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Education: Beyond Theories and Indoctrination

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Abstract

Modern education acknowledges the inadequacy of traditional methods of teaching and learning, recognizing that mere theories and indoctrination lack depth and innovation. The paper focuses on the ways in which education can move beyond the traditional modes of approach such as indoctrination and theories to usher in new educational methods that are built around critical thinking, inquiry-based learning, and problem-solving. By moving away from such education, educators can create a learning environment within which learners are capable of effectively and critically engaging their content, constructing knowledge, and also being capable of challenging assumptions. Thorough research on Literature reviews and case studies indicated the extent to which transformative educational approaches may empower intellectual curiosity, creativity, and independent thought. This transformational approach presents some challenges. The concerted efforts to overcome these challenges require evidence-based research that is able to demonstrate the effectiveness of the alternative ways. In conclusion, the major aim of education should be to develop well rounded individuals who are not only knowledgeable but also capable of thinking innovatively.

Keywords: indoctrination, theories, education, critical thinking, innovative

1. Introduction

Education plays a very significant role in the development of any nation (Copp, 2016) as it involves the process of acquiring necessary skills, knowledge, values, and beliefs, which would improve the well-being and further aid in a positive contribution to their communities. The rigidity of educational curricula and teaching methods has shifted the values embedded in education over time to indoctrination. Indoctrination refers to the process of teaching or instruction on a set of values or beliefs with no avenue offered for critical evaluation or questioning (Evans, 2016). One of the central aims of education is to instill critical thinking and creativity in individuals so that they are able to make sound judgments and decisions on diverse challenges in regard to general livelihood. Creativity and critical thinking continue to be important components that have set aside education from indoctrination, despite the thin

line that separates the meaning of both concepts (Evans, 2016).

The concept of indoctrination was derived from the Latin word *doctrina* which refers to "teaching" or "instruction". The true definition of the word indoctrination in effect coincides with the definition of education. The concept of indoctrination has gradually leaned towards negative connotation with the concept always been used interchangeably with brainwashing (Crouere, 2016). Indoctrination propels an individual to accept a belief without rationally considering such belief (Armstrong, 2022). Copp (2016) opined that indoctrination impacts critical thinking which hinders individual from considering ideal alternatives, even when there is compelling evidence that goes against the belief.

Education in general has gone beyond the spheres of theory and indoctrination as education has generally being recognized as a driving force for development which has been made possible through the development of critical thinking among students (Du-Preez, Simmonds & Verhoef, 2016). This could be a reason that education can be perceived as going beyond the content of curriculum within a formal educational setting and beyond theories as it is hinged on growth on all facet of life ranging from emotional, physical and thus, contributing to the all-round development of the individuals (Du-Preez, Simmonds & Verhoef, 2016).

The significance of critical thinking in education cannot be over emphasized, as it enables student overcome challenges in their personal lives, as well as enhance their ability to cope and compete in the current era of education. Retnaningsih et al (2020) noted the importance of critical thinking, most especially, in the 21st century with notable changes and development in the field of education. Ayçiçek (2021) opined that critical thinking "is beyond just thinking clearly and rationally, and it is related to thinking independently. When humans think about something critically, they formulate their own opinions and draw their own conclusions. To have an understanding of how education enables critical thinking, there is need to study the history of education from the stand point of Socrates where education was made from the position of questioning between the teacher and student, hence presenting persuasive evidence (Ayçiçek, 2021).

It is therefore important to have an in-depth understanding of the true meaning of education to be able to grasp its importance towards individual's growth and their connection to their community. Over the years, education in general has heavily relied on theories, hence, a slight shift from the true concept of teaching despite a thin line separating the actual meaning of education and indoctrination. Scholars have begun to argue the relationship that exist between education and indoctrination and the possible impact of the latter on education while considering the complex definition of the term, indoctrination.

2. Critical Thinking and Its Significance in Education

Critical thinking describes not only the ability to make decisions in line with the principles of logic and probability, but also the capacity to implement these abilities to issues in everyday life. Critical thinking will increase creativity and improve how students use and manage time (Hand, 2018). Students may get a deeper knowledge of themselves by applying critical thinking to their lives. It not only helps individuals learn to value the perspectives of others,

but also provide them with a chance to become more objective, less sentimental, and open-minded (Hand, 2018).

The term "Critical Thinking" has many potential definitions within the context of psychology and philosophy, but it lacks a clear definition. The word, "Critical," derived from the Greek term *kritikos*, meaning to judge, originated from the Socratic method of argumentation and analysis that characterized thought at the time (McGregor, 2007). After which the term "*kritikos*" was adapted into Latin as "*Criticus*," a phenomenon that expanded to other languages (Emir, 2009). According to Critical Thinking Cooperation (2006), critical thinking is a skill that goes beyond mere memory. When students use critical thinking skills to analyse, evaluate, interpret, or synthesize information and employ creative thought to build an argument, solve a problem, or come to a conclusion, they are engaging in critical thinking. Education, whch is perhaps one of the most fundamental human need, serves as the structure that allows for human development (Paul & Elder, 2008).

Angwa (2008, p. 29) asserted that “the purpose of education is to perfect manhood”. Education plays a vital role in shaping the character of individuals, empowering them to become valuable contributors to the society. According to Fafunwa, as quoted in Angwa (2008, p. 29), “It follows that education is concerned with the whole of man and to produce a complete man. It is a powerful tool for shaping a child’s character. This explains why psychologists have asserted that they could determine the type of adult a child can grow into by mere controlling his environment and life experiences”. Halpern (2014) further iterated that the purpose of education is to help each person reach their greatest potential by nurturing them and assisting them in doing so. A long-standing school of educational philosophy maintained that improving students' critical thinking should be the primary goal of education rather than just a by-product (Ennis, 2011). Students should be guided by qualified educators in understanding what and how to acquire knowledge, they should also demonstrate their critical thinking skills as they assess their learning objectives and techniques (Emir, 2009).

2.1 Case Studies on Critical Thinking

Ennis (2011) reported research conducted in the Education Faculty of Anadolu University located in Turkey. The research set out to define critical thinking skills, and the variables that affected the critical thinking of teacher candidates enrolled at the Anadolu University Education Faculty. The findings of the study demonstrated that the critical thinking and overall thinking skills of candidates who were teachers were at a mid-level, and that these skills were influenced by a variety of variables, including age, the type of high school diploma received, and level of exam scores obtained for university admission, the program being studied, financial status, and self-development activities.

Also, subsequent investigations done by Giancarlo, Blohm, and Urdan (2004) were interested in measuring teenagers' critical thinking dispositions. The California Measure of Mental Motivation (also known as CM3) is supported by the findings of their research. This research, operated under the premise that critical thinking is a disposition, and offered useful information for evaluating that adolescents have a propensity for critical thinking.

Several schools and programes across the globe have successfully implemented critical thinking and inquiry-based learning. Some of them include High Tech High in California, International Baccalaurereate Program, Global Indian International School (GIIS), Approach**,** University of Michigan inquiry based learning program, the Institute for Inquiry (IFI), the British School of Barcelona in Europe, etc. Furthermore, learning philosophies such as Montessori and Reggio Emilia are essential in promoting critical learning amongst school aged children.

3. Indoctrination in Education

Indoctrination in education is a process where definite beliefs, ideologies, or values are instilled into students gradually (Hocutt, 2005; McDonough, 2011). Such teaching methods is characterized, for the most part, by a focused campaign to shape the views and behavior of students in a manner that echoes a given agenda. Indoctrination at its root may be defined as the teaching of certain beliefs without the method of critical reflection (Hocutt, 2005; McDonough, 2011; Lopez, 2013; Ioana & Cracsner 2016). This lack of critical thinking is a prime feature because the students are expected to take information without questioning the validity of the information or exploring other perspectives.

The repetitive nature of the instruction is one of the key elements of indoctrination. In most cases, concepts, beliefs, or ideologies are reiterated in other educational materials and through different methods of instruction. This repetition serves to reinforce the same indoctrinated narrative in a manner that is quite difficult for the students to escape from or challenge the ideology being established (Smith, 2023). Selective presentation of information is another aspect of indoctrination, where biased or misrepresented information is provided to support the predetermined agenda, while opposing views are being suppressed.

Along with biased information, indoctrination could also involve the suppression of alternative viewpoints in an active manner, as opposed to critical thinking (Bar-Tal et al., 2021; Troyka & Hesse, 2017). These can take different forms, from the denial of opposing views in discussion groups to the suppression of such views, or even aggressive actions against skeptics or inquisitive parties. When opportunities to expose alternative viewpoints are constrained and critical inquiry is dampened, the path to independent thinking and intellectual exploration is blocked by indoctrination.

The content of indoctrination at educational settings can be political, religious, or ideological. But then again, the intent behind them is all the same: molding students to a pre-designed way of thinking, attitude, and behavior. This could have far-reaching implications on the intellectual development of many students, and indeed for society at large (Costa-Font, García-Hombrados & Nicińska, 2024). By nurturing a culture of uncritical acceptance and conformity, indoctrination undermines the very ideals of intellectual autonomy, free inquiry, and open discourse that are necessary for vibrant, democratic societies.

3.1 Case studies on Usage of Indoctrination in Education

The use of indoctrination in passing the ideology of racial superiority and anti-Semitism was high, especially by the Nazi regime and its leader, the dictator Adolf Hitler. The most

remarkable unit in the process of indoctrination was the Hitler Youth movement. It was founded in 1922 after the First World War and began as a paramilitary organization in the recruitment of young boys and their potential training as soldiers in the future (Bartov, 2013). But under his leadership, the organization grew by leaps and bounds and became a cornerstone in the indoctrination of German youth with Nazi ideology (Kater, 2004). In 1936, membership was made compulsory for all boys between the ages of 10 and 18. Indoctrination in the Hitler Youth program came in many forms (Kater, 2004). It could be lectures, or other propaganda means, physical fitness, and activities in military drilling. These activities were used to brainwash members with Nazi racial theories, anti-Semitic beliefs, and the glorification of militarism and nationalism in the hope of creating a generation that was loyal and subservient to Nazis and their interests (Bartov, 2013).

In the Soviet Union, the Communist regime used indoctrination in the education system to develop loyalty to the state and to spread among the citizens its ideology of Marxism-Leninism (Brandenberger, 2011). The schools and universities were turned into platforms for implanting the communist ideas (Ewing, 2002). They had conceived the syllabi, the textbooks, and other teaching material with great care to support the version given by the party (Brandenberger, 2011). Early on, students in the Soviet Union were to be found in a curriculum that glorified the achievements of socialism and the Soviet state, while on the other hand, criticized capitalism and Western imperialism. At the schools and institutions governed by the Soviets, opposition views would get suppressed. Students expressing any skepticism or questioning the official ideology exposed themselves to grueling treatment, thus creating an atmosphere of fear and self-censorship that thwarted any intellectual curiosity and critical thinking (Ewing, 2002).

Education beyond indoctrination can be understood through the lens of historical instances where mass violence and civil wars drove the expansion of primary schooling. In Europe and Latin America, national elites, motivated by the fear of internal conflict, expanded education to indoctrinate the populace into accepting the status quo, thus ensuring social order and political stability (Paglayan, 2022). Evidence shows that this pattern of expanding primary education followed civil wars, a trend not seen in peaceful countries or those where liberals gained power. For example, after the 1859 Chilean civil war, the central government expanded primary schooling in rebellious provinces, not as a concession, but to instill obedience and respect for authority in future citizens (Paglayan, 2022). This highlights how education has been used as a tool for indoctrination, aimed at maintaining control and preventing future conflicts.

In a study conducted by Petrus (2019), he highlighted that the crisis in higher education in South Africa extends beyond fees; it is rooted in the ideological clash between Eurocentrism and Afrocentrism at universities, highlighting a deeper issue of institutions engaging in indoctrination rather than true education. Bowden (2023) critiques the standardized school system, describing it as a hegemonic structure that complicates and obstructs learning, particularly for persons of colour. This system's lack of support for these students often leads to premature educational termination. Bowden reflects on their own interrupted educational journey and those of peers who feel alienated by the system, perceiving it as not meant for

them. The study by Bowden (2023) highlights the intertwined nature of education and indoctrination within this framework. Bowden (2023) delve into how the public school system serves as an ideological apparatus reinforcing racism, labor, and capitalism in America, and examine the influence of beliefs and values on student behaviors.

4. Redefining Education

In redefining education beyond theories and indoctrination, critical thinking must be instilled (Ennis, 2015). In crafting an education system that gives high regard to critical thinking, a set of key foundational principles forms the basis, among which is the promotion of inquiry and exploration. This is done by creating an environment where students are actively encouraged to ask questions, explore topics of interest, and find answers through independent investigation. By developing a culture of curiosity, educators instill in students that internal drive towards understanding things deeply; it is like the bedrock of critical thinking (Ennis, 2015).

Central to this development is the emphasis on analytical skills (Halpern, 2014). Students should be able to analyze information in a scrutinizing manner, distinguishing valid evidence from biases, and sound arguments from fallacious ones. With guided practice, students are trained to approach problems with a critical eye, developing the capability to draw responsible conclusions and make defensible decisions (Halpern, 2014). Furthermore, critical thinking is based on the foundation of problem-solving. An education system that is rigorous in nature has to offer opportunities for its students to be capable of solving real-world problems. When students can be able to tackle real problems in life, they will have developed the ability to think creatively and reason logically when looking for solutions to challenges, applying in practice what they know. This applied approach, therefore, will not only enhance the skills of critical thinking but also program students with the adaptive mentality that permits them to navigate the complexities of life beyond the classroom (Ennis, 2015).

Additionally, the development of critical thinking skills is heightened through the creation of collaborative problem-solving experiences (Abrami & Persson, 2015). When students are encouraged to work collaboratively in teams to solve complex problems, sharing different points of view creates an exchange of divergent perspectives. Effective communication and consideration of multiple viewpoints are developed, which remain a hallmark of strong critical thinking. Critical thinking should be embedded across the curriculum (Abrami et al., 2015).

Critical thinking skills need to be applied across all learning areas instead of being viewed as a separate learning subject. In each of the areas of science, history, literature, or mathematics, the educator should challenge their students' ability to think critically, analyze information, and apply reasoning skills in the relevant context (Ghanizadeh, 2017). This way, they would emphasize not only the significance of critical thinking but also how it bridges across different disciplines and connects with life.

Intellectual humility is one of the basic principles upon which the teaching of critical thinking in the educational system is based because it emphasizes that an individual idea can be flawed or incomplete. A significant characteristic of this quality is that it opens one up to

learning and critical inquiry as it prompts respectful dialogue and collaboration (Liu, Frankel & Roohr, 2014). It is inculcated by teaching students to appreciate the natural limits of their knowledge. Generally, inquiry-based learning attempts to actively involve students in questioning, investigation, and discovery. Students are guided to investigate topics that are of interest to them, ask questions about these topics, and search for answers to the questions through exploration and research work (Bailin et al., 2017).

This approach creates ownership of the learning process, which contributes to the development of the ability to initiate and pursue knowledge in a self-directed manner. Problem-solving methods, which run parallel to inquiry approaches, give students opportunities to apply their inductive reasoning skills to real-life situations. Students will develop their analytic, creative, and logical thinking skills by solving real life problems and challenges (Bailin et al., 1999). Whether they are working on complex mathematical equations, designing scientific experiments, or confronting problems of society, problem-solving activities help students become critical thinkers, test different strategies, and consult with one another to bring innovative solutions to problems.

The use of inquiry-based learning and problem-solving approaches ensures that students learn profoundly and develop a conceptual understanding. The students are well able to acquire deeper knowledge of core concepts and principles when they are actively engaged with content through inquiry and problem-solving. They do not just simply memorize facts or procedures; they gain deeper knowledge that could be applied across different contexts (Ghanizadeh, 2017).

5. Challenges and Solution in Implementing Change

Moving education beyond theories and indoctrination involves numerous challenges such as overcoming resistance from traditional educational institutions. Traditional educational institutions are inflexible in the sense that since they are based on some practices, curricula, and a particular mode of teaching, it's very difficult to bring in new innovative approaches like inquiry and problem-solving approaches. However, several strategies could be considered as a way to do away with such resistance and form meaningful changes within educational systems (Fullan, 2010). One major strategy is to ensure evidence-based research and empirical data, as they have shown the effectiveness of the alternative approach. Most of the time, when evidence that supports the benefits of inquiry-based learning and problem-solving is presented in the proper light, educators can more effectively influence and implement such learning approaches. This could be done through pilot programs, longitudinal studies, or meta-analyses that examine the effect of innovative teaching methods on student outcomes and academic achievement (Hmelo-silver & Barrows, 2006).

Another effective solution towards this challenge is to work collaboratively with stakeholders towards making decisions; by involving educators, administrators, parents, and community members in deliberations to find consensus and support for new approaches. By adopting such a participatory approach, stakeholders can share their perspectives, express their opinion, and take ownership of the change, thereby giving rise to shared responsibility and commitment towards the changed education.

Infrastructure and resource constraints is another major challenge that can be encountered when trying to ensure the implementation of an innovative education through the means of inquiry and problem-based learning. In many cases, scarce finance or funding with poor facilities and technology pose serious obstacles to the implementation of a new teaching approach while demanding quality learning experiences for all students (Najumba, 2013). Several means may be adopted to minimize these challenges and assure that all students are receiving quality education. This challenge can be resolved by prioritizing resource allocation through the educational needs of students. Needs assessments and resource audits in learning institutions can thus identify areas where an institution urgently needs resource allocation to be channeled there (Altschuld & Kumar, 2010). This may include the rechanneling of finances from less critical areas, looking for external sources of funding, or advocating for more investment in education at the local, state, or national level.

Table 1. Potential challenges in implementing educational reforms and solutions

S/n	Potential Challenges/Shortcoming	Solution
1	over-reliance on standardized testing	Incorporate project-based learning and portfolio assessments to evaluate a range of competencies beyond test scores.
2	Overemphasis on teacher-led instruction.	Encourage student-led discussions and collaborative problem-solving activities.
3	Rote learning and memorization.	Implement inquiry-based learning where students pose questions and explore answers through research.
4	High pressure on students to excel in academics.	Integrate social-emotional learning to build resilience and coping skills for stress.
5	Lack of creativity due to stringent curricula.	Introduce design thinking workshops and creative arts programs
6	Intense competition and long study hours.	Provide balanced education with extracurricular activities that promote overall well-being.
7	Traditional lecture-based teaching.	Utilize flipped classroom models where students review content at home and engage in interactive activities in class.
8	Limited use of technology in classrooms.	Integrate digital tools and online resources to create tech-enhanced learning environments.
9	Standard curriculums that fail to address diverse learning needs.	Adopt differentiated instruction strategies tailored to individual learning styles and needs.
10	Theoretical focus with limited practical application.	Foster internships and partnerships with industries for experiential learning.
11	Curricular rigidity and less adaptability.	Encourage flexible curricula that can be adapted based on student interests and emerging trends.
12	Heavy focus on memorization and less on understanding.	Promote deeper understanding through concept-based learning approaches.
13	High academic expectations and limited creativity.	Balance the curriculum with STEAM (Science, Technology, Engineering, Arts, and Math) education initiatives.

6. Conclusion

In conclusion, exploring education beyond theories and indoctrination provides the critical key for establishing dynamic, inclusive, and empowering learning environments. The appraisal indicates the importance in striking a balance between imparting knowledge and promoting critical thinking. Theories and indoctrination provide a stable platform for teaching methods which ensures a systematic form of learning. However, innovative approaches with critical thinking, inquiry-based learning, and problem-solving at its centre will empower learners with a proactive part in their learning and, more importantly, develop them with requisite skills, knowledge, and mind-set to face a very dynamic future.

The major aim of education should be to develop well rounded individuals who are not only knowledgeable but also capable of thinking innovatively. Also, by advocating for an integrated approach to education that respects independent thinking, open inquiry, and intellectual humility, we can build a more equitable and inclusive educational environment in which people feel empowered to achieve their full potential and are better prepared to contribute to society.

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