Development of an Epistemological Model of Self-Directed Learning Package with Phenomenological Approach

*Kalpana Chavan and **Sybil Thomas

*Assistant Professor, St. Xavier's Institute of Education (Autonomous), Mumbai, Maharashtra (Research Scholar, University of Mumbai, Mumbai) **Professor, Department of Education, University of Mumbai, Kalina, Santacruz, Mumbai, Maharashtra *Corresponding email: kalpana@sxie.in

Abstract

Knowing and learning are important elements of human survival and growth. With the changing times, obsolete knowledge and ensuing education can become redundant or even a mockery. A curriculum based on knowledge as a product, as mere reproduction and the ageold establishment can lead to generations of learners incapacitated to addressing challenges of the changing world. The consequences of the rigid, and unchanging knowledge has been prolifically represented through the parable in the book called the Saber-Tooth Curriculum. Thus, the phenomenological approach towards knowledge and learning was used through the instructional design of self-directed learning package to delve deep into factors affecting knowledge and learning. The method used for the data collection was interview and reflective writing. The analysis of the response showed how the life-based experiences, connecting to real life and deconstructing set ideas can become engaging and empowering in knowledge acquiring and producing. With the basis of post-modernism thinking, deconstruction as a tool of teaching was used for understanding the conceptual as well as situational knowledge. The student-teachers while learning a unit in their course through deconstruction, also critiqued the epistemological understanding of learning and relearning. The open and axial coding paradigm was used to understand the perception of student-teachers towards role of learning as transformative or institutionalised. It was found that the student teachers through process of deconstruction could relook at knowledge and learning not as a set of established predetermined body of knowledge but as evolving, changing and contextual. Thus, the Saber-tooth curriculum was rejected for an emerging, evolving, and empowering approach to learning.

Keywords: Knowledge, phenomenological approach, deconstruction, empowering, learning, postmodernism.

Introduction

The vehicle of learning in the 21st century still is driven by the 20th century teachers fuelled by the 19th century infrastructure and interactions. The author of the 1939 book, The Saber-Tooth Curriculum, Harold Benjamin (aka J. Abner Pediwell) in the parable through metaphorical representation of the fall of an education system points out that what was considered as sacred and idealistic in 19th century may lead to stagnation and wastage of the new age generation. The parable is a simple account of how a palaeolithic school curriculum becomes archaic when the Ice-age dawns. The changed conditions needed new perspectives, different skills and attitude towards curriculum, teaching and learning but what the founders of the old school denied was that these are even to be acknowledged as education. What was and has been, is true education and only worth learning. When the radicals suggested ways to adapt and control the new conditions with skills and education content, it was met with strong criticism and refusal to accept. The main factor was reproduction and solidifying of the old foundational knowledge rather than changing with the times. Needless to say, if we are not teaching the students how they can adapt in today's life we are preparing them for jeopardy, as in the parable, the entire village was destroyed. At the end of the parable, the wise old men very indignantly stated, 'If you would have had any education yourself, you would know that the essence of true education is timelessness, it is that which endures through changing conditions like solid rock standing squarely and firmly in the middle of raging torrent. Unfortunately, the tribe vanquished with their eternal verities, the Saber-Tooth Curriculum.

Learning is not a simple concept, it is affected by socio-cultural, economic and ideological factors that can stagnate with reproduction or move towards production of new knowledge (Topp, 2000). Developing new knowledge can be a result of generative conversation within an organisation. Education has limited itself to reproducing the knowledge, according to Giroux (2003) rather than producing new knowledge.

The researcher developed a Self-Directed Learning Package (SDL) which needed more of unlearning rather than learning on the part of the learner as well as the teacher. Buchen 1994 even claims that innovation cannot occur without unlearning. Thus, the epistemological model of the SDL based knowing as not just lecture given by the teacher in the classroom, the source of knowledge was not monopolised by the lecturer, but there

were multiple sources of knowing and learning. The self, that is the learner himself/ herself was encouraged to build up and construct their journey and path to learning, create their understanding of knowledge and with the scaffolding provided by the facilitator, peers and other resources explore and expand the depth and width of knowing and learning. The SDL went ahead of constructivism, by engaging student teachers in deconstruction through analysis, contextualising and dialoguing about the content. Deconstruction is rhizomatic and therefore the meaning of the content does not have a standardised or general meaning. It encourages the learner to scrutinise, probe connect text to other texts, to one's own life and to the social happenings around him/her. The deconstruction is like making learning be a part of learner meeting the subject content in a context-based ground. There can be awakening of the emotions and thoughts not addressed before the analysis. The learner now is prepared and equipped to reconstruct the subject content in their own way whether in form of an essay, a metaphor, a concept map, a poem, a poster or even a debate. The learner feels empowered to share their reviews and perspectives with ownership, determination and make sense of their education. Thus, the stage of reconstruction is a natural next step which is avoided in the conventional classrooms, making reproducing knowledge an concluding stage, but in SDL it is the production, and creation in reconstruction stage which is far more important than mindless repetition. Thus, the epistemological model of SDL is studied with phenomenological approach for supporting a knowledge of choice, sense-making, and impact.

For the teaching of a unit the deconstruction as a tool was used. The learners in the experimental group were not only in single-loop learning as in identifying the learning concept, identifying the errors but double-looping (Argyris & Schon), 1978, is learning to learn, Bateson (1972), questioning the assumptions of learning, reflecting on what is learnt, requires discarding what is obsolete in learning, Sun and Scott (2003).

Self-directed Learning Package (SDL) and Saber-Tooth Curriculum

The Self-Directed Learning (SDL) Package is an instructional design that aims at developing amongst the student-teachers' the learning readiness, empowerment, and knowledge management. Each unit designed was based on the interplay of the epistemological working of constructivism, deconstructivism and re-constructivism. The

Self -directed Learning (SDL) Package when applied in the educational setting helps the learner to understand the system at the same time explore meaningfulness for their own learning.

The learner in self-directed plan is not isolated or solitary but can learn independently of an authority. The learning is taken responsibility as an owner, as an active analytical thinker and doer. The learner is in the social environment of learning expresses their implicit ideas in explicit way by participating in reflective and experiential activities. The learner is not dictated nor directed by authorities' way but self-directed towards learning, with the help of the resources both human and digital. Knowles who is considered to be the promotor of self-directed learning and andragogy states that adults are fully capable of learning on their own, but they have been conditioned into knowing only how to be taught by others. (Knowles, 1975) Self-directed learning package in Mezirow's words pulls the learner towards 'disorienting dilemma', through critical reflection questions their own epistemic habits and assumptions, creates one's own personal, psychological, and social understanding towards learning, reshapes, reformulates thoughts, views, ideas and thus leads to transformative learning.

The Saber-Tooth Curriculum in the book, ended with the rigidity of what was most stable, core knowledge and learning for all generations, but the Self-directed Learning Package is about adapting to the social context, facilitating experiences, empowering the learner and transforming learning which are required to control the relinquishing detachment and alienation towards learning.

For this paper, the research uses the deconstruction as a powerful postmodern tool for questioning prevailing representations of learners and learning for the development of the epistemological basis of knowing. The teaching approach also helps the learners to identify with the course content to their own life and analyse how a tool can help them in meaning-making and knowledge creation. Deconstruction as a feature of post-modernism explores new meaning to one's existence, system and thinking. Deconstruction of Derrida is not a reconstruction or a redefinition or replacement of the past. Any authoritarian, fixed , dogmatic system can be deconstructed, so it's not the central but even the peripheral can be deconstructed. Derrida approaches philosophy beyond all philosophical

categories as he finds that every philosophical structure has got some basic presuppositions.

Yet deconstruction is never viewed as complete, but a continuous process 'a living philosophy' being adjusted within itself. At the same time it is self-critical and always deconstructing its own temporary assertions. Thus deconstruction is a critical tool rather than a synthetic tool. At the same time it is not intended to destroy the subject. It is a way of reading where the already existing contradictions within the text are brought to surface. What is so interesting to note here is that Derrida does not say there is no reality. The postmodern Derrida insists upon the fluidity of reality and most importantly proves that it is impossible to give a theoretical appropriation of reality.

The researchers noticed that there is solid stability and structured system of modernism and fluidity, becoming, rhizome kind of postmodernism, the learning of 21st century has to have learners who are connected to learning but not giving up on the system. The learners go through the process of construction, deconstruction and reconstruction balancing act between reproduction and destruction of the established Curriculum. This helped the learners to develop their understanding of the epistemological basis of the learning. The phenomenological approach studied the learning experiences at the different stages of the model- that is construction, deconstruction, and reconstruction.

The self-directed learning package breaks through the dualism of pedagogies used in the classroom for strengthening the epistemological model. Three important dualism that is noticed in the classroom is

- 1. The epistemic Is knowledge absolute, certain and has authority as its sources or is knowledge becoming, flexible and changing.
- 2. The Pedagogies: the cartesian dualism of the one who teaches and one who learns are independent of each other; one is the authority of knowledge and other is passive receiver. The method of teaching is that of lecture, preaching and repetition. The dualism in the pedagogies is between traditional teacher-centred and knowledge gathering vs critical thinking and knowledge generation

The illusion of progression is witnessed when the progressive methodologies of project based activities, writing essays or assignments are also misconstrued and misused as a substitute to teaching.

It can become as primitive as hunter and gatherer mission, without understanding, just time consuming, meaningless and also less effective. Moreover it increases the gap between the students who have resources like internet, access to books and other human resources as against who don't have access.

3. Dualism between masculine and feminine subjects – The masculine pedagogies like reasoning, problem solving, universal, abstract ideas are at the top rungs of the hierarchy and on the lower rungs are subjects like imagination, concreteness, emotionality, application etc. Thus, education system gives more importance to subjects which are easy to grade and assessed like Mathematics, Grammar but complex capacities like reflective thinking, critical thinking, active citizenship is easily side lined.

The instructional design in the Self-Directed Learning Package consisted of different learning designs, which was used for the research. Thus the epistemological model

Extract from a lesson design based on deconstruction as a tool, leading to reconstruction.

Self-Directed Language Package	Learning Activities	Learning Procedures
Induction into the unit	Before the class starts, the students are given an input about overall sub-unit. The students explore the interconnection with the unit f secularism with the socio-cultural context of learning.The epistemological reconstructionism, learning deconstruction and reconstruction with deconstruction as a learning tool is oriented to the students.	Tr clearing doubts Input-conceptual Discussion with all students
Elements of self- directed learning- Goal	Students depicted through their learning map their understanding of the base of the topic. The goals were set for learning and	Constructionism

Topic: Interrelationship of education with Secularism of Tagore - Unit 3 c

Self-Directed Language Package	Learning Activities	Learning Procedures
setting and directing one's learning pathway	learners constructed their pathway and presented their views towards the content	Mapping the goal and learning outcomes collaboratively. They were encouraged to engage and explore the purpose and pathway to learning. Their views on the topic were noted down and deliberated.
Elements of Knowledge Management	Phase 1: Deconstruction based on Repository Portal Different learning options are arranged and uploaded on the Open Learning Portal, students can access the choices and select which one of them they would like to study and work upon. Deconstruction of the textual and digital learning resources was followed with help of essay and reflective writing. Other required readings are also attached and uploaded on the portal.	The background of the thinker is done by the facilitator. The contextual understanding equipped the student-teachers to make use of the different resources on the learning management platform. The repositories of essays, extracts and novel were in the classroom and library for access and study. The scene-by-scene deconstruction of the Tagore's film Gora was done in the class with discussion and critical reflective questions. The questions were connected to lived experiences of the student teachers.
	Phase 2: Deconstruction with expert	
	A senior student who is well versed with the context of language and the unit engaged the class with deconstruction of the film Gora. The analysis was interspersed with critical reflections and sharing of contextual and life-shaped experiences.	Reconstruction Essays were written in journal; a critical analysis of bias and prejudice was done. Students connected to their life and engaged in their version of Gora in 21 st century.
Elements of learner empowerment:	Learning Tasks	The short lessons for different pedagogies were

Self-Directed Language Package	Learning Activities	Learning Procedures
choice, meaning- making, impact and self- determination	<i>Essay and reflective writing were given to students.</i> <i>Classroom interactions and sharing was done to understand the concept and factors affecting the relearning of the concept.</i>	planned using deconstruction as a tool. Learning to be able to express their own way of thinking and presenting the plural perspectives was deliberated. The unit was looked upon from their own learning.

With the theoretical background and review of literature, research study was conducted with the student-teachers for understanding the phenomenon of learning and impact of deconstruction as a tool for learning.

Research Questions

- 1. What is student teachers' perception about the phenomena of learning?
- 2. How can deconstruction as a tool affect the phenomena of learning?
- 3. How will you as a teacher use deconstruction as a way of teaching?

Research Design and Methodology

The focus of the study was phenomenological approach to understand the what and how of the phenomena of learning amongst the student-teachers. The sample for this study was 50 student- teachers in Semester I of the first year, The phenomenological approach of the qualitative research design focussing on the individual's lived experiences was used for this study.

This paper is an exploration with phenomenological approach as to how learner and learning moved from a need-based family responsibility to a state responsibility to learning becoming an individual and social journey for transformation. Phenomenological approach essentially seeks to describe rather than interpret or explain. This approach is a significant in qualitative research design. It focuses on the study of lived experiences of the individuals. The purpose of the phenomenological approach brings to light how phenomena are perceived by the people in the particular situation.

This approach with trustworthy data can be a solid indicator of different factors and the consequences of these factors on other situations. The phenomenological approach used different methods like focus meetings, participant observations, personal texts, documents, logbooks, interviews, reflective journal, discussion forums, action research, and text analysis. For the present study too phenomenological qualitative research study was used with interviews and reflective writing as its most suited to explore participants experiences in a situation, in a particular context (Eddles-Hirsch, 2015). Phenomenological approach is relevant for this research as phenomenology is a philosophy to study a phenomenon, it forms basis of qualitative research and at the same time it has its own research method.

The data collection tool for this study was interviews conducted by the researcher and reflective journal writing. The questions for both, interviews and reflective writing were open-ended and promoted critical reflection and sharing of experiences.

Analysis of the Data

The analysis of the data was done with open coding through inductive approach. The first step on the analysis of qualitative research data is Open coding.

Using open coding, the data from the interviews transcript and reflective writing are broken into discrete parts and labelled under codes. The axial coding helped the researcher to draw connections between the codes and looking for the similarities and contrasts with theoretical basis. The next step done by the researcher was to select one central category that connected all the codes from the analysis and captured the essence of the research study.

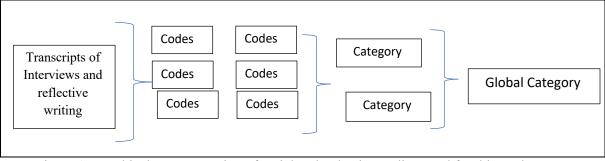


Figure 1. Graphical Representation of Axial and Selective coding used for this study

The phenomenological approach equipped the researchers to analyse the learners conscious experiences with the method of teaching and learning as used under the Self-directed Learning Package. The conscious understanding of the learners, their interpretations, analysis, their cognitive experiences of connecting to the content, shedding their dualism between learning and what is to be learnt. The researchers observed the growing involvement with the content and the context referencing, that the learners could bring to the learning stages. The intentionality of learning and the learners were marked by the researchers through reflective writings and interviews.

Findings of the Study

Research question 1 – What is student teachers' perception about the phenomena of learning?

Global Category: Teacher directed

Category 1: Learning is a result of understanding the concepts after teacher has explained and doubts are cleared. Teacher teaches, students learn.

Codes: Some responses in the interview and reflective writing were

- *i.* Learning is to understand what the teacher teaches.
- *ii.* Learning happens in the classroom after the taught portion is understood and studied.
- *iii.* Learning is where I am interested in knowing more about the subject.
- *iv. I know I have learnt the concepts when I can answer in the tests or can complete an assignment on it with ease.*
- v. I am dependent on teacher for my learning.
- vi. What I have to learn is in the syllabus already decided.
- vii. I want to learn on my own.

Discussion

The student teachers were asked before applying deconstruction as a tool for learning, how do they perceive that learning takes place. It is indicated from the responses that the student teachers' dependency on teachers is high. The scope of learning is with reference to classroom teaching and passing examinations. The students can be passive listeners



and lecturers can complete their portion. This is in agreement with the findings of Muganga, L. & Ssenkusu, P. (2019)., wherein the comments of many students indicated their beliefs that instructors use teacher-centred methods that emphasize the direct transmission of knowledge from instructor to student through organized and systematic methods, such as lecturing; moreover, the objective of memorizing data garnered from lectures and handouts in order to pass examinations.

Though some student teachers believe, as agreed by most andragogy thinkers like Knowles, learning is about their interests and motivation to learn. Some student teachers observed that they can study on their own without their teachers, but hardly anyone spoke about their own thoughts and views are also a part of their learning. It was more to produce what was taught or learn on their own.

Research question 2 - How can deconstruction as a tool affect the phenomena of learning?

Global Category: Learning about Learning

Category 1: Reflective Learning

Codes: Some responses in the interview and reflective writing were -

- *i.* It made me think about my ideologies
- *ii.* I was able to connect with my thoughts on secularism and like the protagonist even questioned my prejudices
- *iii.* I could reflect on how our thoughts can harm the social harmony as I analysed the text and the film Gora.
- *iv.* While writing reflective essay I was thinking how this concept is a part of my life, and how even today the stories and essays written by Tagore are relevant.
- v. The experience of watching the movie Gora definitely helped me to experience Tagore's ideological at a certain depth.
- vi. I was a little shaken up by the strong language of the text and how we take this for granted in our society.

Category 2: Empowering Learning

Codes: Some responses in the interview and reflective writing were -

- *i.* Deconstructing texts and scene-by-scene made me realise the different perspectives by which we can look at a situation.
- *ii.* It helped me find meaning to my learning.
- *iii.* The impact of deconstructive way of learning helped me to read more about the discrimination in the society practiced even today. I was also thinking of my role as a teacher in the classroom.
- iv. The unit was taught in such a manner, as if all our views had a significant place in education. I was thinking about a society where there was no caste system, this I have to instil in students' minds.
- v. I was happy at my own way of reflective on such an intense topic and that my sharing was appreciated. I will learn my other topics also with more depth.

Discussion

The responses given by student teachers brought out the perspectives as held by critical theorists like Freire, Habermas, and Derrida that education can be the vehicle of change and emancipation. The deconstruction as a tool foster, in the students a willingness to go in-depth of the studies and make it as a tool for transforming, changing one's own rigid ways of thinking. Deconstructivism as a tool for learning equips learners to look critically and analytically social inertia and slumber, that which is to be accepted blindly. The student teachers after the experience of deconstructionism as a tool became more reflective and could feel their thoughts have an impact. The desire to explore more, go beyond classroom teacher instructed class was experienced. The student teachers can critically reflect and question their assumptions and beliefs (Howlett et al., 2016). Thus, it is in agreement with the findings of Samawi A. and Murtiningsih S. (2020) that student (96%) felt that their critical and creative thinking can be stimulated by deconstruction learning.

Research question 3 - How will you as a teacher use deconstruction as a way of teaching?

Global Category: Learning connected to society

Category 1: Life- based Learning

Codes: Some responses in the interview and reflective writing were -

- *i.* Connect it to students' life
- *ii.* Give more real-life examples, make it connected to their life
- *iii.* Use newspapers, articles and documentaries in the class to help students look at studies differently.
- iv. Explore more in the areas connected to syllabus
- v. Students can be told to express their thoughts, their own fears and experiences
- vi. This will make students enjoy their studies as I did.
- vii. I don't know whether I can apply this to school children
- viii. This method is very useful, but time-consuming
- *ix. I think this method can help students to be critical thinkers.*

Discussion

The responses given by student-teachers reflect that they are relooking at alternate ways of teaching which will involve their students in teaching. The role of teaching is not to just to transmit knowledge but also to bring about change in way of thinking. This way of learning can be brought in by student centric methods like connecting to the real life, going beyond syllabus. The democratic way of teaching by promoting students to participate is the way to help students to learn on their learning. This is in consensus with that knowledge can be generated by both studying external sources and engaging in complex activities that require them to construct their own knowledge" (Beane & Apple, 1995, p. 16). The potentials of active learning, higher order thinking, and the social construction of knowledge are undercut by the teaching method promoting student passivity. (Brophy 2006, p.40). The approaches like constructivism can be used for engaging students. After experiencing deconstructivism, the student teachers were more assured of these methods, plus creating a learning environment for sharing and expressing their own perspective to the syllabus.

Thus, the self-directed learning package taking into account the evolution of learning through the centuries and understanding the reason for both the extremes, tries to build a bridge between the dualisms. The self-directed learning package moves from construction to reconstruction, through deconstruction.

An epistemological model of Self-Directed Learning Package is developed to show that learning with the help of Self-Directed Package modules can start with constructionism, not learning by instruction but by building knowledge, constructing with their way of understanding learning. Deconstructionism helps to analyse and deconstruct the grand theoretical concepts to their context and within their lived experiences. This further leads to reconstruction to their learning, and regeneration of knowledge making education connected to their life, having meaning and a feeling of ownership. The epistemological model thus deduced from the SDL Package and learners' experience of learning presents the lived experiences of the learners.

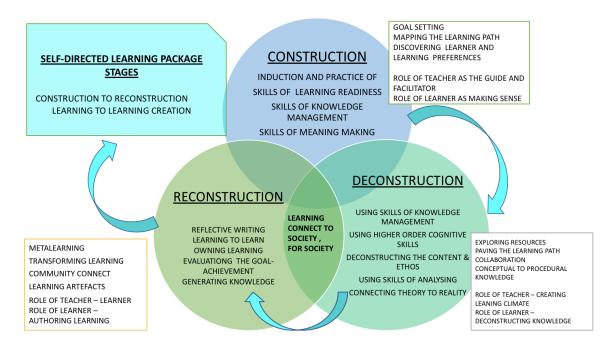


Figure 2. Graphic Representation of Model of Self -Directed Learning Package Stages

Thus to conclude, the objectification of the students in the hierarchy of the system is the story of the education in the 19th century. The mid 20th century saw questioning of this system from its authority to its meta-narratives, the uniformity of thoughts to being an individual who thinks and can act though differently from the system. And in the 21st century the learning is connected to education in such a way as to make it owned by the

learner, experienced through reflections and expressed through reconstruction and generation of knowledge. The consumers of education will still be stuck with the Saber-Tooth Curriculum and the promoters of such rigid system will be left far behind with their set ways and conventional knowledge as they are neither beneficial nor relevant. The Self-directed Learning Package developed by the researchers recommend that the different approaches, mindset and strategies will if not change the system will equip the budding teachers and learners towards transformational learning in a democratic learning ethos. The movement from construction to reconstruction through deconstruction is about being able to shed off the blinders and gradually widen the horizons for creating a true knowledge society and not keep fuelling the knowledge market.

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