

FROM SOCRATES TO SCREENS: EXAMINING THE EVOLUTION OF SOCRATIC DIALOGUE IN ONLINE EDUCATION

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Abstract

Socratic dialogue is a form of discussion between two or more people, where one brings up an argument and the other provides a rebuttal or affirmation till they reach a level of shared understanding. This dialogue is used as a teaching system where teachers provide questions to which students, through critical thinking, give answers. Socratic dialogue is now widely used in online education, therefore this study focused on examining the evolution of Socratic dialogue in online education. This research aims to understand how the historical roots and philosophical foundation of the Socratic teaching methods are related to the digital learning environment today. It employs a qualitative research method by means of a literature review. This study touched upon aspects such as the concept of online teaching methods, historical overview of Socratic dialogue, platforms for Socratic dialogue, choice of engagement, and the effectiveness and challenges of Socratic dialogue in online teaching methods. The findings of this study show that Socratic dialogue indeed enables active participation leading to critical thinking among all students. Despite the challenges such as lack of access within financially disadvantaged areas, Socratic dialogue still remains a significant tool to address lack of interactivity in online education. As more schools continue to embrace its adoption, the future promises profound understanding for all students, rather than just a selected few.

Keywords: Socratic dialogue, Online education, E-learning, Critical thinking

Introduction

Since the inception of online education in the late 20th century, it has over the years continued to gain more prevalence yearly. Records show that during the COVID-19 pandemic, online education reached its all-time high with an increase of 70% of students enrolling in online learning programs (Don Santos, 2022), and this continues to increase even after the pandemic. Today, many universities and other educational institutions now strive to offer online education because of the acceptance by many. Despite the digital gap in underdeveloped nations, such as Africa, it continues to record a high surge since the COVID-19 pandemic and is predicted to reach an increase of 13.46% between 2024 to 2028.

Online education reinforces social structures, both positively and negatively. Blayone *et al.*, (2017) suggested that online education greatly democratizes access to knowledge and can empower marginalized groups. It accommodates global learning, with no form of distance interdiction. However, other studies such as Srinivasa (2021) agreed that online education leads to inequalities in terms of access to technologies for the disadvantaged. If all schools seek to utilize online education, many students who only have access to the traditional method of learning will be at a loss. Therefore, it is advisable to bridge the digital gaps as online education continues to gain more momentum. Together with equitable access to technologies, another key aspect deserving of equal attention is the pedagogical innovation within the online education systems. One such innovation with deep historical roots and undeniable relevance in this modern and technological age is the Socratic dialogue by the great philosopher, Socrates.

Socrates' well-known legacy is the art of critical thinking, honed through his method of questioning and logical reasoning. This method of conversation is important and has over time been incorporated into different life domains, including education. According to Slaney (2016), Socratic dialogues are intellectual exchanges characterized by collaborative learning of moral and ethical dilemmas. Socrates typically recognized the inconsistencies in passive learning which involves one person giving out ideas and the other mostly assimilating, and therefore breeding discrepancy in understanding. However, the method of question and answer brought up by Socrates, therefore, addresses this in the way that teachers do not only passively communicate with students but also ask questions that students answer after thinking about what was asked. The most pleasant thing about this is that people think differently, and a rise in questions means that more questions will be developed due to the differences in the level of reasoning and this leads to a formation of better understanding of different concepts.

Normally, online education was seen as a passive form of education where students go online to receive lectures without actual contributions. But, as time went on, students started responding to online education with critical thinking as it employed more Socratic strategies, there are now more sessions for students to socially interact on topics discussed and in other cases assignments that involve them thinking critically. The fact that lectures are also focused individually without the teacher only carrying a few along in a traditional setting makes it more realistic for critical thinking as students can be carried along according to their capabilities (Suhandi *et al.*, 2015). This study aims to discuss the critical history of Socratic dialogue, the emergence of online education, the integration of Socratic dialogue in online education, and the effectiveness and obstacles of Socratic dialogue in online education. By reviewing the historical backgrounds and the effectiveness and challenges through literature reviews a conclusion of how to maintain Socratic dialogues in online education systems will be achieved. This will enable the optimization of the online learning experience and empower students and educators to leverage more digital tools for better understanding and effective dissemination of knowledge.

A Brief History of Socratic Dialogue

Socratic dialogue originated in ancient Greece as a method of philosophical inquiry, exemplified by the conversations between Socrates and his interlocutors (Rudebusch *et al.*, 2014). These dialogues were primarily oral and interactive and enabled critical thinking, self-examination, and active engagement among participants. Socrates' Student, Plato is most famously associated with the Socratic dialogue

genre, with around 35 dialogues attributed to him. These dialogues typically feature Socrates engaging in philosophical discussions with various interlocutors, aiming to explore moral issues and pursue wisdom through questioning and critical examination. Plato's dialogues often center on the idea that an unexamined life is not worth living, encapsulating the essence of the Socratic Method. Plato's dialogues thus preserved Socratic philosophy and educational experience.

Emergence of Online Education

Harish (2013) defined online education as encompassing the terms “e-learning”, “virtual education”, “web-based training”, “computer-aided instruction”, and “digital education” as relating to the use of electronic media and ICT in education. It is a contemporary method of education, gaining traction from the continuous advancement in technology and the internet. The origin of online education can be traced back to the 1960s and 1970s with the introduction of computer-based learning systems such as computer terminals linked to form a network without the internet. At the time, online learning systems were mainly used to deliver educational materials and assessments to students. Later in the 1980s, the concept of online education expanded with the advent of the internet, which allowed for broader access and interactivity. The emergence of the World Wide Web in the 1990s further revolutionized online education, enabling the development of multimedia-rich content and collaborative learning environments. Online education underwent a significant transformation. The development of the World Wide Web allowed for the creation of virtual classrooms, discussion forums, and multimedia content delivery systems.

Today, online teaching methods encompass a wide range of approaches and technologies including asynchronous and synchronous learning (Rapanta *et al*, 2020). Asynchronous learning, where students access course materials and participate in discussions at their own pace, offers flexibility and convenience, and synchronous learning which involves real-time interaction between students and instructors through video conferencing or live chat platforms allows for immediate feedback and brings about a sense of community among learners. In recent years, the concept of blended learning has gained popularity, combining traditional face-to-face instruction with online components. This hybrid approach leverages the strengths of both modes of teaching, providing students with personalized learning experiences while accommodating diverse learning styles.

Furthermore, the emergence of learning management systems (LMS) such as Moodle, Blackboard, and Canvas has revolutionized the way educators design and deliver online courses. These platforms offer features such as content management, assessment tools, and communication channels, streamlining the teaching and learning process. Despite the advancements in online teaching methods, challenges persist. Access to technology and reliable internet connectivity remain barriers for many learners, particularly those in underdeveloped communities. Moreover, maintaining student engagement and motivation in virtual environments can be challenging by requiring innovative pedagogical strategies and interactive course design.

This is where the principles of Socratic dialogue come into play. By encouraging critical thinking, inquiry, and active participation, Socratic dialogue enhances the online learning experience. Through thoughtful questioning and meaningful discourse, instructors can stimulate intellectual curiosity and ensure deeper understanding among students. Platforms for Socratic dialogue range from text-based discussion boards to video conferencing tools which allow diverse modes of interaction. However, implementing Socratic dialogue effectively requires careful planning and facilitation. Educators must create a supportive learning environment where students feel comfortable expressing their thoughts and challenging assumptions especially in the present time realities of inclusivity and collaborative inquiry.

Integration of Socratic Dialogue in Online Education

Socratic dialogue, rooted in the philosophical tradition of inquiry and critical examination, offers a powerful pedagogical tool for promoting deep learning and intellectual engagement in online education settings (Johnson, 2018). It is a vibrant exchange akin to a spirited conversation among friends, but with

an intellectual edge thereby encouraging active participation, collaborative inquiry, and reflective discourse. The evolution from Socrates' dialogue-based teaching to modern digital education represents a continuum of educational principles bridging different historical epochs. Socrates initiated critical thinking through face-to-face discussions, a stark contrast to today's digital era where screens symbolize a revolution in education. This shift in communication mediums is profound. While Socrates relied on spoken dialogue, contemporary educators harness multimedia tools and online platforms to engage learners in immersive experiences.

Digital technology has in essence opened up education, allowing access to resources and communities regardless of location or socioeconomic status (Timotheou *et al*, 2022). Online platforms offer flexible, self-paced learning, extending education beyond traditional classrooms. The interactive nature of digital screens enhances engagement through multimedia presentations, simulations, and collaborative activities. Examples include gamified learning experiences, virtual reality simulations, and interactive assessments, all for catering to diverse learning styles. Online platforms provide diverse opportunities for integrating Socratic dialogue into the course curriculum, ranging from asynchronous discussion forums to synchronous video conferencing sessions. According to Garrison *et al* (2005), asynchronous discussions allow students to engage in reflective discourse at their own pace, providing opportunities for in-depth exploration of complex topics. On the other hand, synchronous interactions ensure real-time dialogue and peer collaboration, promoting active engagement and critical thinking.

The effectiveness of Socratic dialogue in online education depends on several factors, including the design of learning activities, the quality of facilitation, and the level of student participation (Bates, 2019). Effective facilitation involves posing thought-provoking questions, encouraging diverse perspectives, and guiding discussions toward deeper levels of inquiry (Gibbs, 2013). Moreover, creating a supportive online environment where students feel empowered to express their views and challenge assumptions is essential for a meaningful dialogue (Shea *et al.*, 2010). Socratic dialogue has further evolved to engaging in dialogue with artificial intelligence systems as a contemporary development in the emergence of technology and education. With the advancement of artificial intelligence (AI) and natural language processing technologies, AI-driven conversational agents or chatbots programmed to engage in dialogue with users can simulate human-like conversations, respond to questions, and facilitate discussions on various topics. Some educators and researchers have explored the potential of incorporating AI-driven dialogue systems into learning environments (Grassini, 2023). These AI-based systems now provide personalized tutoring, answer students' questions, and stimulate critical thinking through interactive conversations. The timelines in the adoption of socratic dialogue in education is given thus:

1. **Classical Period (Ancient Greece):** Socrates, as portrayed in the dialogues of Plato, engaged in philosophical discussions aimed at eliciting deeper insights and understanding from his interlocutors. He used a question-and-answer format to probe assumptions, challenge beliefs, and arrive at a clearer understanding of complex issues.
2. **Medieval Period:** During the Middle Ages, the Socratic method continued to be influential, particularly in the scholastic tradition of Western Europe. Scholars like Thomas Aquinas utilized dialectical reasoning, inspired by Socratic inquiry, to explore theological and philosophical questions within the framework of Christian thought.
3. **Renaissance and Enlightenment:** The Socratic Method experienced a revival during the Renaissance and Enlightenment periods, as thinkers sought to revive classical philosophical approaches. Figures like René Descartes, John Locke, and Immanuel Kant engaged in dialogues and debates that echoed Socratic inquiry while contributing to the development of modern philosophy.
4. **Adaptation to Modern Contexts:** With the advent of online platforms and digital technologies, the Socratic Method has been adapted to virtual environments through online forums, video conferences, and interactive multimedia tools. These adaptations reflect ongoing efforts to integrate traditional pedagogical methods with contemporary educational practices.

Obstacles in Utilizing the Socratic Method in Online Educational Settings

Though online education as a significance of digitalization offers numerous benefits, it however comes with certain challenges that must be addressed. For instance, the absence of non-verbal cues like facial expressions and body language in text-based discussions limits instructors' ability to gauge students' understanding and engagement, hindering the effectiveness of the method. Moreover, it sometimes proves to make active participation difficult due to factors such as anonymity and communication apprehension among students, which can lead to passive involvement in online discussions. Additionally, text-based communication in online forums may result in misinterpretation or misunderstanding of ideas, particularly in complex topics, undermining the precision required for effective Socratic dialogue. According to Bates, (2021), technological challenges, including internet connectivity issues and software glitches, sometimes disrupt the flow of discussions and impede the learning process. Furthermore, implementing the Socratic Method online demands significant time and effort from instructors in planning, moderating discussions, and providing timely feedback, especially in large classes. Ensuring inclusive participation poses another challenge as certain students may dominate discussions while others remain passive or marginalized, highlighting the need for strategies to create a supportive learning environment for all students.

Conclusion

Socratic dialogue emerges as a potent educational instrument for reflective discourse among learners. By employing inquiry-based learning principles and encouraging active participation, educators can craft dynamic online learning environments that stimulate intellectual curiosity and facilitate profound comprehension. The findings of the literature review thus show that while the core principles of the Socratic Method remain consistent, its application and interpretation have evolved to meet the demands of digital learning environments..

The progression of online teaching methods, from traditional approaches to incorporating Socratic dialogue and multimedia tools, reflects today's landscape of technological advancements and inclusivity. While online education offers flexibility and scalability, it also poses obstacles such as integrating technology and engaging students effectively. Nevertheless, the potential for meaningful discourse and transformative learning urges its continuous adoption.

As more institutions continue to embrace the adoption of Socratic dialogue in online education, the future promises profound understanding for all students, rather than just a selected few. This evolution not only enhances the accessibility of education but also fosters critical thinking skills and active participation among learners. Therefore, the relevance of Socratic dialogue in online education underscores its importance as a tool for cultivating a deeper understanding of complex concepts and promoting inclusive learning environments.

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