DOI: 10.20472/TEC.2015.002.004

RUDINA GULEKER

European University of Tirana, Albania

ALBANIAN PRESERVICE LANGUAGE TEACHERS' AWARENESS OF THE LEVEL OF THINKING IN CLASSROOM ACTIVITIES

Abstract:

Thinking is becoming a priority in the education systems across the world. Yet it is sill a commodity that is relatively new in Albanian classrooms. While there are many factors to blame, a big responsibility falls to the teacher. In the effort to assess the state of higher order thinking in teachers, this study aims to determine the extent to which pre-service teachers of English language are able to identify the thinking levels in certain classroom learning activities according to Bloom's Taxonomy. The participants of the study (n=38) were students of masters of education in English who completed a questionnaire to determine the level of thinking in vignette-like classroom activities. The mean for ten vignettes was 6.02 and there was no statistical significance between the means and the reported level of comfort in teaching the skills. The results showed that more qualitative data is needed to further explain the factors that influenced their decisions.

Keywords:

preservice, higher order thinking, language teachers

Introduction

Critical thinking skills are a common denominator for the schools and curriculums across the world as they are deemed essential for the 21-st century. The information we can now access is mind blowing. "Researchers have estimated the world's data storage capacity at 295 exabytes—enough information to fill a pile of CDs that would stretch beyond the moon. That vast pile of information is only getting vaster: It increases by a factor of 10 every five years" (Winerman, 2012, p.44). Despite this knowledge, the lack of the ability to think means we have the answers but don't understand them. (Halpern, 2014). Studies and performance exams alike have come to the conclusion that today's students are far from the required level in thinking. Kennedy (1991), citing the research done around that the US, stated that students may be good at constructing sentences or time in performing basic arithmetic calculations, but they can not reason through a multistep problem or support an argument properly. And these are the types of tasks students will face in life so failure to perform in those might imply the failure of the education system. In fact, the latest results of the PISA assessment listed Albanian students below the average of their neighboring peers and ranked them twice less successful than the European counterparts indicating the dire situation of thinking in education (World Bank, 2014).

As Resnick (1985, p. 130) stated: "Knowledge is no longer viewed as a reflection of what has been given from the outside; it is a personal construction in which the individual imposes meaning by relating bits of knowledge and experience to some organizing schemata". As such, it affects the relationships and the roles of all parts involved in the educational process. The pressure is now on teachers to provide learning opportunities that incorporate content with higher-order thinking (HOT s) skills as critical thinking is often referred to in K-12 settings. Higher order thinking skills are the key to provide opportunities to make meaning and connections in this vast amount of knowledge. In this framework, pre-service teachers' knowledge about critical thinking and HOTs is important. Nevertheless, knowledge about them does not result in their implementation. Chai, Theo and Lee (2009) found that pre service teachers' beliefs after their practicum changed form a constructivist perspective to a more traditionalist approach. They explained this finding with the uncertainties and the intensity of the demanding factors in the classroom for the first time teachers. Consequently, although teachers are knowledgeable and maybe feel passionate about higher order thinking skills, they may resort to the safety of a traditionalist, content-bound, teacher-centered approach once they face the classroom. On the other hand, the lack of knowledge makes their implementation practically impossible. 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. Many of these institutions have it listed among their objectives and outcomes but its implementation has been far from satisfactory. Therefore, an assessment of the ability to detect different levels of thinking might be useful for different disciplines of teaching. In this perspective, this study aimed to examine the knowledge pre-service English teachers hold about the thinking level of different classroom activities measured by Bloom's taxonomy of educational objectives (Bloom, 1984). Bloom's Taxonomy was chosen as the basis for categorizing the thinking levels as it is translated in many languages and is frequently used in K-12 classrooms across the world.

Higher order thinking in education

Critical thinking is the buzzword in education along with problem solving and creative thinking. It is often used in meetings and documents, yet no consistent set of vocabulary terms or set of skills is present in K-12 education. One exception is the Bloom's Taxonomy which addressed six levels of thinking: knowledge, comprehension, application, analysis, synthesis and evaluation. The first three levels are referred to as low level thinking, while the last three have been considered as high level that leads to critical thinking although researchers and authorities in the field oppose the idea that the two can be used interchangeably. Bloom asserts that students move up the ladder of the thinking levels by mastering the fist steps. Anderson and Krathwohl (2001) revised his taxonomy with the purpose of simplifying and making it more applicable to write lesson objectives. They acknowledged the fact that students can not only move upwards the taxonomy but also move back and forth by stating that "critical thinking and problem solving tend to cut across rows, columns and cells of the taxonomy" (p.312). In the revised taxonomy, verbs were provided to describe the activities for each level. It includes the levels of remembering, understanding, applying, analyzing, evaluating and creating. Creating, represented by synthesis in the old taxonomy, was placed at the top of the ladder. The authors stated that the level of thinking is not dependent on the complexity of the knowledge. Even with simple knowledge, students can be pushed to use higher order thinking (Bloom, 1984). In Albania, teachers attend PD sessions to train but change is not easy. Familiarity with the concept is essential and it begins in teacher education programs. Research has shown that teachers' skills affect the process of teaching higher order thinking. Effective faculty tend to use both low and higher level activities whereas less effective faculty fall short on applying the higher order thinking skills (Stronge, et al., 2011). Torff (2006) concluded that non expert teachers regardless of the years of experience tended to depend on the learners' perceived advantages such as cognitive or academic ability and socioeconomic status to use activities high in critical thinking deeming these more useful and appropriate for high ability learners. The expert teachers used higher thinking activities more consistently for all student groups. The beliefs about the effectiveness of these activities with certain learners certainly effects their implementation in class. On the other hand, direct instruction on the methodology and usages of higher order thinking may have an effect in its usage in the classroom. Preservice teachers who were taught how to teach and include HOTs in the classroom were more likely to better apply these skills in their practicums (Pleyvak, 2007).

Methods

Participants

Participants of the study were students of the master of education in English language teaching (N=38) in a public university in Albania. The Albanian higher education system has been restructured according to Bologna Declaration and requires teacher candidates to complete their subject matter education followed by masters in education where they mainly take methods courses. They were the willing participants from a cohort of 58 students and completed the Thinking Level Questionnaire along with some general

questions. The questionnaire was in Albanian but the students were told they could ask clarification questions if they needed to. Because it might have been perceived as a kind of test, the instructor was not present in the room during the questionnaire administration. The researcher and a colleague administered the questionnaire ensuring the students' anonymity.

Research Questions

- 1) Can preservice English teachers identify the thinking level of instructional activities?
- 2) Is there any difference between the level of identification and the perceived ability to teach them?

Instrument

The instrument was inspired by Torff, & Warburton, (2005) and Coffman (2013) vignettes but was modified to contain items only for language teachers. Ten vignettes described scenarios targeting both low and high order thinking skills (Appendix 1). Participants were to read descriptions of learning activities common to a language classroom. For each description, they were asked to identify the highest level of thinking the activity uses. They were also asked to rate their level of comfort in teaching these skills.

Results and Discussion

The first research question was to determine weather the participants could accurately determine the type of thinking involved in different activities. By being able to determine this level, it was believed that teacher candidates would be able to prepare different level activities and include more high order thinking in the classroom. Descriptive statistics for the level of thinking in instructional vignettes was used to answer this question. A summary of the data is given in Table 1.

Activity # Level of thinking	Percentages responses	of	correct
1 remember	84% (n=32)		
2 understand	60% (n=23)		
3 analyze	50% (n=19)		
4 evaluate	55% (n=21)		
5 create	84% (n=32)		
6 apply	71% (n=27)		
7 analyze	45% (n=17)		
8 remember	34% (n=13)		
9 create	84% (n=32)		
10 evaluate	32% (n=12)		

Table 1: The percentages of correct responses

The highest number in the correct responses was from the creating category with both items having the same correct number of responses. One of the reasons might be the fact that the activity asked the students to produce something using the information they'd learned. On the other hand, this skill was a huge distractor for the last activity where students had to write an evaluative paragraph to evaluate different recycling programs. The process of writing was seen as creating even though all they had to do was evaluation. This was the item with the least correct responses (n=12). The total mean score for all the participants was 6.08 with a standard deviation of 1.44. It can be concluded that students need more practice in discerning the skill of creating, what makes it superior from the other skills. As Bloom asserted, the problem with identifying higher skills is that they contain lower skills and the two can be easily confused (Bloom, 1984)

As for the second question, the students were also asked to rate the level of comfort in teaching these skills. They had to rate their comfort level as comfortable, somewhat comfortable and uncomfortable. ANOVA was performed to look if there is a difference in the means between these three groups. It was predicted that the students who reported low levels of comfort would also have a low mean in the Thinking Level Questionnaire. The results did not show a statistical significance. This finding is unexpected as previous research has shown that low levels of comfort were associated with low success in identifying the skills. One reason for this can be the carelessness with which this question was answered or the overly pessimistic or optimistic beliefs about their future practice. The later can be connected to the gaps in a systematic inclusion of HOTs methodology in

preservice courses. Further qualitative data would help to understand why students made certain choices.

Table 2 Differences	by	comfort	level
---------------------	----	---------	-------

Mean score	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.897	2	3.948	2.007	.150
Within Groups	68.866	35	1.968		
Total	76.763	37			

Conclusion

As we go forward, it is seen that a confusion arises in the levels of thinking different classroom activities. Although knowledge does not secure implementation, it is essential that teacher education programs, now more than ever put their focus on explicitly teaching them to teacher candidates not only as theories, but with hand on activities so they can be internalized and valued by them. Because each subject area has its specificities, research on each on of them especially in the form of teacher interviews and observations may shed light on the behaviors of including higher order thinking in the classroom.

References:

Albanian Ministry of Education. (2008). Strategjia Kombetare per Arsimin e Larte (SKALA) 2008-2013.

- Anderson, L., & Krathwohl, D. (2001). A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives. New York, NY: Addison Wesley Longman Inc.
- Bloom, B. (Ed.). (1984). *Taxonomy of educational objectives, book 1 cognitive domain*. White Plains, NY: Longman Inc.
- Chai, C., Teo, T., & Lee, C. (2009). The change in epistemological beliefs and beliefs about teaching and learning: A study among pre-service teachers. *Asia-Pacific Journal of Teacher Education*, 37, 351-362.
- Halpern, D. (2014). *Thought and Knowledge: An Introduction to Critical Thinking*. 5th Ed. Psychology Press. Taylor & Francis Group
- Kennedy, M.M. (1991). Policy issues in teacher education. Phi Delta Kappan, 72(9), 659-665.
- Plevyak, L. H. (2007). What do preservice teachers learn in an inquiry-based science methods course?. *Journal of Elementary Science Education*, 19(1), 1-12.
- Resnick, L. B. (1985). Cognition and instruction: Recent theories of human competence and how it is acquired. In B. L. Hammonds (Ed.), *Psychology and learning: The master lecture series*.Vol. 4, pp. 123-186. Washington, DC: American Psychological Association.
- Torff, B. (2006). Expert teachers' beliefs about use of critical-thinking activities with high- and low-advantage learners. *Teacher Education Quarterly*, 33, 37-52.
- Torff, B., & Warburton, E. (2005). Assessment of teachers' beliefs about classroom use of critical-thinking

activities, Educational and Psychological Measurement, 65, 155-179.

Stronge, J., Ward, T., & Grant, L. (2011). What makes good teachers good? A cross-case analysis of the connection between teacher effectiveness and student achievement. *Journal of Teacher Education*, 62, 339-355

Winerman, L. (2012). Tracking the scent of information. Monitor Staff, 43(3), p.44.

World Bank, (2014). Cilësia e Arsimit dhe Mundësitë për Zhvillimin e Aftësive në Shqipëri.

Appendix 1 Classroom Activities

- 1. Students are studying food related vocabulary. The teacher writes the new words on the board, gives their meanings, asks students to repeat them. Then he/she asks students to write the word below the the picture in a hand out.
- 2. Students are reading a fable about helping and cooperation. In a class discussion, students describe the characters' actions that show how they helped the others.
- 3. The students are learning about the difference between different parts of the speech such as nouns, verbs, and adjectives. The teacher gives the students a group of words and asks them to separate the words into the three categories.
- 4. The students are learning about the adjectives used to describe the weather. The book provides photos with captions to describe the adjectives. The teacher provides a hand out with incorrect captions asking students to make corrections.
- 5. The class is reading a short story. The teacher asks students to read all of it except the last part and asks students to write their own endings of the story.
- The students are learning the conjugation of the verbs in the past tense and the teacher after explaining the rules and conjugating some verbs, the teacher asks the students to make some past tense sentences.
- 7. They are reading about the different alternative sources of energy. The teacher asks the students to chose two of the sources mentioned in the text and compare and contrast them by using a Venn Diagram.
- 8. Students are studying prefixes, suffixes and word formation. After presenting them with some prefixes and suffixes, the teacher writes on the board examples of words formed with them. Later on s/he gives a hand out asking the students to match these prefixes/suffixes with corresponding root to make words s/he wrote on the board.
- 9. After completing a unit on food and restaurants, the students were asked to prepare two menus: one for a fast food restaurant, the other for a fine dining restaurant.
- 10. After reading a piece on advantages and disadvantages of different programs of recycling, students were asked to write a paragraph about the program they would chose to implement in their school.