

ENVISAGING AN ACTIVE LEARNING APPROACH FOR ECONOMICS TEACHER EDUCATION STUDENTS AT UNIVERSITY OF TECHNOLOGY

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Abstract

Traditionally Economics subject teaching has been 'formal' teacher centered subject in schools with: heavy reliance being placed on the textbook that preordains the approach to the subject; the teacher is more dominant in class and the learners simply record the information and learners are passive in the learning process. Essentially, therefore a predominantly passive approach to the teaching of Economics has been developed in the classroom, which further makes it difficult to attain the objectives of teaching Economics. University lecturers teaching Economics are not totally excluded from the latter mentioned processes and seem to pursue non-participatory and passive teaching methods- a practice for which there might be several reasons. It is further noted from my observations and interactions as Economics lecturer with teacher education students that they appear to experience difficulties in understanding certain contents and mastering specific skills in Economics. Economics concepts such as scarcity, markets and reserve banking are best understood in action through experience and makes students, in having fun, are more engaged by such methods (Mtshali, 2008). In an Active Learning environment, the student plays an active role in learning by exploring issues and ideas under the guidance of the lecturer. With the latter said in mind, the purpose of this reflective paper is to explore various notions attached to Active Learning and its suitability for Economics teaching.

Good practice pedagogical approaches and related policy and systemic issues, especially as they relate to the teaching of Economics at a University of Technology will be interrogated for this study. The phenomenon under investigation will further be informed by Constructivism as theoretical underpinning for this study. It is envisaged that the anticipated findings of this study will reveal future considerations for the teaching of Economics at university level.

Keywords: teaching, schools, economic education, active learning, teacher, teacher education students

1. INTRODUCTION

Coping with continuous educational reform in South Africa has become increasingly more challenging for lecturers because they have to be innovative and supportive in their teaching/facilitation. Lecturers need to

consider diverse student populations and socio-economic circumstances when dealing with their students.

According to Leet and Lopus (2012: 1) teaching economics can be challenging, it is imperative that lecturers make use of classroom activities that can be used to make economics come to life for students. Furthermore, they suggest that activity-based pedagogical techniques which include the following; simulations, role plays, active demonstrations, group problem solving, economics cartoon, cooperative learning and Readers' Theaters enhance teaching and learning. They went further to suggest that, lecturers should stop over-emphasizing the lecture-centered method (Leet and Lopus, 2012:1).

Furthermore, they suggest that activity-based pedagogical techniques which include the following; simulations, role plays, active demonstrations, group problem solving, economics cartoon, cooperative learning and Readers' Theaters. They went further to suggest that, lecturers should stop over-emphasizing the lecture-centered method (Leet and Lopus, 2012:1).

Van Wyk (2011:1) argues that excellent and effective teaching demands a host of devices, techniques and strategies not only to achieve cross critical outcomes, but because variety, itself, is needed. He concludes that as a result of active learning, which will both enliven instruction and facilitate learners understanding, Economics as a subject can arouse students interest when they see it in action.

Karisson and Janson (2016:127) argue that the developments gained from active learning, in which students engage actively in the learning process throughout a course are notable. They further argue that the failure rate of students in regular passive teaching is higher than those engaging in active teaching methods

Some authors identify the potential of group-based pedagogies to create richer environments for exploring pluralistic content by making the classroom more collaborative and cooperative (Aerni, Bartlett, Lewis, McGoldrick and Shackelford (1999:32). It is important to note that, as teaching strategy active-learning in Economics will include the following benefits, the promotion of understanding, increased attention and interest, motivation towards learning, improved attitudes and divergent thinking by students.

2. TEACHING PHILOSOPHY

Middleton (2013:2) posits that lecturers should be consciously aware of their teaching philosophy, this being underlined as a valued element of teaching and learning. Engaging active learning during teaching helps in creating an environment that is conducive, meaningful and student centered. He went further to suggest that, being clear about teaching philosophy empowers lecturers with reflection and review about their teaching which cascades in making learning a more enjoyable process of education for all parties.

Joshi and Marri (2006:199) argue that there has been a virtual flurry and broad agreement in both social studies and economic education in theorizing and testing "active" methods of teaching. They further suggest that such teaching methods, in the case of economics education, include simulations, experiments, interactive computer exercises, various kinds of games coupled with creating various games such as jigsaw, graphs, charts and tables, and the use of graphical informational systems and the like in creating maps of economic data. They conclude by arguing that constructivism is the preferred form of pedagogy in both progressive economics education for the straightforward reason that economic concepts such as scarcity, markets, and fractional reserve banking are dynamic and best understood in action through experience and that students, in having fun, are more engaged by such methods.

Laney as cited by Joshi and Marri (2006) indicated a good summary for the case of using "active" methods, which he referred to as "experience-based instruction." Experience-based instruction is noted to have the following benefits:

1. Emphasizes active learning rather than passive learning
2. Promotes greater learning through personal experience than vicarious experience
3. Bearing the consequence of one's action leads to greater learning.

Laney concludes by saying that two prominent types of experience-based instruction are role-playing and simulations. Role-playing allows students to learn by taking on others' perspective, often through play and drama. For example, in examining the issue of progressive income taxes, students can take on the positions of high-, middle-, and low-income earners to better understand their viewpoints. In this case simulations (which simplify real-world conditions into workable models) allow students to gain understanding often through live competitions such as stock market stimulation. If lecturers make use of active-learning while teaching Economics it will not only decrease academic stress, anxiety and boredom but as an effective teaching tool to create a more interesting and develop a critical classroom discussion in Economics teaching.

3. SIGNIFICANT LEARNING

Fink as cited by Peterson (2013) furnishes a useful framework for articulating them types of desired course outcomes that can guide economics education reform. Significant learning is **defined by a** taxonomy, identifying six types of learning that is; foundational knowledge, application, integration, human dimension, caring, and learning how to learn.

Table A. Taxonomy of Significant Learning Selected Characteristics

Foundational knowledge	Students gain knowledge that <i>“provides the basic understanding that is necessary for other kinds of learning, including the understanding of specific information, ideas and perspective.”</i>
Application	Students learn <i>“to engage in some new kind of action,” including “critical,” “creative,” and “practical” thinking.</i>
Integration	Students are empowered to <i>“see and understand connections”</i> between ideas, people, and realms of life.
Human Dimension	Students <i>“learn something important about themselves and others,”</i> thus recognizing <i>“the human significance of what they are learning.”</i>
Caring	Students experience a change in the degree to which they <i>“care about something”</i> and that increases their energy to learn more.
Learning how to learn	Students learn <i>“about the learning process itself,”</i> including how to <i>“engage in a particular type of inquiry”</i> and become <i>“self-directing learners.”</i>

Source: L. Dee Fink (2003: 31-32)

He argues that each category identifies a different way in which an individual may be changed through his/her educational experiences. That the need for students to be able to critically evaluate emerging economic trends and explanations, engage in creative thinking about future economic possibilities, and exercise the practical ability of asking questions and solving problems, calls for the development of a broad set of application skills.

4. INDIVIDUAL LEARNING STRATEGIES

Niemi (2002) posits that lecturers and teacher education are considered as key factors in promoting active learning. That all pedagogical arrangements should improve the quality of learning, enhance the equality of opportunities for different students and help combat social exclusion.

Active learning strategies emphasize constructivistic qualities in knowledge processing. In active learning, the processing of knowledge also requires a problem-solving orientation, a critical approach and an evaluation of knowledge. The ultimate goal of knowledge processing is that the student can elaborate on applications of knowledge and he/she may also produce new knowledge using cognitive process. It is also imperative to note that, according to the newest learning theories, quality of learning also depends on students' abilities to steer their own learning orientation, to develop inquiring skills and to learn to reflect on and control their own learning process (Niemi,2002:764).

Yoshida (2016) argues that in the construction of knowledge, social elements have emerged as very imperative. How individuals learn and comprehend knowledge depends on our beliefs, attitudes, and values and our self-concept as a student. Knowledge is seen as the creation of a social group, as it engages in its

daily interaction and praxis, and both adapts to and transforms the environment around it.

Grimmett (1994) elaborates the fact that promoting active learning in classroom had a clear influence on lecturers' roles. That they become facilitators, who gave more responsibility to students. Applying democracy, negotiating more with students about aims, methods and control of their learning. To promote active learning, the lecturer should be a tutor. Lecturer's position was no longer in front of the classroom, nor in the center of the classroom, but s/he was circulating expert, learning together with students and trying to give as much space as possible to his/her students. Barone (1991:18) states that lecturers must engage the hearts as well as the minds of students by critically evaluating assumptions and teaching approaches, this will make economics to better reflect the world that students actually observe, thus engaging their interest.

5. STATEMENT OF THE PROBLEM AND AIM OF THE STUDY

Student achievement at institutions of higher learning is generally attributable to a compass of multiple reasons, which are both intrinsic and extrinsic in nature.

Teaching using active-learning method appear to pose more challenges as compared to teaching using lecture-centered method. This is because lecturer's have difficulty with time-management, implementation and resources to utilize active-learning method (Ginsburg, 2010).

Straus & Volkwein (2002) and Lourens & Smit (2003) propound that while the Higher Education literature contribute an exhaustive range of theories regarding the reasons for students success, as well as submission for positive intervention, it remains critical academic planners, curriculum designers and lecturing staff should understand the unique combination of factors that contribute to students' academic performance and attrition at their institution and how best to assist lecturers to deal with these problem.

At the Faculty of Humanities at the Central University of Technology, departments are conjectured to perform and uphold a certain performance standard. This criterion is checked regularly after every examination. Indications from the bulk of departments seem to advocate that the cause for most deviations from the agreed yardstick is attributed to mainly methods of teaching employed by lecturers. It is against this background that this article sought to address the following main research question: ***What factors are perceived to have constrained or enabled lecturers to implement active-learning pedagogies?***

6. RESEARCH METHODOLOGY

This study used the quantitative research approach and followed a descriptive and exploratory research design, using a survey to collect the data. The survey instrument was developed by the researcher and was in the form of a questionnaire comprising closed-ended items. The issues investigated were hurdles encountered or seen to be faced by lecturers in implementing active-learning in their teaching of students at a University of Technology in Education programme and the following variables were identified as predictors of their performance: lecturer centered approach; use of different lecturing methods; active participation in class; diverse academic competency levels in class; and class sizes.

6.1.1 Population and sample

Firstly, due to time constraints, a purposeful or non-probability sampling was used whereby a total number of 65% (n=16) of lecturers from departments namely: Science & Technology, Languages & Social Sciences, Educational Studies and Maths & Sciences, all located within the Faculty of Humanities at the Central University of Technology. All those selected were lecturing students in teacher education. Because the study was conducted on such a relative small scale (n=16, lecturers) over a limited time and in a limited context, this study does not attempt to extrapolate of its findings, but dispense only indications on trends and inclinations as perceived and reported by lecturers.

6.1.2 Data analysis

Data was analyzed by means of the Statistical (software) Package for Social Sciences (SPSS), henceforth referred to as for UNIX, release 6.1 Solaris 2.3 to test the research assumptions. The independent variable in the lecturer's instrument was age, gender, place of birth and qualifications. The dependent variable was factors perceived to be challenging lecturers in implementing active-learning. (Ary *et al.* 2002: 380). Descriptive statistics were used to summarize patterns of response obtained from respondents in a meaningful way. (Denscombe, 2000:193).

7. DISCUSSION AND ANALYSIS OF RESULTS

The questionnaires were given to 16 lecturers. A response rate of 100% was obtained. Questionnaires were collected on the specified return date. The discussion that deals with the responses of the lecturers follows.

Factors are perceived to have constrained or enabled lecturers to implement active-learning pedagogies

Table B Lecturers' teaching/facilitation methods and strategies approaches

ITEM	Always	Frequently	%	Sometimes	Never	%	Total Responded
	4	3	4+3	2	1	2+1	
Lecture-centered approach	6.25	37.5	43.7	37.5	18.75	56.3	16
Student-centered approach	24.2	32	56.2	33.2	10.6	43.8	16
Use of different lecturing methods	30.6	38.2	68.8	12.45	18.75	31.2	16
Direct instruction method	32.2	42.8	75	12.5	12.5	25	16
Discussion method	25.6	55.6	81.2	5.6	13.2	18.8	16
Small group work method	14.4	35.6	50	21.1	28.9	50	16
Problem solving method	24.6	56.7	81.3	8.1	10.6	18.7	16
Co-operative method	18.8	37.5	56.3	43.8	0	43.8	16
Research method	20.7	23.1	43.8	13.5	42.7	56.2	16
Lecturing encourages students to follow deep approach to learning	67.4	20	87.4	12.5	0	12.5	16
Lecturing encourages students to follow surface approach to learning	20	67.4	87.4	12.5	0	12.5	16
Lecturing allow students to relate learning content with their existing knowledge	60.8	20	68.8	21.3	10	31.3	16
Students apply learning strategies when they learn	10	8.7	18.7	10	71.2	81.2	16

Table B shows that 56.3% of the lecturers said that they sometimes to never apply a lecturer-centered approach. It is interesting to note that 24.2% to 32% lecturers always to frequently apply a student-centered approach during lecturing. Costello and Brunner (2008,63-79) argue that lecturers should move away from the traditional lecture-centered approach to one that allows students to take responsibility for their own learning. In this way they help students to become critical thinkers who engage meaningfully in their studies. In using a student-centered approach lecturers do not lose authority because they still provide a basic syllabus and they ultimately evaluate students. This study found that 68.8% of lecturers indicated that they

always to frequently lecture students in a manner that allows students to relate learning content to their existing knowledge. Only 31.3% of participants indicated that they sometimes to never lecture students to relate learning content to their existing knowledge. Continuously relating learning content to students' daily lives is a challenge for lecturers. Chickering and Gamson (1987,1-5) posit that lecturers find it difficult to encourage active learning in which students are motivated to relate their studies to their existing knowledge and apply it to their daily lives. According to Biggs (2003:13), knowledge is created by involving students in their learning activities.

In this study, 68.8% of lecturers indicated that they always to frequently use different lecturing methods during instruction. A further 31.2% of lecturers indicated that they sometimes to never use different lecturing methods. Ellington (2000:315-316) states that it is important that lecturers use active-learning lecturing methods and they should be familiar with a variety of lecturing methods.

In support of Ellington, Biggs (2003:1-10) points out that good lecturing is characterized by lecturers' adapting their own personal strengths in order to enhance their lecturing. Bitzer (2005:173) points out those lecturers at institutions of higher education must attend to the non-cognitive as well as cognitive abilities of students in order to create diverse learning opportunities during their teaching.

In this study, 87.4% of the participants did not show an understanding of deep and surface learning. This is a good indication that participants do not understand deep and surface learning. Johnston (2001:170) contents that lecturers are faced with challenge of ensuring that students approach their learning in a holistic manner. This approach ensures that students find a deeper meaning in the task at hand. According to Watters and Watters (2007:22), students showing a keen interest in critically analysing texts have a deep approach to learning. This attitude should enhance student learning and achievement. This study revealed that 87.4% of the lecturers encourage their students to follow a deep approach to learning, whereas 87.4% of the lecturers encourage their students to follow a surface approach to learning.

In this study, 81.2% of lecturers indicated that sometimes to never students apply learning strategies when they learn. Angelo and Cross (1993:23) state that lecturers who teach students have to deal with many challenges. These stumbling blocks include students who do not participate in classes, lack commitment regarding class attendance and failure to submit work.

In addition, lecturers must assist students to become independent learners and to manage their studies responsibly. Lowe and Cook (2003:54) argue that students do not want to participate in classroom discussions because they were not encouraged to do so at school.

8. DISCUSSION ON THE FINDINGS OF THE STUDY

Table B indicates that, lecturers are faced with the challenge of implementing the active-learning approach that dictates that the student takes the center stage in learning, they take charge of their own learning and they participate in decision making regarding their learning and that the lecturer becomes the facilitator. From this study it is clear that lecturers are faced with the challenge of how to lecture their students. Most lecturers do not make use of different lecturing methods in order to accommodate students with different learning styles. A challenge for lecturers is assisting students with learning and developing by accommodating their diverse learning styles thus enabling students to participate successfully in active-learning situation.

9. SUMMARY AND CONCLUSION

Confirmation, from this study is that it is vital to understand that lecturers need not only master the subject matter, but also comprehend that the way students learn is a paramount ingredient. How to help them develop not only their cognitive skills, such as analyzing, applying and evaluating information (Bloom's 1956) higher order cognitive skills), but also empathy, caring and support equally necessitate a special skill from a lecturer. Undoubtedly, the success of a lecturer is dependent largely upon the willingness and ability of a student to succeed a daunting task for academics if proper mechanism is not put in place timeously and proactively.

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