Synopsis of Ph.D in Education

EFFECTIVENESS OF CRITICAL PEDAGOGY COMBINED WITH CONSTRUCTIVIST APPROACH IN LEARNING COMMERCE AT THE HIGHER SECONDARY LEVEL

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Introduction

Education is the most effective instrument to make citizens socially sensitive, responsible and forward looking. In a plural society like ours, it is through broad secular education that we can hope to foster values to promote national integration and harmony among all citizens and particularly, secular credentials. It was recognised that only through good education can we produce people who will be committed to democratic consolidation and strengthening and unity and integrity of the country and will also provide the necessary momentum to economic progress to ensure better quality of life to people and to help bring about an acceptable level of social and economic equity in the country (Chatterjee, 2008).

The values and perspectives that are envisioned by the constitution and also identified at the national level like democracy, secularism and social equality remain significant components of the Curriculum (Kerala Curriculum Framework, 2007). Cultivating values is possible through a wide range of experiences. The learner has to go through many experiences that give him/her a vision of social outlook. In the light of this vision, Kerala has already started focusing its attention on quality education along with the effort of universalisation of education. It recognised the essentiality of the collective effort of the society and its intervention in school activities. The Curriculum stressed on activity-based, process oriented learning and liberal democratic learner friendly approach and space for learners to engage in critical dialogue that lead to the overall development of the learner. Any meaningful attempt to evolve a new strategy of learning-teaching will be a great help in promoting quality education. Constructivism and Critical Pedagogy promotes higher order thinking skills, foster self direction in learning and development of metacognitive skills, increases social and emotional skills and promotes collaborative interaction between students and teachers. The aims of education have to be in tune with the needs of the society from time to time. In the 21st century, the society needs creative people, who should take part actively in the production process. Education at this level is diversified so as to form a foundation for those who go for higher studies and those who opt for employment.

Criteria behind the selection of the study

Education is the primary agent of the transformation towards sustainable development and increasing the people's capacities to transform their vision for society into reality. As part of universalising quality education, the Government of India has launched prime policies/programmes from time to time. National Policy on Education (NPE, 1986) is one among them. A comprehensive appraisal of the existing educational scenario was made on the basis of a country wide debate. NPE 1986 advocates the education for equality. Every child has a right to quality education. The quality of education largely depends upon the quality of instruction provided in the classrooms. There should be a shift from 'content' to the 'processes' of learning. Teaching shall have to be geared to making students 'learn how to learn'. Learning should relate to the child's life experiences.
which are directly linked to the problems faced by the society. The classrooms should provide spaces for discussing the contradictions existing in society. There should be ample scope for the learners to reflect on the socially constructed knowledge from a critical perspective. Learning demands the development of higher order thinking skills, social skills and emotional skills. The study is selected based on the criteria that the perspective of critical pedagogy and constructivist approach provides for the natural development of the individual connecting the individual and the society and ensuring the development of both individual and society.

**Need and relevance of the study**

The advent of globalisation ensures only the survival of the fittest. The field of education has no exception to this. Therefore, it is high time to equip the learners of today, to make a proper analysis of the issues existing in the society and to critically reflect upon it, to make capable of social commitment, and to enable them to be creative which would help in shaping a better tomorrow. But the fact that learning has become a burden and stress on children is an evidence of a deep deterioration in educational aim and quality (NCF 2005). This calls for a drastic shift from conventional approach to learner centred approach through the principles of constructivism and critical pedagogy throughout the nation. Children grow up in their own social worlds. The social construction of knowledge has been an important principle in the socio-cultural theory. In the constructivist setting, the learners have autonomy for their own learning, opportunities for peer collaboration and support, occasion for learner generated problems that drive the curriculum, time for self observation and evaluation and outlets for reflection. Autonomy encourages learners to construct their own knowledge and gain new perspectives through hand-on-experiences rather than follow prescribed information. This perspective recognizes the teacher as primarily a facilitator of learning. The teacher tends to act as a guide, providing resources for learner and enabling them to decide how to learn and why to learn.

Yeshpal Committee Report (1993) highlights ‘learning without burden’. While putting the child at the front seat, National Curriculum Framework 2005 has recommended constructivist approach in teaching and learning (for construction of knowledge and fostering creativity, connecting knowledge across disciplinary boundaries for insightful construction of knowledge), providing learning experiences for developing critical perspectives on social issues (critical pedagogy), plurality of text books and other materials incorporating local knowledge mediated through constitutional values, scientific temper and principles. It also emphasizes on group learning strategies and states that examination needs to be non-threatening, flexible and integrated with everyday classroom life. An effort for the formulation of a comprehensive Curriculum focussing on the process of learning was initiated in Kerala from 1997 onwards and it reached only up to class X. As part of the introduction of grading system up to higher secondary level, earlier the Government implemented activity based approach up to the higher secondary level. Only the pedagogy according to this approach has been fitted into the existing curriculum at the higher secondary level.

NCF 2005 has put forward critical pedagogy together with constructivism for the purpose of achieving the present needs of the generation. The curriculum makers and researchers use
constructivist approach together with critical pedagogy to learning in order to meet the present and future needs of the society. The relevance of this study lies here. The quality of life depends purely on the kind of education provided. The Investigator felt that, with the application of constructivism combined with critical pedagogy towards learning can definitely equip students to a certain extent to face the enormous challenges taking place. The study will definitely help the curriculum makers while revising the curriculum of higher secondary classes. The study will benefit the teachers for developing confidence to attempt a variety of learning strategies which in turn helps the pupils to develop critical thinking and construct knowledge by themselves. The study will contribute suggestions for improving quality of education and to make the learners social beings. Hence the present study.

Statement of the problem

The State of Kerala has adopted activity based approach at the higher secondary level as part of the reforms in the National Curriculum Framework 2000. Activity based approach is followed in a didactic manner with a little effort of group working strategies at higher secondary level. Curriculum internalisation, its transaction, evaluation and similar processes as part of classroom practices need to be fine tuned in accordance with the constructivist learning approach and critical pedagogy. This study is an attempt to explore the maximum possibilities for the effective implementation of critical pedagogy combined with constructivist approach in the subject area in full fledged manner. Therefore the study is entitled as ‘Effectiveness of Critical Pedagogy combined with Constructivist Approach in Learning Commerce at the Higher Secondary Level’.

Definition of the key terms

Effectiveness

Effectiveness means the effect of an experimental factor under controlled conditions, that is, with other factors held constant. It is the change, result or outcome produced by an action (Good, 1973).

In the present study, by the word effectiveness, the Investigator means that the intended result of the application of critical pedagogy combined with constructivist approach in learning commerce at higher secondary level.

Critical Pedagogy

It is an approach which attempts to help students question and challenge dominations and beliefs and practices that dominate. In other words, it is a theory and practice of helping students achieve critical consciousness.

In this study, by the term critical pedagogy the Investigator means that it is a dialogic exchange between teachers and students, where teachers’ role is to provide pedagogic space by using their personal passion, knowledge and expertise to pose problems in order to help learners analyse their own experiences and thus arrive at critical understanding of their reality. It deals with the ‘why’ aspect of learning.
Constructivist approach

It is an approach through which pupils construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences.

In this study, by the term constructivist approach the Investigator means that it is an approach through which transaction of curriculum take place so that the learners’ immediate environment is easily connected to the knowledge that is to be constructed. It deals with the ‘how’ aspect of learning.

Critical pedagogy combined with constructivist approach

In this study, by the term critical pedagogy combined with constructivist approach the Investigator means that it is an approach whereby the features of both constructivism and critical pedagogy were applied together for making meaningful learning. Both should go hand in hand in such a way that constructivism helps promote discovery learning, experiential learning, collaborative learning, co-operative learning and learning through problem solving and critical pedagogy helps to enhance critical thinking, critical questioning and helps the learners to act as social change agents.

Learning

In this study, by the term learning the Investigator means that the changes in achievement, retention and social and emotional skills of learners as a result of experiences that provide evidences of learning at higher secondary level.

Hypotheses of the study

The following hypotheses were formulated for the study.

1. Critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing the achievement of learners in commerce at higher secondary level.

2. Critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing the retention level of learners in commerce at higher secondary level.

3. Critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing social and emotional skills of learners in commerce at higher secondary level.

4. Critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing the achievement of learners in commerce at higher secondary level in all sub-samples taken by gender and locale.

5. Critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing the retention level of learners in commerce at higher secondary level in all sub-samples taken by gender and locale.
6. Critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing social and emotional skills of learners in commerce at higher secondary level in all sub-samples taken by gender and locale.

Objectives of the study

1. To compare the effect of critical pedagogy combined with constructivist approach with that of activity based approach in enhancing the achievement of learners in commerce at higher secondary level.

2. To compare the effect of critical pedagogy combined with constructivist approach with that of activity based approach in enhancing the retention level of learners in commerce at higher secondary level.

3. To compare the effect of critical pedagogy combined with constructivist approach with that of activity based approach in enhancing social and emotional skills of learners in commerce at higher secondary level.

4. To compare the effect of critical pedagogy combined with constructivist approach with that of activity based approach in enhancing the achievement of learners in commerce at higher secondary level in all sub-samples taken by gender and locale.

5. To compare the effect of critical pedagogy combined with constructivist approach with that of activity based approach in enhancing the retention level of learners in commerce at higher secondary level in all sub-samples taken by gender and locale.

6. To compare the effect of critical pedagogy combined with constructivist approach with that of activity based approach in enhancing social and emotional skills of learners in commerce at higher secondary level in all sub-samples taken by gender and locale.

Scope of the study

The present study covers learning of commerce at the higher secondary level in the State of Kerala. The study has been designed with the objective to compare the effectiveness of critical pedagogy combined with constructivist learning approach with that of activity based approach in learning commerce at higher secondary level. The learning strategies used for critical pedagogy combined with constructivist approach will open up new perspectives of education which suits the need of 21st century and helps the learners to foster learner autonomy, creativity, inquiry based learning, critical thinking, problem solving and to enhance social and emotional skills. It also provides enough chances to the learners to take up global challenges. It enables the learners to solve real life problems and to develop life skills. The assessment procedure used in this approach allows learners to use higher order thinking skills as they collaborate with teachers in the assessment of learning-teaching process.

Limitations of the study

Due to lack of time, the study is confined to class XI of higher secondary level. Only some topics of a single subject such as Business Studies are considered. The Investigator selected only two schools covering 156 students, consists of one government school and one aided school of Thiruvananthapuram district due to practical difficulties in conducting experimental study of control group – experimental group, pre-test post-test design.
Methodology

Experimental method was adopted to compare the effectiveness of the critical pedagogy combined with constructivist approach in learning commerce at higher secondary level with that of activity based approach. In experimental method, the investigator has to follow an experimental design. In the present study, the ‘pre-test post-test non equivalent groups design’ was used. The investigator made use of two non-equivalent intact classroom groups, one experimental group and other control group. For the present study independent variables include; (1) Critical pedagogy combined with constructivist approach and (2) Activity based approach.

The dependent variables include (1) Achievement, (2) Retention power and (3) Social and Emotional Skills. The population consists of higher secondary school students of Kerala. The sample selected was the representative of the population. A total of 156 students of Class XII from New Higher Secondary School, Nellimoedu and Government Medical College Higher Secondary School, Thrivunanthapuram district were taken as sample. The following tools are used for the study.

1. Pre-requisite test
2. Formative Assessment Tools
3. Summative assessment (Achievement tests)
   (a) Achievement test - I (Fixed response type) (b) Achievement test - II (Free response type)
4. Social and emotional skills inventory
5. Lesson transcripts based on critical pedagogy combined with constructivist approach
6. Lesson transcripts based on activity based approach
7. Focus group discussions

Statistical techniques used in the study

In the present study the researcher decided to adopt Critical Ratio and the technique of ANCOVA for ensuring most accurate results when comparing the performances of both experimental and control groups.

Conclusions based on findings

1. Effectiveness of critical pedagogy combined with constructivist approach on achievement (based on whole sample)

   Achievement is measured on the basis of (1) total achievement scores, (2) scores of achievement test - I and (3) scores of achievement test - II. In all the three cases, the study revealed that critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing achievement of learners in commerce at higher secondary level.

2. Effectiveness of critical pedagogy combined with constructivist approach on retention (based on whole sample)

   Retention is measured on the basis of (1) retention scores of total achievement, (2)
retention scores of achievement test - I (fixed response type) and (3) retention scores of achievement test - II (free response type). In all the three cases, the study proved that critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing retention level of learners in commerce at higher secondary level.

3. Effectiveness of critical pedagogy combined with constructivist approach on social and emotional skills (based on whole sample)

Social and emotional skills is measured based on (1) scores of social skills, (2) scores of emotional skills and (3) scores of social and emotional skills. In all the three cases, the study proved that critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing social and emotional skills of learners in commerce at higher secondary level.

4. Effectiveness of critical pedagogy combined with constructivist approach on achievement (based on sub-sample)

Achievement is measured in terms of (1) total achievement scores, (2) scores of achievement of achievement test - I and (3) scores of achievement of achievement test - II by selected characteristics such as gender (boys, girls) and locale (rural, urban). In all the cases, the study proved that critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing achievement of learners (boys, girls, rural learners and urban learners) in commerce at higher secondary level.

5. Effectiveness of critical pedagogy combined with constructivist approach on retention (based on sub-sample)

Retention is measured in terms of retention scores of total achievement, achievement test - I and achievement test - II by selected characteristics such as gender and locale. In all the cases except in the retention of boys, rural learners and urban learners of the scores of achievement test - I, the study proved that critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing retention level of learners in commerce at higher secondary level. In case of retention of boys, rural learners and urban learners of the scores of achievement test - I, the study revealed that critical pedagogy combined with constructivist approach and activity based approach is equally effective in enhancing the retention level.

6. Effectiveness of critical pedagogy combined with constructivist approach on Social and emotional skills (based on sub-sample)

Social and emotional skills is measured based on (1) scores of social skills, (2) scores of emotional skills and (3) scores of social and emotional skills by selected characteristics such as gender and locale. In all the cases, the study proved that critical pedagogy combined with constructivist approach is more effective than activity based approach in enhancing social and emotional skills of learners (boys, girls, rural learners and urban learners) in commerce at higher secondary level.