



Critical Thinking and Professional Competence

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Abstract

In a study conducted by the American Psychological Association (APA) in 1990 with 46 theorists from the United States and Canada in order to provide an interdisciplinary definition of critical thinking, critical thinking is defined as "making and expressing analytical, evaluative, conscious judgments to decide what to do and what to believe" (Evancho, 2000). Elements such as teachers, administrators, materials and assessment have an important role in the development of critical thinking. Especially the teacher ensures the active participation of students in order to develop critical thinking. The following strategies should be considered in the development and teaching of critical thinking (Berman, 1991, 10). According to the results obtained by the Ministry of National Education (M.E.B., 2006) in line with the project studies carried out within the scope of the Support to Basic Education Project and the studies carried out within the scope of the provisions of Article 45 of the National Education Basic Law No. 1739, the General Qualifications for the Teaching Profession consisted of 6 main qualifications, 31 sub-qualifications and 233 performance indicators.

Keywords: Critical thinking, competence, conscious judgement, teaching strategies

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1. Introduction

The word "critical" is derived from the Greek term "kritikos", which means evaluation, judgment, and discernment; it was translated into Latin as "criticus" and spread to other languages in this way. Criticizing means evaluating something with its good or bad sides. (Kaya, 1997). Ennis (1985) mentioned three structures of critical thinking as judgment, knowledge development and questioning and defined critical thinking as reflective and logical thinking focused on deciding what to do and what to believe. Watson and Glaser saw critical thinking as the individual's ability to identify assumptions, hidden beliefs, values and attitudes. Smith stated that critical thinking is judgment focused on accepting or rejecting claims. On the other hand, Paul stated that critical thinking is the process of shaping and evaluating one's own thinking. According to Mayhevv, critical thinking is the process of questioning the how and why (as cited in Branch, 2000). In a study conducted by the American Psychological Association (APA) in 1990 with 46 theorists

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from the United States and Canada in order to provide an interdisciplinary definition of critical thinking, critical thinking is defined as "making and expressing analytical, evaluative, conscious judgments to decide what to do and what to believe" (Evancho, 2000).

1.1 Critical Thinking

Critical thinking can be defined as an effective, orderly and functional process that is carried out to better use the individual's ability to better understand and present his/her own and others' thoughts and ideas (Chaffe, 1994; as cited in Kökdemir, 2003). According to Facione, critical thinking is defined as making judgments and decisions in line with a purpose by explaining evidence, concepts, methods, criteria and contexts as well as interpretation, analysis, evaluation and inference (Özdemir, 2005).

According to Kökdemir (2000), among the skills involved in the critical thinking process are: being able to capture the difference between proven facts and asserted claims; being able to test the reliability of the sources of information obtained; being able to extract irrelevant information from evidence; being aware of prejudices and cognitive errors; being aware of inconsistent judgments; being able to ask effective questions; being able to use oral and written language effectively; and meta-cognition in which the individual becomes aware of his/her own thoughts and so on. Various studies on critical thinking reveal that there are three basic components of critical thinking. These are critical thinking attitudes and dispositions, prerequisite learning and critical thinking skills.

(Özdemir, 2005; Scriven ve Paul, 2007; Siegel 1999; Yeh, 1997). The first basic component, critical thinking dispositions, are the attitudes, sense of responsibility and dispositions that one should have in order to think critically (Norris & Enis, 1989: cited in Yeh, 1997). The second basic component is prior learning. The ability to use prior learning to solve problems, make decisions or make evaluations in new situations is a basic requirement of critical thinking (Garcia & Pintrich, 1992: cited in Yeh, 1997). Critical thinking skills, the third basic component of critical thinking, are cognitive and meta-cognitive skills such as analysis, comprehension, inference, evaluation, self-regulation, and assumptions.

(Norris & Enis, 1989: cited in Yeh, 1997; Facione, 1990: cited in Özdemir, 2005) Demirci states that Barry Beyer (2001) defines critical thinking as "a way of determining the scientific values of beliefs, claims and inferences and the value of certainty and accuracy. In a very general definition, critical thinking is "an idea that does not adopt any argument without questioning its validity and accuracy" (Demirci, 2000: 3). In another

view, critical thinking is defined as "the ability to analyze facts, generate and organize ideas, defend opinions, make comparisons, make inferences, evaluate discussions and solve problems" (Chance, 1986: 236 as cited in Şahinel, 2002: 4).

It is a comparative reflective thinking that focuses on deciding what to believe or do (Ennis, 1986, 10). In another sense, it is the ability to persuade an undecided person with reasons within the framework of a debate (Gaforlh, 1999). On the other hand, critical thinking is the development of the ability to better learn, apply and evaluate information in new situations. Critical thinking is not an innate characteristic; it is a system that can be taught, explained and easily applied (Cumhuriyet, 2001). Gaining critical thinking skills, which is a set of skills that enable students to access information easily and overcome the difficulties encountered more easily, is one of the desired outcomes of education (Hudgins & Edelman, 1988, 262; Halpern, 1993, 238). Some of the critical thinking characteristics and skills that can be acquired by students are as follows (Kazancı, 1989; Lee, 1989):

The tendency to be systematic,

Flexibility,

Patience

Don't act deliberately,

Students' cooperation,

Knowledge and skills transfer,

Visual aid,

Open intentionality,

Metacognition (how to think),

Clear use of language,

Autonomy and independence,

Reconstruction,

Motivation,

Group activities, Discussion

Elements such as teachers, administrators, materials and assessment have an important role in the development of critical thinking. Especially the teacher ensures the active participation of students in order to develop critical thinking. The following strategies

should be considered in the development and teaching of critical thinking (Berman, 1991, 10).

1. Preparing a safe environment,
2. Utilization of the known,
3. Working together with class members,
4. learn to ask good questions,
5. Learning commitment to classmates,
6. Gaining a multidimensional perspective,
7. Building sensitization,
8. Create a vision for the future and develop standards,
9. Transforming thoughts into behavior.

A teacher or lecturer should take the above strategies into account when teaching thinking. Among these, an environment of trust is very important (Semerci, 1999: 54). However, there are cultural and psychological barriers arising from students that prevent the creation of this environment and thus prevent the learning of critical thinking. These obstacles can be listed as follows: Monotony, fear of making mistakes and errors, negativity, inability to think independently, overconfidence in logic, self-sufficiency, perfectionism, acting without thinking, overconfidence in the teacher, lack of concentration, stubbornness and obstinacy, dogmatic behavior, overconfidence in oneself, inability to achieve the goal and resistance to thinking (Clark & Starr, 1991, 270; Carin & Sund, 1985, 226; Kökdemir, 1999, 28-30).

1.2 Professional Competence

Competence is a person's ability to do a necessary job in a certain situation in his/her environment in the right way at the right time. The area of competence is the areas that cover the competencies that a person should have in order to fulfill the duties of a certain position (Altaş & Doğan, 2002). Other different definitions on the concept of competence are; competence, license and special knowledge that provide the power to do a job. It is the ability of a person to reach the desired level in a certain profession in terms of the ability to do that job (TDK, 2005). Competence is the level of having the necessary skills, knowledge and attitudes to perform a role (Balci, 2005). In another definition, the concept of competence is a concept that refers to the ability needed to overcome the responsibilities required by the task, to perform a task, knowledge and skills. This concept emphasizes the capacity to fulfill a certain task or role at an acceptable level (Akar, 2007). When the concept of competence is evaluated from the teacher's

perspective, it refers to the knowledge, understanding, skills and attitudes that should be possessed in order to fulfill the duties and responsibilities required by teaching. Teaching competencies can be defined as a set of knowledge, skills, attitudes and personality traits necessary for effective performance in different teaching environments. On the other hand, competencies are considered important as indicators of professional performance and can be used to define a job or occupational field precisely.

On the basis of identified competence statements, the effectiveness of professional members can be analyzed and evaluated. Many competency-based managerial actions aim to improve the performance of employees. Competencies are also considered as an effective means of obtaining more accurate information about the characteristics of employees, making more accurate evaluations, providing feedback, developing and rewarding them (Şahin, 2004). During the performance of the teaching profession, two main qualities of the teacher emerge; personality qualities and professional qualities. Teachers may encounter many different types of people and therefore many different problems in the classroom environment.

In order to overcome these problems, teachers need to have some personal qualities as well as professional knowledge. The personal characteristics of the teacher affect the student's attitude towards the lesson and school. A teacher with a negative personality can cause students to become disenchanted with school and fail. Most of the time, students are affected by the teacher's approach to the subject rather than what the teacher tells them (Başaran, 2004). According to Özden (2000), prospective teachers should have sufficient knowledge about the field, teaching profession, education policies and education system before graduation. When the relevant sources on teaching profession competencies are examined, it is seen that professional competence characteristics are generally gathered under three roofs. These are teaching professional knowledge, content knowledge and general culture. Gündüz (2003) states that teacher competencies can be categorized into five groups depending on these three frameworks.

1.3 Personal Qualities Teachers Should Have

- Acceptable personality, good health, open-mindedness, self-confidence, commitment to professional and democratic ideals, leadership, openness to continuous learning and development, creative thinking, above normal mental ability, good morals, hope for the future, communication, love, patience and tolerance, validity, humor, fairness and impartiality, desire to contribute to the upbringing of others

1.4 Qualities Students Should Have

- Competence in the principles of students' social, economic, psychological problems, behaviors, attitudes, mental, social and physical development, knowledge and skills about instructional technology and applications related to students' development and learning levels, knowledge and skills in effective guidance of students with various pre-developmental and different experiences in individual and group situations

1.5 Qualities for Society

- To be a respected and responsible citizen, to understand and evaluate the social order, the culture in which he/she lives, to have a comprehensive and contemporary worldview, to understand and evaluate international cultures, to participate in social activities and to assume a leadership role

1.6 Qualifications for Educational Processes and Service Areas Qualifications for Processes

1.6.1 Qualifications for Processes

- Planning, organizing, conducting, evaluating educational activities, making content, behavior and task analysis, organizing, implementing and developing, identifying student needs and providing appropriate experiences, using instructional technologies effectively, conducting clinical individual and independent group studies successfully

1.6.2 Qualifications for the Service Area

- To be able to conduct research on education and training, to plan education and training, to prepare and develop education and training programs, to develop educational technologies, to participate in guidance and counseling services, to have effective classroom management knowledge, skills and attitudes

1.7 Qualifications for the Profession

- Understanding the place, function and importance of education and teaching profession in human life and society, knowing and acting in accordance with the laws and regulations related to education and profession, having a sense of professional belief and commitment, acting in accordance with the values and norms of the profession, recognizing and supporting professional organizations, contributing to raising the social status of the profession, working in harmony with educational staff, students, parents and business environment (Gündüz, 2003). After making a detailed explanation about teacher competencies, the characteristics and dimensions of

teacher quality according to educators can be expressed as follows: According to Oğuzkan (1990), the basic qualifications of teachers are:

- 1) The teacher must first know the impact and place of his/her profession in society
- 2) The teacher should have a sincere commitment to teaching and a strong belief in the importance of this profession.
- 3) The teacher should like to work in harmony with others and attach importance to cooperation.
- 4) The teacher should encourage learning by using the assessment process and should know how to utilize the selective, directive and empowering function of assessment.
- 5) The teacher should guide the student in the learning process.
- 7) The teacher should be knowledgeable and aware of world and national problems.

2. Conclusions

According to the results obtained by the Ministry of National Education (M.E.B., 2006) in line with the project studies carried out within the scope of the Support to Basic Education Project and the studies carried out within the scope of the provisions of Article 45 of the National Education Basic Law No. 1739, the General Qualifications for the Teaching Profession consisted of 6 main qualifications, 31 sub-qualifications and 233 performance indicators. The 6 main competencies and 31 sub-competencies:

1. Personal and Professional Values - Professional Development

Valuing, respecting and understanding learners,

Believing that students can achieve and learn,

Giving importance to universal and national values,

Self-assessment,

Ensuring personal development,

Continuous monitoring of professional developments and continuous contribution,

Contributing to the development and improvement of the school,

Knowing professional duties and responsibilities and adhering to the law.

2. Recognizing Developmental Characteristics

Consideration of interests and needs,

Do not value the student,

Guiding the student.

3. Teaching and Learning Process

Planning the lesson in the right way,

Preparing appropriate materials,

Organizing extracurricular activities,

4. Diversifying teaching by taking individual differences into account

Managing time well,

Managing behavior correctly,

5. Monitoring and Evaluating Learning and Development

Identify appropriate techniques and methods for assessment and evaluation,

Measuring student learning using different assessment techniques,

Providing feedback on student progress and learning as a result of good analysis of data,

Reviewing the teaching-learning process according to the results obtained.

6. School, Family and Community Relations

Knowing the environment well,

Utilizing environmental opportunities as much as necessary,

Making the school a cultural center,

Ensuring impartiality in relations with families, getting to know the family well.

Program and Content Knowledge

Principles and aims of Turkish National Education,

Knowledge of special field curriculum and the ability to apply this program,

It is the development, monitoring and evaluation of the special field curriculum by identifying its shortcomings (M.E.B., 2006). In the studies prepared by the General Directorate of Teacher Training and Education, Higher Education Institution-Ministry of National Education and EARGED in connection with the National Education Development Project (MEGEP) on teacher qualifications, the general competencies of the teaching profession,

- Main competence areas

- Sub-qualifications of the main qualifications

- It was decided that it would be the most appropriate method to determine sub-competencies in the form of performance indicators. Unlike previous studies, it was accepted that teacher competencies should include skills and attitudes as well as knowledge (MEB, 2007).

According to Bandura (1997), people with high self-efficacy beliefs do not run away from the new experiences they encounter and have to struggle with, and they are very determined to complete their actions successfully. Individuals with low self-efficacy beliefs also experience more tension, stress and dissatisfaction than individuals with strong self-efficacy beliefs in the process of fulfilling certain tasks.

Self-efficacy beliefs are mostly related to special areas. One of the most important of these special fields is teacher self-efficacy. Teacher self-efficacy is an important construct in teacher education and it is very important for determining how teacher self-efficacy develops, which components it consists of, which factors contribute to strong and positive teacher efficacy, which educational programs to develop a high level of teacher efficacy and how to develop them (Pajares, 1997). In addition, teachers' self-efficacy beliefs draw attention as an important variable in creating an efficient school or restructuring schools (Hoy & Woolfolk, 1993; Pajares & Miller, 1994; Ross, 1994).

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