Promoting Critical Thinking through Socratic Questions in Health Sciences Work-Integrated Learning

Zijing Hu*
Department of Complementary Medicine,
University of Johannesburg, South Africa

Abstract. Critical thinking is an essential skill that needs to be developed in students to provide quality support, care and well-being for their patients. It is an important skill that includes critical decision-making, evaluating the situation, communicating and participating in the decision-making. These skills are aligned with the 21st century work skills required for efficient and quality outputs. The Socratic question technique has been found to be an effective approach to promote and enhance students' critical thinking during their work-integrated learning. This study aimed to explore students' experiences of Socratic questioning to promote their critical thinking skills during the work-integrated learning of an acupuncture programme at a South African higher education institution. This study used a qualitative case study design embedded within an interpretivist paradigm. The research setting was a public university in Gauteng province. The purposive sampling technique was used to invite participants. Six (6) participants voluntarily agreed to participate. The data collection instrument was text-based interviews. Data were analysed inductively whereby themes were identified and analysed. Trustworthiness and its relevant principles were adhered throughout the study. The findings of this study revealed that students acknowledged the value of Socratic questioning in work-integrated learning to improve critical thinking. They further agreed that the technique gave them the opportunity to be self-reflective. However, participants indicated that there is a need for academics to be thoroughly familiar with Socratic questioning to add value to their learning. More time should be allocated for Socratic questioning during work-integrated learning. This study concluded that Socratic questioning was essential and pertinent to promote students' critical thinking during work-integrated learning. There is a need to provide training for academics and clinical instructors to be knowledgeable on how to utilise Socratic questioning methods appropriately. Further studies are recommended to be conducted at international levels with different research approaches.

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* Corresponding author: Zijing Hu; zhu@uj.ac.za

1. Introduction

Critical thinking is a mental process, that requires acute perception, analysis, synthesis and evaluation of collected information (Papathanasiou et al., 2014). This is done through observation, shared experience, participation and communication. These are skills that are required by health sciences students who should have diverse knowledge to manage and handle various situations during their work-integrated learning (WIL). According to Van Nguyen and Liu (2021), there is evidence that critical thinking skills have improved patient outcomes and care and support. During WIL, students are faced with various medical conditions; therefore, critical thinking skills become a necessity for them to ask appropriate questions and critique the solutions. The author opines that critical thinking is a necessity for practising medical students; however, anecdotal evidence has shown that students lack the ability to ask appropriate questions and make evaluative judgements. The world of work is demanding, and it is expected of students to be 'quick at wit' and acute in their observations. However, according to Oraison, Konjarski and Howe (2019) the primary aim of tertiary education is to prepare students for the world of work; it is debatable whether higher education institutes adequately and appropriately provide their students with 21st century workplace skills. For this reason, the author aimed to explore students' experiences of promoting critical thinking skills through the use of Socratic questioning. Specifically, it addressed the research question on '*How do students experience Socratic questioning in promoting their critical thinking in WIL?'*

There is much criticism regarding the misalignment in students' training and the requirement from the world of work in health sciences (Oraison et al., 2019). Students are unable to critically think, make appropriate decisions regarding their practice. Hu et al. (2022) concur with Paul and Elder (2008) that the weakness of critical thinking is a significant contributor that negatively affects students' competencies in clinical practice. Abidah (2022) and Oyler and Romanelli (2014) believe that critical thinking is a fundamental 21st-century skill, particularly in health sciences where quick appropriate decisions are required. Despite the absence of a universal definition of critical thinking, Fahim and Bagheri (2012) agree with Paul (1988) that critical thinking refers to the ability to explore authentic and accurate knowledge to reach sound conclusions through observation and information. To improve students' critical thinking, Kusmaryani (2020) suggests that Socratic questioning is an effective approach since it helps students to think critically by focusing explicitly on their own thinking processes (reflective thinking). However, there is a lack of research that focuses on exploring students' experiences, using Socratic questioning to promoting critical thinking during WIL within the South African context.

Zare and Mukundan (2015) concur with Ennis (1987:10), who explains critical thinking as "reasonable reflective thinking that is focused on deciding what to believe or do". In their work, Paul and Elder (2001) state that critical thinking focuses on reasoning with the aim of sharpening one's thinking by analysing and

evaluating information (Abidah, 2022). Critical thinking assists students in assessing their own thinking through their existing knowledge (Fahim & Bagheri, 2012). Sahamid (2016) articulates that the characteristic of critical thinking is the ability to think logically and abstractly, and to reason theoretically. The author believes that Socratic questioning stresses the importance of questioning for learning. Kusmaryani (2020) and Sahamid (2016) both articulate that asking the right questions in Socratic questioning is of profound importance since good thinking derived from asking questions stimulates thought. Venville (2018) points out that WIL is prevalent in medical training since it provides lived experiences and knowledge in the working world. According to Jeong and McMillan (2015), WIL is organised through practice-based learning activities in real contexts.

2. Literature Review
2.1 Explanation of Socratic questioning
Socratic questioning is defined as systematic questions that facilitate students to reflect on their misconceptions or incorrect conclusions on specific topics (Fahim & Bagheri, 2012; Nair & Ramasubramaniam, 2021). Acim (2018) and Katsara and De Witte (2019) contend that Socratic questioning is a technique to achieve logical thinking through inference. Kusmaryani (2020) further explains that Socratic questioning is performed with frequent and systematic questioning. The role of a lecturer in Socratic questioning is to facilitate students' self-reflection to identify their deficiencies and weaknesses (Acim, 2018). Socratic questioning promotes critical thinking in the world of work because it assists students in synthesising their views, analysing and evaluating solutions (Cekin, 2015). Socratic questioning assists others in identifying what is untrue; because it is difficult for them to identify their own mistakes without others' questioning (Suhardiana, 2019). This view concurs with Katsara and De Witte (2019) who highlight that Socratic questioning aims to probe and reveal contradictions by cross-examination of information.

Kinney (2022) states that the Socratic method of inquiry is an inspiring process since the questions are asked both to draw individual answers and encourage individuals' fundamental insight into the issue under discussion. Kusmaryani (2020) mentions that critical thinking consists of the following components: active involvement, thinking elements, thinking standards and thinking systems. In the process of Socratic questioning, students are asked to think carefully and answer open-ended questions to texts that foster controversy about issues and values (Katsara & De Witte, 2019). This kind of questioning will strengthen students' understanding of information and the perspectives discussed (Pihlgren, 2014). In the author's opinion, promoting students' understanding of information and critical thinking in clinical practice is of profound significance. The reason is that the accuracy of understanding in WIL will influence students' critical thinking when making decisions. The author believes that although Socratic questioning requires more comprehensive skills from lecturers, continuous practice will lead to success.

Nair and Ramasubramaniam (2021) are of the view that Socratic questioning requires lecturers to guide students toward their self-reflection on their

knowledge, skills, attitudes and values (KSAV). Therefore, lecturers do not merely provide answers to questions asked; instead, they probe for the answers and facilitate students to discover the correct conclusions by themselves (Kusmaryani, 2020). These questions are for the purpose of facilitating students to evaluate their knowledge, skills, attitudes and values instead of judgment. In Socratic questioning, the role of lecturers is to assist students in justifying their thoughts. Therefore, in the Socratic approach, lecturers facilitate students to construct their opinion and identify inconsistencies and contradictions in their thoughts (Barnes & Payette, 2017). Active involvement in discovering answers significantly promotes critical thinking (Nair & Ramasubramaniam, 2021). Although Socratic questioning appears simple, it is in fact intensely rigorous. Venkatesan (2020) explains that Socratic questioning is an effective approach that leads to self-discovery and self-rectifying of errors in thinking. Therefore, it focuses on identifying the validity of ideas by asking systematic questions. Suhardiana (2019) are of the view that the utmost goal of Socratic questioning is changing minds; therefore, questions that are not designed to change minds cannot be considered as Socratic questioning. Once a response is made, it is followed up by asking more probing questions (Overholser, 2018). In a sense, Socratic questioning uses the W-Question format covering the what-where-which-whom-when-how and why the sequence of asking queries (although may not be in the same order) for each statement made by respondents (Dinkins & Cangelosi, 2019).

2.2 Value of Socratic questioning in promoting critical thinking

In their work, Fahim and Bagheri (2012) contend that through the effective use of Socratic questioning, students will improve their skills in identifying, exposing, and evaluating their KSAV. Furthermore, students will identify contrary assertions and experiences that significantly promote critical thinking in clinical practice (Pihlgren, 2014). Zare and Mukundan (2015) indicate that lecturers should ask questions that assist students in identifying fundamental elements and their evolution. Furthermore, lecturers should prepare to provide follow-up inquiries based on students' answers. Paul and Elder (2008) explain that Socratic questioning can be categorised into three categories, namely spontaneous, exploratory and focused. Each of these modes of questioning assists in students' critical thinking from diverse perspectives (Paul & Elder, 2006). In particular, the author concurs with Zare and Mukundan (2015) who contend that focused Socratic questioning provides an opportunity for students to explore specific topics in-depth and extensively. Through focused Socratic questioning, students can identify the known and unknown. Students will be able to identify misconceptions in critical thinking. To achieve the best outcomes of focused Socratic questioning, Paul and Elder (2008) believe that lecturers should pre-plan the topic. They need to identify what they want students to think through possible perspectives on an issue; grounds for conclusions; problematic concepts, implications, consequences; and so forth. It is also useful to anticipate student responses to questions. Therefore, the role of lecturers shifts from simply transmission of knowledge to facilitating students to identify misconceptions (Barnes & Payette, 2017).

Socratic questioning is one of the most popular pedagogies that effectively engages students in inquiry toward higher levels of thinking, thus strengthening students' critical thinking (Barnes & Payette, 2017). The author opines that the case-based Socratic method in WIL is useful for preparing students' competencies in clinical practice. This view concurs with Fahim and Bagheri (2012) who indicate that Socratic questioning is of particular significance in promoting students' critical thinking and reaching a deeper level of understanding of particular phenomena through systematic questioning. Socratic questioning aims to help students become aware of their weaknesses in thinking, lack of knowledge, wrong inferences, and false hypotheses (Zare & Mukundan, 2015). Consequently, the author believes that it is crucial for lecturers to acquire the skills of asking good and deep questions in questioning. This view concurs with Sahamid (2016) who affirms that, in the context of learning, students' critical thinking can be developed if teachers have the skill to conduct questioning and to ask appropriate questions. Nair and Ramasubramaniam (2021) further state that follow-up questions should be able to probe students' understanding and misconceptions that underlie the initial answers. Through Socratic questioning, students also learn how to justify their arguments and understanding. A person who trains and disciplines his mind to think in a prescribed manner, consistently using the same set of procedures to guide that thinking, would be able to raise his standard of thinking (Zare & Mukundan, 2015).

Chian (2020) and Zare and Mukundan (2015) further articulate that the purpose of questioning is to raise self-awareness of misconceptions. They are of the view that in the Socratic approach, students do not need to memorise and read textbooks (Zare & Mukundan, 2015). Moreover, Socratic questioning motivates and inspires students' self-reflection through questioning (Barnes & Payette, 2017; Chian, 2020). The author argues that students should acquire relevant knowledge before participating in answering questions. The reason is that students need to have fundamental knowledge and understanding of the content knowledge to apply critical thinking in a clinical setting. Sahamid (2016) reports that students who have gone through the learning process of Socratic questioning demonstrate the ability to deliver a more in-depth discussion. In a similar vein, a study conducted by Kinney (2022) reveals that Socratic questioning significantly promotes students' critical thinking skills.

2.3 Challenges in Work-Integrated Learning (WIL)
Scholars, such as Govender and Wait (2018) and Wilson et al. (2022), concur that WIL improves students' competencies in the working world since the role of WIL is to encourage learning for performance. These researchers agree that WIL offers an opportunity for students to identify their learning needs and optimise their practical skills from actual practice in the real world. The author believes that the authentic practice context provides opportunities for students to connect their practice to the course curriculum through novel situations arising from the dynamic environment in which professionals work. However, Hu et al. (2022) and Paul and Elder (2008) point out that there is an absence of effective approaches to promote students' critical thinking in WIL. Furthermore, despite Socratic questioning being an effective method to improve critical thinking,

Venkatesan (2020) argues that merely asking questions cannot necessarily be considered Socratic questioning. Lecturers must acquire adequate skills in questioning, which should redirect to topics towards the purpose of the discussion and conclusion (Barnes & Payette, 2017). Kinney (2022) contends that the success of Socratic questioning depends on the lecturers who prepare the questions. Therefore, it is of profound importance that lecturers are competent in facilitating the learning process using the Socratic method. They should be able to ask good questions systematically. Suhardiana (2019) believes good questions should lead to deeper thought. Misconceptions pose a great barrier to learning and often lead to frustration with the subject.

Universities need to ensure that their students can make sound judgements and decisions in the world of work. Many lecturers cannot make use of the Socratic questioning method to engage students in WIL effectively (Barnes & Payette, 2017). Students are unaware of misconceptions, which pose significant barriers to teaching and learning (Chian, 2020). Therefore, there is a need to strengthen lecturers' competencies in the application of Socratic questioning techniques in WIL. Sahamid (2016) is of the view that there is no practical manual for Socratic questioning. The reason is that there are no step-by-step questions that can be followed. The author believes the absence of practical manuals places significant challenges in teaching and learning; because the quality of the Socratic questioning process in particular courses depend on lecturers' skills (Paul & Elder, 2008). Furthermore, Grondin (2018) reports that a large class poses challenges in Socratic questioning since limited time is allocated to a particular class. The author concurs with Grondin (2018) that even in a small classroom, answers from one student do not necessarily represent the understanding of the entire class.

3. Conceptual Framework

This study was anchored to the conceptual framework adapted from the revised Bloom's Taxonomy developed by Anderson and Krathwohl (2001) and Paul's classification of the six types of Socratic questions (Mason, 2011; Paul, 1990). Bloom's Taxonomy has been introduced in education to evaluate diverse goals since the 1950s. In 2001, Anderson and Krathwohl proposed the revised Bloom's Taxonomy, which was developed from Bloom's Taxonomy (Hu, Venketsamy & Pellow, 2022). Anderson and Krathwohl (2001) propose four types of knowledge, which are factual knowledge, conceptual knowledge, procedural knowledge and metacognitive knowledge. This knowledge is further categorised into six processes: remembering, understanding, applying, analysing, evaluating and creating [See Figure 1] (Barari et al., 2020; Chandio et al., 2016).

The revised Bloom's Taxonomy is a valuable resource to guide teaching and institutional planning. According to Anderson and Krathwohl (2001) and Barari et al. (2020), the revised Bloom's Taxonomy consists of six cognitive levels. Firstly, remembering questions emphasises memory, which requires students to recall information in a particular course; secondly, understanding questions measures students' abilities to explain what they have learned; thirdly, students are requested to apply the knowledge in a novel situation, which is applying questions; fourthly, students are requested to explore the relationships among

information – analysing questions. The fifth level is evaluative questions, which invite students to determine a conclusion. Lastly, students are requested to develop novel approaches for specific situations (creating questions).
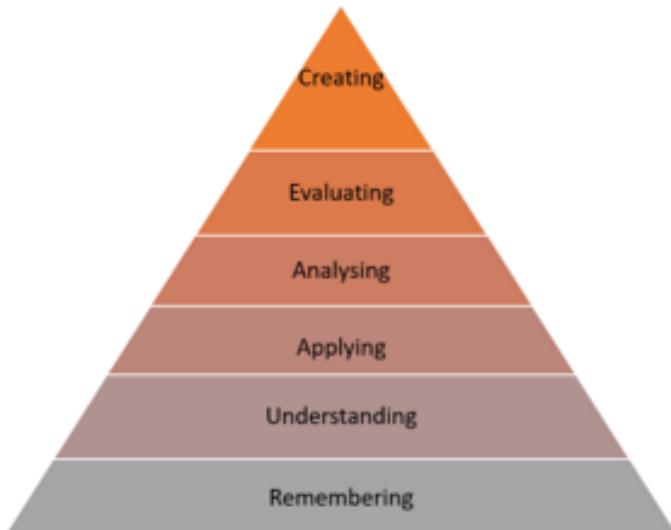
Figure 1. Revised Bloom's Taxonomy (As adapted from Barari et al., 2020)

According to Mason (2011) and Paul and Elder (2008), there are six types of Socratic questions. Table 1 below illustrates different types of Socratic questions. Chandio et al. (2016) and Fahim and Bagheri (2012) further explain that based on Bloom's Revised Taxonomy and Paul's six types of Socratic Questions, there are different types of questions that lecturers can use to promote students' understanding and assess their knowledge. The author believes that the revised Bloom's Taxonomy and the six types of Socratic questions are effective approaches to guide Socratic questioning in WIL to promote students' critical thinking.

Table 1. Six Types of Socratic Questions (As adapted from Mason, 2011; Paul, 1990)

Types of questions	Examples
1. Questions that clarify.	What do you mean?
2. Questions that challenge assumptions.	How will you justify your argument?
3. Questions that examine evidence or reasons.	What are the risk factors for …? Can you provide any evidence to support your conclusion?
4. Questions about viewpoints and perspectives.	Can you provide rationale for your conclusion?
5. Questions that explore implications and consequences.	What are the consequences or complications?
6. Questions about the question.	How will you advise the patient and why?

4. Methodology
Research design
Research methodology is a bridge between the worldview and the findings of research (Venketsamy & Hu, 2022). The author adopted a qualitative case study approach to explore South African students' views and experiences of Socratic questioning in WIL. The research setting was an identified public university in Gauteng province. The author utilised a single case study design within an interpretivist paradigm. The interpretivist paradigm was of particular significance in this study as it provided an opportunity for the author to comprehend students' lived experiences in WIL. The author concurs with Hu and Venketsamy (2022) and Yin (2018) who substantiate that single case design is appropriate when the identified case is critical, and the researcher has access to the identified case.

Research setting
This study was conducted at an identified public university in Gauteng province.

Sampling and participants
The author employed a purposive sampling strategy to recruit participants for this study. A research invitation post was displayed on the noticeboard on the identified campus. The participants of the study were those students, who responded to the invitation, and qualify the following inclusion criteria: a) participants must be registered students with the Bachelor's Degree of Health Sciences in Complementary Medicine; b) participants had to be in the fourth year of their study in the acupuncture programme; c) participants must be above the age of 18; d) participants must express their willingness to voluntarily participate in the study by signing the research consent forms. Five students were recruited for this study because only five students responded to the research invitation.

Data collection
In this study, the author utilised text-based interviews as the data collection instrument. At the identified university, students participated in Socratic questioning activities after they saw patients in the clinic (WIL). The text-based interviews were conducted after the Socratic questioning activities which took place between March 2022 and April 2022. Table 1 below illustrates the participants and the respective codes used in the data analysis. To ensure confidentiality and anonymity, pseudonyms were used throughout the research.

Table 2. Biographical data of participants

Pseudonyms	Gender	Year of study
P1	Female	4th-year
P2	Female	4th-year
P3	Male	4th-year
P4	Male	4th-year
P5	Female	4th-year

Data analysis
In this study, the author utilised thematic analysis to analyse students' lived experiences. The reason is that the author concurs with Venketsamy et al. (2022) and Hu et al. (2022) who articulate that important perspectives of data will be identified through a systematic process of analysis. The six-step thematic analysis proposed by Creswell (2014) was followed in this study. The data were analysed inductively. The author applied qualitative validity criteria to ensure the trustworthiness of the findings, which included credibility, conformability, dependability and transferability. To improve the trustworthiness of this study, the author employed multiple techniques in this study. These techniques included well-planned research design and methods, rich descriptions, and an audit trail that was audited by a second coder.

Ethical consideration
The ethical clearance for this study was approved and obtained from a research committee at a public university in Gauteng province (Ref: REC-1443-2022).

5. Findings
This study explored students' experiences of Socratic questioning in clinical practice. All participants in this study acknowledged the importance of Socratic questioning in WIL. They highlighted several benefits of conducting Socratic questioning in their clinical training. However, some participants reported that there was a need to strengthen lecturers' skills in Socratic questioning. During the data analysis, two major themes emerged, which are presented below. Direct quotes are presented in the findings as well.

Theme 1: Benefits of Socratic questioning
The findings of this study revealed that all participants recognised the value of Socratic questioning in WIL. They concurred that Socratic questioning significantly promoted their critical thinking in clinical practice. Furthermore, through the questioning, they would be able to identify their deficiencies in content knowledge. P1, P2 and P4 all agreed that they were able to identify specific shortages in their critical thinking through the questioning. They further highlighted that Socratic questioning assisted them in clarifying what to focus on in their studies.
P1 indicated: "*The [Socratic] questioning challenges critical thinking and it always forces me go back to study the content knowledge that I do not understand.*"
P2 said,

> *I enjoy the [Socratic] questioning in the clinic. I felt like I could perform better even under stress. Answering questions increases my stress limit since I need to answer the questions well in front of all students. In particular, the Socratic questions guide me to think step by step, which leads me to the correct conclusion.*

P3 added: "*It [Socratic questioning] helps me to identify where I go wrong in my thinking.*" P4 stated: "*[Through Socratic questioning], I could see I made mistakes [in my critical thinking], and we learned from each other's mistakes.*"

In her response, P5 said: "*The Socratic questioning forces me to go back and revise content knowledge because the questioning helps me to clarify my weaknesses in my knowledge.*"

Theme 2: Challenges of Socratic questioning in WIL

Despite all participants acknowledging the significance of Socratic questioning in improving their critical thinking, they reported some challenges in WIL. These challenges were primarily related to inconsistency, incompetency of instructors, insufficient time and limited space and infrastructure in the clinic. Some participants believed that there was an inconsistency among lecturers (instructors). They received different instructions and feedback from different lecturers for the same topics. The inconsistency in Socratic questioning negatively influenced their learning experiences. To this, P1 stated,

> *I felt frustrated by the different instructions that I received from clinicians in the clinic on campus. For instance, Dr X indicated that I should analyse the case in one way, while Dr Y told me that I should not think of the case in this way. There seem to be inconsistencies among clinicians. This was discouraging as I did not know which was the correct way that I should follow. I believed the inconsistency of how to think critically negatively affected my study.*

P3 said: "*The different feedback from the [Socratic] questioning confused me a lot. As I did not know which part was correct.*" In their opinions, P2 and P4 stated that there was a shortage of competent clinicians in WIL. P5 believed that sufficient time should be allocated for the Socratic questioning. They all agreed that the shortage of clinicians further affected the concern about insufficient time. The reason was that students were waiting for a long time before they could have opportunities to discuss with clinicians. To this, P2 stated: "*From my experiences in the clinics with different clinicians, I felt like one of the most challenging parts was clinicians' competencies.*" P4 added: "*I realised that some clinicians asked random questions which might not lead to a conclusion.*"

P3 said: "*We will benefit more if we can have the discussion [Socratic questioning] longer. Because I felt like we rushed to the end because we did not have sufficient time to discuss with the clinician.*" P5 articulated: "*I had to wait for 20 minutes before I could discuss my case with the clinician. Because the clinic was discussing with other students. It would be great if there were more clinicians supervising simultaneously in the clinic.*"

Furthermore, P1, P2 and P4 were of the opinion that there was limited space in the clinic where the questioning was conducted. They believed that the absence to sufficient space negatively affected their learning. To this, P1 stated: "*The clinic was so crowded. We don't even have space to stand.*" P2 said: "*I cannot hear what the discussion was about. Because the clinician room was full of students and I could not go into the clinician room.*" P4 added: "*I had to stand outside the door of the clinician room.*"

6. Discussion

Critical thinking is of profound importance in the world of work. Scholars, such as Kusmaryani (2020) and Sahamid (2016), concur that Socratic questioning is an effective approach to promote students' critical thinking in WIL. Fahim and

Bagheri (2012) point out that lecturers should assist students to recognise their misconceptions through their existing knowledge. The findings of this study concur with Katsara and De Witte (2019) and Zare and Mukundan (2015) who indicate that Socratic questioning assists in identifying contradictions; for instance, P3 said: "*It [Socratic questioning] helps me to identify where I go wrong in my thinking*." P4 stated: "*[Through Socratic questioning], I could see I made mistakes [in my critical thinking]*." Researchers highlight the significance of Socratic questioning in strengthening students' critical thinking in WIL (Abidah, 2022; Fahim & Bagheri, 2012; Venville, 2018). In the author's opinion, Socratic questioning significantly improves students' critical thinking, which facilitates students to clarify misconceptions and reach correct conclusions. Moreover, Socratic questioning promotes students' learning. Evidence can be found in participants' responses. P1 indicated: "*[Socratic] questioning forces me to go back to study the content knowledge that I do not understand*."

Despite the profound significance of Socratic questioning in promoting critical thinking in WIL, the literature reveals that there are some challenges in implementing WIL (Hu et al., 2022; Pau & Elder, 2008). Barnes and Payette (2017) contend that one of the most critical barriers to Socratic questioning in WIL is the absence of competent lecturers. The reason is that the successful implementation of Socratic questioning relies on skilled lecturers/instructors who can ask appropriate questions (Suhardiana, 2019)). The findings of this study highlighted the importance of competent lecturers and clinical instructors.

According to the revised Bloom's Taxonomy (Anderson & Krathwohl, 2001; Mason, 2011), it is crucial that lecturers should be able to use diverse questions effectively. These questions should reflect different levels of skills. In the author's opinion, questions that are utilised in Socratic methods should be at applying, analysing, evaluating and creating levels. To achieve the best outcome of Socratic questioning, lecturers should have an in-depth understanding of the difference in questions and ask these questions in a coherent order (Fahim & Bagheri, 2012; Paul & Elder, 2007). Therefore, the author believes there is an urgent need to improve lecturers' questioning skills in order to utilise Socratic questioning effectively in WIL.

The findings of this study reveal that to implement Socratic questioning effectively, there is a need to allocate sufficient time in WIL. The author contends that insufficient time for Socratic questioning in WIL is also negatively influenced by the shortage of competent lecturers. Because students have to wait for relatively long periods before the discussions. This finding supports a study conducted by Grondin (2018) who reports that not all students have an opportunity to participate in Socratic questioning in WIL when there is a large group of students. P2 indicated: "*Sometimes I do not have a chance to answer questions because all of us have to leave at 16:00 when the clinic is closed*." The author believes that the inadequate opportunity to actively participate in Socratic questioning negatively affects students learning of critical thinking.

The finding of this study reveals that there is limited space in the clinic for WIL. When answering the question: "Please describe the challenges that you

experienced in the WIL", P3 stated: "*I have to stand outside the clinician room when students are discussing with the clinician.*" The author is of the view that the poor infrastructure in African countries negatively influences students' learning. This view concurs with Hu and Venketsamy (2022) and Hu et al. (2022) who report that there is a need for policy makers to consider improving infrastructure, in order to promote learning at higher education institutions (HEI).

7. Conclusion and Recommendations

This study contributes to the body of knowledge and the use of Socratic questioning to enhance critical thinking skills among students. Evidence from the study highlighted participants' satisfaction and enthusiasm for the use of Socratic questioning to improve their critical thinking skills to make trustworthy decisions when treating patients. The study is significant in that it has the potential to change teaching and learning in the health science programmes at HEIs by encouraging students to be self-reflective in their practices. Furthermore, it gives lecturers the opportunity to simulate clinical situations 'out of the box' which would allow students to assess, evaluate, reflect, and make on the spot decisions regarding the well-being of their patients.

Higher education institutions are responsible for their students to be competent in making sound decisions (Hu et al., 2022). Critical thinking is one of the most essential 21st century skills in the world of work. Kinney (2022) agrees with Barnes and Payette (2017) that Socratic questioning significantly strengthens students' critical thinking. This study focused on exploring students' experiences of Socratic questioning in WIL to promote critical thinking. The findings of this study confirm the importance of Socratic questioning in WIL for the improvement of critical thinking. It is crucial to ensure lecturers are skilled and competent to apply the Socratic method effectively (Barnes & Payette, 2017; Overholser, 2018). Moreover, this study reveals that poor infrastructure in WIL negatively influences students' learning. The author recommends that the value of Socratic questioning should be explored at international universities. The author also recommends that further studies can adopt diverse research approaches to investigate students' experiences of Socratic questioning in promoting critical thinking.

Based on the above conclusion, the following recommendations are made:
1) It is recommended that Socratic questioning should be implemented in the curriculum in health sciences to improve students' critical thinking. This is of particular significance in WIL where students obtain their clinical experiences in authentic scenarios.
2) It is further recommended that Socratic questioning should be utilised in case-based clinical training where students engage with patients and commence in the working world directly.
3) It is of significant importance to ensure lecturers are competent in conducting clinical supervision with Socratic questioning. It is further recommended that HEIs should provide appropriate training for emerging staff so that they can conduct Socratic questioning effectively.
4) Further research can be conducted at international universities with other research approaches.

8. Limitations of this study

This study was limited to explore one HEI in South Africa; therefore, there was a lack of comparison of the findings. The author employed a qualitative approach in this study; however, the author believed that this topic could also be investigated through quantitative or mixed methods approaches. In this study, the interpretivism paradigm was employed to analyse students' experiences of Socratic questioning, the subjective interpretation within the interpretivism paradigm also seemed as a limitation. The author followed a rigorous research procedure to ensure the trustworthiness of this study.

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