Redefining the Role of Teachers in Developing Critical Thinking Within the Digital Era

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ABSTRACT

The growth of the learner is the central concept of schooling. It is important to teach substantial skills such as CT to the learner for him or her to be able to think clearly and make the best decisions possible. CT is a valuable trait for learners to master problem-solving skills to deal with all difficult problems in life. As a result, CT is a method of dynamically conceptualising, integrating, analysing, forming, and assessing that is mentally organized. Data is gathered or generated as a guide to believes or behaviours through observation, practice, thought, logic, or engagement. In the digital age, unlike the traditional role of teachers in the past, teaching critical thinking skills requires effective technical and management skills in the classroom, which means that the role of teachers will be multifaceted and complex. This article will research the importance of critical thinking in education and how teachers can use different technologies to help students achieve critical thinking.

Keywords: Critical thinking, digital technology, the role of teachers

1. INTRODUCTION

Digital media have completely transformed our lives and the way we think, as well as our educational discipline. This paper looks at how an instructor uses new technology to help students improve critical thinking skills and the importance of critical thought in a learner's education. There is also widespread concern about our outdated educational system and its inability to instil critical skills for a child's growth. The old school approach is based on conscientiousness, while the modern system uses ideas like desire, feelings, and commitment to inspire students to learn.

The role of the teacher in the twenty-first century is more challenging as they are required to be competent in digital technologies to cope with the demands of modern students. Classrooms have become active student-centred learning environments. Teachers need to utilise modern technology to stimulate students' imaginations and interests to develop their critical thinking skills [9].

To succeed in today's dynamic environment, students must possess an innovative outlook, comprehension, and strong problem-solving abilities. At the same time, a teacher's position has evolved from that of a traditional information transmitter to that of a facilitator and organizer. Tutors are fitted with a variety of modern technology to provide outstanding instruction to students. This highlights the importance of rethinking and reorganizing systems that prepare teachers to deal with new challenges [2].

2. CONTEXT

The growth of the learner is the central concept of schooling [6]. CT, as substantial skills, is crucial for learners to develop the abilities to think for themselves and make informative decisions. CT is a valuable trait for the learner to master problem-solving skills to deal with all kinds of challenges in life. As a result, CT is a method of dynamically conceptualizing, integrating, analysing, forming, and assessing that is mentally organized. Data is gathered or generated as a guide to belief or behaviour by observation, practice, thought, logic, or engagement. To improve strategic thinking skills, changes in emphasis from studying to thought, practice to problem-solving experience, and performance to develop critical thinking abilities are essential. Therefore, CT is considered a vital aspect of today's educational modules.

Teaching CT skills in the modern era will necessitate an instructor with strong technological and management abilities. The teacher's position has

changed from that of an educator to that of a communicator using modern media [4]. Tutors must assume the role of a facilitator to assist students in developing into logical thinkers and self-sufficient practitioners. Several modern approaches are used in the classroom to inspire students to engage in CT.

3. LITERATURE REVIEW

3.1. Transformation in the role of teacher to develop critical thinking.

Evelyn and Hemming emphasize the method of interviewing minds to develop critical thought processes. Instructors should organise the substance of the syllabus to allow students to investigate the response to the question asked. This method relies heavily on open-mindedness. The instructor must frame the questions ahead of time to instil the ability to learn in a disciplined and responsible way. To foster CT in a detachable way, learners may be asked to analyse their own CT. CT learning is made easier in a student-centred classroom. The instructor should create opportunities for debates and discussions in the classroom for students to participate in, which will encourage the kids to look at data, analyse parameters, and come up with their opinions.

According to Abrami et al., learners can be improved their CT skills at all educational levels and in all contexts using appropriate approaches [1]. The author focuses on two instructional methods for teachers to introduce CT to students during the learning process. The first is to create opportunities for students to participate in active debate, and the second is to expose students to real-world issues. To maximise students' involvement, teachers can ask students questions or engage them in group discussions to encourage students to practise different problem-solving strategies. As a result, when students encounter similar situations in real life, they will be better prepared and more confident in dealing with the problems.

Sharma explores how teachers' functions evolved from that of an educator to that of a constructor, facilitator, mentor, and designer of learning environments. As a facilitator, teachers need to be supportive and open-minded in their roles as co-operators, partners, and mediators, to cope effectively with the complex, competitive, and the interconnected world around them, and equip students with strong problem-solving skills, an innovative outlook, and knowledge literacy. As a result, a comprehensive restructuring of educators' roles in the educational system is needed to boost children's productivity and learning for them to survive and thrive in this modernised world.

Saragih and Zuhri explained that teachers need to have a thorough understanding of CT and its benefits in motivating students and helping them to achieve cognitive and affective learning, using appropriate strategies and materials. Teachers shouldn't simply be a carrier of the curriculum in helping students to develop CT.

3.2. Development of critical thinking with the help of digital technology.

Teachers are facing challenges in adapting various resources and technologies to create a digital-based learning environment in their classrooms. Game-based learning approaches with the help of modern technologies are useful in developing contemporary skill sets such as CT, imagination, connectivity, and teamwork, according to a study conducted by Qian and Clark [8]. Also, teachers can corporate virtual laboratories, e-learning tools, and open educational resources with instructions, tutorials, presentations, and courses to help students improve their skills.

The use of multimedia instruction methods, according to McKnight et al. [7], can improve the efficiency of information transfer. The use of technology has improved collaboration between teachers and students without the limitations of time and space, as up-to-date learning opportunities are easily accessible. Collective learning is a great way to improve students' CT and encourage them to participate more actively in discussions, gain responsibility, and develop as analytical thinkers.

Kong concluded that incorporating interactive classrooms into the pedagogy helps students improve knowledge literacy and critical thinking skills [5]. Yang and Wu conducted a year-long trial and found that multimedia storytelling enhances CT, teaches inspiration, and allows students to attain higher academic goals.

4. DISCUSSION

Mendenhall and Johnson researched the improvement of undergraduates' reading comprehension skills using a Web 2.0 learning framework. According to Yang and Wu, multimedia storytelling raises CT and improves a student's inspiration and academic achievements. According to a report by Le, current technologies improved the critical thought learning environment. To find out if technologies can enhance CT teaching, several experiments were conducted, and the results showed that technologies have positive impacts on effective CT teaching. As a result, in the modern age, teachers must cultivate and master an entirely new range of skills in addition to their teaching abilities and develop networking skills to promote shared learning. Above all, the tutor's networking skills

will enable him or her to communicate with students through numerous digital and social media platforms. For instance, in the current pandemic situation, the entire educational system was performed online. As a result, teachers must acquire technical knowledge.

Teachers must have exceptional leadership abilities in the modern age. Traditional teachers were required to provide reading, listening, and writing skills, but today's teachers must also have social media skills, which include producing images, hosting webinars, creating online digital archives, creating online records, exchanging knowledge accurately, giving input, and detecting emerging patterns and ideas to provide quality education. As a result, a teacher's experience will be expanded to new heights with the help of strong communication skills.

Critical thinking, imagination, individuality, problem-solving, and strategizing are all important qualities that an instructor must possess and develop through preparation and practice. Teachers used to have limited teaching resources and had no trouble picking the most suitable one for their students. However, with a vast amount of teaching resources available online, teachers need to have CT in choosing the right learning materials by identifying the interests of the learners and deliver useful information to students, helping them to widen their knowledge and connections of the world.

Teachers' new role required them more commitments and responsibilities. As a result, he or she must possess complex management skills that enable them to handle information by scrutinizing the sources' credibility and validity. They must manage and compare the interests or expectations of students with the syllabus's purpose to achieve the expected instructional objectives. In addition, a teacher in the modern age has more obligations to impart wisdom, such as keeping up with new technology and transforming the learning experience to students. Students, on the other hand, would have a solid legal foundation, outstanding decision-making abilities, and agile stamina, and therefore would be potentially responsible citizens. To cope with these tasks, the teacher must combine CT with standard critical thought training approaches.

Critical thinking can be taught using a public dialogue on interactive platforms by an instructor. It is one of the most widely used technologies in online education for promoting dialogue and collaboration. The method allows students to discuss issues in a public setting, socially and academically engaging with teachers and other students. Furthermore, Students can go back to these conversations and discussions when they need to, as they are saved on the forum. This approach is especially helpful for students who are nervous and shy during face-to-face interactions. Cooperation, meditation, dialogue, and peer teaching all

help to improve CT skills [3]. As a result, students' CT can be grown to a high level through active sharing of information, collaboration, and engagement. In the classroom, Google Docs can be used as a chat application. The sheet could be used by the instructor as a collaborative activity to promote debate among the students. Students can apply their experience and analysing methods to experiment with various approaches to achieve high CT abilities.

Many methods can be used to teach and nurture CT in students. One of the most significant benefits is that the same lesson can be learned using various instructional methods. An instructor may use multiple learning modes to involve students, such as video tutorials, online conversations, and instructional computer games, to keep the idea solid, simple, and inspiring. Also, using polls can encourage student participation and motivate them to consider and make better choices. Teachers should have a digital debate in which all students can join and message, audio recordings, or short videos can be posted to the desk. Rather than the conventional dialogue, this will be a fun way for students to present their cases and defend their viewpoints. To improve CT in pupils, an instructor can also use 3D printing to produce visual learning aids by bringing the subject to life, which will have a positive impact on the learners' CT. CT can also be promoted by flow chart games with a drag-and-drop feature. Teachers will teach CT by having students organize the various phases of a cycle, such as a butterfly's development cycle or photosynthesis stages.

Qian and Clark suggested that game-based learning can motivate and encourage students to be innovative and engage in the learning process and developing CT skills [8]. These interactive multisensory exercises consist of a series of tasks that can activate students' prior knowledge and apply it to new situations while using facts and checking probabilities to solve problems and enhance their learning experience，knowledge, as well as to develop their CT skills. CT principles can be taught using audio, visual, and multimedia displays, which can help students to visualise abstract concepts. Teachers should create self-regulated learning to aid CT and information transfer. Experimentation, tactical games, and exercises can help students grasp and exercise CT. Among all, interactive strategies that foster CT include web 2.0 software, immersive learning environments, robots, simulation, and digital tales. The application of these methods to teach would necessitate a high level of technical expertise on the part of the teachers. Therefore, teachers need to acquire a high level of technical skills to prepare, build, design, and incorporate new technology in CT.

5. CONCLUSION

In the 21st century, CT is a crucial and valuable skill for young people to acquire, as it can improve their problem-solving skills and learning abilities. Therefore, there are demands to corporate CT into the school curriculum. Teaching CT skills necessitates a thorough comprehension of the definition as well as constant practice to learn the technique. This paper concludes that teachers must fulfil many roles to help students improve productivity, creativity, and problem-solving skills. To achieve such a shift, the instructor must act as a facilitator, organizer, guide, and motivator. Teachers can use multimedia tools to engage and encourage students to the process of CT learning and achieve the required educational objectives. These tools and methods include online forums, conversations through Google Docs, images, audio, interactive demonstrations, debates in the classroom, explanations using interactive resources, engagement by sports, and other similar practices. CT skills will help learners to assess the situation, identify alternative and available approaches, compare, and contrast various solutions, and make sound decisions. This process will improve the student's imagination, ingenuity, and decision-making abilities.

All in all, CT is extremely important to learners. With the assistance of emerging technology, instructors must take on a new position with greater responsibility and aspirations. To fulfil the duties and achieve the task of teaching and practising CT to the students, the new instructor will need to learn some new skills, such as being digitally trained.

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