Analysis of Critical Thinking Skills (CTS) as a 'Survival Kit' in 21st Century World

[1]AbdulMumini Inda

Abstract--Critical thinking is fast becoming most important skills needed for surviving the challenges of the digital age. The era of Information and Communication Technology (ICT) challenges the world with its rocket-like speed of too many information and developments. Recent studies have identified skills needed for withstanding the challenges; Collaboration, Communication, Critical and Creative thinking skills (4cs), though additional one is added by other researchers to include Caring. The twenty first century requires individuals to have key competencies that are important for the achievement of all SDGs, as well as educational approaches and tools for the implementation of these competencies. The methodology adopted for this research involves critically analysing related theories (such as Critical Theory) and researches. It identified the key variables based on the subject area, identified the independent and dependent variables and the connections were presented using a flow chart. Elements of critical thinking as contain in Paul-elder Critical thinking framework were considered with brief analysis on Islamic theoretical framework and blooms theory of critical thinking. A conceptual framework for critical thinking for teaching Islamic studies was produced

Key words--Critical thinking skills, Critical theory, Paul-Elder theoretical framework, Islamic studies education

I. INTRODUCTION

Critical thinking is considered a toolkit for surviving the stormy challenges of the digital age.(Hosu, 2015; Toner & Moran, 2016) five Skills are identified as life jacket for surviving the oceanic and dynamic hurdles of the rapidly changing world. Creativity, Critical thinking, Communication, collaboration and Caring are the most essential skills for the rapidly changing world (Mazwati et al., 2018). The need for creative critical in the digital era is not only prerequisite but pivotal. CT urges individuals to mould their own views and thoughts with optimism rather than merely reiterating others' point of views which can be done through studying opinions from diverse angles with rationally consistent claims (Steve Higgins, 2015)). According to Bell & Loon (2015) and Abrami et al. (2008) the body of knowledge is satisfied with how CT plays a fundamental role for students.

Similarly, considers CT as a collection of skills and strategies that a thinker can use when the situation calls for them. It is also a disposition towards thinking carefully and thoughtfully. The central role plays by CT from the beginning of the twenty-first century, is not only essential but a necessary skill needed in many fields especially that of of education (Olalekan, 2017). Moreover, Critical thinking has been recognized as indispensable part of human life as well as in accomplishing tasks at work (Boa, Wattanatorn, & Tagong, 2018). This paper focus on elements of critical thinking as contain in Paul-elder Critical thinking framework with brief analysis on Islamic theoretical framework and blooms theory of critical thinking. Furthermore, it proposed a conceptual framework for critical thinking for teaching Islamic studies.

.

[1]*School of Education, Faculty of Social Sciences and Humanities, University TechnologyMalysia, Faculty of education Taraba State university, jalingo, Email-abdulmumini.inda1976@graduate.utm.my*

Scope of Critical Thinking

Critical thinking covers the element skills of analysing arguments, making inferences using inductive or deductive reasoning, judging or evaluating, and making decisions or solving critical thought within a given subject. Critical thinking involves both cognitive skills and dispositions. These dispositions, which can be seen as attitudes or habits of mind, include open and fair-mindedness, inquisitiveness, flexibility, a propensity to seek reason, a desire to be well-informed, and a respect for and willingness to entertain diverse viewpoints. There are both general-and domain-specific aspects of critical thinking. Empirical research suggests that people begin developing critical thinking competencies at a very young age. Although adults often exhibit deficient reasoning, in theory all people can be taught to think critically. Instructors are urged to provide explicit instruction in critical thinking, to teach how to transfer to new contexts, and to use cooperative or collaborative learning methods and constructivist approaches that place students at the centre of the learning process. In constructing assessments of critical thinking, educators should use open-ended tasks, real-world or "authentic" problem contexts, and ill-structured problems that require students to go beyond recalling or restating previously learned information. Such tasks should have more than one defensible solution and embed adequate collateral materials to support multiple perspectives. Finally, such assessment tasks should make students' reasoning visible by requiring to provide evidence or logical arguments in support of judgments, choices, claims, or assertions

*Ozkan-Akan (2003) cited in Demirdag (2015), explained that the students with critical thinking are active thinkers, address questions in order to understand, search for answers and solutions, support their answers with arguments, interpret, analyse logically and evaluate the arguments of others. Beyer(1995) presents 6 essential aspects of critical thinking:

   i.   Dispositions
  ii.   Criteria
 iii.   Argument
 iv.   Reasoning
  v.   Point of view
 vi.   Procedure of applying Criteria

Dispositions: Critical thinkers are sceptical, open-minded, value fair-mindedness, respect evidence and reasoning, respect clarity and precision, look at different points of view, and will change positions when reason leads them to do so.

Criteria: To think critically, one must apply certain criteria. One needs to have conditions that must be met for something to be judged as believable. Although the argument can be made that each subject area has different criteria, some standards apply to all subjects;

Argument: A statement or proposition with supporting evidence. Critical thinking involves identifying, evaluating, and constructing arguments.

Reasoning: The ability to infer a conclusion from one or multiple premises. Doing so requires examining logical relationships among statements or data.

Point of View: How one views the world, which shapes one's construction of meaning. In a search for understanding, critical thinkers view phenomena from many different points of view; 6. Procedures for Applying Criteria.

The following theories were analysed with a view to propose a conceptual framework for teaching Islamic studies thus:

Critical Theory

The origins of critical theory are often drawn back to the hypothesizing of KarlMarx (Luxemburg, 2018). Marx's exertion stirred forward from that of Hegel's who primarily advocated that people were upshots of their culture (Blunden, 2011). In a modification of this viewpoint, Marx regarded the idea of knowledge as the connection of the human being to the world (Levinson, 2011). A foundation of critical theory is to involve in change through practices of liberation, stimulating the status quo and in search of communal uprightness in the situation of a criticism of authority in order to encourage better collective practices. Critical theory identifies that an individual's shared position in the world unswervingly influences right to use properties such as rule, prospect and news, which are all prone by knowledge (Kondrat, 2002). Therefore, critical social scientists essentially question whether dogmas, morals and collaborations in the social order prompt overriding dealings that can be changed (Welton,1993). In pinpointing the *critical* in critical theory, Brookfield (2001) summaries that critical theory is initiated in political analysis; critical theory is about the critique of the prevailing societal order and publics' tussles contrary to it. The main aim of critical theory is endowing individuals with awareness and comprehension solely so as to free them from domination (Brookfield, 2001). A post-Marxist theorist that have contributed greatly to the growth of critical theory is the German intellectual Jurgen Habermas. According to Welton (1993), Habermas advanced an opinion of the connection between understanding, learning and the social circumstance that affords a tool for thoughtful awareness of the multiplicity of learning methods. His work is widely utilized in the area of education, predominantly connected to the enormous sociocultural setting and its impact on public's opinions, aims and activities (Gouthro, 2006). In his hypothesizing, Habermas identifies the status of linguistic and established his model of communicative action (Welton, 1993) which is based on the idea that all social communication contains legitimacy rights that care for the concept of *ideal speech.* Four conditions for measuring these claims were being drawn:

1) comprehensibility, referring to individuals disclose their imports to each other;

2) sincerity, which covers the illustration of concerns and purposes;

3) correctness or legality, that involves establishing proper roles and perspectives; and

4) truth, which is directed by producing an array of the proof (Habermas, 1981; Levinson et al, 2011; Welton, 1993). For Habermas (1970), meaning, truth and knowledge encompass the realm of communal collaboration where common values permit individuals to interconnect; thus, message provides the context for societal and traditional unification in the globe (or life world) (Habermas,1970; Levinson, 2011). According to Levinson (2011), Habermas' work has been significant to education by uncovering how communication happens in the classroom and for teaching procedures of critical thinking.

II. METHODOLOGY/MATERIALS

The methodology adopted for this research is producing a tentative framework for teaching critical thinking in Islamic Studies through literature review. The review involves critically analysing related theories (i.e. Critical Theory) and researches. The key steps followed includes; identifying key variables based on the subject area, drawing the connections within and among the variable, segregating the independent and dependent variables, brainstorming the key constructs relating to the variables and showing the relationship between the constructs and the variables using arrows. The connections were presented using a flow chart. These steps guide the researchers to suggest for suitable test for analysis.

The Paul-Elder Framework of critical thinking

The critical thinking can help us to address topics and problems in a more rational way that contribute to building a clear understanding of topics. This can be achieved through having a clear reasoning about the addressed topics. The Paul-Eder Critical Thinking Framework was introduced in 2001 in order to improve the critical thinking The framework includes *standards*, *elements*, and *traits*. The *elements* are the elements of thought; they can be used to decompose any critical thinking into its constituent components: "what are the assumptions?" The *standards* are used to evaluate the elements, "Are the assumptions valid?" *Traits* are used to describe the characteristics of a good critical thinker.
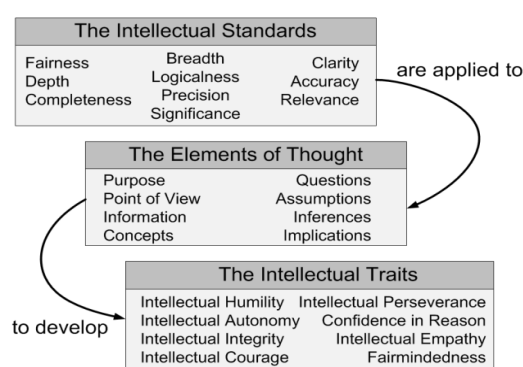

Fig: 1

Islamic Studies Education

Like any other form of education, Islamic education is also a learning and teaching process of both informal and formal to produce learners who can apply vigorously the skills and knowledge built on the Islamic traditions (primarily, the Sunnah of the Prophet Muhammad and the Quran). This would enable achieving a degree of compassion in order to accomplish the responsibilities and functions in thriving the world and to enable the realization of the exhilaration in the current world and in the hereafter. If the Islamic system of education will be based on these principles, then the implementation of Islamic doctrines in the modern world should be assessed, because there are several difficulties and impediments faced that may interfere with the attainment of the universal objective of Islamic education.

According to Faisal, Ismail, Puteh, and Adib (2012) "the western secular education system lacks tools to understand the moral and spiritual realms; it reduces reality to its material; it demands neutral values which are

impossible and it divides knowledge into fragments. Due to these reasons, they attributed the western education as violating the Islamic principles of *Tawhid"*

It is apparent that most of frameworks are based on western perspectives which may not be adequate in tackling or understanding multifaceted issues across the globe. Furthermore, the underlying philosophy is secular materialistic in nature, there is no gain saying such system of thought is yet or failed to address most issues bordering the global community. The need to turn to a framework that will combine best practices that works in both modern and Islamic world is not only essential but a necessity. This study therefore proposes an eclectic theoretical framework of critical thinking for teaching Islamic studies.
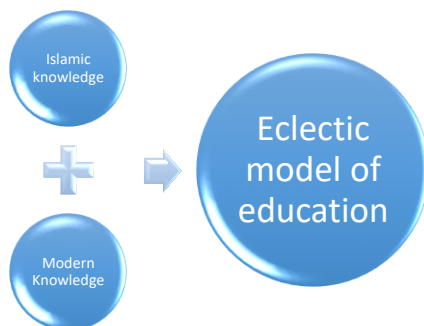

Fig: 2

The eclectic approach

This refers to a technique that combines both traditional and modern educational perspectives by selecting the best from each world view by carefully selection the most authentic opinions or models that can best address a current challenge.

In view of the above the current research proposes the integration of critical theory, Islamic theoretical framework of critical thinking and Paul-Elder framework of critical thinking with the firm hope that it can greatly facilitate the development of Critical thinking skills
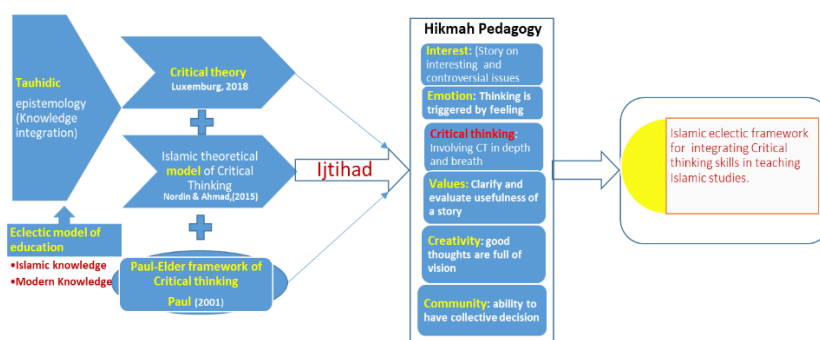

Fig: 3 Proposed Conceptual Islamic Eclectic Framework for Teaching Islamic Studies

III. CONCLUSION

In conclusion having an all-inclusive framework for improving critical thinking skills of teachers of Islamic studies like the one proposed above is a step towards the right direction. This is to enable the attainment of the objectives of teaching Islamic studies which is to produce a holistic personality that is useful to himself and society at large. The question still remains, how did the Islamic educational system blend the sacred and

skepticism? Can an Islamic educational system pose insight into the goals of education in general and perhaps bring to question the idea that critical thinking is the final objective of education? Al-Sharaf (2013) and Altunya (2014) are both of the opinion that the Islamic pedagogical outlook is based on producing critical thinkers. The ultimate goal of the revelation of the *Quran* is for men of understanding to critically ponder over its verses and derive lessons therein (Q. 38 v 29). Hence the need of a framework to enhance critical thinking is crucial.

REFERENCES

1. Abrami, P. C., Bernard, R. M., Borokhovski, E., Wade, A., Surkes, M. A., Tamim, R., & Zhang, D. (2008). Instructional interventions affecting critical thinking skills and dispositions: A stage 1 meta-analysis. Review of Educational Research, 78(4), 1102–1134.
2. Bell, R., & Loon, M. (2015). Reprint: The impact of critical thinking disposition on learning using business simulations. International Journal of Management Education, 13(3), 362–370. https://doi.org/10.1016/j.ijme.2015.10.003
3. Boa, E. A., Wattanatorn, A., & Tagong, K. (2018). The development and validation of the Blended Socratic Method of Teaching (BSMT): An instructional model to enhance critical thinking skills of undergraduate business students. Kasetsart Journal of Social Sciences. https://doi.org/10.1016/j.kjss.2018.01.001
4. Butler, H. A., Pentoney, C., & Bong, M. P. (2017). Predicting real-world outcomes: Critical thinking ability is a better predictor of life decisions than intelligence. Thinking Skills and Creativity, 25(June), 38–46. https://doi.org/10.1016/j.tsc.2017.06.005
5. Faisal, M., Ismail, Z., Puteh, A., & Adib, M. (2012). An assessment of teaching and learning methodology in Islamic studies, 59, 618–626. https://doi.org/10.1016/j.sbspro.2012.09.322
6. Hosu, F. (2015). Toolkit to happiness in the 21 st century. Procedia - Social and Behavioral Sciences, 180(November 2014), 176–183. https://doi.org/10.1016/j.sbspro.2015.02.102
7. Luxemburg, R. (2018). Karl Marx. TripleC. https://doi.org/10.31269/triplec.v16i2.1018
8. Mazwati, W., Yusoff, W., Hashim, R., Khalid, M., & Hussien, S. (2018). The Impact of Hikmah (Wisdom) Pedagogy on 21st Century Skills of Selected Primary and Secondary School Students in Gombak District. Journal of Education and Learning, 7(6), 100–110. https://doi.org/10.5539/jel.v7n6p100
9. Olalekan, M. (2017). Critical thinking in Nigeria's pre-service teachers education: A philosophical investigation. Journal of Teacher Education and Educators, 6(2), 205–221.
10. Professor Steve Higgins. (2015). A Recent History of Teaching Thinking Professor. Journal of Experimental Psychology. General, 144(4), 744–763. https://doi.org/http://dx.doi.org/10.1037/xge0000076
11. Toner, J., & Moran, A. (2016). On the importance of critical thinking : A response to Wulf ' s (2015) commentary. Psychology of Sport & Exercise, 22, 339–340. https://doi.org/10.1016/j.psychsport.2015.05.007
12. Abrami, P. C., Bernard, R. M., Borokhovski, E., Wade, A., Surkes, M. A., Tamim, R., & Zhang, D. (2008). Instructional interventions affecting critical thinking skills and dispositions: A stage 1 meta-analysis. Review of Educational Research, 78(4), 1102–1134.
13. Bell, R., & Loon, M. (2015). Reprint: The impact of critical thinking disposition on learning using business simulations. International Journal of Management Education, 13(3), 362–370. https://doi.org/10.1016/j.ijme.2015.10.003
14. Boa, E. A., Wattanatorn, A., & Tagong, K. (2018). The development and validation of the Blended Socratic Method of Teaching (BSMT): An instructional model to enhance critical thinking skills of undergraduate business students. Kasetsart Journal of Social Sciences. https://doi.org/10.1016/j.kjss.2018.01.001
15. Butler, H. A., Pentoney, C., & Bong, M. P. (2017). Predicting real-world outcomes: Critical thinking ability is a better predictor of life decisions than intelligence. Thinking Skills and Creativity, 25(June), 38–46. https://doi.org/10.1016/j.tsc.2017.06.005
16. Faisal, M., Ismail, Z., Puteh, A., & Adib, M. (2012). An assessment of teaching and learning methodology in Islamic studies, 59, 618–626. https://doi.org/10.1016/j.sbspro.2012.09.322
17. Hosu, F. (2015). Toolkit to happiness in the 21 st century. Procedia - Social and Behavioral Sciences, 180(November 2014), 176–183. https://doi.org/10.1016/j.sbspro.2015.02.102
18. Luxemburg, R. (2018). Karl Marx. TripleC. https://doi.org/10.31269/triplec.v16i2.1018
19. Mazwati, W., Yusoff, W., Hashim, R., Khalid, M., & Hussien, S. (2018). The Impact of Hikmah (Wisdom) Pedagogy on 21st Century Skills of Selected Primary and Secondary School Students in Gombak District. Journal of Education and Learning, 7(6), 100–110. https://doi.org/10.5539/jel.v7n6p100
20. Olalekan, M. (2017). Critical thinking in Nigeria's pre-service teachers education: A philosophical investigation. Journal of Teacher Education and Educators, 6(2), 205–221.

21. Professor Steve Higgins. (2015). A Recent History of Teaching Thinking Professor. Journal of Experimental Psychology. General, 144(4), 744–763. https://doi.org/http://dx.doi.org/10.1037/xge0000076

22. Toner, J., & Moran, A. (2016). On the importance of critical thinking : A response to Wulf ' s (2015) commentary. Psychology of Sport & Exercise, 22, 339–340. https://doi.org/10.1016/j.psychsport.2015.05.007

23. Yao, L., Romero, M.J., Toque, H.A., Yang, G., Caldwell, R.B., Caldwell, R.W. The role of RhoA/Rho kinase pathway in endothelial dysfunction (2010) Journal of Cardiovascular Disease Research, 1 (4), pp. 165-170.
DOI: 10.4103/0975-3583.74258

24. Fauzi, Huda, M., Teh, K.S.M., Haroon, Z., Ripin, M.N., Hehsan, A., Abas, H., Hehsan, M.R., Irawan, J., Abadi, S., Maseleno, A. The design of fuzzy expert system implementation for analyzing transmissible disease of human(2018) International Journal of Pharmaceutical Research, 10 (4), pp. 68-73.

25. Susi Ari Kristina, Ni Putu Ayu Linda Permitasari. "Association of Secondhand Smoke (SHS) Exposure with Health-Related Quality of Life (HRQOL): A Systematic Review." Systematic Reviews in Pharmacy 10.1 (2019), 61-66. Print. doi:10.5530/srp.2019.1.10