Conceptions of Constructivist Teaching Approaches In Higher Education: A Case Study

Reda Darge*

Introduction

In many countries policy makers, educators, parents and the public at large are challenging the qualities of teaching in schools in general and in higher education (institutions) in particular. Today, research on teaching-learning process has shown that students in higher learning institutions memorize specific facts and skills that help them to be promoted from one to another level of education. As a result most students cannot very well practice the contents they have learned in college to solve real-life problems. It is a wonder that any of them can learn to pass exams in higher institutions with good academic achievement. Such a disparity between theoretical knowledge and practical ability of students encouraged the researcher to identify and reflect on one profile of higher education instructors, namely higher education instructors' conceptions of constructivist teaching approach.

Teaching and learning are usually interconnected. Learning is considered as a relatively permanent change in behavior due to experience or training. Teaching thus should be assumed as a planned action to bring about behavioral change in learners. Therefore, if the bond between teaching and learning is to some extent unpredictable, then attempts to bring about behavioral change is problematic. It is unlikely that attempts to define effective teaching can be made with confidence.

Teaching in higher education should go beyond the imparting of knowledge and skills to students. It is argued that teachers should be able to think about effective methods that encourage higher education

^{*} Pedagogical Science Department, Education Faculty, Bahir Dar University.

learners actively involve in the teaching-learning process rather than methods for doing lecture. Research evidence suggests that students should do more than just listen. In other words, instructors should be able to encourage students to read, write, discuss, solve problems and construct their own meanings and understandings. Instructors should promote active learning in their classes.

One promising approach to help instructors promote active learning in their classrooms is the constructivist teaching approach. Unlike the traditional methods of teaching such as the lecture method, constructivist teaching approaches are regarded as producing greater internalization and deeper understanding than others. In constructivist approaches teachers are expected to facilitate active learning by encouraging active inquiry, guiding learners to question their assumptions, and coaching learners in the construction process. Moreover, the constructivist teacher is more interested in uncovering meaning than in covering prescribed material.

Although a constructivist teaching approach has been well documented in the literature, its effective implementation in Ethiopian higher education institutions, namely Bahir Dar University, is scant. Thus the purpose of this study is to examine Bahir Dar University selected instructors' conceptions of constructivist teaching behaviors. To this end, the specific question entertained in this study is:

Do Bahir Dar University instructors facilitate teachinglearning process in line with the constructivist teaching approach?

A limitation of this study is that respondents could respond to the items on the basis of what they think are socially acceptable answers. Another limitation of this research is that the study has covered only a limited number of respondents. So, the application of the results to real-life situations should be taken with special care.

Methods

Subjects

A total of 3 Bahir Dar University instructors (participants in the training workshop on teaching and learning in higher education) were taken as study subjects.

Method of Data Collection

To collect the necessary data from respondents a checklist reflecting constructivist teaching behaviors was used for assessing higher education instructors' conceptions of constructivist teaching approaches. The items were developed from available literature (Brooks and Brooks, 1997 cited in Temechegn, 2001).

Example

- I encourage and accept student autonomy and initative.
 A) Yes
 B) No
- I use cognitive terminologies such as "classify", "solve", "analyze" and "predict" when framing tasks. (A) Yes (B) No

Responses were coded as follows a "yes" response was coded as 1 and a "no" response as 0.

Data Analysis Method

The purpose of this research was to investigate instructors' conceptions of constructivist teaching approaches. For this purpose, percentage analysis was used to examine the data.

Results

The data collected from the respondents are reported as follows:

Table 1: Percentage of Teachers Use of Constructivist Teaching Approaches

No.	Descriptors of Constructivist Teaching Behaviors	Responses in %	
		Yes	No
1	I encourage & accept student autonomy and initiative	100%	0%
2	I use cognitive terminologies such as "classify", "solve", and "analyze" when planning lessons	100%	0%
3	I encourage students to analyze, evaluate, and synthesize ideas in classroom learning	100%	0%
4	I inquire students' understanding of concepts before sharing their own understandings of these concepts	33%	67%
5	I encourage student-to-student dialogue	100%	0%
6	I encourage students to engage in dialogue with me	100%	0%
7	I always seek elaboration of students' initial responses	33%	67%
8	I use feedback to know students' present conceptions of the lesson	67%	33%
9	I allow wait time after posing questions for students to understand the questions	67%	33%
10	I always provide time for students to construct relationships and patterns while working on certain activities	0%	100%

Results shown in Table 1 revealed that all respondents (100%) accepted student autonomy, designed lessons in terms of student behaviors, and encouraged students to synthesize and evaluate learning activities. Moreover, all the respondents (100%) encouraged student-to-student interaction and encouraged students to be engaged in dialogue with the teacher himself.

Moreover, the percentage analysis shown in Table 1 revealed that 67 percent of the respondents used feedback to know students' present concept of the lesson and allowed wait time after posing questions for students to understand the questions. And also 33 percent of the total respondents inquired students' understanding of concepts before sharing their own understanding of these concepts and required elaboration of students' initial responses. Finally, the results shown in

Table 1 indicated that all respondents (100 percent) did not provide time for students to construct relationships and patterns while working on certain activities.

Discussion

The central purpose of the present study was to investigate conception of higher education instructors about the constructivist teaching approach.

In line with the constructivist teaching approaches, results in the present study revealed that higher education instructors, namely the Bahir Dar University instructors encouraged student autonomy and initiative, designed lessons in terms of behavioral outcomes, and helped students synthesize and evaluate ideas during the instructional process. Moreover, they had an opportunity to sense the manner how most of the students had understood the question and they used to allow wait time for students. Students' opportunity to engage in dialogue, both with the teacher and with one another was highly encouraged.

Indeed, these aspects of constructivist teaching approaches were producing greater internalization and deeper understanding than the lecture method. These aspects of learning approaches may facilitate learning by requiring students to make new understandings and connections among learning experiences/ activities.

On the other hand, the teaching-learning process in higher education did not go beyond doing a good lecture. Instructors were not highly involved in finding out students' understanding of concepts before sharing their own understanding of the lesson under discussion and did not require elaboration of students' initial responses. Instructors did not provide time for students to construct and work on problems with the potential for evoking a fresh look at the concept previously discussed (studied). This problem may be attributed to the broad nature of the contents to be covered in a definite time-table.

In general, the study leads to a basic conclusion that the constructivist teaching approach has been one of the essential ingredient of teaching and learning process of higher education. The study has shown that higher education teachers go beyond providing (delivering) a good lecture. They seem to increase students' involvement and hence encourage students' success in higher learning institutions. Instructors, in general have a good conception of the constructivist teaching approach.

Finally, the present findings seem to have the following practical implications to help higher education instructors recognize constructivist teaching approach as one of the theoretical framework for teaching and learning in higher education.

- Instructors should frame activities so that students may become autonomous and initiatives takers.
- When real-world possibilities (activities) are presented to students instructors should encourage them to generate abstractions that bind knowledge together.
- Instructors should state objectives in behavioral terms.
- Instructors should consider teaching beyond providing (delivering) lecture. They should increase students' involvement and information during the teaching-learning process.
- Instructors should extend their knowledge of the constructivist teaching approach as one of the theoretical framework for teaching and learning process in higher education.
- Give an opportunity for learners to develop their own ideas before sharing your own understanding of the lesson.
- Encourage group discussion in classroom situation.

- Instructors should get feedback about the learners' present (appropriate) conceptions of the subject - matter.
- Finally, the study on the conception of the constructivist teaching approach has covered only a limited number a subjects; therefore, it is of paramount importance to conduct a detailed study that will cover the higher education instructors in general.

Reference

Temechegn E. (2001), Profile of Higher Education Teacher Training Workshop on Teaching and Learning in Higher Education. Addis Ababa, Institute of Educational Research, Addis Ababa University (13 August-September 4).