Teaching Methodologies Used for Learning Critical Thinking in Higher Education: Pakistani Teachers' Perceptions

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Abstract

Critical thinking is a type of ability that students need in their personal and professional life. Therefore, universities must do their utmost to include it in the syllabus, curriculum, and programs. However, since there is no clear definition of this ability, there is still much work to be done, and new positive methods need to be strengthened to develop this ability. This article first reviews the main methods used to teach this ability and then analyzes the main methods used in the classroom by 600 university teachers from Pakistan and the methods they believe are more effective for developing critical thinking. This information contrasts with these teachers' critical thinking concepts and is based on twelve different conceptual categories that have been discovered in previous studies. Chi-square test and Cohen's Kappa test were used for data analysis. The research results show that there are three main methods that teachers practice and cogitate the most helping: Telling lecture, storytelling, discussion; Argumentation, presentations (verbal reports and speeches), and Writing assignments, essays; no matter what, kind of critical thinking they have. There are some other tendencies observed in critical thinking, despite the difference in methodology and concepts. Also, the teachers use and find the most effective methods have a significant relationship between them. Finally, this research proposes the enlightenment of critical thinking on curriculum design and its implementation.

Disciplinary: Higher Education (Teaching Methodologies, Learning Critical Thinking Study).

Cite This Article:

1 Introduction

Nowadays, it is an age of artificial intelligence; individual abilities and potentials are more in demand, such as teamwork, individual abilities, and emotional intelligence. In this study, for solving problems, attitude and values, skills and abilities, mobilization of knowledge, and competence are understood key. One thing to keep in mind is that the term "competence" is commonly referred to as "skill" in the Anglo-Saxon world and is associated with general or horizontal skills (Drayton, 2014; Duron et al., 2006).

Over the past two decades, higher education students have been increasingly exposed to critical thinking, improving personal abilities and professional skills as global society members (Quitadamo et al., 2009). Teaching students to think critically and think effectively is vital because it warns us to quickly gain large amounts of knowledge with a single click (Saiz & Rivas, 2016). Critical thinking is usually associated with students' learning process in the 21st century, with stakeholders and other skills such as metacognition, motivation, and creativity necessary in everyone's family life (Nold, 2017).

In 2012 the European Higher Education Area highlighted the worth of student critical thinking. Critical thinking is a reflective activity that leads to action (González-González & Jiménez-Zarco, 2015). Drayton (2014) finds that the comprehensive text reading program significantly improved students' critical thinking. Lack of student experience can be overcome by reading and thinking from different sources. Critical thinking is a method, which takes time to find. University teachers must be aware that teaching methods need to adapt their teaching methodologies according to their learning situation (Carter et al., 2016).

The researcher has researched critical thinking in nursing, especially healthcare, in the past few years. Bezanilla, et al. (2019) pointed out that there are more than 2,800 critical thinking articles in the nursing field's title or abstract. Although people are interested in this, they found no universal description of this capability (Condon & Kelly-Riley, 2004). There is a public discussion about whether higher education improves this ability or not. Contrary to this, (Egege & Kutieleh, 2004) points out few studies on critical thinking and its effectiveness in teaching.

Those with "good" thinking seem to have more options in professional, academic, and everyday life. It seems to be so. In higher education, Gul et al. (2014) emphasized the development of critical thinking is strongly correlated to teaching factors, including active development activities, research, group work projects, essay exam patterns. Improving critical thinking in the classroom is to know the value of writing and rewriting; data analysis strategies and case studies are mostly used for education purposes (Khan et al., 2012).

The literature review focuses on the methodologies of teaching critical thinking in higher education, rather than the concepts of evaluation or critical thinking. Therefore, after searching the metasearch engine web of sciences and Google Scholar, only papers involving methodologies, training, and education strategies for critical thinking progress were considered. Furthermore, the

analysis of educators' methodologies at Pakistani universities and critical thinking effectiveness provides a valuable basis for education, research, and learning. Also, the perception of this effectiveness contrasts with the teacher's critical thinking view, which followed the critical thinking categories (Bezanilla et al., 2019).

2 Methodologies Used for Learning Critical Thinking

According to Lauer (2005), for consideration of critical thinking, the development of the following methodologies must be promoted. Conferring to these authors, the wise use of critical thinking is that students expect that affirmative action to promote such abilities should be included in planning educational skills and activities required for such behavior. Miri, et al., (2007) also insisted on the necessity and value of critical thinking in the subject curriculum strategy. They are confident that theoretical aspects need to be combined with professional practice to obtain critical thinking. Besides, given the terms' complexity and ambiguity, some authors emphasize the importance of clarifying the meaning of critical thinking from the outset in the outline of a specific topic (Orique & McCarthy, 2015). Shim & Walczak (2012) explained that there are countless approaches for developing critical thinking, but when teachers ask students questions, the level of the question must be proportional to the level of the thinking.

Quitadamo et al. (2009) pointed out that it is problematic to distinguish between two approaches that help students think critically. Their belief for problem-solving elections must be held, so this may help students know how to be critical of their choices. A study by Kowalczyk et al., (2012) showed that pupils who use problem-based learning methods for education form higher stability between deductive and inductive thinking. Compared with traditional teaching methods, using problem-based learning does not develop students' critical thinking skills.

The development of critical thinking and educational activities should be appropriate and based on active learning principles, such as: to provide evidence and new ideas built on the use of primary and secondary sources, the experience of performing, observing, or modeling activity. Khan et al., (2012), Suggested that teachers use various activities' concepts that teachers use in the classroom to improve critical thinking.

Cargas et al. (2017) also demonstrated that argument mapping could improve critical thinking. For effective teaching strategies, teachers should help students to develop critical thinking, they say. Angel et al. (2000) pointed out the feedback's importance for the development of critical thinking is examined through face-to-face meetings and electronic media means.

Alwehaibi (2012) added the principles to the above methods, such as create an educational environment in which students can participate and practice dialogues, strive for reliability in course objectives, training activities, and assessment procedures. Gujjar et al. (2010) suggested the need to define teaching methods, including various critical thinking development activities.

Table 1 provides methods and activities to enhance critical thinking based on many authors' opinions and can be used as a guide for teachers who demand to teach these skills. All different

activities and methods are divided into categories. All mentioned categories are formed by induction after revision of the extensive bibliography.

Table 1: Teaching methodologies used for learning critical thinking in higher education

Teaching Methodologies	References
Telling lecture, storytelling, discussion	(Arslan et al., 2014; Crenshaw et al., 2011; Lloyd & Bahr, 2010; Smolarek & Hora, 2016)
Activity learning (project-based, problem solving)	(Angel et al., 2000; Gujjar et al., 2010; Martyn et al., 2014; Orique & McCarthy, 2015)
Audio-visual (written textbook, graphics, demonstration, field trips)	(Franco et al., 2017; Lauer, 2005; Wilson, 2016)
Inductive and deductive, analysis, synthesis	(Ahrari et al., 2016; Arum & Roksa, 2011)
Argumentation, presentations (verbal reports and speeches)	(Makhene, 2017; Noblitt et al., 2010)
Questions- Answers	(Rashid & Qaisar, 2016; Saeed et al., 2012)
Research	(Alwehaibi, 2012; Nold, 2017)
Case study	(Duron et al., 2006; Sharples et al., 2017)
Collaboration/Cooperation work	(Duron et al., 2006; Lin et al., 2016)
Writing assignments, essays	(Grohs et al., 2018; Wilson, 2016)
Assessment, follow-up, feedback	(Cargas et al., 2017; Smolarek & Hora, 2016)
Real world connection (experiential learning)	(Egege & Kutieleh, 2004; Moeti et al., 2017)

Learning is bent by many aspects, including every student's abilities or what the teacher recognizes through critical thinking. In previous studies, we have found six different categories that define critical thinking: Analyzing/Organizing (Kowalczyk, 2011); Reasoning/Argumenting (Martyn et al., 2014); Questioning/Asking oneself (Noblitt et al., 2010); Evaluating; Taking a position/Taking Decisions (Rashid & Qaisar, 2016); and Acting/Compromising (Snyder & Snyder, 2008), which were related to teaching methodology in learning. This study aims to elaborate on the most effective methods and the concept of critical thinking among teachers, with the following research questions.

· What are the methodologies teachers used to enhance critical thinking in their university subjects?
· What methods are the most effective methods for university tutors to develop critical thinking?
· Is there a relationship between the most effective methods and the concept of critical thinking among teachers?

3 Methodology

A Questionnaire was used to collect information regarding methods used to develop critical thinking by university teachers and their perception about these methods through random sampling. A sample of 600 university teachers from public and private universities of Pakistan, having different fields of knowledge and departments, are included in this research study. From the total number of participants, 70% were from public sector universities while 30% from private universities. Most teachers belong to social sciences (38.5%), followed by basic sciences (21.7%), engineering (11.3%), arts and humanities (9.6%), environmental sciences (9%), health sciences (6.4%), and architecture (3.5%), moreover 55 % women and 45% men. Among the age groups, 30% of the teachers were old 30-40 years old, 41-50 (45.9), 51-60 (15.3%), only 3.2% older than 60, and 5.6% younger than 30. Most of the teachers (60%) had a high teaching experience from 10 to 25

years. Only 7% had less than five years of teaching experience. Then we analyzed the relationship between the teacher's concept of critical thinking and the methods they used in the class.

4 Results and Discussion

4.1 Methodologies Used for Critical Thinking Development

Organizing the data regarding the methods that teachers use to teach critical thinking, these methods are classified by inductive analysis into 12 main categories, shown in Table 2. Telling lecture, storytelling, discussion (20%), Telling lecture, storytelling, discussion (15%), and Questions- Answers (11.7%) were mostly used in higher education.

Table 2: Methodologies used

Methodology	F	%
Telling lecture, storytelling, discussion	120	20.0
Argumentation, presentations (verbal reports and speeches)	90	15.0
Assessment, follow-up, and feedback	56	9.3
Questions- Answers	70	11.7
Case studies	48	8.0
Activity learning (project-based, problem solving)	42	7.0
inductive and deductive, analysis, synthesis	54	9.0
Writing assignments, essays	30	5.0
Research	52	8.7
Collaboration/Cooperation work	12	2.0
Audio-visual (written textbook, graphics, demonstration, field trips)	20	3.3
Real world connection (experiential learning)	6	1.0
Total	600	100

Also, the Kruskal-Wallis test (χ^2 = 903.11, p = <0.001) was performed to see if there was a significant difference between the various methods, and significant results were obtained. This fact seems to indicate that the samples differ in the methods teachers use to develop this concept. For example, in the process of critical thinking, we can observe significant differences among the argumentation, presentations used, and the use of writing assignments and essays.

4.2 The Most Effective Considered Methodologies for Critical Thinking

The concordance was examined among the previously established twelve methodologies that teachers choose to develop critical thinking and the most effective methodologies.

Table 3: The most effective considered methodologies

Methodology	F	%
Telling lecture, storytelling, discussion	177	29.5
Argumentation, presentations (verbal reports and speeches)	111	18.5
Assessment, follow-up, and feedback	22	3.7
Questions- Answers	34	5.7
Case studies	33	5.5
Activity learning (project-based, problem solving)	33	5.5
Inductive and deductive, analysis, synthesis	21	3.5
Writing assignments, essays	82	13.7
Research	20	3.3
Collaboration/Cooperation work	21	3.5
Audio-visual (written textbook, graphics, demonstration, field trips)	27	4.5
Real world connection (experiential learning)	19	3.2
Total	600	100

The results in Table 3 show that telling lectures, storytelling, discussion (29.5%) followed by argumentation, presentations (18.5%), and writing assignments and essays (13.7%) are considered to be the most effective, but the real-world connection (3.2%) is the least effective. In contrast, research (3.3%) and collaboration/cooperation work (3.5%) are considered less effective than other methods. However, the two most effective methods were telling lectures, storytelling, discussion, and verbal reports and speeches.

As before, we used the Kruskal-Wallis test to see if there remained significant differences in the perceived effectiveness of the several methods used. The results showed differences between the most influential critical thinking methods (2 = 465.45, p = <0.001). For example, research and real-world connection (experiential learning) are the least.

4.3 Concordance between Methodologies Used and the Most Effective Considered by Teachers

In addition to the first two descriptive analyses, a further analysis was performed to compare the methods used by university professors to create analytical thinking and the methods they considered the most effective. Statistical Cohen's Kappa (k) measures the degree of continuity between the methods they used and the most effective. This value reflects the consistency between the two variables and ranges from 0 to 1; 0 is inconsistent, and 1 is optimal.

Table 4: Concordance between methodologies used and to be considered the most effective

Methodology	K	Sig.
Telling lecture, storytelling, discussion	.345	<.001
Argumentation, presentations (verbal reports and speeches)	.507	<.001
Assessment, follow-up, and feedback	.467	<.001
Questions- Answers	.233	<.001
Case studies	.572	<.001
Activity learning (project-based, problem solving)	.223	<.001
Inductive and deductive, analysis, synthesis	.067	.345
Writing assignments, essays	.321	<.001
Research	.190	.012
Collaboration/Cooperation work	.287	<.001
Audio-visual (written textbook, graphics, demonstration, field trips)	.156	.001
Real world connection (experiential learning)	.211	<.001

The findings show that almost all methods have significant values from k = 0.156 (p = 0.001) to k = 0.507 (p =<0.001). These results support the idea that educators used what they believe is the most considered method to improve critical thinking in the classroom. However, the k-value shows that the two variables' intensity is significant but rather weak (Styers et al., 2018). This fact may indicate that there is no complete agreement between the participants. Also, there is a complete difference in assessment, follow-up, and feedback (k=.067; p=.345). In this case, those who used it seem not to think it is the most effective method to develop critical thinking.

4.4 Association between the Most Effective Considered Methodologies and Critical Thinking of Teachers' Concept

In response to the above goals, we considered the critical thinking concepts of each university teacher according to the defined categories Questioning/asking oneself (QAO): Evaluating (E.V.); Analyzing/organizing (A.O.); Taking position/taking decisions (TPTD); Acting/compromising (A.C.); Reasoning/Argumenting (R.A.) are the methods used to build this ability in the classroom and coincide with university teachers who participated in the study. They were asked about their understanding of critical thinking and how to define it. After that, their definitions were grouped by the categories mentioned in the inductive process above. These results are shown in Table 5.

Table 5: Frequency distribution between the perception of methodologies' effectiveness and categories of critical thinking's concept

Methodologies	Categories of critical thinking's concept													
	QAO		EV		AO		TPTD		AC		R.A.		Total	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Telling lecture, storytelling, discussion	14	23.3	40	38.1	55	35.5	27	22.5	6	20.0	35	26.9	177	29.5
Argumentation, presentations (verbal reports and speeches)	11	18.3	20	19.0	35	22.6	17	14.2	5	16.7	23	17.7	111	18.5
Assessment, follow-up, and feedback	3	5.0	5	4.8	2	1.3	4	3.3	4	13.3	4	3.1	22	3.7
Questions- Answers	5	13.3	3	2.9	6	3.9	9	7.5	2	6.7	9	6.9	34	5.7
Case studies	3	5.0	7	6.7	5	3.2	2	1.7	3	10.0	13	10.0	33	5.5
Activity learning (project-based, problem-solving)	4	6.7	4	3.8	2	1.3	15	15.8	1	3.3	7	5.4	33	5.5
Inductive and deductive, analysis, synthesis	2	3.3	3	2.9	7	4.5	3	2.5	2	6.7	4	3.1	21	3.5
Writing assignments, essays	8	8.3	10	9.5	25	16.1	19	12.5	1	3.3	19	14.6	82	13.7
Research	4	6.7	5	4.8	6	3.9	3	2.5	0	0.0	2	1.5	20	3.3
Collaboration/Cooperation work	2	3.3	3	2.9	4	2.6	9	7.5	0	0.0	3	2.3	21	3.5
Audio-visual (written textbook, graphics, demonstration, field trips)	2	3.3	4	3.8	5	3.2	7	5.8	3	10.0	6	4.6	27	4.5
Real-world connection (experiential learning)	2	3.3	1	1.0	3	1.9	5	4.2	3	10.0	5	3.8	19	3.2
Total	60	100	105	100	155	100	120	100	30	100	130	100	600	100

Note: QAO: Questioning/asking oneself; EV: Evaluating; AO: Analyzing/organizing; TPTD: Taking position/taking decisions; AC: Acting/compromising; RA: Reasoning/Argumenting; F: Frequency; %: Percentage

The chi-square (χ^2 = 70.903; p = 0.073) of this table shows no significant difference between the critical thinking concept and the effective considered methodology used to develop critical thinking. However, the p-value is still close to the range of significance (0.05). This can be explained as though there is no apparent difference, and some tendencies usually coincide. For example, critical thinking of teachers' concepts as "analyzing/organizing" are most considered effective methodologies such as telling lecture, storytelling, and discussion (35.5%), verbal reports and speeches (22.6%), and writing assignments, and essays (16.1%). The same happens to teachers who think of critical thinking as reasoning/arguments. Regardless of the concept of critical thinking, these are considered the most effective methods. However, those who understand critical thinking as questioning/asking oneself also include questions-answers (13.3%) as an effective teaching method.

Those who understand critical thinking as taking a position/taking decision thinks Activity (project-based, problem-solving) (15.8%) are the most effective. On the other hand, those who understand critical thinking as acting/compromising think it is the assessment, follow-up, and feedback (13.3%) as an effective teaching and learning method. This fact assumes that these methods' views are inconsistent and that they are considered differently by different categories.

In this sense, teachers who have a concept of A.O., R.A., and E.V. tend to think that audio-visual is more effective than concepts that regard questioning/asking oneself as questioning considered the most effective methods. Finally, those who thought critical thinking is taking a TPTD tend to think that activity learning (project-based, problem solving) and case studies are one of the most effective methods and those who think critical thinking is A.C. that one of the most effective methods is related to the real-world connection (experiential learning).

5 Conclusion

This study has evaluated teaching methodologies Used for learning critical thinking in higher education. This study's results reveal that the most common methods used by university teachers for critical thinking development are telling lectures and storytelling. Also, results showed that these methodologies are most effective for critical thinking. Moreover, the methods used and the most effective methodologies considered by teachers have consistency. The study's findings showed that the relationship between the most effective considered methodologies and critical thinking concepts are varied according to methods. Teachers think that the most effective reasoning/Argumenting, questioning/asking are assessment, follow-up, and feedback. Different methodologies have differences among different categories of critical thinking concepts.

Actions are needed to be taken care of to promote and advance teachers' training in terms of worth, importance, and value of critical thinking and the methodology that can build a structure of this ability in academic students' development. It is a critical issue because not all educators can realize the importance of the methodologies they apply and the application form that is the research limitation in the same way. Also, to authenticate, compare the part of universities in the critical thinking development, it is necessary to conduct more research based on this research or in complementary fields because critical thinking is a crucial ability for university students to grow individually and professionally.

6 Availability of Data And Material

Data can be made available by contacting the corresponding authors.

7 References

Ahrari, S., Samah, B. A., Hassan, M. S. H. B., Wahat, N. W. A., & Zaremohzzabieh, Z. (2016). Deepening critical thinking skills through civic engagement in Malaysian higher education. *Thinking Skills and Creativity*, *22*, 121-128.

Alwehaibi, H. U. (2012). Novel program to promote critical thinking among higher education students: Empirical study from Saudi Arabia. *Asian Social Science*, *8*(11), 193.

Angel, B. F., Duffey, M., & Belyea, M. (2000). An evidence-based project for evaluating strategies to improve knowledge acquisition and critical-thinking performance in nursing students. *Journal of Nursing Education*, *39*(5), 219-228.

Arslan, R., Gulveren, H., & Aydin, E. (2014). A research on critical thinking tendencies and factors that affect critical thinking of higher education students. *International Journal of Business and Management*, *9*(5), 43.

Arum, R., & Roksa, J. (2011). Limited learning on college campuses. *Society*, *48*(3), 203.

Cargas, S., Williams, S., & Rosenberg, M. (2017). An approach to teaching critical thinking across disciplines using performance tasks with a common rubric. *Thinking Skills and Creativity*, *26*, 24-37.

Crenshaw, P., Hale, E., & Harper, S. L. (2011). Producing intellectual labor in the classroom: The utilization of a critical thinking model to help students take command of their thinking. *Journal of College Teaching & Learning (TLC)*, *8*(7), 13-26.

Duron, R., Limbach, B., & Waugh, W. (2006). Critical thinking framework for any discipline. *International Journal of Teaching and Learning in Higher Education*, *17*(2), 160-166.

Egege, S., & Kutieleh, S. (2004). Critical Thinking: Teaching Foreign Notions to Foreign Students. *International Education Journal*, *4*(4), 75-85.

Franco, A. R., Costa, P. S., Butler, H. A., & Almeida, L. S. (2017). Assessment of undergraduates' real-world outcomes of critical thinking in everyday situations. *Psychological reports*, *120*(4), 707-720.

Grohs, J. R., Kirk, G. R., Soledad, M. M., & Knight, D. B. (2018). Assessing systems thinking: A tool to measure complex reasoning through ill-structured problems. *Thinking Skills and Creativity*, *28*, 110-130.

Gujjar, A. A., Naoreen, B., Saifi, S., & Bajwa, M. J. (2010). Teaching Practice: Problems and Issues in Pakistan. *International Online Journal of Educational Sciences*, *2*(2).

Lauer, T. (2005). Teaching critical-thinking skills using course content material. *Journal of College Science Teaching*, *34*(6), 34.

Lin, M., Preston, A., Kharrufa, A., & Kong, Z. (2016). Making L2 learners' reasoning skills visible: The potential of computer supported collaborative learning environments. *Thinking Skills and Creativity*, *22*, 303-322.

Lloyd, M., & Bahr, N. (2010). Thinking critically about critical thinking in higher education. *International journal for the Scholarship of Teaching and Learning*, *4*(2).

Makhene, A. (2017). Argumentation: A methodology to facilitate critical thinking. *International Journal of Nursing Education Scholarship*, *1*.

Martyn, J., Terwijn, R., Kek, M. Y., & Huijser, H. (2014). Exploring the relationships between teaching, approaches to learning and critical thinking in a problem-based learning foundation nursing course. *Nurse education today*, *34*(5), 829-835.

Moeti, B., Mgawi, R. K., & Moalosi, W. T. S. (2017). Critical Thinking among Post-Graduate Diploma in Education Students in Higher Education: Reality or Fuss? *Journal of Education and Learning*, *6*(2), 13-24.

Noblitt, L., Vance, D. E., & Smith, M. L. D. (2010). A Comparison of Case Study and Traditional Teaching Methods for Improvement of Oral Communication and Critical-Thinking Skills. *Journal of College Science Teaching*, *39*(5).

Nold, H. (2017). Using Critical Thinking Teaching Methods to Increase Student Success: An Action Research Project. *International Journal of Teaching and Learning in Higher Education*, *29*(1), 17-32.

Orique, S. B., & McCarthy, M. A. (2015). Critical thinking and the use of nontraditional instructional methodologies. *Journal of Nursing Education*, *54*(8), 455-459.

Rashid, S., & Qaisar, S. (2016). Developing Critical Thinking through Questioning Strategy among Fourth Grade Students. *Bulletin of Education and Research*, *38*(2), 153-168.

Saeed, T., Khan, S., Ahmed, A., Gul, R., Cassum, S., & Parpio, Y. (2012). Development of students' critical thinking: the educators' ability to use questioning skills in the baccalaureate programmes in nursing in Pakistan. *Journal of the Pakistan Medical Association*, *62*(3), 200.

Sharples, J. M., Oliver, S., Oxman, A. D., Mahtani, K. R., Chalmers, I., Collins, K., Austvoll-Dahlgren, A., & Hoffman, T. (2017). Critical thinking: A core skill within education and healthcare. *Profession*, *18*, 19.

Smolarek, B. B., & Hora, M. T. (2016). Examining How Faculty Reflect on Instructional Data: A Call for Critical Awareness and Institutional Support. WCER Working Paper No. 2016-4. *Wisconsin Center for Education Research*.

Wilson, K. (2016). Critical reading, critical thinking: delicate scaffolding in. *Education*, *32*, 205-214.

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