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INSTRUCTIONAL STRATEGIES TO FOSTER CRITICAL THINKING: SELF-REPORTED PRACTICES OF THE FACULTY IN ALBANIA

RUDINA GULEKER

Abstract:

Although critical thinking is listed among the objectives and outcomes of many programs in higher education, it is not clear whether faculty foster it in the classroom. This study is designed to look into the usage of instructional strategies that encourage critical thinking by the faculty in private educational settings in Albania. The results revealed that certain aspects of critical thinking such as defending positions and considering other perspectives were frequently used where as modeling CT was more meaningful in younger faculty with less experience. Teacher reflection was widely practiced but student reflection needed better tools to be developed. As we go forward, increasing faculty awareness about the importance of training students for critical thinking will make the learning process more productive and memorable.

Keywords:

strategies, critical thinking, private university, faculty

Authors:

RUDINA GULEKER, European University of Tirana, Albania, Email: rudinak@yahoo.com

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1 Introduction

It has been widely agreed upon that critical thinking is one of the skills of the 21 st century needed for employment, societal advancement and better civic participation. In the context of global competition and fast changing technology, this skill gains a special importance as it contributes to the advancement of life long learning crucial for our future. A job is no more secured and guaranteed for life as it was in the past. Moreover, possessing skills not just a diploma can assist in finding a job today (World Bank, 2014). According to the recommendations of the European Parliament (2006) the emphasis to attain the eight skills for life long learning is on critical thinking as well as creativity, initiative, problem solving and risk assessment. As development continues, people need to make rational decisions based-on evaluative/critical thinking rather than accepting things at face value. Therefore, students should be prepared to question truisms, raise doubts, investigate situations, and find alternatives in the context of both schooling and daily life (Miri et.al., 2007). In the Albanian context, the Albanian Ministry of Education (2008) in its national strategy program for higher education, listed critical-thinking as a skill which is much talked about but missing across the classrooms in higher education. Many of these institutions have it listed among their objectives and outcomes but its implementation has been far from satisfactory.

There is no agreed upon definition on critical thinking and many have argued that it is difficult to teach something that is not clearly defined. On the other hand, studies have shown that although discussion is ongoing in the academic world, in applied settings students and academics share substantively similar definitions and understandings of critical thinking (Lloyd & Bahr, 2010). All this disagreement is actually in line with the spirit of the term critical where we never cease to ask questions and seek alternative explanations. How these fluctuations affect the classrooms today is a matter of interest for researchers. How is the faculty reflecting and fostering these skills in the classroom? In a seminal research, Paul, Elder & Bartell (1997) found that although most faculty (89 %) sees critical thinking as a primary objective of the course, only a minority (19 %) can provide a definition of the concept. In this aspect, the present study set out to examine the faculty attempts in private universities in Albania to foster critical thinking in the classroom. Private universities were chosen on purpose as they score better in certain factors that are viewed as obstacles to critical thinking, such as the number of the students in classrooms and facilities and technology available.

2 Strategies used to foster critical thinking

Paul (1990) stated that many professors teach students a body of knowledge in a sequence of lectures and then ask them to internalize that knowledge outside of class on their own time. Not all students possess the thinking skills to analyze and synthesize information without practice (Walker, 2003). Therefore, delivering content without the

means and tools to internalize it, is a job half done. Content is as important as the teaching methods one uses to deliver it. But what is good learning? Paul describes the conditions of achieving a mediocre learning:

> When students do not actively think their way to conclusions, when they do not discuss their thinking with other students or the professor, when they do not entertain a variety of points of view, analyze concepts, theories, or explanations from their own points of view, when they do not actively question the meaning and implications of what they learn, compare what they learn to their experiences, tackle non- routine problems, examine assumptions, or gather evidence, they do not achieve higher order learning'' (Paul,1990).

Teaching is highly situational and contextual. Strategies and roadmaps delineated as effective don't always work in the classroom. Sometimes instructors need something completely out of the ordinary or even radical to sustain the process of learning. Yet, certain tools and strategies have been associated with the development of good thinking. Browne & Freeman (2000) support the following characteristics for a thinking classroom: frequent questions, engagement in active learning, challenging students beyond their comfort zones and making them aware of the uncertainty in conclusions. In the framework of this study, three strategies are going to be considered as fostering critical thinking in higher education settings: explicitly targeting critical thinking components, active learning, and reflection.

How critical thinking is defined seems to be connected to the academic discipline and the context (Brookfield, 2013). However there is some agreement on the specific abilities included in the various definitions: analyzing arguments, evidence or assumptions, making inferences, making decisions or solving problems, analyzing different perspectives, evaluating and reasoning in conditions of uncertainty (Lai, 2001). Teaching critical thinking and its components explicitly has been a stance defended by many researchers (Halpern, 1998, Willingham, 2007) although empirical results are mixed. In a meta analysis of studies in critical thinking, Abrami et, al (2008) found that pedagogical grounding and the type of intervention in teaching critical thinking predicted the variation in effect sizes across different studies. The findings suggested that the immersion approach, where students are not explicitly taught for critical thinking, had the smallest effect across the studies they reviewed. In other words, it is important to provide explicit instruction in critical thinking rather than simply viewing it as the by-product of the learning process. Brookfield (2013) states that students' assumptions must be challenged and they must be directed towards considering alternative ways of thinking. They also must be challenged to uncharted waters and be introduced with the unexpected or dilemmas. This is not a new concept and many parallelisms can be drawn with Vygotsky's ''zone of proximal development''.

Another method believed to foster critical thinking is an active learning environment. Collaborative learning is one technique often scarce in high educational settings where instructors rely on a combination of lectures and discussions as their primary instructional method (Palmer 2002). Nelson (1994) explains that this type of learning can eliminate misconceptions that despite appropriate instruction, can impede student learning. Brookfield (2013) explains that as far as critical thinking is concerned , student surveys indicate that it is best developed in small groups where peers can shed light on unchecked assumptions and unconsidered perspectives. Students also find helpful, case studies, simulations and scenarios (Brookfied, 2013). Interactive lectures are a convenient active leaning strategy for university professors as they can still rely on lecturing but make it more effective for learning. In the literature cited by Brookfield (2006, p.100) it is stated that no lecture should contain more than twenty-minute blocks of uninterrupted teacher talk.

Reflection is a commonly recognized component of critical thinking. It indicates a very important aspect of the concept: its self-regulatory nature. Ennis(1989) included it in the definition and Facione and the Delphi experts listed self-regulation as one component skill of critical thinking (Facione, 1990). Halpern (1988) refers to it as the meta-cognitive process that monitors thinking and strategy using. Reflection allows people to evaluate their own thoughts, behaviors, and feelings and make adjustments if necessary. Reflection on both instructor and student is useful for the learning process. Tsui (1999) asserted that written assignments encourage critical thinking as they can provide an avenue for students and teachers alike to reflect on what is accomplished and what needs to be done.

3 Methodology

This quantitative study is designed to look into the usage of instructional strategies that encourage critical thinking by the faculty in private educational settings in Albania. A quantitative survey was developed to examine the usage of certain strategies by the faculty. The survey was sent to instructors in three private universities via google docs and 57 answers were received.

3.1 Research Questions

- To what extent does the faculty target explicitly critical thinking components in class? Is there a difference regarding the years of experience in teaching in higher education?
- To what extent does the faculty use active learning strategies in class? Is there a difference regarding the years of experience in teaching in higher education?

- To what extent does faculty use activities that target reflection in class? Is there a difference regarding the years of experience in teaching in higher education?

3.2 Instrument

The instrument was an adaptation of a protocol used by Bouton (2008). It was divided in tree parts: targeting critical thinking components, incorporating active learning strategies, and incorporating reflection. The participants had to rate the items based on the frequency they were used in class in a five-point likert-type scale. The instrument contained 16 items and four demographic and general questions.

4 Results

The results are presented according to each research question. The first research question was concerned with the extent to which faculty targets critical thinking components in class. The respondents were asked to rate the frequency of usage of categories such as examining assumptions and different points of view, tolerating uncertainty and question conclusions, explicitly explain what it is to engage in critical thinking, assign challenging tasks, ask for reasons and arguments to defend a position, and model critical thinking skills. The following means were used to interpret the answers: 1-1.49 was viewed as never using these strategies in class, 1.50 - 2.49 was interpreted as rarely usage, 2.50-3.49 was viewed as using them sometimes, 3.50-4.49 was calculated as using the strategies frequently and 4.50-5 was viewed as using them consistently. Table 1 presents the findings of targeting critical thinking components in class. As seen from the responses defending a position has the highest mean (M= 4.28, SD= .60) indicating that instructors frequently ask students to defend their positions as part of seeking input from them. Exploring multiple perspectives and challenging assumptions are also used consistently across classrooms whereas modeling CT, introducing uncertainty, and giving challenging assignments that require critical thinking are used some of the time. Explicitly identifying what CT is and is not is the lowest scoring item in the list (M=2.38, SD=1.00) indicating that this strategy is only used rarely in the classroom.

Table 1 Targeting Critical Thinking Components in Class

Survey Item	Mean	Std. Deviation
Explore multiple perspectives	4.2500	.80861
Defend position	4.2750	.59861
Model CT	3.2750	.98677

Challenge assumptions	3.5250	.59861
Introduce uncertainty	3.4500	.98580
Explicit identify CT	2.3750	1.00480
Give challenging assignments	3.6000	.59052

The perceived usage of some active learning strategies in class are shown in table 2. Among many active learning strategies three were chosen to be included in the study: discussions, group work, and interactive lectures. The results indicated that the instructors reported to frequently use discussion (M=4.18, SD=.59) and interactive lectures (M=3.95, SD=.78) in the classroom. Critical thinking in group work was only used some of the time.

Table 2 Using Active Learning for CT

Survey Item	Mean	Std. Deviation
Discussion	4.1750	.59431
CT in group work	3.4500	.98580
Interactive lectures	3.9500	.78283

Table 3 shows the results for using strategies targeting reflection. Four categories were included here: teacher reflection, allowing multiple drafts in assignments to give students a chance to reflect and revise, reflection logs about learning, and peer and self-assessment where students get a chance to involve in reflective and meta-cognitive processes. The results show that instructors frequently reflect on their work (M=4.1; S=.78), followed by self/peer assessment and multiple drafts which are used some of the time. Reflection logs are rarely used as a tool in the classroom (M=2.45, SD=.71)

Table 3 Reflection Strategies Used in the Classroom

Survey Item	Mean	Std. Deviation
Instructor reflection	4.1000	.77790
Multiple drafts	3.3000	.72324

Reflection logs	2.4500	.81492
Self and peer assessment	3.4500	.71432

To answer the second parts of the three research questions, one way ANOVAs were conducted to compare the means and determine the differences in these three categories based on the years of experience in teaching. Tukey's Honestly Significant Difference test was performed to determine which groups differed significantly from each other. The results showed that only the change in modeling CT was statistically significant (sig.=.041) indicating that the instructors who had 1-5 years of experience were modeling critical thinking more than the other two groups (6-10 and 11-15).

5 Discussion

According to Tiruneh el/al.'s (2014) review of research on effective strategies to promote critical thinking in higher education, it was concluded that direct instruction in thinking skills and detailed explanation of CT principles along with teacher modeling and small group discussion appear to consistently result in greater CT improvement compared to implicit teaching strategies. The results of this study show that instructors report to frequently use three important CT components (defending a position, challenging assumptions and exploring multiple perspectives) whereas modeling CT falls on the sometimes category. This may be due to the limited explicit knowledge instructors have towards critical thinking components and the important role modeling plays in creating a habit of critical thinking in the classroom. Tiruneh et. al's (2014) review indicates that many studies that report CT increase in students after some kind of intervention, have been conducted by either trained instructors or researchers. Specific trainings that raise awareness to these aspects of CT may be beneficial to all the faculty in order to increase targeting CT skills and modeling in the classroom. The statistical significance in the modeling category among the experience groups (1-5 years of experience differed significantly from other groups in CT modeling) shows a change in the right direction in the young faculty. Nevertheless the small scale of the study prevents from any significant generalizations in this area. Another important finding is that critical thinking in group work is only used some of the time. This is consistent with the literature findings that lectures and discussions are more popular than group work due to the fact of diminished instructor control levels. Embracing group work means shifting the authority and the focus to the students which can be accepted with by some instructors. Similarly, the relatively large number of students in auditoriums makes group work difficult to manage. The last important finding was the reported reflective practice on faculty's side but a lack of incorporating student reflection logs as part of the course. This may be partly due to the amount of work and effort it requires to be carried out but is also due to the fact that the

transmission of the knowledge is seen as more important than the responsibility of making sure students have the tools to learn it. Reflection is an activity and a habit of mind that has consistently produced positive results in improving thinking and is highly transferable among disciplines.

6 Conclusion

Regardless of the teaching methods used in class, faculty must exercise care to deliberately incorporate critical thinking, especially if it is listed among the course objectives. Even with great strategies and tools, however, student success is not guaranteed. Students need ongoing and frequent practice with applying critical thinking, and they need practice with applying it in diverse ways. Faculty should foster the culture of inquisitiveness and the habit of thinking so that the material presented can be analyzed, internalized and actually mean something even after the students are graduated and the knowledge learned forgotten.

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