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Teachers' perception of the barriers to critical thinking

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Abstract

The need to teach students to think critically has been emphasized and has become a major concern among educators and researchers in recent decades. However, the literature reports that teachers often experience barriers to implementing critical thinking skills in classes. Regarding the assumption that improvements in critical thinking skills and strategies would be easier if the obstacles along the way could be removed and due to the rarity of relevant research in the Iranian context, the present study surveyed 100 educators for barriers to critical thinking implementation. The results revealed that students' attitudes and expectations, self-efficacy constraint and lack of critical thinking knowledge among teachers were reported as major obstacles in teachers' view.

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1. Introduction

As Paul and Elder (2002) assert mind has three basic and interwoven functions—thinking, feeling, and wanting. Where there is one, the other two are present as well. The function of thinking is to create meaning, make sense of the events of our lives, sort events into categories, and find patterns for us. Fostering students' thinking skills in general and critical thinking (hereafter C.TH) skills in particular has always been an important aim of education since 1960s.

Although C.TH skills are highly valued, the available literature represents that due to the existing barriers higher education does not have strong effect on promotion of students' critical thinking skills (Aliakbari & Sadeghdaghghi, 2011). Through recognizing the barriers and seeking the way for

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overcoming them, methods, approaches and techniques can be developed which can be helpful to both educators and students in improving their instructional and learning skills. Prompted by these facts, the present study was intended to investigate the barriers to developing good critical thinking skills from English teachers' view.

2. Statement of the Problem

C.TH skills are not inherent. They are developed through time and experience. Such a fact is truly stressed by Hackworth (2009) in that she notes that for students to be able to use critical thinking skills in their professional careers, they must first be taught how to develop those skills. Although it is widely accepted that improving student thinking is an important goal of education, there appears to be many problems in achieving this goal. Accordingly, this study is an attempt to find out the constraints on improving student-thinking skills in the Iranian educational context. In this regard, the central question of the study is: What factors do teachers perceive as barriers to their use of critical thinking strategies in the classroom?

3. Methodology

A group of 100 English educators, aged between 25-60, from different universities and schools of Ilam and Karaj were addressed. They were 48 females and 52 males. The sample included 67 BA, 24 MA, and 9 PhD educators majoring in TEFL, English literature, or English translation.

To collect data, the Survey of Perceived Barriers to Teaching Critical Thinking by Shell (2001) was administered to English teachers. The questionnaire consisted of three parts. Part 1 requested bio-data in terms of age, gender, and years in teaching experience. Part 2 which consisted of 23 statements asked educators to rank barriers on a 5-point Likert scale ranging from "strongly disagree, 0" to "strongly agree, 4." Part 3 with 20 items asked respondents to rate to what extent (major factor, minor factor, or not a factor) the listed barriers interfere with their ability to implement critical thinking teaching strategies. Shell (2001) identified each item of the questionnaire with one of the eight sub-scales of the instrument as listed in Table 1.

4. Results and Discussion

As shown in Table 1, mean scores for the eight subscales ranged from the low of .60 for the time constraint, to the high of 2.67 for the student characteristics. The highest barrier was related to *student characteristics* with total mean of 2.67. Teachers were given five statements about the student-related constraints. Although lack of motivation, concern of getting good grade, and resistance to active learning were regarded as major barriers by more than 60% of teachers, expectation of lecture format (item 38) and fear of negative student evaluation (item 25) were not among the most significant factors. In general, when all student-related constraints were taken into consideration, the majority of the respondents agreed that students themselves constituted the constraints in improving their thinking skills in various ways.

Table 1, Survey items along with its sub-scales and the obtained means

Sub-scales	Obtained mean	Item number
Student characteristics	2.67	25, 36, 37, 38, 39
Self-efficacy	2.59	1, 3, 15, 16, 17, 20, 29
Lack of knowledge	2.26	8, 31,32, 33, 35
Faculty resistance	1.85	4, 10, 11, 14
Content coverage	1.46	7, 9, 30
Importance and relevance of C.TH	1.31	5, 6, 12, 18, 19
Institutional barriers	1.19	2, 13, 21, 22, 23, 24, 27, 28, 40, 41, 42
Time constraint	.60	26, 34, 43

Student constraints can be ascribed to lack of chance to practice thinking skills, mostly due to the overloaded curriculum and their own attitude towards thinking. Besides, they relatively prefer activities and assignments with simple answers and are not tolerant with the difficulty of thinking. To tackle the problem, program developers and educators need to consider ways of dealing with student resistance to active learning.

The instrument presented seven statements on *self-efficacy constraints* and teachers were asked to express their degree of (dis)agreement with the given items. The majority of the teachers, more than 50%, agreed or strongly agreed that they were not sure of their abilities to teach critical thinking skills (item 1). Almost an equal number were not sure how to model or demonstrate critical thinking (item 3). In addition, they expressed the need for further professional development and additional education (item 16 and 20) in the area of teaching which indicated that the participants were open to using innovative teaching strategies in C.TH development. Further, 65% of teachers regarded feelings of unpreparedness to teach critical thinking skills as a major factor in C.TH development (item 29).

Lack of knowledge with total mean of 2.26 was the third highest scored barriers. It was determined by five survey questions. Although nearly two-thirds (more than 60%) of educators regarded lack of knowledge of what critical thinking is, difficulty in evaluating students, and lack of knowledge of how to promote C.TH as the major barriers, less than 10% agreed that teachers can explain their departments' definition of critical thinking (item 8) .

Lack of knowledge along with the self-efficacy index are supportive of the important role of teachers in C.TH development. In other words, teachers play an influential role in improving C.TH among students in educational settings and teaching critical thinking skills to the students requires competent teachers in using higher order thinking skills. Hence, the results would imply a need to improve the understanding of the concept of critical thinking among teachers to enable them to effectively teach student to think in this way.

Regarding *faculty resistance*, teachers were given four statements. Although nearly 95% of teachers agreed that teaching strategies can change students' critical thinking (item 4), majority of teachers (54%) were not willing to implement new teaching strategies (item 14). Unwillingness to implementing new strategies can be related to the fact that more than 75% of teachers found it difficult to change their teaching strategies (item 10) and that they had difficulty implementing new, innovative teaching strategies (item 11).

Teachers were given three statements about the *content coverage* constraints and were asked about the degree to which they agreed with those items. A large majority of them (97%) highlighted that combining teaching for content coverage with the promotion of critical thinking skills was not difficult for teachers. 70% of the teachers didn't regard the need to deliver a large amount of information to cover content as a

barrier to C.TH development. 64% of teachers agreed that lecturing is teachers' primary method of teaching (item 9). It deserves notice that lecturing strategy may be used mostly by the teachers when the curriculum is loaded and the teachers feel a need to cover the whole content within a short time. However, the results obtained from items (26 and 43) of the questionnaire did not support this assumption in the Iranian context. Accordingly, factors other than time seem to affect teachers' preferences to use lecturing format. These factors may include lack of knowledge of what C.TH is (item 31) or their unwillingness to implement new teaching strategies (item 14).

From among the eight sub-scales, *Importance and relevance of C.TH* received the low of 1.31. The result made it clear that teachers were not aware of the importance of thinking skills. More than 60% of teachers disagreed with two items which indicated that critical thinking is a primary objective of teaching effort and teaching strategies are designed to promote critical thinking (items 5 and 6). More than half of the teachers also were undecided about items 18 and 19, critical thinking is necessary for teaching success and teachers attend a continuing educational class on critical thinking skills in the class.

Teachers were given eleven statements about the *institutional barriers* as constraints on improving thinking skills and were asked about the degree of agreement with the items. 78% of the teachers stated that improving thinking skills has not been established as one of the university priorities. With regard to administrative support, more than three-fourth (81%) of the teachers thought that administrators did not provide support for improving thinking skills. More than 70% of the educators did not regard emphasis on students' evaluation of teachers, large number of students per class, large number of students in total teaching load, and lack of appropriate instructional material as impeding factors. Besides, more than 75% of respondents disagreed that their college considers research more important than teaching. They did not think that teachers teaching load interferes with their ability to teach critical thinking skills or that teachers research activities interferes with their ability to teach critical thinking skills (items 2, 21, and 22).

The majority of the respondents tended to agree that *time constraints* did not highly affect students' thinking skills. Although insufficient time to learn new teaching methods and inadequate time in class were considered as being not a factor by teacher respondents, lack of time for preparing and planning critical thinking activities was regarded as a major barrier by 67% of respondents.

Comparison of the means indicated that teachers seemed to display a higher level of agreement with student characteristics constraints than the other sub-scales (mean=2.67). Following that, the self-efficacy related constraints were perceived as the second most agreed one (mean=2.59). Time and institutional barriers (with mean values of .60 and 1.19) were among the least significant barriers to C.TH.

5. Conclusion

The purpose of this study was to investigate teachers' perceptions of constraints on improving student thinking skills. Improvements in critical thinking skills and strategies would be easier if the obstacles which educators' experience along the way can be removed.

The respondents in the current study reported three major barriers to their implementation of critical thinking teaching strategies. The highest barrier was related to student characteristics. Self-efficacy, with the total mean of 2.59, was the second main obstacle. Respondents reported lack of knowledge of the concept of critical thinking as the third high barrier to the implementation of critical thinking teaching strategies.

The faculty resistance, content coverage, and importance of C.TH were the other reported barriers. A large percentage of the respondents agreed or strongly agreed that critical thinking was not necessary for success of the student and it is not a valuable education outcome or a primary objective of their teaching. Besides, although educators stated that training can improve C.TH ability of students, they were unwilling to use new methods because of their difficulty.

Other possible barriers, such as time constraint and institutional barriers were found to be less important. Although time was an important hindrance of critical thinking for program directors in previous literature, it appeared as the least important factor in this study.

This study may help curriculum designers, supervisors, policy makers, educators by providing insight into the issue of understanding teachers' perceptions of the constraints on thinking skills. It may provide some suggestions for in-service training and improving the quality of teaching. The findings, although significant, had limitations as well. The relatively small sample size and limiting the study to only English teachers call for additional research of this type with larger number of educators enrolled in other courses.

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