

CRITICAL THINKING IN EDUCATION: AN ANSWER TO EXTREMISM

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Abstract

Pakistani society during the 1950s-1960s was a much harmonious, moderate, tolerant, and inclusive society with a progressive outlook. The era of the 1980s saw a major shift in the society, when core values exchanged hands with globalization, which, apart from its other benefits, also brought negative trends of extremist tendencies, polarization, and exclusive approach in the society. Unity in diversity was no more our strength, where extremist elements started imposing their beliefs on others. Educational reforms of the early 1980s have discouraged the art of questioning among the nation as a whole, whereby, pedagogical construct was redesigned to discourage critical reasoning by students and a culture of following rules, procedures and dogmas was promoted. Lack of critical thinking skills served the elites and policy-makers of the time, but in the long run, had devastating ramifications on the nation as a whole. The society moved from inclusive to exclusive approach, from progressive to regressive trends, from tolerant to intolerant dispositions. This study highlights the importance of critical thinking skills in our education system and draws a linkage that lack of these skills in our society is a cause for our extremist tendencies and intolerant behaviour. With critical thinking, problems are analyzed in totality for a logical solution. The menace of extremism in our society can be addressed by revisiting our educational mosaic under the ambit of critical thinking skills.

Key Words: Critical-thinking, Pedagogical-construct, Education policy, Higher and Lower Order Thinking Skills, Extremism.

Introduction

The pursuit of education is one of the most vital aspects of life. It is not only important that education empowers us, but also as it assists us in understanding different world views. Education is what makes us special from other living organisms. It is due to learning that we are able to engage and interact with our environment. Derived from the Latin language, 'education' means an upbringing. According to M. Craft, author of the book 'In Education and Cultural Pluralism', the word 'Education' originates from 'educare', which means to train or to build oneself. Education, in its true essence encompasses the Latin words where, at one time, it covers the 'know' part, and at the same time, it also refers to 'preparing the youth' to lead the society. At one end of the

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spectrum, it encourages gaining knowledge while at the other; it provokes a questioning mind, thinking, and a creative mind.¹

Education is a learning process to develop skills, and knowledge usually takes the transformational mode from one another. Though usually done through guidance, in recent times with 3rd and 4th generation education system, it can also be obtained being self-learning, as an independent learner, which may however come about at later stage in one's life. Not all education is good education. Quaid-e-Azam Muhammad Ali Jinnah, during the first Pakistan Educational Conference held on 27 November 1947 said, "*You know that the importance of education and the right type of education cannot be over-emphasized.*" He further added, "*Education does not merely mean academic education, and even that appears to be of a very poor type....*"²

Education is a double-edged weapon, encompassing both positivity and negativity, as education in the negative direction can become a major cause of extremism, violence and even terrorism. Sam Harris's 'New Atheism' theory in his book 'Letter to Christian Nation' writes that "The idea that Islam is a peaceful religion hijacked by extremists is a fantasy, and it is now a particularly dangerous fantasy for Muslims to indulge." In the same paragraph, he comments that "most Muslims are utterly deranged by their religious faith."³ Richard Dawkins says that "only religious faith is a strong enough force to motivate such utter madness in otherwise sane and decent people."⁴ Richard Hawkins, being a scientist, comes in the category of modernists, who only believe in the epistemology of positivism. His argument is that the fundamentalists believe in the Holy Book in a way that if the evidence is contrary to the book, the evidence is rejected. He declares his position as hostile to fundamentalist religion, which encourages 'not to change the mind'.⁵

Other scholars like Charles Kimbell, Madawi al-Rasheed, and Marat Shterin take the position that religion is not intrinsically violent and identify causes and drivers that lead to a dangerous path, when religion knowingly and unknowingly is used and abused. All major religions are based on the foundation of absolute truth that is present in the 'sacred text'. These truths are interpreted by religious scholars and leaders. Therefore, the correct interpretation of the truth is dependent on the education, social outlook, intellect, and world view of the interpreter. Usually, these interpretations are actually taken as absolute truth rather than the sacred text itself, and this is

when the religion is corrupted.⁶ Christians with a fundamentalist approach, killing the doctors performing abortions, is a case in point, where Christian organization 'Army of God' out of context quoted biblical text such as; "(1) They sacrificed their sons and daughters to the demons,⁷ (2) In your struggle against sin, you have not yet resisted to the point of shedding your blood."⁸ This justified their heinous acts of cold-blooded murder of the doctors. The Crusades are yet another case in point, when, on receipt of a request from Alexius, Pope Urban-II in 1095 ordered Christians to fight against the Turks, wherein, he passed a decree to all the Christians all over the world especially Europe and the Middle East; "*You are obligated to succour your brethren in the East, menaced by an accursed race, utterly alienated from God. The Holy Sepulchre of our Lord is polluted by the filthiness of an unclean nation.... Start upon the road to the Holy Sepulchre to wrest that land from the wicked race and subject it to you.*"⁹ Hence, sacred texts have been misused in the past and are still being misused and abused through selective, out of context readings and interpretations. The point to bring home is that all education is not a good education what Quaid-e-Azam Muhammad Ali Jinnah referred to as the "right type of education". Education, with selective and ulterior motives, has its ramifications and leads to extremism, intolerance, exclusion, and even terrorism.

Purpose of Education

What is quality and a good education? How the value of school can be described or how quality education can be defined? The value of school is traditionally being measured in terms of grades and results. Diane Ravitch, a historian while commenting on education in his comments in New York Times Magazine, states that there is no consensus among scholars as to what is the purpose of education? Policymakers take advantage of a lack of consensus and define good education in terms of higher grades and test scores. The understanding of students cannot be judged by their scores. While elaborating on the purpose of education, he explains the purpose of education is to make a citizen capable of taking social responsibilities of their own life as well as that of the community and society.¹⁰ While another scholar, Geoffrey Canada, states that the schools were designed to prepare children for jobs.¹¹ As *Elliot W. Eisner* states, "*As long as schools treat test scores as the major proxies for student achievement and educational quality, we will have a hard time refocusing our attention on what really matters in education*".¹² For him, the pupil can best be

prepared for the future when they are trained to have more options for an issue when they have more alternatives and more than one answer. For this, students must be trained in making sound judgments based on their abilities of reasoning, critique various ideas. The schools should train their students in critical thinking.¹³

In the Social Constructivism Theory, Alexander Wendt explains the importance of thoughts and ideas. To him, thinking can be changed, if the idea can be changed. This can act as a chain reaction, where a social, local, inter-state and international system can also undergo a change. Europe of the pre-1940 era and the Europe of today is a good example, where the concept of nation-state is under question. According to constructivist philosophy, the social world is a social phenomenon, highly dependent on the thinking attitude of the people living in a set of environments, to be precise, "the culture of thinking". John Dewey is considered as one of the major proponents of the social constructivists' approach, who opposed rote learning and memorization at the schools and propagated that students should be exposed to creative thinking. Dewey wrote, "If you have doubts about how learning happens, engage in sustained inquiry: study, ponder, consider alternative possibilities and arrive at your belief grounded in evidence."¹⁴ Dewey emphasized the nurture of independent reasoning as central to education.

Dewey's concept of progressive education was hallmarked by his pedagogical construct, where teachers played a paramount role in encouraging the students in deeper study, more information, and constructing group dialogue amongst students, so that students can take on greater responsibility for their learning as well as are equipped with decision-making tools. The punch-line of Dewey's educational philosophy rested on the edifice of case study education or project-based learning agitating students' minds and encouraging them to attain further knowledge.¹⁵ Dewey, an opponent of the traditional classroom, was a strong proponent of the learner-centered school system. Progressive education to him was a by-product of dissatisfaction from the teacher-centered class, imposing adult standards, transferring adult knowledge to children that were content-based.¹⁶ He wrote, "Learning here means acquisition of what already is incorporated in books and in the heads of the elders".¹⁷ Dewey believed that the teacher becomes an adult learner and

takes a back seat, while the students' thinking takes priority irrespective of being right or wrong.

Human Thinking Process

The term critical thinking has attained much popularity in recent years. Despite its popularity among the educators and the school owners, it is the least understood term. Richard Paul, in his famous book 'Critical Thinking' discusses the paradoxical pulls of human thinking, where he argues that humans at one end are logical species, while at the same time they are illogical too. The dialectic human nature on one end of the spectrum makes use of ideas, concepts, theories, and explanations to give meaning to various world views, on the other hand, they use the same aids to negate, contradict, mislead, misinterpret, become intolerant, and narrow-minded. For this reason, the author suggests that humans should not take their thinking for granted and hence should avoid taking things for granted as truth, when told by someone. Humans "are not born with, intellectually sound standards for belief, for truth and for validity."¹⁸ And therefore, there is a need for them to understand this inherent weakness and work towards improving and developing their thinking skills.

Critical Thinking

The modern concept of 'critical thinking' trends has been developed by a number of leading thinkers, where a number of scholars have attempted to define what critical thinking is? Few definitions are given below so that a good understanding is developed about critical thinking.

- a. John Dewey referred to critical thinking as reflective thinking and defined it as "Active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends."¹⁹
- b. Edward Glaser defines critical thinking as: (1) an attitude to reflect in a thoughtful way, (2) knowledge as to how to approach a logical enquiry and reasoning; and (3) skills to manifest these methods. Critical thinking demands examination of our belief systems in the light of the evidence.²⁰

- c. Robert Ennis, in 1989, defined critical thinking as “Critical thinking is reasonable, reflective thinking that is focused on deciding what to believe or do”.²¹
- d. Richard Paul developed his own idea of critical thinking, where he defines critical thinking as, “Critical thinking is that mode of thinking about any subject, content or problem in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.”²²

Educators have become interested in teaching critical thinking skills for a variety of reasons that also include marketing and more business. When questioned, most of the school owners and bulk of the teachers have no idea as to what critical thinking is. Many would claim that they teach their pupils, as to how to think rather than what to think, but when asked they proclaim that in a way ‘indirectly’, they teach critical thinking, which according to Alec Fisher is an absurd idea as critical thinking is a specialized subject and can only be taught through formal training. Each scholar, who has worked with critical thinking skills, has described the flow chart of critical thinking. Edward Glaser tabulates the basics like:-²³

- a. Recognize the issue.
- b. Means to approach the issues.
- c. Information gathering phase.
- d. Identify the unstated assumptions and values attached to the problem.
- e. Understand the language and also to use clear and accurate language.
- f. Correctly interpret the information available.
- g. Evaluate the evidence and statements.
- h. Draw pertinent conclusions.
- i. Reconstruct the belief system in the light of evaluated evidence.
- j. Finally, pass judgments.

Critical thinking is ‘understanding the problem and logical reasoning’, where assumptions are carefully identified, since our belief systems are based on

these assumptions. Critical thinking demands that our judgments are deferred until all facts and information are thoroughly evaluated. While indulging in critical thinking exercise, the justifications for a decision need to be confronted objectively against real-world situations. The most inescapable feature of the future is continuous change, and therefore, critical thinking attains the importance of essential edifice of an education system to prepare the students on the personal, social, and societal level to adapt to change.

Educational institutions in Pakistan are unprepared for this change. The society as a whole has not learnt the art of disciplined reasoning and, hence, we are generally poor problem solvers. The education system fails to differentiate the students, who are good at memorization and reproduction against the students, who have the ability to analyze, question, and come up with alternatives. Schools at the moment strongly resist foundational changes in their regimes. Rote learning, memorization is still the core of the Pakistani education system, although with glitz, fanfare, rhetoric, and clichés. First generation traditional education system remains embedded and deep-rooted with averse to change attitude in the wake of rapidly changing global and regional environment. Teachers, on the other hand, are not ready to leave the unending unimaginative pedagogy, students on their part are also not ready to think and understand the concepts, rather are comfortable with memorisation, parroting and ill-disciplined passive thinking, as the product of anti-intellectual outdated exam culture.²⁴ The schools today though different in the outlook, still believe in the teacher-centric approach of the past, where teachers are thought to be the custodian of knowledge. The pedagogical culture today is based only on the content knowledge, the facts, and opinions, but missing the well-reasoned argument. At every level, the schools, the teachers, the students are indulging in Low Order Thinking (LOT), where their thinking has been marred by merely getting good grades.²⁵

The 21st century demands are different; the world of economics and business is rapidly changing. The worker is no more required to make the judgment and make decisions. They are required to take good judgments and well thought out decisions. Rapid and bold changes in the world of economics and business demands reciprocal changes in the education system. Scholars agree that the 21st century would be hallmarked with the extensive competition in the wake of limited resources, thus, exacerbating the economic and social

problems, “The forces to be understood and controlled will be corporate, national, trans-national, religious, economic and environmental, all intricately intertwined.”²⁶ Under these trying circumstances, coupled with the state of Pakistani education system that is based on traditional rote learning and parroting skills, the youth bulge from a positive indicator will soon transform into a Frankenstein. Pakistani society, even today from international standards, is quite radicalized with extreme tendencies. These extremist tendencies and intolerant attitudes will get a fillip, if we do not rightly educate ourselves. It is for this reason that critical thinking attains paramount importance, an essential prerequisite of survival by every individual, society, and the nation state.²⁷

Critical thinking is a positive as well as a negative exercise at the same time. It is an exciting exercise, when other vistas of mind are opened, while it also is a depressing activity, when previous belief systems are challenged. Critical thinking demands extra effort, extra time, demands a thorough examination of the facts and hence is a painstakingly slow process. Critical thinking is an enlightening experience, which emancipates minds. People exposed to critical thinking skills are confident about their views, being well read and logical with sound reasoning, and in-depth analysis.²⁸ Indulging in critical thinking exercise would provide awareness of one’s biases and the preconceived ideas, an individual’s taken for granted assumptions and, thus, protects the individual from blindly following what others are saying. Human psyche works strangely and more than usual finds easier way outs, like believing the face value i.e. ‘bandwagon effect’, extraordinary weightage to one or few facts for making decision, ‘anchoring’, to confirm own preconceptions and beliefs, ‘confirmation biases’, then comes the ‘outcome bias’, where the end state is seen and not the quality of the argument and finally the ‘pseudo certainty effect’, this is the zero syndrome, where all efforts are made to avoid risks and minimum negative fallouts.²⁹

Critical thinking is a specialized subject, hence, cannot be taught indirectly. Critical thinking demands a precise thought that is logical and methodical following the rules of logic and reasoning.³⁰ Critical thinking is not about criticizing others. Indeed, it is not accepting the ideas out rightly without proper study and inquiry. Against the common belief, critical thinking discourages degrading others for their mistakes and errors; it rather helps them to reason better in a polite and logical manner. Common faults in thinking are

due to the combination of various factors or sometimes by a single overriding factor. These are, rushing to conclusions, generalization, over-simplifying, personalizing (giving own examples), stereotype thinking, fall prey to propaganda, projection biases (one thinks that his/her thinking is also equally shared by the others), hyperbolic discounting (short term rewards), correspondence bias (making hasty decisions on first available information), Dunning Kruger effect (incompetent boosting their capabilities), framing effects (reach different conclusions from same information), hindsight bias also known as 'knew-it-all-along' effect, over-confidence bias, self-serving biases.³¹

At times we are confronted with people pleading their case for one reason or the other. This pleading in literary terms is called 'argument'. While making an argument to support a case sometimes, it is possible to clearly see the reasons, while most of the time, reasoning in the argument is hazy, that cannot be deciphered. Presenting the reasoning in a logical manner is an



important segment of critical thinking.³² Contrary to the general understanding, an argument is not a disagreement, however, may include a disagreement. An argument, therefore, is more than a disagreement, where reasoning is given to disagree.³³ An argument generally has assumptions and at times arguments are based on scanty knowledge. Unless we know these, we are not in a better position to understand how an argument is structured. This is what is lacking in Pakistani society, where right kind of education is not available to the masses. Hearsay is taken as the truth without any further study or research. People take things for granted, as *who is saying is more important than what is being said*. Pakistani society, by and large, suffers from the bandwagon syndrome.

The heart of critical thinking is the art of questioning. Socrates believed that “human development is a continuous process, where there are no definitive answers. The best possible answer or a solution today may not remain relevant after some time, when thought is a by-product of questioning minds than we have a dynamic and vibrant society.” Socratic circle, most of the time also called Socratic fish-bowl, is a classical manifestation of questioning technique.³⁴ The realization that there is something wrong with the thought process is a must and foremost condition. If the realization is there, then, the second step is to identify as to what is wrong in one’s thinking. Education has always attained the highest place in any society, since it shapes society. It is considered as an indispensable instrument for bringing positive change in the social outlook of the society. The right kind of education comes with a host of factors, such as the education policy, the infrastructure, the school systems and administration, the quality of text books, the pedagogy, and the societal aspirations. The end state of the education system is what kind of citizens the system has produced? We should ask the question as to what kind of thinking skills or education is needed to become a productive and contributing citizen of the society. A derivative of critical thinking is Higher Order Thinking (HOT). Both work hand in glove and one could say that both without one another are meaningless. HOT is not new, this higher order of thinking prevailed since the times of Socrates, Plato, and Aristotle. Socrates was averse to loose thinking, by posing questions to his students about the evidence of any statement, he would drive them towards the facts. Philosophers, on the one hand, are more concerned about the logical part of the reasoning, whereas, psychologists focus on the thinking process.³⁵ What is HOT and LOT? As per scholars, this depends on the educational background and exposure of a student. A situation for a student demanding HOT may demand a LOT by another student.³⁶

Lower Order Thinking

In Pakistan, schools are somewhat detached from the social world. Students generally learn to reproduce what is being taught or written in the textbooks. Good students are those, who have good memories. This rote learning syndrome restricts thinking processes. However, at primary level education, though rote learning has its importance, the teachers are not aware that at some stage, rote learning should diminish gradually, by the understanding of the concepts. This lack of education in critical thinking skills does permanent

damages in the personality of the individual in the shape of multiple forms of prejudice, biased opinions, and narrow mindedness towards other's points of view, may it be in the field of academics, social life, personal domain or concerning professional dimensions. The conservative and myopic lens starts affecting the individual / social / national dimensions with religion manipulated, racially exploited, and ideologically disoriented minds.³⁷

Lower Order Thinking (LOT) is where logic is missing or not given due attention. Classically LOT is associated with rote learning or memorisation without understanding the logic or reasoning or questioning and still taken as absolute truth. Mathematics and history class are good examples, where formulas and names of people, places, and dates are to be memorised without logic, reasoning and are to be reproduced in the exams. As per Alen Schoenfeld "... most instruction in mathematics is, in a very real sense, deceptive and possibly fraudulent."³⁸ For example, in the mathematics classes from the middle to senior sections, solving the right angle triangle with the help of the Pythagoras Theorem, is taught, and yet most of the teachers even don't know what are the practical uses of this theorem in the day to day life.

Most of the schools do not teach students to think and understand the concept to gain knowledge.³⁹ LOT is rote learning and memorization, and that kind of thinking multiplies misunderstanding and prejudice. The traditional pedagogy (the teacher-centric classroom with monologue modus operandi) coupled with outdated examination regime has excluded the schools from the real social world. Extensive transformations of content and repeated tests have made the students empty vessels, devoid of the confidence for self-learning. Students generally in Pakistan are passive learners, where they are at the receiving end in a teacher-centric class environment. There is no space for the students to discuss a concept or an alternative or even his / her misunderstandings either with their colleagues or with the subject teachers. At school, there is a mad rush to achieve targets set not by the students, but by the administration, the completion of the syllabus, irrespective of whether the students have understood or not. On completion of schools, the students move out confused with fragmented pieces of knowledge, with no concept of correlation in the real world and with jumbled up opinions, rigidly understood procedures, and undisciplined beliefs, as "They are at best trained, not educated, not critical thinkers or persons."⁴⁰ LOT highly restricts one's

capability to learn on the personal as well as the societal pedestal. Researchers' personal observation during over 500 interviews of aspiring candidates to seek teaching jobs is that a very alarming number of candidates are confused about their academic pursuits. A large number of candidates have done their bachelor's degree in computer sciences, then, shifted to Masters in literature and again shifted the discipline during their M. Phil programmes, in an altogether divergent field. When asked for this confusion and side-stepping, they usually have no answer except total confusion about their goals in life.

Higher Order Thinking

Higher Order Thinking (HOT), on the contrary, enhances understanding and awareness. It inspires and motivates a person to be empowered. HOT, as against the common belief of being a new thing in education, is not new. In fact, this was the Socrates style of teaching, followed by Plato and Aristotle. Socrates challenged the unconsidered and un-reflected thinking of youth, by asking questions on the evidence. Hence, "Philosophers promote an approach designed to discipline thinking and to guard against the propensities of humans to accept fallacious arguments and draw inappropriate conclusions..⁴¹ Maier, another scholar, while explaining HOT, used the terms reasoning or productive behavior in contrast with learned behavior or reproductive thinking.⁴² Bartlett defines thinking as "the extension of evidence in accord with that evidence, so as to fill up gaps in the evidence; and this is done by moving through a succession of interconnected steps, which may be stated at the time, or left till later to be stated."⁴³ Higher Order Thinking is a stage above rote memorization, where the essence is to understand the concept through questioning. Though facts are recalled, HOT is a step ahead of where the facts are thoroughly analyzed, and if some element is missing then that element or information is obtained to analyze an issue in its entirety. This is how a phenomenon is understood. HOT takes a leap beyond the basic information or a fact. It addresses the inquisitiveness of mind to ask questions like 'Why, When, What, and How'. The Socratic questioning technique is a variety of questions, such as *questions to seek clarifications, questions to explore assumptions, questions that examine motives and evidence, questions about standpoints, questions that probe implications and consequences, and the 'meta-cognition', i.e. questioning the question. Socratic questioning is, in fact, a systematic and disciplined way to explore complex ideas, to get to the bottom of the issues, to peel off problems and*

issues layer by layer to get to the truth and present options and more alternatives to resolve the issues.⁴⁴

Figure 1

<p>Task Complete the sentences with <i>be</i> or <i>have</i>. Remember to use the correct forms.</p> <ol style="list-style-type: none"> The class _____ very boring because the students _____ no activities. Alia _____ a new pen pal from America. Alia _____ lucky because now she can practice writing in English. Maheer Zain _____ Saidah's favorite singer. He really _____ good voice. My hobby _____ reading novels. I _____ a collection of good novels. Bali _____ magnificent scenery. In fact, it _____ one of the most wonderful islands in the world. My younger sister and I _____ three cats. They _____ cute. Our favorite subjects _____ Math and English. We _____ a great time when we do math and English exercises. Caroline and Hannah _____ similar interests in fashion. They _____ crazy about the newest trends in fashion. Bob _____ a gadget maniac. He always _____ the latest version of mobile phone, which is actually not necessary. Sita _____ a dream of becoming one of the next female president of Indonesia. She _____ optimistic about her dream <p style="text-align: center;"><i>(Taken from Bahasa Inggris untuk SMA/MA/SMK/MAK Kelas X Semester 1)</i></p>

To quote a few examples of LOT and HOT as clearly seen in figure-1, students are to apply LOT skills to complete sentences. Here the students only memorize the use of 'be' and 'have' and apply them in the incomplete sentences.⁴⁵

Figure 2

<p>Text 1: An email from Hannah</p> <p>Hello, Alia! Let me introduce myself. My name is Hannah. I know your name from my friend, Caroline. She told me that you sent her an email telling her that you would like to have more pen pals from the US. I'd really like to be your E-pal. You sound really cool! I guess I'd better tell you something about myself first. I'm 16 years old and I attend Thomas Edison High School here in Minneapolis, Minnesota, USA. I have two brothers and two half sisters and I'm the middle child. My father died a few years ago so my mother runs the house and the family business. My father was a barista. I have lots of hobbies. I like music – mostly classical music and folk music – but I don't play an instrument. I like sports, especially tennis and basketball. At school I'm in the basketball team and I spend most of my extra-curricular time playing basket ball. I'm into animals very much. My sister and I have three dogs, a rabbit and an iguana. They need lots of attention as you can imagine. At school, I have many Hmong friends who were not fully fluent in English. Their family moved here from Asia. I enjoy talking to them about our different cultures. My favorite subjects at school are art and geography. I think I'd like to become a park ranger when I graduate, perhaps work for the National Parks Service. I haven't got much interest in fashion, although we have 'Mall of America,' the biggest mall in Minnesota. We can reach the mall very easily. A commuter train runs every 15 minutes, buses also come from different directions. We can also drive to the mall. It's much faster than going there by train or by bus. I don't like reading but I love drawing and painting. How about you? Please drop me a line, Alia! Can't wait to hear from you! Hannah.</p> <p>Answer the following questions briefly.</p> <ol style="list-style-type: none"> How does Hannah contact Alia? Is there anybody introducing Hannah to Alia? Does Hannah want to be Alia's friend? Where does Hannah study? Tell me about Hannah's family! What are Hannah's hobbies? Does she like animals? What animals does she have? What do Hannah and her among friends love to do? What profession would she like to have after graduating from her school? She isn't interested in fashion. Why? <p style="text-align: center;"><i>(Taken from Bahasa Inggris untuk SMA/MA/SMK/MAK Kelas X Semester 1)</i></p>

In figure-2, one can see that questions 1-8 are LOT factual questions, where the answer is already given in the question, and the students have only to recollect and recall and copy. In other words, there is no brain storming by the students and students are not exposed to content analysis. Only question-9 is a HOT question that forces the students to think and analyze the text and think out of the box with independent thinking including creativity.⁴⁶

LOT has serious ramifications on society as a whole. The individuals and groups of individuals can be exploited in the name of identity, religion, ideology, and political affiliations for the interests of the elite and the few. Most of the social and national issues cannot be resolved unless significant intellectual growth takes place among the masses. Such intellectual growth can only be possible with formalized critical thinking skills to resolve complex issues, related to deep-seated problems of human relations, religious differences, and ideological conflicts. The menace of LOT can only be resolved through formalized training in the schools, not by mere lip-service, but with dedicated and concerted efforts in the entire education regime. In recent times since the ordinary person is daily bombarded with diverse contradictory explanations and prescriptions through the print and electronic media, an untrained mind retreats into oblivion and picks up the face value of the things, being said and the minds being manipulated for the vested interests by the few. Unless the entire education regime, including the schools and the pedagogical construct, leaps for a paradigm shift from rote learning and memorization to critical thinking, there is little hope for enlightened society and a society free from extremist tendencies.

Pakistani society, over the last three decades or so, has seen a paradigm shift from a tolerant to intolerant society, from an inclusive to exclusive society, from liberal to conservative society, and from a progressive society, we slipped back towards regression with extreme views. We are not ready to listen and understand others' points of view. We live in a "Mr. know it all" syndrome and our point of view is the only point of view that is correct and that matters. The Pakistani society has been drifted towards radicalization and extremism for want of personal and political gains by the elites of the society. Had we given the right kind of education to our masses, in critical thinking skills, people would have questioned the leaders, who instigate people in the name of religion, ideology, political beliefs, and ethnicity etc. Had the nation been

rightly educated, we would not have damaged the property of fellow poor citizens on the streets, as an outrage to atrocities on Palestinians and Kashmiri people. The recent incident of lawyers' attack on Punjab Institute of Cardiology Lahore, is a case in point where the grievances of the lawyers could have been resolved through other peaceful means.⁴⁷ There is a direct link between radicalization, extreme views and violent behaviour with lack of critical thinking skills. Critical thinking assists us to respect and understand others' points of view, it enhances tolerance and promotes inclusiveness and at the same time, it enhances the power of argument based on logic and knowledge.

Critical thinking rejects extreme tendencies and discourages jumping to conclusions. Instead of the use of force or threat of use of force, it promotes peaceful ways to resolve issues. Unfortunately, Pakistani society has not been exposed to critical thinking skills, as most of the schools still follow the same old fashioned traditional philosophy of rote learning and memorization, without exercising the mind and art of questioning. Teacher-centric classrooms, with 'monologue methodology' and students being passive learners, have no say in the system. In the rapidly changing global environment, where Pakistani culture and values are also undergoing swift transition, it is time for us to go back to the basics, re-look at the structural mosaic of Pakistan's education system as a whole and re-define the end state i.e. purpose of education. We need to trust our youth and empower them through Socratic dialogue and offer them opportunities to practice critical thinking skills, be able to learn the art of questioning and prepare them for life-long skills. The way forward is introducing critical thinking in Pakistani education system. This can be done by either introducing the subject of critical thinking, as an independent and separate subject or can be embedded in the existing syllabus. Here, train the trainers is also a gigantic task to prepare teachers to undertake the responsibility. This, by no means, is an easy task and there are no quick fixes to solve this gigantic problem. But, then, somewhere we have to take a start. In nutshell, critical thinking is the answer to the menace of extreme tendencies in Pakistani society. The need of the hour is to fight against ignorance, miss and disinformation, false beliefs, nepotism, shallow mindedness and 'Us versus Them' syndrome. We need to encourage inclusive approach, respect for other views and ideas, tolerance and broaden mental horizon with a view to improving existing thought processes. All this is no doubt a tall order but is do-able.

Endnotes

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- ³ Sam Harris, *Letter to a Christian Nation* (Knopf, 2006), 27.
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