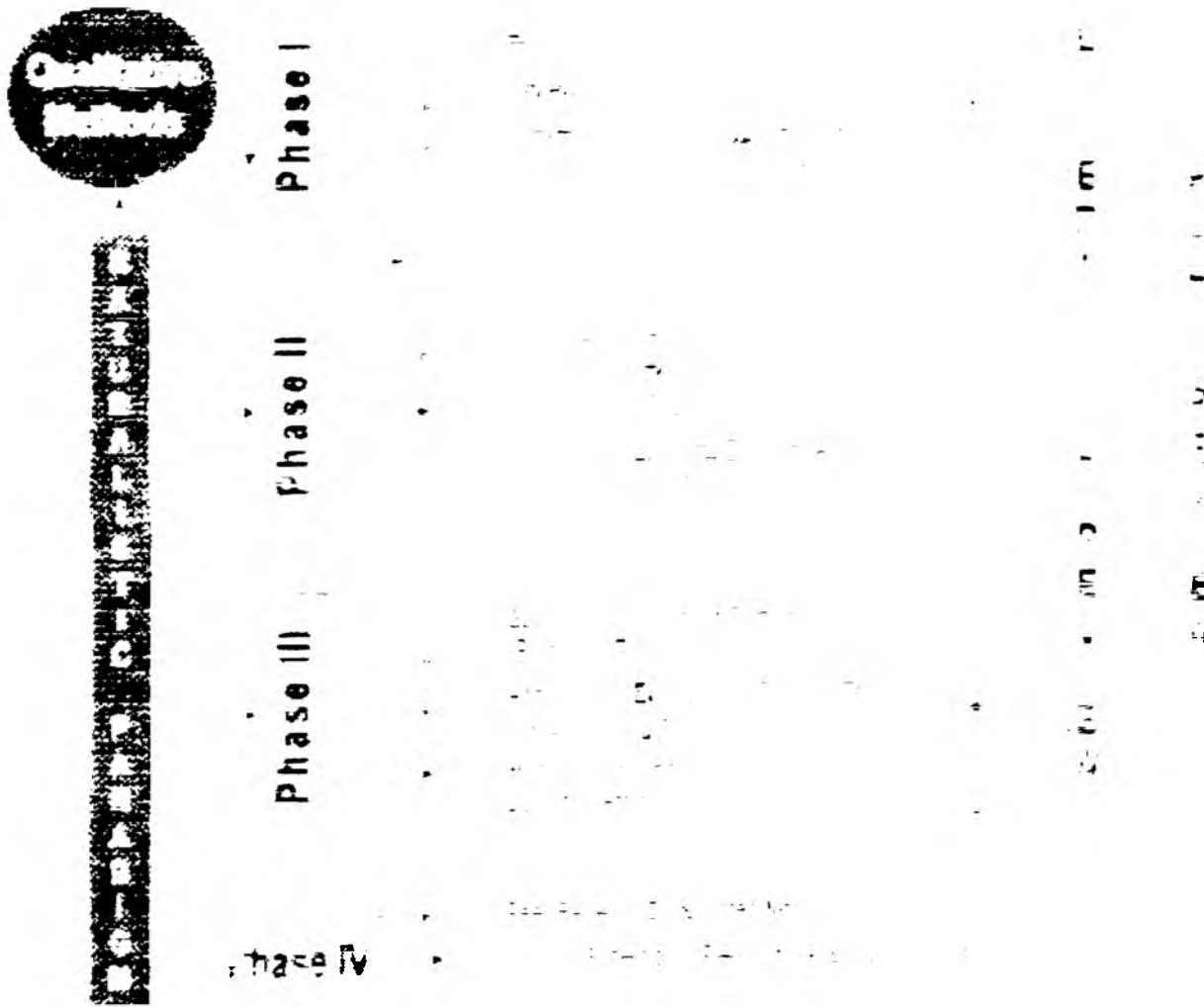
The inquirer purposefully selected to start with a preliminary framework as more effective inquiry is possible if "you make your framework - and associated choices of research questions, cases, sampling and instrumentation - explicit, rather than claiming inductive 'purity'" (Miles & Huberman, 1994: 23). The aim of the inquirer was to construct a model for critical reflective practice that attempt to account for the 'real' world of health care practice that is both bounded by theory and perceptually laden.

Research Process

Phases specific to the inquiry and construction of the model are visualized in figure 1 (see Figure 1. Phases and flow of the inquiry). The phases followed within this inquiry are specific and unique to this study, as it was developed/selected by the inquirer in order to reach the purpose if the inquiry. In reality the four phases cannot be seen as separate entities, as the inquiry necessitated moving back and forth between the different phases. **Bias and subjective** involvement of the model constructer were limited and exposed by peer reviewers' critique of each step taken in the four phases.

**Purposive sampling** was central to the inquiry as it was not

the inquirer's major concern to generalize findings to a broader population. The purposive sampling method was used to select literature, participants and guided reflective techniques for data-gathering and analysis. For purposive selection of participants the inquirer invited 'information-rich' and 'accessible cases' (individuals) to take part in the study. 'Information-rich cases' included students who in the opinion of the inquirer could contribute to the purpose of the inquiry. Purposive sampling was used to include adult students who complied with the following criteria. The participant should: (1) have given informed consent; (2) be a post-basic student; and (3) be willing to participate in critical reflective exercises

Regarding sample size, no predetermined rules could be followed, as interest centred on information richness rather than information volume. Sample size was determined by the willingness of potential participants to enlist in further critical reflective techniques on completion and analysis of selected exercises. **Ten (10)** students agreed to participate in the study.

Informed consent

The inquirer's explanation included orientation regarding the: (1) different types of methods that would be used; (2) possible benefits and risks for participants involved; (3) requirements

Figure 2 : A model for facilitation of Critical Reflective Practice
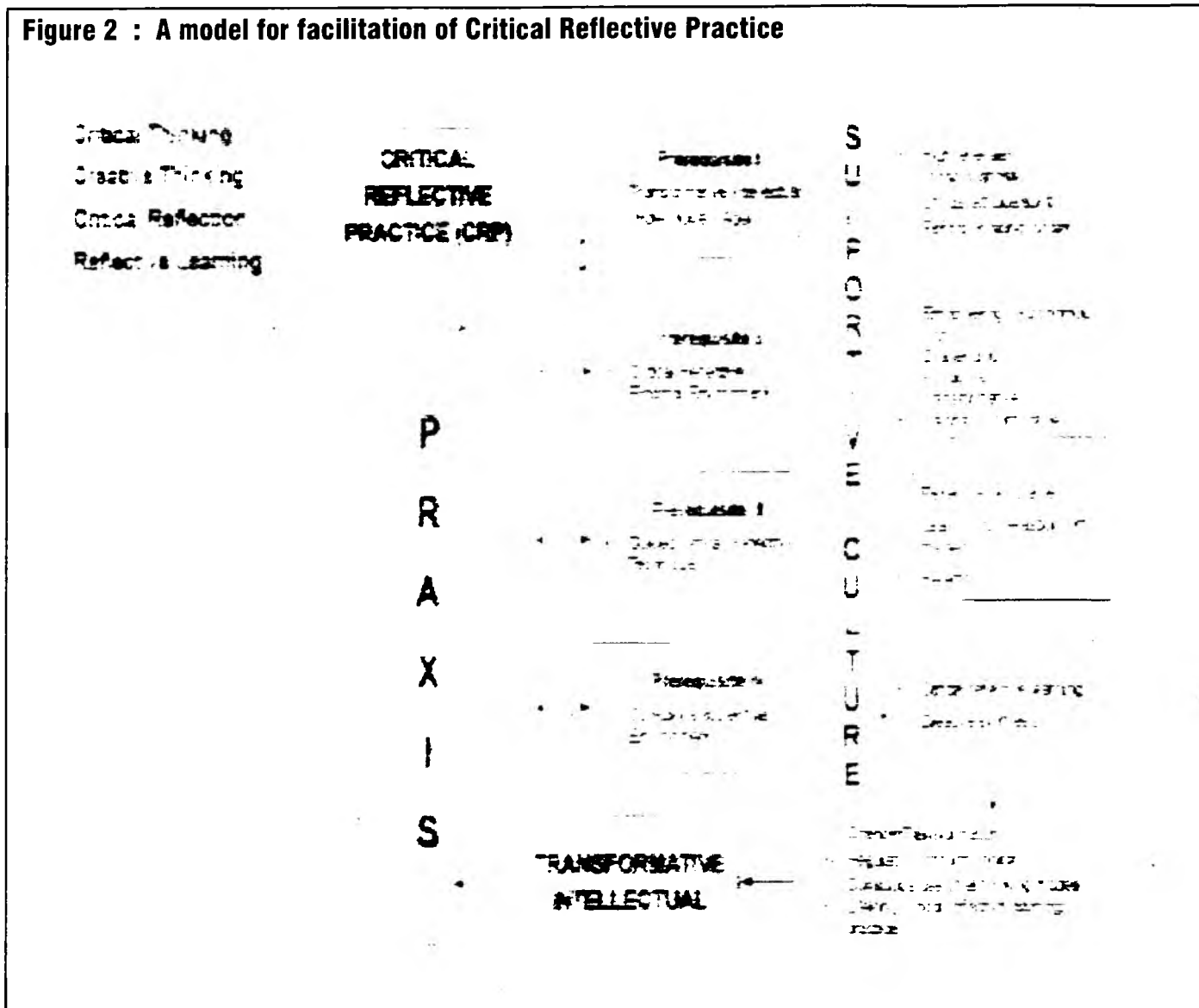
for participation; (4) right to withdraw at any time; and (5) what was to be expected from the inquirer. During the introductory explanation it was made clear that: (1) continuos and summative feedback would be requested from every participant to evaluate the methods used, and that (2) the data would be used for further publication.

Description of the four phases

The phases followed within this inquiry are specific and unique to this study, as it was developed/selected by the inquirer in order to reach the purpose if the inquiry.

• Phase I

I. **The literature review** started in phase one of the inquiry and continued during phases two and three. It was finalised after three years as **prolonged engagement** with available literature was seen as necessary to maintain openness in perception. The sources included the opinions of experts in a variety of disciplines, on the selected concepts, applicable models, theories and strategies. This was necessary as it forced the inquirer to be selective and it provided clarity and focus. The literature review included cross-disciplinary sources (primary and secondary).

The central themes, application possibilities and constraints

of the available models, theories and guided reflective strategies were identified during the first review. The knowledge thus attained was synthesised and enabled the inquirer to: (1) obtain clarity regarding the nature of the main concepts and their supporting concepts; (2) develop and select working definitions for the main bins; (3) develop a working definition for the umbrella concept (concept: critical reflective practice); and (4) to gain insight into the processes involved in critical reflective and creative thinking; the prerequisite for facilitation of critical reflective thinking; and available strategies or techniques for facilitation of critical and reflective ability. This resulted in construction of a conceptual framework and preliminary model (diagram) for facilitation of critical reflective practice.

II. **Construction of the conceptual framework and preliminary model** forced the inquirer to make some explicit theoretical statements and to decide: (1) which variables are most important; (2) which relationships are likely to be most meaningful; and (3) which information should be collected and analysed. The conceptual framework in the inquiry was structured according to the survey list of Dickoff, James & Wiedenbach (1968), namely: purpose, agent, recipient, framework, dynamics and procedure. From the conceptual framework a preliminary model for facilitation of critical reflective practice was developed. This model was revised as the inquiry continued and new insight was gained.

The inquirer used both inductive and deductive reasoning to construct the conceptual framework and preliminary model for *facilitation of critical reflective practice*. The **confirmatory mode** was chosen to provide clarity and focus, which prevented diffuseness and data overload.

The need for a confirmatory mode was stated by Miles & Huberman (1994), who are of the opinion that data collection is inescapably a selective process. The challenge is to be explicitly mindful of the purpose of the inquiry and of the *conceptual lenses* you are training on it - while allowing yourself to be open to and reeducated by things you didn't know about or expected to find. As data was collected from the participants, the conceptual framework and preliminary model were revised to make it more precise. Thus, empirical feeble concepts were replaced with more meaningful ones, and relationships were reconstructed.

• Phase II

This phase was characterized by:

I.   **Thorough study of available, guided reflective techniques and strategies.** The purpose was to identify strategies which could be applied and used to evaluate the inquiry and assess students' attitudes towards guided critical reflective techniques.

II.   **The development of instruments and guidelines for the selected techniques:** (Socratic Technique & Learning Through Discussion [Dialogical Technique]; Critical Incident Technique; and Guided Critical Reflective Exercises [based on journal articles and the Termination of Pregnancy Act, Act 92 of 1996]). The selected techniques, the motivation for their use as well as the instruments and guidelines for their operationalization were subjected to peer critique.

• Phase III

This phase was characterized by:

I.   **Orientation and selection of participants.** Application and evaluation of the selected guided reflective techniques were limited to students registered for post-basic and post-graduate courses, as prolonged engagement with this group of students was possible. Orientation was done at the beginning of the 1997 academic year, and the techniques were applied and evaluated for a period of nine months. Feedback regarding the effectiveness of the techniques took place on a continuous basis and after completion of the nine month period.

II.   **Model construction and development of criteria for peer review of the model.** The inquirer reflected critically on the diagram of the preliminary model constructed in phase one of the inquiry, the conceptual framework, and the application and evaluation of the selected techniques. This exercise resulted in a revised edition of the diagram.

The revised model encompassed contextuality, visual presentation, concepts, interrelationships and criteria for peer review. Guidelines for analysis and evaluation of the model were adapted from Fawcett (1984), Chinn & Kramer (1995), Maker (1982) & Reigeluth (1983).

• Phase IV

The selection of peer reviewers to review the constructed model, was purposefully done. The inquirer identified peers according to specific criteria. The selection was based on their expertise, ability to remain objective, personal interest in the topic of the inquiry and willingness to undertake comprehensive evaluation of the constructed model. Seven (7) peers reviewed the constructed model in February 1998: (1) three reviewers with a doctorial degree (D. Litt.et. Phil.) and (2) four reviewers with a master degree (M Cur and M Sociology).

In phase four, the inquirer's critical reflection on the critique and recommendations of the peer reviewers, revealed that no major changes were suggested. Overall feedback indicated acceptance of the proposed model for facilitation of critical reflective practice.

Data-gathering sources and data-analysis

In order to obtain a holistic qualitative portrayal of each unit (incident, event, exercise or participant) was treated as a unique entity with its own particular meaning. Data-analysis took place as an ongoing process and included the participants' self-analysis and the inquirer's analysis of the completed incidents and exercises which were submitted. More than one approach or one set of techniques were used in the analysis. The methodological tools used for the data analysis included 'member checking', 'peer debriefing' and 'linking' of concepts to codes. Criteria for judging the adequacy of the naturalistic inquiry included: credibility, transferability and dependability.

• **Credibility** in this inquiry "refers to the truth as known or experienced by the people being studied" (Leininger, 1993, In: Talbot, 1995:528). It refers to establishment of a match between the constructed realities of the participants and those realities as represented by the inquirer (Guba & Lincoln, 1989: 237). In this inquiry the following techniques were used to increase credibility:

i.   **Prolonged engagement.** This was possible in that the inquirer is a staff member of the selected site. Immersion in and understanding of the context's culture thus was not a problem. The trust and rapport necessary to uncover constructions, misinformation, distortion and presented *fronts*, were integral to the situation.

ii.   **Persistent observation.** Sufficient observation were possible, which enabled the inquirer to identify those characteristics and elements in the situation that are most relevant to the topic being pursued and to focus on it in detail. The purpose of persistent observation is, according to Guba & Lincoln (1989: 237), to add depth to the scope which prolonged engagement affords.

iii.   **Peer debriefing.** The process of engaging with *disinterested peers*, in extended and extensive discussion of the study findings, tentative analyses and problems experienced were utilized in this study.

iv.   **Member checks.** The process consisted of verifying

data, preliminary categories and interpretations with the participants. The process occurred continuously during both data-gathering and data-analysis. Member checks were both formal and informal (for example: after Socratic & LTD discussion; after critical incident reporting and analysis; and after completion of critical reflective exercises).

• **Transferability.** This refers to whether particular findings from the inquiry can be transferred to another similar context or situation, and still preserve the particularized meanings, interpretations and inferences from the completed inquiry (Leininger, 1993, In: Talbot, 1995: 528). The major technique for establishing the degree of transferability is *thick description*: setting out all the working hypotheses for this study, and to provide an extensive and careful description of the time, place, the context, the culture in which those hypotheses were found to be salient (Guba & Lincoln, 1989: 242). Within this inquiry the inquirer provided as complete a data base as humanly possible in order to facilitate transferability judgements on the part of others who may wish to apply the study in other situations.

• **Dependability.** Methodological changes and shifts in constructs are expected products of an emergent design (naturalistic inquiry) dedicated to increasingly sophisticated constructions (Guba & Lincoln, 1989: 242). Far from being threats, within this inquiry, the inquirer treated such changes and shifts as hallmarks of a maturing inquiry. The changes and shifts, in this inquiry, were documented in the *reflexive journal* kept by the inquirer. Outside reviewers can thus explore the process, judge the decisions made and understand which salient factors in the context led the inquirer to the decisions and interpretations made.

Ethical implications

The inquirer, influenced by the values and complexity of the naturalistic paradigm sought to:

i. **empower** all who participated in the inquiry through development of a true partnership with the participants. This ethical requirement was met through the process of member checking (Erlandson, Harris, Skipper & Allen, 1993).

ii. **educate** all participants. Opportunities to share, confront, criticize and learn from one another's constructions were a central feature of the inquiry. Each participant involved in the inquiry emerged with better self-insight and understanding than he or she initially had. The inquirer in this study sought to develop each participant through guided reflective techniques. The techniques enabled the participants to critically reflect on incidents, problems, experiences, personal actions, and implicit and explicit theories. In addition the techniques provided an educative opportunity for the inquirer in that it resulted in better understanding of the participants' personal realities and the process of critical reflective thinking (Erlandson, Harris, Skipper & Allen, 1993).

iii. **recognise the inquirer's frame of mind.** The inquirer attempted to meet this requirement through 'reflexive journal' writing. Thoughts, assumptions, values and reflections noted in the journal were challenged during 'peer debriefing' sessions (Erlandson, Harris, Skipper & Allen, 1993).

iv. **recognise the inquirer's competence boundaries.** In this inquiry the inquirer was supported by more experienced colleagues in the field of qualitative research. A thorough study of available literature on qualitative research, naturalistic paradigm, model and theory construction was utilized to overcome the inquirer's acknowledged lack of experience in the area.

v. **obtain informed consent.** Although the major topic and data collection methods in a naturalistic inquiry may change during the data-gathering period, the inquirer explained: (1) the focus of the inquiry and reasons for the inquiry; (2) the methods of data collection and why these techniques were used; (3) how the participants may benefit from participation; (4) the role of the participants' in the inquiry; (5) how the participants' confidentiality would be protected; (6) the participants role in verifying the correctness of the analyzed data; (7) that the participants may find their involvement in critical thinking and reflection inherently disruptive, as well as measures to support participants; (8) the duration of the study; (9) that the study would end when saturation of the data is reached, or when it no longer follow the standards formulated during the planning phase; and (10) that any participant may: [i] choose what experiences he or she wishes to share during critical incident reporting or during personal journal writing; and [ii] end participation if wished, despite initial consent to participate.

vi. **ensure research integrity and quality.** In this inquiry the inquirer utilized *peer debriefing* sessions, *member checks* and *rich descriptions* to improve quality.

Conclusive remarks

This article provided the necessary orientation and motivation for the phases distinguished in the inquiry that resulted in construction of **The Model for Facilitation of Critical Reflective Practice**. It is, however, important to remember that the specific phases were not linear in that the inquirer continuously moved back and forth between the literature review, application and evaluation of the selected techniques and construction and critique of the framework and model.

The following article, "A Model for Facilitation of Critical Reflective Practice: Part II - Conceptual analysis within the context of constructing the model", reflects on the process of creating conceptual meaning as basis for the constructed model. The process of conceptual analysis was followed to: (1) refine ambiguous concepts, (2) clarify overused vague concepts, and (3) to construct precise working definitions. However, within the context of this study and the requirements of the naturalistic paradigm, this phase (Phase I: construction of conceptual meaning) was viewed as the inquirer's 'first cut' at making some explicit theoretical statements. The inquirer sought to test and further explicate the conceptualizations during the empiric inquiry. During the data-gathering and analysis phase (Phase II), the inquirer was mindful to be open to the unexpected. Thus, as the inquirer gathered feedback from peer reviewers' and participants', the working definitions were revised to make it more precise. In spite of this, the inquirer wishes to draw the reader of this article attention to the fact that critical reflective practice is a social construction of the mind. As such it enables the reader

to reach some level of understanding and not precise prediction in similar or different contexts of transferability.

The last of the three (3) articles, "A Model for Facilitation of Critical Reflective Practice:
Part III - Description of the model", describes the constructed model and emphasizes the need for a **transformative intellectual** whose aim is to empower developing health care practitioners to attain the highest possible level of professional care.

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A model for facilitation of critical reflective practice:

Part II - Conceptual analysis within the context of constructing the model.

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Introduction

Conceptual meaning within the context of the model construction was obtained through the method of conceptual analysis. Conceptual analysis allowed the inquirer to examine the attributes and characteristics of the main concept (critical reflective practice) and supporting concepts. The purpose of concept analysis was not to provide a final viewpoint on the attributes or characteristics of the concepts being studied. It was an attempt at capturing the critical elements of the chosen concepts in a moment of time, in order to encourage communication and promote understanding. Through the process of creating conceptual meaning a tentative definition of the concept(s), and a set of tentative criteria were formulated to determine if the concept(s) exists in a particular situation.

Conceptual analysis within the context of model construction was deemed necessary, as it helped to provide clarity and focus. It also provided a method to examine the ways in which the concepts are used in existing writings. The concept critical thinking, for example, frequently appears in cross-disciplinary literature with diverse meanings. The meanings conveyed reflect different assumptions about the phenomena of critical thinking. By becoming aware of these meanings, the model constructor could explore the extent to which the meanings were consistent with this inquiry's purpose.

Resulting from this conceptual analysis phase (Phase I), the inquirer, for example, attempted to construct tentative, 'new' concepts, that of: (1) **critical reflective practice,** and (2) **the transformative intellectual** (discussed in Part III of the articles). These concepts were tentative in that, the inquirer recognized that the empirical findings may lead to redefinition of the concepts or refinement of it.

Discussion of the literature reviewed

According to Schwartz-Barcott & Kim (Rodgers & Knafl, 1993:112) a successful review of the literature requires a broad systematic, cross-disciplinary approach. Therefore, the inquirer within the context of this analysis extensively reviewed behavioural, educational, sociological, social psychological, nursing and medical literature.

The initial review of the literature focused on central questions of meaning, definition and measurement. Once a few definitions were in hand, the inquirer looked for major points of contrast and similarity. It immediately became clear that concepts, such as critical thinking and reflection, were used differently by various scholars. For some scholars (Sternberg, 1986; Siegel, 1985; Peters, 1972; Gavier, 1985; Blair, 1985), critical thinking and reflective practice is an aspect of cognitive functioning or logical reasoning, a way of thinking. For others (Siegel, 1988; Beyers, 1983; Saarman, Freitas, Rapps & Riegel, 1992; Brookfield, 1987; Mezirow, 1990; Hester, 1994), it is a personal and interpersonal process. This type of comparison provided some idea of the degree of consensus among users of the particular concepts and led to an understanding of the intersubjectivity of meaning. Although actual definitions provided helpful, important data regarding the meaning and attributes of the selected concepts, these authors rarely provided such definitions in their writings. Consequently, the inquirer identified and included statements that provide a clue about how the author defines or views the selected concepts.

Tentative working definitions

After prolonged engagement with cross-disciplinary literature the following tentative working definitions were constructed and antecedents and consequences selected. For the purpose of this article only selected concepts are included, however, the inquirer analysed thirty-two concepts that were seen as closely related to the purpose of the inquiry. Identifying the antecedents and consequences of a concept was seen as useful theoretically. The antecedents were useful in that it helped the model constructor to identify underlying assumptions about the selected concepts, and consequences in that it describes those events or incidents that occur as a result of the occurrence of the concept.

The following tentative working definitions, antecedents and consequences were constructed for the selected concepts:

Reflection

The ideal reflective thinker is more than thoughtful in that his or her reflective skills are internalized and involve a total response to a situation, event or internal feeling. In recaptur-

ing the experience the reflective thinker mulls over it, evaluates it, rationally examines it in an open-minded and insightful way, effectively formulates competing assumptions, thinks about his or her thinking process itself, admits the feelings that accompany the situation and takes control of the situation. Such reflection results in deliberate action (Barell, 1995; Lukinsky, 1990; Mezirow, 1990; Schön, 1983; Johns, 1993; Boyd & Fales, 1983).

- ## Antecedents
i. Conscious involvement.
ii. Response to the situation, event or feeling.
iii. Willingness to learn more about *the self*, the environment, the situation and others (open-mindedness).
iv. A reflective environment.
v. Self-discipline.
vi. Withdrawal (recognizing the need to step back from the incident or situation).

- ## Consequences
i. Changed conceptual perspective.
ii. Insight into how personal feelings mediate response.
iii. Understanding of situational constraints.
iv. Correction of distortions in personal beliefs, convictions and errors in problem-solving.
v. Informed action.
vi. Self-regulation.

Critical Reflection

The thinker involved in critical reflection challenges the validity of previous learning, questions the premises on which problems are posed or defined, is not concerned with the *how* or the *how-to* of action but with the *why* (the reason for and consequences), examines the realities of practice as experienced while assuming that much is not known, accepts that there is more than one equally acceptable response or answer, and goes beneath the surface structure of the situation in order to reveal the underlying assumptions that constrain open discourse, autonomous and responsible action. The critical reflective thinker is willing to take risks and, to challenge the status quo in order to obtain a new perspective in existing knowledge (Street, 1991; Hedin, 1989; Alexander, 1993; Mezirow, 1990).

- ## Antecedents
i. Sceptical attitude.
ii. Willingness to become involved in risk taking by challenging the status quo.
iii. Critical thinking ability in order to go beneath the surface structure of the situation.

- ## Consequences
i. New perspective on existing knowledge.
ii. Transformation of personal frame of reference.
iii. Personal empowerment (emancipation).
iv. Autonomous, responsible action.
v. Critical consciousness.
vi. Positive or negative response to the environment.

Reflective Thought

The thinker involved in reflective thought consciously sus-

pends judgement, maintains a healthy scepticism, focuses on a concern of central importance to *the self*, clarifies the meaning of experience (present or past) in terms of *the self* (self in relation to self and self in relation to the world) in a rational manner. Reflective thought results in new insight and a changed perspective (Schank, 1990; Boyd & Fales, 1983).

- ## Antecedents
i. Self-knowledge.
ii. Sceptic attitude.
iii. Detachment from personal feelings, in order to think in a rational manner.
iv. Conscious effort to establish beliefs on a firm basis of evidence and rationality.
v. Intense focusing on a particular experience.
vi. Self-discipline.
vii. Open-mindedness.

- ## Consequences
i. Changed conceptual perspective.
ii. Self-insight.
iii. Emancipation from impulsive or routine activity.
iv. Deliberate and intentional action.
v. Personal meaning.

Reflective Learning

Reflective learning is the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action. It involves critical analysis and interpretation of an experience, openness to new information, acceptance of self-reality, a change in personal meaning structure, resolution, review of past values in relation to the changed perspective, and examination of the implications for future behaviour and others (Boyd & Fales, 1983; Horowitz, 1978; Hall & Nordby, 1973).

- ## Antecedents
i. Self-discipline.
ii. Self-awareness of feelings. Awareness of the experience.
iii. Recognizing the need to reflect on the meaning of the experience.
iv. Ability to observe and take in from a variety of perspectives.
v. Openness to new information from internal and external sources.
vi. Self-confidence. A trust of *the self* to discover and recognize relevant information.
vii. Ability to set aside the need for immediate closure in relation to the issue.
viii. Reflective environment.

- ## Consequences
i. Cognitive and affective change in the learner.
ii. Change in personal meaning structure.
iii. Creative synthesis.
iv. Internal change and/or overt action. Decision to act or not to act.

Critical Thinking

The following definition was not constructed by the inquirer,

but developed by a panel of forty-six theoreticians (representing several academic fields) from throughout the United States and Canada. This definition was selected for inclusion in the model as it captures what some theorists call 'the critical spirit' - a style, a set of attitudes that defines a personal disposition to prize and use critical thinking in one's personal and professional conduct:

The ideal critical thinker is *"habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fairminded in evaluation, honest in facing personal bias, prudent in making judgements, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in selection of criteria, focused in inquiry, and persistent in seeking results that are as precise as the subject and the circumstances of the inquiry permit."* (American Philosophical Association, 1990: 3)

• Antecedents

i. Awareness of the limits of personal knowledge.
ii. Sensitivity to personal egocentrism, bias and prejudices.
iii. Willingness to face and assess ideas, beliefs, and viewpoints fairly despite personal negative feelings towards them.
iv. Recognizing the need to imaginatively put oneself in the place of others in order to understand them.
v. Recognizing the need to be true to one's own thinking, to be consistent in the intellectual standards one applies, to hold oneself to the same rigorous standards of evidence and proof to which one hold one's antagonists.
vi. Dialectical (multilogical) reasoning ability.
vii. Willingness to put personal assumptions and ideas to the test of the strongest objections that can be levelled against them.
viii. Patience to wait for evidence and weigh evidence, with out being influenced by the confidence with which assertions are made on one side or the other.
ix. Ability to sense difficulties, problems, gaps in information.
x. Ability to reflect (that is to internally examine and explore issues of concern).
xi. A reflective environment.
xii. A positive self-image.
xiii. Self-discipline.

• Consequences

i. A change in assumptions about oneself and the world, corresponding with a change in personal behaviour and relationships.
ii. Ability to give justifications for ideas and actions.
iii. Ability to think through, to project, and anticipate the consequences of actions.
iv. Insight into personal relationships.
v. Rational examination of controversial, social, ethical, political, economic, religious and work related issues.
vi. Creative synthesis (consistency in thought and action).
vii. Ability to take a position and change a position when the evidence and reasons are sufficient to do so.
viii. Ability to see similarities and analogies that are not superficially apparent.

ix. Understand the difference between winning an argument and being right.
x. Recognize that most real-world problems have more than one possible solution.
xi. Can represent different viewpoints without distortion, exaggeration, or caricaturization.
xii. Is sensitive to the difference between the validity of a belief and the intensity with which it is held.
xiii. Habitually questions personal views and attempts to understand both the assumptions that are critical to those views and the implications of the views.

Following the conceptual analysis phase (Phase I), the inquirer within the context of model construction, decided to construct a 'new' concept, namely that of **critical reflective practice**.

This was deemed necessary as the literature reviewed lack a proper definition. During the construction phase the inquirer viewed concepts such as critical thinking, reflection, critical reflection, reflective thought and related concepts as part of (intrinsic to) critical reflective practice.

Construction of the concept Critical Reflective Practice

The following tentative, working definition for critical reflective practice was constructed:

Critical-reflective practice requires ability to consciously and purposefully withdraw (internally) from the situation, experience, or issue at stake in order to reflect and critically think about what has happened or what is or will be happening. Critical reflective practice is characterized by habitual inquisitiveness; well-informed and multilogical (dialectical) reasoning; open-mindedness; proactive thought; fairminded evaluation; honest self-evaluation; focused inquiry; persistence; empathy into diverse opposing points of view; devotion to truth against self-interest; willingness to take risks; deliberate and principled thinking about the thinking processes; insight into the social construction of the situation; creative synthesis; autonomous, responsible and informed action; and reflective learning. Critical reflective practice shows self-regulation, imagination, innovation, insight, moral integrity, courage, and perseverance.

Taking the literature reviewed and the above stated working definition into account the inquirer constructed tentative working statements. For purpose of this article only ten statements (twenty-eight statements were constructed) are included:

i. Critical reflective practice is characterized by the ability of the practitioner to reason dialectically, thus to reason across, between, and beyond the neatly marshalled data of the given technical domain.
ii. Critical reflective practice involves a level of thought that incorporates the consideration of moral and ethical criteria in addition to reflective thinking procedures.
iii. Critical reflective practice requires that unexamined practices and beliefs (personal, professional, institutional, social and political) be subjected to scrutiny and

a continual process of revision.

iv. Critical reflective practitioners expose their thinking to others and open themselves to criticism from peers as well as from authority.

v. Critical reflective practitioners direct their activities with foresight and plan according to end-in-view, or purposes of which they are aware.

vi. Critical reflective practitioners display ability to integrate new knowledge with previous knowledge, and use this knowledge in a creative way to solve problems and to predict likely consequences of actions.

vii. Critical reflective practitioners display ability to make explicit the knowledge that is implicit in their actions.

viii. Critical reflective practitioners suspend judgement in the absence of sufficient evidence to support a decision.

ix. Critical reflective practitioners value feedback, but do not defer to convention and social pressure.

x. Critical reflective practitioners do not ignore their gut feelings about a situation, experience, or problem, but consciously recognize and use intuitive thought processes.

• Antecedents

i. Withdraw (abstracting) from the experience, situation or issue.
ii. Open-mindedness.
iii. Willingness to take risks.
iv. Habitual inquisitiveness.
v. Self-knowledge.
vi. Devotion to truth.
vii. Dialectical and dialogical reasoning ability.
viii. Willingness to suspend judgement.
ix. A sense of the value and cost of information.
x. Self-questioning ability and comfortability with being question by others.
xi. A sceptical attitude.
xii. Knowledge of personal values. Values clarification.
xiii. Creative synthesis ability.
xiv. Knowledge and respect for personal intuitive skills.
xv. Self-confidence (emotional security).
xvi. Intellectual humility.

• Consequences

i. Insight into the uniqueness of a specific situation.
ii. Informed, moral, ethical and autonomous action.
iii. Reflective learning.
iv. Meaning in terms of *the self*.
v. Integration of new and previous knowledge and creative use of this combined knowledge in future actions.
vi. Confidence in the personal sense of 'rightness' in the solution of a problem.
vii. Explicit knowledge.
viii. Deliberate use of theories generated from experience, education and past strategies.
ix. Authentic caring (based on self-knowledge - knowing *the self* so well that you understand how you affect others).

Conclusive remarks

In this article the inquirer argued and justified the necessity for creating conceptual meaning through the process of con-

ceptual analysis. The article highlighted the fact that critical reflective practice is more than mere reflection. It includes careful consideration of a persons actions, and more specific it represents a persons professional actions. Critical reflective practice enables systematic analysis and intervention that challenge conventional practices, and facilitates the pursuit towards new perspectives and solutions. Through critical reflective practice, the practitioner builds various theories about practice. As practitioners improve their ability to survey the knowledge that they accumulate and to apply it to new dilemmas, an increasingly broad repertoire of action alternative develop.

Through exposé and critique of ideology, practice and theories, critical reflection forces into consciousness the nature and meaning of conventions used to organize reality. Therefore, the experienced practitioner and educator, as a *transformative intellectual*, unite the language of critique with the language of possibility. The Model for Facilitation of Critical Reflective Practice (Part III of the articles), attempt to make the reader aware that transformation from *auto-pilot* functioning to critical reflective practice is only possible if the individual (practitioner/student) and health service mobilizes (realize) the need to go beyond the usual (habitual) thinking to reconfigure the norm.

The process of empowerment for critical reflective practice, involves *transformational intellectuals* (practitioners and educators) who are self-empowered through their critical reflective ability and are willing to empower others to discover and use their unique skills, knowledge, experience and creativity.

The last of the three (3) articles, "A Model for Facilitation of Critical Reflective Practice:
Part III - Description of the model", describes the constructed model and emphasizes the need for a **transformative intellectual** whose aim is to empower developing health care practitioners to attain the highest possible level of professional care.

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A model for facilitation of critical reflective practice:

Part III - Description of the model.

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Introduction

This model was derived from: (1) prolonged engagement with available literature in a variety of disciplines; (2) conceptual exploration and analysis; (3) development of working definitions and hypotheses; (4) application and evaluation of selected critical reflective techniques in an educational setting; (5) construction of a conceptual framework and preliminary model for facilitation of critical reflective practice; and (6) critical reflection on the critique and recommendations of peer reviewers and participants. **Figure 1:" Phases and flow of the inquiry"**, provides a visual presentation of the of the phases and flow of the inquiry and **Figure 2: "A model for facilitation of Critical Reflective Practice"**, a visual presentation of the model after revision.

The model is based on assumptions derived from an in-depth analysis of the literature, empirical observations, intuitive insights of the inquirer and from deductions that combined ideas from several fields of inquiry.

The model for facilitation of critical, reflective practice postulates that health care practitioners have the inherent potential for change from **auto-pilot** practice to **critical, reflective** and **creative practice**. Such potential may be overt or latent, triggered by internal motivation or by certain environmental conditions.

This model is seen as an attempt to make critical reflective practice and facilitation of critical reflective practice more understandable, as it cannot be directly observed. The concepts of this conceptual model are highly abstract and general, thus, they are not directly observed in the real world nor are they limited to any specific individual, group, situation, or event. The propositions of this conceptual model also are abstract and general, thus, they are not amenable to direct empirical testing. This conceptual model thus have the basic purpose of focusing, ruling some things in as relevant, and ruling others out due to their lesser importance.

The utility of this conceptual model comes from the organization that it provides for thinking, for observations and for interpreting what is seen. The constructed model provides only **general guidelines**, which must be specified further by relevant and logically congruent theory before action can occur.

Background of the model

Overall aim/purpose

The purpose of the constructed model is to facilitate critical reflective and creative practice in students and health care practitioners to enable them to become transformative intellectuals.

Rationale

Health care requires commitment, maturity and ability to assess and synthesize a great deal of information consciously, quickly and accurately. Practitioners' need to be self-confident enough to be able to adjust and modify their understanding of theory, making use of theory in a way unique to the particular setting in which it occurs. Knowledge of what the various disciplines say is not in itself sufficient. **Knowledge through relationship** is necessary. Practitioners need to be empowered through critical reflective thinking and creative skills to explicate their implicit theories.

Critical reflective thinking and creative skills enhance the ability to analyze issues and form judgements, find solutions and evaluate conclusions, to research and negotiate, and anticipate the actions of others. The process of critical reflective thinking is seen as the key to **conscious awareness**. The process involves reflective **self-criticism** or, thinking about one's own thinking, to make one's own thinking object of one's thoughts and to discover its limitations and weaknesses. Self-criticism results in self-regulation - **regulation through choice** - an essential characteristic of autonomous practitioners.

If autonomy is the goal of professional education, the key is to bring its facilitation from the unconscious (unplanned level) to the level of conscious awareness. As part of this process, adult learners must be taught to **abstract from** their immediate experiences in order to have a **learned conversation with the self.** The task is to produce a changed environment for learning - an environment in which there is a new relationship between learners and their subject matter, and practitioners and their work situation - in which knowledge and skill becomes objects of interrogation, inquiry and reason.

The crucial point is that experienced role models must become aware of the variety of strategies available for cultivating affective traits of mind essential to higher order thinking. To educate, the educator needs to attend to what learners think and value, otherwise the most powerful thoughts and values they possess - affecting all others - will be left untouched. A professional education in the area of values must expect from learners to embark on a process of value self-reflection and clarification, to provide enlightened action in the professional setting.

The purpose of the model based on a heightened awareness of the self is to facilitate critical reflective practice in developing practitioners. Only by thinking critically and reflectively, by making a conscious effort to meet challenges and problems, will health care professionals be able to meet community needs and expectations. The desired outcome is transformative intellectuals that will strive to empower others to become critical reflective learners and practitioners.

Theoretical assumptions for the model

The following theoretical assumptions are stated for this model:

• Health care practice in a rapidly changing environment necessitates critical reflective, creative and innovative thinking in order to render holistic, contextually-based care.

• Variables in the external environment result in uncertainty in the health care and education system, therefore, critical reflective practice, teaching and learning are required to facilitate development of the type of practitioner who can meet the demands of quality health care.

• A high level of (self-) consciousness is a prerequisite for critical reflective practice.

• Critical reflective practice is characterized by praxis which results in authentic knowledge and autonomous action.

• The transformative intellectual (role model) emphasis the vitality of critical, reflective practice as the sole means to clearer understandings, developed skills, and improved ethics of intellectual freedom.

• Responsible action is a continuous exercise of critical reflective thinking, creative imagination, discretion, judgement and the ability to make conscious decisions about one's practice.

• The critical reflective practitioner as transformative intellectual, interacts wholistically with the internal and external environment through conscious use of critical reflective withdrawal and reentry.

• The transformative educator enables learners to alter self-limiting beliefs (habits of mind) by encouraging self-consciousness, reflective withdrawal, reflective self-criticism and self-responsibility (internal locus of control).

• The transformative intellectual recognizes that critical reflective thinking has the potential to be emotionally disruptive, and will thus, consciously provide a supportive environment.

• Through communication and role modeling the transformative intellectual allows recipients to become stakeholders and participants in planned change/ transformation of health care practices.

• The transformative intellectual is motivated by his/her ability to create vision in others in such a way that they will follow the vision because they see the need for it, thus, accept ownership of it and be committed to achieve it.

• The transformative intellectual actively defines health care functions and is prepared to challenge existing practices, structures and power relationships.

• The transformative intellectual sees critical reflective learning and practice as the invisible act of caring, in that the secret of the helping art lies in conscious, careful practice.

• The core of critical reflective practice is caring. Caring is dependent on a critical reflective environment (culture) which empower the individual to look and listen to the self.

• Facilitation of lifelong critical reflective learning and practice requires motivation: motivation within the transformative intellectual to provide a conducive environment and motivation of the recipient to benefit from critical reflective learning.

• By implementing specific behaviours (increasing self-consciousness/awareness, building trust through communication, developing vision and empowerment) the transformative intellectual strives for successful transformation from auto-pilot functioning to critical reflective functioning.

• Educational practices which enable the process of critical reflection on learning and practice result in a transformational process of intentional learning. Intentional learning involves the structures which give meaning to experience.

• The learner who constructs knowledge intentionally will consciously control learning metacognitively.

• A critical reflective environment enables individuals to make conscious decisions based on understood and accepted feelings, knowledge and motivations.

• Guided reflective techniques enable the recipients to become conscious of the self and others and to have a learned conversation with the self and with others. Such techniques result in a critical reflective spirit in the individual enabling him/her to act as role model and to allow the critical reflective behaviour in others.

• The transformative intellectual needs to establish definite standards for thinking and practising. Learners and

practitioners should continuously be reminded of their responsibility to express themselves in reasoning that are clear, specific, accurate, relevant, consistent, logical, deep, complete, and open-minded.

Description of the model

The model encompasses contextuality, visual presentation, concepts and interrelationships.

The context of the model

The context of the model is health care practice and education. The model can be implemented in any health care and educational situation which is responsible for preparation of professional carers (workers).

The structure of the model

The structure of the model gives overall form to the conceptual relationships within it, and represents the inquirer's perception of the reality of **facilitation of critical reflective practice**, the required conditions, the methods and outcomes. The visual presentation of the model is meant to improve insight into how ideas are organized and how structure flows from relationships between the ideas.

The central focus of the model is a **transformative intellectual** (prerequisite I), who within a **critical reflective external environment** (prerequisite II) enables conscious use of **guided critical reflective techniques** (prerequisite III), thus stimulating a **conscious subjective internal environment** (prerequisite IV) in learners/practitioners. The effect of the interaction between the four prerequisites is **critical reflective learning and creative synthesis**, resulting in **change/ transformation** which enables fulfilment of the main purpose of the model, namely **lifelong critical reflective learning and practice (praxis)-** and a **transformative intellectual** (critical reflective practitioner) who takes responsibility for **empowerment** of others to become critical reflective and creative practitioners.

Definition of the major concepts, related concepts and interrelationships

Selection of concepts and construction of definitions to include in the constructed model, were influenced by experts in the field of critical, reflective and creative thinking. Various authors contributed towards this vision and should by right be acknowledge, however, due to printing limitations it is only possible to list the most influential authors: Basseches, 1984; Biggs, 1988; Boud, Keogh and Walker, 1985; Brookfield, 1987; Carr and Kemis, 1986; Covey, 1990; Davis, 1992; Dewey, 1933; Dittman, 1976; Gambrill, 1990; Glaser, 1984; Jarvis, 1992; Johnson, 1975; Lipman, 1988; Marsick, 1987; McPeck, 1981; Mezirow, 1990; Norris, 1982; Schlossberg, 1984; Siegel, 1990; Torrance, 1979; Watson & Glasser, 1989; Wilmot, 1993).

Main concept: Critical Reflective Practice

Critical-reflective practice requires the ability to consciously and purposefully withdraw (internally) from the situation, experience, or issue at stake in order to reflect and critically think about what has happened or what is or will be happening. Critical reflective practice is characterized by habitual inquisitiveness; well-informed and multi logical (dialectical) reasoning; open-mindedness; proactive thought; fairminded evaluation; honest self-evaluation; focused inquiry; persistence; empathy with diverse opposing points of view; devotion to truth against self-interest; willingness to take risks; deliberate and principled thinking about the thinking processes; insight into the social construction of the situation; creative synthesis; autonomous, responsible and informed action; and reflective learning.

Critical reflective practice is portrayed by self-regulation, imagination, innovation, insight, moral integrity, courage and perseverance.

Critical reflective practice is thus more than thoughtful practice. It is practice that seeks to analyse the situations of professional performance so that they can become potential learning situations. Critical reflective practice is the utilization of good theory in practice in what must always be a situation of probability. The critical reflective practitioner is continuously trying to ensure that the outcome of any action is close to what is anticipated by the theory and the previous experience combined. Critical reflective thinking as praxis, requires action, involvement and risk taking.

Concepts which provided the building blocks for the main concept

The following four (4) concepts provided the main building blocks for the concept **critical reflective practice.**

i. Critical thinking

The ideal critical thinker is "habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fairminded in evaluation, honest in facing personal bias, prudent in making judgements, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in selection of criteria, focused in inquiry, and persistent in seeking results that are as precise as the subject and the circumstances of inquiry permit." (American Philosophical Association, 1990:3)

ii. Creative Thinking

The element of **creativity** in relation to critical reflective practice may be described as the ability to sense gaps or problems within known information; ability to see many relationships among elements; flexibility in thinking and reorganization of understanding to produce innovative ideas and solutions; testing ideas and modifying those ideas in a unique way; and communicating the results.

Creativity within critical reflective practice conjures up several abilities rather than a single characteristic. It involves curiosity, imagination, discovery, innovation, invention, balance between divergent and convergent thinking, intuitive processes and contemplation of abstract philosophical issues.

iii. Critical Reflection

The thinker involved in **critical reflection** challenges the validity of previous learning, questions the premises on which problems are posed or defined, is not concerned with the **how** or the **how-to** of action but with the **why** (the reason for and

consequences), examines the realities of practice as experienced while assuming that much is not known, accepts that there is more than one equally acceptable response or answer, goes beneath the surface structure of the situation in order to reveal the underlying assumptions constraining open discourse as well as autonomous and responsible action. The critical reflective thinker is willing to take risks, to challenge the status quo to obtain a new perspective on existing knowledge.

iv. Reflective Learning

Critical reflective learning is the process of making a new or revised interpretation of the meaning of experience to guide subsequent understanding, appreciation and action. It involves critical analysis and interpretation of an experience, openness to new information, acceptance of self-reality, a change in personal meaning, structure, resolution, review of past values in relation to the changed perspective and examination of the implications for future behaviour and others.

The key characteristic differentiating critical reflective learning from other types of mental activity (thinking or problem solving) is that the problem is conceptualized in relation to the self. Critical reflective learning often results in knew knowledge, or a new perspective on existing knowledge which is relevant to improving standards of care. Critical reflective learning results in creative synthesis (consistency in thought and action). Having decided on the worth, accuracy, and validity of new ways of thinking, living or practising, the person integrates these into the fabric of his/her life.

Supporting Main Concepts

i. Transformative Intellectual (Role Model/Agent)

The transformative intellectual is the person performing critical reflective practice. The transformative intellectual is an individual who is educated to rely less on personal fictions and conventional wisdom for personal and professional conduct and more on critical structures of knowledge considered in the context of ideological possibilities and probabilities.

In the context of health care practice/education the transformative intellectual is a critical reflective practitioner or educator who functions in an integrated biopsychosocial manner and who role models the specific behaviour of critical reflective practice in his or her quest for self-regulated, independent, empowered and caring practices. The transformative intellectual underscores the vitality of critical reflective learning and practice in that he/she sees critical reflection as a significant step towards developing an antidote for auto-pilot functioning and reliance on others.

The transformative intellectual as agent, is a critical reflective practitioner and role model of professional maturity in that he/she shows strong commitment to improve practice and learning. Such an agent engages in continuous observation, critical thinking and reflection in order to challenge preconceived ideas. The transformative intellectual is a change agent. The agent of critical reflective practice establishes his/her credibility through role modeling competence, objectivity, high ethical standards and critical reflective ability. The transformative intellectual is a catalyst who accepts responsibility for management of change activities. The

transformative intellectual is self-empowered through critical-reflective processes (ability) and is therefore, willing to empower others to discover and use their unique skills, knowledge, experience and creativity.

ii. Critical Reflective External Environment

The external environment for facilitation of critical reflective practice is the totality of patterns existing external to the health care setting and the individual learner/practitioner. It is the context in which the activity of critical reflective practice takes place and includes a complex of extraneous factors and circumstances which are present in every situation. The external environment (social, political, legal, economical, educational and institutional) has significant implications for health care.

Contemporary expectations in the external environment (community) require transformation which includes review of all relevant legislation, institutions, organizations, management practices, norms and standards. This suggests the need for a different kind of health care practitioner and institutional (service) environment, as concepts and actions such as democracy, transparency, transformation, empowerment, human rights, and accountability are part of the philosophy of the current South African society. These demands can only be met within an external environment (service/educational) characterized by a supportive culture and praxis.

For the purpose of the model the critical reflective external environment is, defined as a service or educational environment characterized by a supportive culture and praxis..

iii. Guided Critical Reflective Techniques

Reflective learning occurs as a result of the process of guided reflection. Guided reflection is a combination of techniques intended to enable practitioners (learners) to reflect on their professional and personal conduct (experiences) in order to become increasingly effective (critical, creative and reflective). Guided reflection enables the practitioner to use experience and learn from experience in a structured and supported way. This is necessary as critical reflection is a profoundly difficult process.

Guided critical reflective techniques include all strategies which enable learners/practitioners to reflect with other people and discover meaning with others. Guided critical reflective techniques are seen as mutually enabling processes that result in dialogue and revelation of the self to one another. It enables the learner/practitioner to become conscious of and keep an ongoing record of his or her actions, feedback, beliefs, assumptions and theories. Guided critical reflective technique is purposeful and goal-directed. It begins with the goal of reconstructing individual and social experiences as a basis for understanding the attitudes and emotions which shape the present knowledge of practice, and for incorporating new ideas and information. The process of reconstruction requires the learner/practitioner to collect comprehensive, descriptive accounts of his/her experiences.

Examples of guided critical reflective techniques are: Socratic Questioning and Discussion; Analogy and Metaphor; Debate; Critical Incident Reporting and Analysis; Brainstorming; Journals; Critical Reflective Exercises (using media/journal reports); and Guided Imagery.

iv. Conscious Subjective Environment (Internal Environment)

The internal environment in the model consists of each individual learner's/practitioner's personal system (internal environment: **the self**). **The self** is a composite of thoughts and feelings that constituting the individual's awareness of individual existence, his/her conception of **who** and **what** he/she is.

The self (internal environment) includes, among other things, a system of ideas, attitudes, values and commitments. **The self** is a person's **total subjective environment.** It is a distinctive centre of experience and significance which constitutes a person's inner world as distinguished from the outer world.

v. Praxis

Praxis is thoughtful reflection and action which occur in synchrony. Action is **informed** by reflection and reflection is **informed** by action. Praxis involves a shift away from critical thinking as problem solving, to critical thinking as a process in which knowledge and action are **dialectically** related through the process of **critical reflection.**

Action without reflection does not lead to informed, intentional behaviour: action by reflection can ensure that anything learned from the action can be carried to the next situation.

vi. (Self-) Consciousness/Awareness

The self plays a critical role in the motivation to practice in a critical reflective manner and to learn from practice. The metacognitive, cognitive, and affective aspects of **the self** are subsystems of **the self** and under control of **the self** as agent. **The self** directs and/or oversees information processing, formulates intentions, makes choices, and generates motivation to engage in critical reflective activities.

Consciousness is awareness. It is understanding and experience of how thought, consciousness, and mind work together. A high level of **self-consciousness** is a prerequisite for critical reflective practice as it allows the individual a more objective perspective. **Self-awareness** enables the learner/practitioner to examine the way he/she sees **the self** (self-paradigm). A learner/practitioner with a positive self-concept will be more likely to engage in exploration of ideas, which may conflict with personal views. A positive self-concept results in **reflective self-criticism** which requires provisional or hypothetical detachment from personal viewpoints.

The learner/practitioner, through guided critical reflective technique and role modeling, should be empowered to become aware of personal identity, acts, thoughts, feelings, assumptions and motives.

vii. Critical Reflective attitude/spirit

A **critical reflective attitude** or **spirit** shows willingness to conform judgement and action to principle. The transformative intellectual has integrated a host of **rational passions** with his or her assessment skill. Together these constitute and instantiate the critical attitude. Rational passion is characterized by a drive for clarity, accuracy and fair mindedness, a fervour for getting to the bottom of things and for listening sympathetically to opposing points of view, a

compelling drive to seek evidence, an intense aversion to contradiction, sloppy thinking, inconsistent application of standards and a devotion to truth against self-interest.

A critical reflective attitude or spirit is characterized by **reflective scepticism** in that the **transformative intellectual's** thought involves a certain scepticism, or suspension of assent towards a given statement, established norm or mode of doing things.

viii. Reflective (Self-) Criticism

Self-criticism derives from a desire within the individual to free *the self* from the constraints of conventional (habitual) thinking. Critical reflection involves a highly introspective inquiry involving the process of observation of **the self** and critical reflective thinking about **the self** with a view to **action.** By engaging in observation and critical reflective thinking about **the self** it is possible for the individual to challenge all preconceived ideas, principles, theories, policies and "right" ways of thinking and behaving. Through self-criticism the individual weighs-up, evaluates and decides upon the validity of something.

Reflective self-criticism requires provisional or hypothetical detachment from the personal viewpoints, through the process of **reflective withdrawal** and **reentry.** Self-criticism involves a **learned conversation** with **the self.**

Relating concepts

i. Empowerment

To **empower** learners/practitioners as **transformative intellectuals** mean to educate for critical reflection. **Empowerment** is a process which increases learners/practitioners intrinsic motivation. Empowerment involves taking actions which affect **impact, competence, meaningfulness** and **choice** People are empowered by involving them in their work and learning through a process of **inclusion.**

Empowerment is composed of two specific conceptual components: (1) a cultural change process: this means defining new, or revising and reaffirming existing values; and (2) a paradigm shift: this means changing what an organization believes about itself and how it thinks and acts. There should be a move from organizational domination to person participation through the process of critical reflective practice - thus, partnership. The paradigm shift results in commitment, as the learners'/practitioners' actions are freely chosen, owned, and critiqued without any requirement to do so.

Empowerment enables **autonomy.** Actions that empower others include: delegating authority, using participative decision making, encouraging self-management, lessening formalization, creating a supportive culture and encouraging goal setting. Empowerment involves sharing of power and authorizing learners/practitioners to think critically, reflectively and creatively. It is a process of focusing on the needs of others and encouraging self-responsibility by altering self-limiting beliefs (habits of mind).

ii. Caring

In this model critical reflective practice is seen as the invisible act of **caring,** in that the secret of the helping art of health care and education lies in **conscious,** careful health care prac-

tice and education for critical reflective practice. Caring involves an engrossment or motivational displacement whereby the transformative intellectual moves away from his or her own viewpoint and looks at things as though from the viewpoint of the other person (recipient) and make the other person's motives his or her own. Caring involves willingness in the transformative intellectual to move from self-centeredness to other-centeredness.

The caring relationship, in this model, assumes the meeting together and mutual positive regard between the transformative agent and the recipient (learner/other). This ensures that such factors as maintaining the integrity and dignity of the recipient (cared for) will be part of caring.The core of critical reflective practice is **caring**. Caring is dependent on a critical reflective environment (culture) that enables the individual practitioner and learner to **look** and **listen** to **the self**.

iii. Challenging

A critical reflective external environment **challenges** in that the transformative intellectual rejects uncompromising, uncontested knowledge and skill, and mindless adherence to the status quo. The transformative intellectual challenges learners and practitioners to obtain insight or see meaning in findings that may not be readily apparent by use of scientific procedure only. A challenging external environment invites learners/practitioners to prove and justify something.

iv. Proactive

A critical reflective external environment in which there is freedom to **choose** fosters **proactivity** in learners/practitioners. Proactive individuals are value driven; and if their value is to produce quality work through critical reflective and creative processes they subordinate the influencing environment to their thought processes. Proactive learners/practitioners create or control a situation by taking the initiative. Highly proactive individuals have the ability to choose their response, they do not blame circumstances, conditions, or conditioning for their behaviour. Their behaviour is a product of the motivation within the environment and their own **conscious choice**.

v. Transformative

A transformative environment is characterized by activities that are intentional and goal directed. The activities are goal intentional and goal directed in that it has as purpose the deliberate transformation of the individual (psychologically, physically, cognitively and socially) in striving for personal and professional development. Within the transformative environment the **change agent** underscores the validity of critical reflective practice and use persuasive messages to develop competence, objectivity, high ethical standards and a changing attitude towards health care practice.

A transformative environment energizes the need to transform from auto-pilot mode to critical reflective mode. **Auto-pilot mode** is uncritical, unconscious practice, which is characterized by routine actions that are potentially dangerous. A transformative environment opens challenges for the learner and practitioners so that they **consciously** notice what they think, feel and do. This results in a sense of **agency**, in that the individual conceives **the self** as being in possession of an ultimate power of decision and action.

vi. Visionary

Vision is a mental picture of a possible situation or state of affairs. The transformative intellectual enables learners/practitioners to **imagine** how things might be different from the way they are. The transformative intellectual is motivated by his/her ability to create vision in others in such a way that they will follow the vision because they see the need for it - accepting ownership of it and is committed to achieve it.

vii. Motivative

A critical reflective external environment **motivates** learners/practitioners to develop a critical reflective spirit. Motivation is a state of need-induced tension which manifests as a 'push' on the individual to engage in critical reflective learning and practice. Motivation for critical reflective practice is defined as conditions which influence the arousal and maintenance of behaviour relevant to critical reflective thinking.

viii. Autonomy

In the model **intellectual autonomy** entails a commitment to analyzing and evaluating beliefs on the basis of reason and evidence, to question when it is rational to question, to believe when it is rational to believe and to confirm when it is rational to confirm.

ix. Reflective withdrawal

Reflective withdrawal is the conscious process of creating a personal **resting place** to obtain openness to information from internal and external sources. The beginning of the reflective episode is an awareness that something does not fit, or does not sit right within the individual, or a feeling of unfinished business.

The events that trigger reflective withdrawal are unique to every individual and result in discomfort which requires a response not yet available to the conscious intent of the person reflecting. The trigger event evokes an awareness in **the self**, that **the self** is not in an adequate position to manage the experience or to perceive it fully. This awareness is the first step in bringing unconscious determinants to a conscious level where they then guide the next stage of the critical reflective learning process, the identification and clarification of the concern.

Reflective withdrawal requires a setting aside of the immediate need for closure in relation to the issue. Openness or receptivity to information from within and/or outside **the self** is necessary.

x. Learned conversation with the self

Critical thinking and reflection involve a learned conversation with **the self**. Within this conversation emotive aspects - feelings, responses, intuition, sensing - are central as the learner or practitioner deliberately breaks with traditional modes of thought to prompt forward leaps in creativity. The learned conversation with **the self** results in emancipatory learning which frees the individual from personal, institutional and environmental forces and prevent him/her from seeing new directions and gaining control of his/her personal life.

xi. Reentry

Reentry is possible at the point where the individual experiences **the self** as changed, having learned, or having come to a satisfactory point of closure in relation to the issue. It is similar to self-insight. The closure is often recognized as not the final answer, but a psychological place where the individual feels comfortable in relation to the issue. The individual experiences a subjective sense of rightness, certainty, or adequacy of the solution or changed perspective.

The changed perspective or resolution is self-affirming in that the individual experiences a surge of positive energy at the time of reentry. As a result the individual is faced with the challenge of relating his or her **changed self** to the past self, to other areas of his or her present life and to future behaviour. A conscious decision may be made to immediately and completely, incorporate the change into behaviour to test the public reaction, or merely to allow it to exist within **the self** without acting overtly on it. Negative reaction from others may force the individual back into **reflective withdrawal**.

xii. Regulation through choice

Critical reflective practitioners experience themselves as the initiators of their own behaviour, they select desired outcomes and choose how to achieve them The action is self-initiated and grasped as a personal solution. **Regulation through choice** is characterized by flexibility and the absence of external pressure. The behaviour or action is endorsed by the **whole self** and is experienced as action for which **oneself** is responsible.

xiii. Supportive culture

A supportive culture for facilitation of critical reflective practice is empowering, caring, challenging, transformative, motivative, visionary, imaginative, proactive, creative and autonomous in nature, thus, energizes **regulation through choice**.

Conclusive remarks

Peer critique of the model confirmed its value for the context of education, health care practice and other caring professions in general. The constructed model is an attempt by the inquirer to make educators and practitioners conscious of the need for a **transformative intellectual** whose aim is to empower developing health care practitioners to attain the highest possible level of professional care in regard to its science and its practice.

The model should be implemented to develop critical reflective practice in various disciplines in order to assess its suitability (its value, meaningfulness, significance). Implementing this model in totality - as is desirable - implies the introduction of a 'new' approach to professional education. The selected theoretical assumptions and statements described in this article can be used to formulate working hypotheses on which to base further empirical studies. The techniques and strategies for guided critical reflection should be introduced as a requirement for basic-, post-basic and post-graduate courses. This could bring students to see the techniques and strategies as a 'normal' way of teaching, learning and practicing, and could thus, limit resistance.

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