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Teaching Critical Thinking Skills in Higher Education: Some Reflections

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Abstract

Critical thinking skills are seen as a required quality that students should acquire in order to excel on their education journey. Critical thinking skills enable students to critically analyze materials and improve their analytical, argumentative and communication skills. Using critical thinking skills students are able to evaluate different arguments and based on that knowledge resolve different conflicts and come up with solutions to problems they experience in their lives. The main aim of this paper is to analyze some conceptions of critical thinking skills, to investigate the importance of critical thinking skills for students, and to examine the need for teaching strategies to develop students' critical thinking. If we are to revive critical thinking in our education system, especially in English language teaching, then we must give opportunity to train, learn, adapt, and of course teach how to evaluate such assessment. This sums up the purpose of this paper, which beside discussing what is critical thinking will research language and critical thinking, evaluation and assessment, critical thinking as educational goal and critical thinking in classrooms with some examples in context of English language teaching. The research method in this paper used to prove the hypothesis that critical thinking is crucial and beneficial for students that should be practiced in language education are descriptive method, analysis, synthesis, and deduction.

Keywords: Critical Thinking, Education, Knowledge, Teaching Strategies

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Özet

Eleştirel düşünme becerileri, öğrencilerin eğitim yolculuklarında başarılı olabilmeleri için edinmeleri gereken bir nitelik olarak görülmektedir. Eleştirel düşünme becerileri, öğrencilerin materyalleri eleştirel olarak analiz etmelerini ve analitik, tartışmacı ve iletişim becerilerini geliştirmelerini sağlar. Öğrenciler eleştirel düşünme becerilerini kullanarak farklı argümanları değerlendirebilir ve bu bilgilere dayanarak farklı çatışmaları çözebilir ve hayatlarında karşılaştıkları sorunlara çözümler üretebilirler. Bu makalenin temel amacı, eleştirel düşünme becerilerinin bazı kavramlarını analiz etmek, öğrenciler için eleştirel düşünme becerilerinin önemini araştırmak ve öğrencilerin eleştirel düşünmesini geliştirmek için öğretim stratejilerine olan ihtiyacı incelemektir. Eleştirel düşünceyi eğitim sistemimizde, özellikle İngilizce öğretiminde yeniden canlandıracaksak, bu tür değerlendirmelerin nasıl değerlendirileceğini yetiştirmek, öğrenmek, uyarlamak ve elbette öğretmek için firsat vermeliyiz. Eleştirel düşünmenin ne olduğunu tartışmanın yanı sıra dil ve eleştirel düşünmeyi, değerlendirme ve değerlendirmeyi, eğitim hedefi olarak eleştirel düşünmeyi ve sınıflarda eleştirel düşünmeyi İngilizce öğretimi bağlamında bazı örneklerle araştıracak olan bu makalenin amacını özetlemektedir. Dil eğitiminde uygulanması gereken eleştirel düşünmenin öğrenciler için çok önemli ve faydalı olduğu hipotezini kanıtlamak için kullanılan bu yazıda kullanılan araştırma yöntemi betimsel yöntem, analiz, sentez ve tümdengelimdir.

Anahtar Kelimeler: Kritik Düşünce, Eğitim, Bilgi, Stratejileri Öğretmek

1. Introduction

According to Daud and Husin, 2004 educational institutions often teach students what to think but they do not teach them how to think. Teaching methods employed at the Universities nowadays should be reconsidered in order to teach students how to think but not only what to think. Thus, critical thinking has become prominent issue in the last few decades because researchers have realized its' importance. One specific example is in the field English language teaching. In this case CLIL approach was used to provoke critical teaching skills among students. Researchers who use CLIL Methodology used Bloom's taxonomy of learning. It has been shown through different research that the use of specific content promotes effective learning.

The education system is certainly the most important system we have and every anomaly of it creates far-reaching consequences for society. A question that has often been imposed lately is whether student assessment is absurd. Before considering this issue, it should be noted that many students who are not interested in all school subjects usually do not have high average grades and therefore cannot enroll in prestigious colleges and universities. Then, the academic world is losing many gifted students. Looking at things from that angle, the grading system prevents geniuses in certain fields from gaining formal diplomas and being recognized as authorities, although they can convincingly overshadow educated colleagues.

Views on education and what needs to be done have changed continually. Each perspective brought something new to the science of learning and new directions flourished. Today's education varies from country to country, but amid revolution everyone has agreed that literacy and critical thinking are of tremendous importance in students' lives and academic success. Not only that critical thinking is certainly a way of a better future and success, but also happiness, and other virtues that improve a person. In fact, studies have shown that in countries where literacy and critical thinking are high, the average IQ rises. What better proof then do we have of the importance of critical thinking and knowledge of a language? Another study shows that learning languages is correlated with open-mindedness, expanding worldview, academic and career success. Since literacy is best taught by learning a language, and critical thinking, language and literacy are correlated. Then English language teachers in this case should pay attention to teaching critical thinking. However, many try teaching critical thinking with method of only abstract thinking, which results in unsuccess. This matter requires time, personal investment, patience, and ambition. Critical thinking is something in which a 3-year-old can thrive and a 50-year-old fail.

2. Critical Thinking

According to Choy, Abdul and Cheah (2009) "the concept of critical thinking was featured in taxonomies a few decades ago. Critical thinking is a complex process that requires higher levels of cognitive skills in the processing of information. The teachers' perceptions of critical thinking among students influence their behaviors in the classroom. It has been found that teachers perceive they are teaching critical thinking to their students and believe that critical thinking will provide the intellectual stimuli that will facilitate critical thinking. The evidence of critical thinking among students was perceived to be their ability to explain ideas and concepts in their own words. However, the ability to think logically and solve problems using new approaches paraphrase is not an indication of the students' higher-level cognitive skills but the process the student undertakes to

gain understanding of the material presented. Teachers did not seem to understand the requirements needed to cultivate critical thinking among students. Although teachers perceive that they are encouraging critical thinking in the classroom, they are merely focusing on the comprehension of the subject matter." In this regard, one may assert that critical thinking has ancient roots, especially with the reference to Socrates (Paul, R.W., Elder, L., & Bartell, T., 1997.) Socratic model of critical thinking was based on forming and asking more questions which kickstarts the train of thought and letting those questions be the guide. The good question then is the first step in effective learning (Wang, Shin-Yun & Tsai, Jer Chia & Chiang, Horn-Che & Lai, Chung-Sheng & Lin, Hui-Ju, 2008.)

John Dewey (1997) called critical thinking reflective thinking and defined it as "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends" (Dewey, 1910; 1993). In the shift from traditional education many progressivists suggested critical thinking as educational goal. Richards et al (2005) define it as "a level of reading comprehension or discussion skills when the learner is able to question and evaluate what is read or heard" (p. 174, as cited by Khatib, Sarem, & Hamidi, 2013) In The Eight-Year Study (also known as the Thirty-School Study) conducted between 1930 to 1942 by the Progressive Education Association (PEA) schools were given the chance to redesign their curriculum free of the authority pressure and many participants supported the progressive education movement even after the study was completed. This suggests that it had positive effects on education and confirms the need for change in the system as such freedom provides better customization of curriculum to students' goals and needs. Research on critical thinking in education has shown that critical thinking skills can be successfully applied in different segments of an individual's life, transcending their use exclusively within the classroom (Anderson and Reid, 2013).

Critical thinking has been an important trend in changing education over past decades. Nevertheless, critical thinking is much older than it seems. In fact, its ancestors are ancient philosophers, who by asking right questions guided and motivated thoughts of others. This marks the beginning of education whose initial goal was exactly that. However, in 21st century course of education has deviated due to globalization, mass media, misusage of technology, fear of change and no matter how innovative, creative, and effective the trend towards change becomes it does not last long. Despite benefits of teaching critical thinking, some educators often choose to teach in traditional ways. The reason for this issue may be that while critical thinking requires more time and effort and personal investment in the content, traditional ways seem much simpler. Overall, we then feel the outcomes in the form of independent and critical thinking obscurity of generations after us.

Certainly, in language education, according to many instructors it is much easier to grade e.g., a test than an essay. "But why should we be concerned about critical thinking in our classrooms? Obviously, we want to educate citizens whose decisions and choices will be based on careful, critical thinking. Maintaining the right of free choice itself may depend on the ability to think clearly. Yet, we have been bombarded with a series of national reports which claim that "Johnny can't think" (Mullis, 1983; Gardner, 1983; Action for Excellence, 1983. As cited by Tama, 1989.).

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teaching, then we must give opportunity to train, learn, adapt, and of course teach how to evaluate such assessment. This sums up the purpose of this paper, which beside discussing what is critical thinking will research language and critical thinking, evaluation and assessment, critical thinking as educational goal and critical thinking in classrooms with some examples in context of English language teaching. The research method in this paper used to prove the hypothesis that critical thinking is crucial and beneficial for students that should be practiced in language education are descriptive method, analysis, synthesis, and deduction.

3. The Need for Critical Thinking

Through course of time, means of education have changed drastically. Since emergence of behavioristic perspective in teaching the highlight was put on factual knowledge and memorization of these facts rather than developing critical thinking in students. Behaviorism as well as other directions that proved to have fewer positive outcomes, left its roots too deep across all fields that it is still felt in 21st century. In later years, after the decline of behaviorism for obvious reasons, innateness, critical thinking, and other major components in developing the human mind took the stage. The first most important work after behaviorists that changed education and view of human mind belongs to Chomsky. The thoughts in our mind always must be expressed in language, therefore, critical thinking is tightly related to language. Though he had no books on topics such as critical thinking, Chomsky's theory of innateness, Language Acquisition Device and Universal Grammar prove that creativity is the real human intelligence, and the only way to spark that up is to be a guide than an authority of the student's minds. After all, language is what makes the distinction between humans and animals, as well as the ability to think critically. In this regard, "the history of education is also the history of educational panaceas, the comings, and goings of quick fixes for deep-seated educational problems. This old problem is dramatically on the increase. The result is intensifying fragmentation of energy and effort in the schools, together with a significant waste of time and money. Many teachers become increasingly cynical and jaded" (Paul & Elder, 2007).

Behavioral theory of language did not pay attention to the linguistic creativity that is manifested in the process of its learning and use. Chomsky later criticizes that while theories were developed and approaches used in education, the system has forgotten the initial goal because of the wrong view. Namely, we teach children to value wrong things, to conform to the rules, discipline and make tests according to what is thought. Despite tremendous success on tests, there is truly little space for creativity, and we know that creativity is and should be one of the main things we should measure and improve when it comes to intelligence.

In his book Language and Mind (2006), Chomsky begins with reviews on previous linguistic contributions discussing from before and after Cartesian linguistics and philosophy. When we travel through time, we see that from Greek philosophers like Aristotle, to modern day that they questioned the world, mind, body, and existence in general. Chomsky talks about illusions about language in the past. After Cartesians fell, the new trend changed directions the science of mind was going. They thought that the world could be explained as such that everything is some sort of machine, and therefore extended this thought on language and mind as well. Thus, "cognitive science is a child of the 1950s, the product of a time when psychology, anthropology and linguistics

were redefining themselves and computer science and neuroscience as disciplines were coming into existence" (Miller, 2003). Since major discoveries were very fruitful, the planted seeds kept persuading and promising for future explanations. Along rose hope that technology (and later behaviorists and cognitivists) could explain language and that the computer can extract grammar based on a certain corpus of texts, or computer translation. Some even thought that in linguistics everything was already discovered by that time... After several wrong approaches, it became quite clear that an independent study must abstract one cognitive system, one knowledge system and beliefs that develop in early childhood and that, in contact with many other elements, determines the type of behaviors we observe. That is a system of linguistic or the ability to speak a language that is found as a basic human behavior that is, certainly not basic nor is it accomplished in a simple way, at all! As he said for MIT Press "Homo sapiens is radically different from other species in numerous ways, too obvious to review. "Possession of language is one crucial element, with many consequences." With some justice, it has often in the past been considered to be the core defining feature of modern humans, the source of human creativity, cultural enrichment, and complex social structure" (Chomsky, 2019). Chomsky's biggest contributions are in terms of creative use of a language, because infinitive use of finite means determines how we express ourselves and that is the ultimate key to critical thinking because every word presents an idea, and together they make a meaning which should be constructed un such way that it clearly represents what we imagined.

But firstly, one must know how to form and ask questions, how to take on both sides – the one they agree on and the opposite one and evaluate them with both strengths and weaknesses; this, of course, starts from educators and their change. Critical thinking also relies on judgement, and just mentioned example strengthens the ability think and judge before submitting to prejudices, stereotypes, and common beliefs. Our ever-changing and challenging world requires students, our future citizens, to go beyond the building of their knowledge capacity; they need to develop their higher-order thinking skills, such as critical system thinking, decision making, and problem solving (Miri, David, & Uri, 2007).

4. Struggle for Change

To reinstate critical thinking skills certain groups of scholars' design different standardized tests (Willingham, 2008). However, the same culture of testing has caused student anxiety, low self-esteem, lack of confidence to achieve freedom of expression. In other words, students (especially in these transitional years from traditional to modern education) are in fear of being in contradiction to what authorities at the time believe. They are in fear of making a mistake and scoring low on exams to the extent where their critical thinking becomes endangered. In the 21st century, youth are at risk of choosing the wrong profession with this being as one key factor in the equation. We can prove this by e.g., comparing Finland's education system and Bosnia and Herzegovina's education system (where the author is seated at), where Finland has been awarded many times for successful education and stands 7th on the average IQ by country in ranking. Finland has one of the best education systems in the world, as evidenced by the repeated success of the Finnish students in national education rankings. For example, they ranked 5th in science, 4th in reading and 12th in mathematics in the Program for International Student Assessment ("PISA"1) that took place in 2015. In addition, the Organization for Economic Co-operation and Development has praised the Finnish schools for serving all students well, regardless of family background, socio-

economic status, or ability (from Research Office Legislative Council Secretariat, 2019). In Finland, instead of conditioning children and students with tests, their true reward is learning itself. There are no grades but teach children self-assessment and peer reviews and they do so for the sake of reference in self-achievements. Children would know that all that learning is only for their own interests instead of societal pressure and expectations. Classes are short, they value free time, creativity, teachers do much less talking and let children practice problem-solving skills and critical thinking by themselves or with others, be that even figuring out what to do next.

Bosnia and Herzegovina (and most part of Balkan countries) still relies on the old system of ex-Yugoslavia and post-war consequences that are widely felt to this day. The country struggles to change its education nowadays, and in a way pushes society to change mentality. It is still a society where factual knowledge and memory is considered intelligence, while critical thinking stays more in theory than it is practice. Despite all the progress, it seems like we are far from it (at country level) because we have plans; we have books, sources, equipment, and tools, but it is the current state of mind of educators and higher position authorities that needs rewiring. Teachers talk 90% of the time, lectures are long and student participation must be forcefully invoked. Students experience their learning environment with negative feelings and the only response to this can be rebellion or assimilate to the requirements. But now, more than ever we need to revive critical thinking and information evaluation, especially since conversations about war reopened once again.

5. English Language Education and Critical Thinking

Since it is established that language is crucial for critical thinking, it is the time we talk about the use in practice of critical thinking in English language education. In modern era, language, especially English, is an absolute necessity to function as an adult since all job opportunities favored knowledge of English to certain fluency level. In all countries a second language is a required subject starting from as early as elementary school or even earlier. It is scientifically proven that the more languages we know we expand our worldview. We are familiar with more concepts and can think abstractly in more languages than one and therefore that spikes up our creativity. What is more to say, more than one language means that we can access information which can be quite useful especially in English since English is a lingua franca. However, globalization in mass media has made information accessibility become the reason of mass confusion. Namely, since there is a sea of information, it is extremely hard to distinguish the truth from bad information, unless that is, if we know how to think critically. Why then we do not use the chance to instruct students in the context of English language education what it means to think critically and to acquire problem solving skills?

Many suggestions have been made on how to practice critical skills. For example, in the book Your College Experience John Gardner, Jerome Jeweler and Betsy Barefoot provide strategies for success. in chapter on How College Encourages Critical Thinking (p. 91) they said that: "Because critical thinking depends on discovering and testing connection between ideas, your instructor may ask open ended questions they have no clearcut answers, questions of Why and How or What if? For example: "In these essays we have two conflicting ideas about weather bilingual education is effective in helping children learn English. What now?" your instructor may ask you to break a

larger section into smaller ones: "Let us take the first point. What evidence does the author offer for his idea that language immersion programs get better results?"

This example continues describing the process of essay writing which includes correct argumentation in reasons why a person stands behind the chosen view. Nevertheless, essay writing, debates and such are a perfect example of practicing critical thinking and it is an absolute must in college. To write about some topic a student needs knowledge of content, fluency in language, reasoning, organizational skills, evaluation of sources, and finally most importantly – creativity to prove the hypothesis. However, grading an essay is not a favorite activity of teachers. This way of examination has its weak spots; it is relying on teachers' judgement, and it is a bit difficult to grade properly and justly in a way we can explain to the student why he got that grade. This proves one more reason the teacher must be skilled first in critical thinking, before grading an essay.

On the next page they provided an example of the poster that advertised pills for losing weight. Here the task is to critically think whether this pill really works, in judging by the emphasis on persuasion on the poster that said "Eat what you want! Stop watching every bite you take. With the SlimTab, all you must do is take one tablet before each meal, and just watch the pounds fall off!! Feel at ease attending those holiday parties. Finally, something that really works and is better than the rest!" we could feel that it is not better than others or not good at all, but why? What do they mean by this ad? This exercise can be practiced anytime in English language classes, even with technique like team work to discuss, share experiences and views on the topic. A nice suggestion was the nine C's for Evaluating Internet sources: Content, Credibility, critical thinking, copyright, citation, censorship, comparability, and context that come in very handy when doing research.

6. Conclusion

As studies have shown, the benefits of critical thinking are vast when it comes to shaping our mind. Nowadays, youth is easily distracted, and opinions can be distorted, which is why we must use every chance for teaching critical thinking and problem-solving skills. Unemployment rate in the world increased from the COVID-19 pandemic, and to get a job an individual needs to have interdisciplinary knowledge and skills. Job qualification standards rise in continuum to sometimes even unrealistic requirements. Today's globalization requires mastering the skills of problem solving and critical thinking due to perseverance and success in the global economy. In the most successful educational cultures in the world, it is the system that is responsible for student success, says Slizer. Not just a parent, not just a student, not even just a teacher. Culture creates a system and in such countries as BiH, a strong revolutionary trend that stays is very much needed. It must be acknowledged that the due date of today's concept of education has expired. Society has been thoroughly redefined in recent decades, and in the process, the needs that education must meet have changed. The time has come to reconstruct the most important pillar of progress and get a new form adapted to the world that has dawned in the meantime.

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