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Research Article:

Instructional Approach of Islamic Education Teachers to Gearing Up Future Muslim Generations with Environmental Education

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ABSTRACT

The potential for incorporating religious and environmental values into school education should be consistently manifested as an internalisation-enhancing mechanism. Hence, a study was conducted to investigate this integration process by examining aspects of Malaysia's educational transformation. This study used the qualitative design to examine three Islamic Education Teachers (IET's) instructional approaches in the Sustainable Schools-Environmental Awards program (SSEAP) to equip future generations with environmental education. The study's findings revealed two IETs' approach patterns in the integration of Islamic Education and environmental education. The first pattern involved the implementation of a teacher-centred approach by the IET with greater autonomy for teachers in the integration process. However, the IET implemented a student-centred approach for the second pattern, giving students more autonomy in the integration process. Based on the two patterns of instructional approach, this study showed that the IETs require ongoing pedagogical exposure and training in order for Malaysia's educational transformation agenda to be successfully realised.

Keywords: Instructional approach, Islamic Education teacher, Islamic Education, environmental education, sustainable schools

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INTRODUCTION

The national and global environmental crises, which date back decades to the present, appear to have no end in sight. The issue of global warming and climate change is becoming a paramount concern worldwide. Global warming, driven by the escalating emissions of greenhouse gases into the atmosphere, results in a discernible increase in the earth's temperature, precipitating significant alterations in climate patterns (Rangga et al., 2023). The impact of global warming and climate change in Malaysia has been profound, evidenced by rising temperatures and unpredictable precipitation patterns (Sa'adi et al., 2023; Tang, 2019). In response, the Malaysian government has introduced several initiatives aimed at mitigating these adverse effects, including the promotion of renewable energy sources and the implementation of environmental protection laws. However, these efforts require further enhancement through the advancement of green technologies, the promotion of environmental awareness through education, and fostering international cooperation to ensure the long-term sustainability of Malaysia's environment.

From a religious perspective, Islam firmly forbids any type of environmental injustice, and humans are commanded by Allah SWT to protect the environment (Aboul-Enein, 2018; Lahmar, 2020). In order to foster a genuine appreciation for these prohibitions and commandments, it is imperative to emphasise an integrated approach to education from an early stage (Nilan, 2021), ensuring that every Muslim understands the inseparability of religion from various aspects of life. Integrated education entails blending traditional Islamic teachings with modern educational methodologies, thereby ensuring that all knowledge is aligned with the vision, mission, and resources of Islam (Al-Attas, 2014; Ashraf, 1985; Wan Daud, 2013: Baharuddin, 2021). Therefore, the integration of Islamic Education with environmental education serves as one example of integrated educational practices within schools (Bahagia, 2021; Mangunjaya, 2011; Mohamed, 2014; Wakhidah & Erman, 2022).

Western academics ought to encourage the integration of spiritual (religious) and environmental considerations in educational settings. This support for integration is grounded in the fact that studies demonstrate how environmental education activities, incorporating spiritual elements either formally or informally, possess the potential to influence the individual's sense of self. For instance, according to Beringer (2006), environmental education based on religious paradigms should live in a modern education system and be strengthened at the institutional level, i.e., individual, cultural and global education. Swan (1978) also honoured that the growing spirit of environmental education, religious perspective is not ignored. This indicates that the acceptance of religious aspects in environmental education is aligned with the stage of development. Beringer and Swan's argument also aligns with Hitzhusen's position (2006), who concurs with the perspective that environmental education and religion share a common viewpoint. According to Hitzhusen (2006), religion, like art and poetry, can solve environmental problems in ways that science cannot. This position challenges the idea that religious thought is merely a

subject and does not contribute to the objectivity or validity of environmental education science (Mustafa, 2021).

In this light, incorporating environmental education based on diverse religious beliefs effectively creates room and significance for the spiritual dimension. Parker (2017) expresses optimism about the potential of an Islamic-based environmental education strategy in Indonesia. He refers to it as a form of religious environmental education aimed at integrating environmental concerns into the nation's new curricula. This strategy demonstrates that the attempt to raise ecologically aware future generations can also benefit from the merging of Islamic and environmental education in classrooms (Mangunjaya & McKay, 2012; McKay et al., 2014; Zabidi et al., 2021).

In Malaysia, Islamic Education has its own privileges and position in the education system. Referring to the Education Act 1996 (Act 550) under Schedule subsection 18(2) has stated that "Islamic Education is a core subject at primary and secondary level for pupils who profess the religion of Islam" (Legal Research Board, 2015, p. 93). In addition, under Section 50(1) also provides for the act on the teaching of religion in educational institutions, namely "if in an educational institution there are five or more students who profess Islam, then the students shall be given Islamic religious instruction by teachers approved by the State Authorities" (Law Research Board, 2015, p. 39). After nearly 66 years of Malaysia's independence, these two legal provisions serve as both the guarantee and the source of authority for the implementation of Islamic Education in schools.

However, the question arises: how can teachers of other subjects effectively incorporate the concept and perspective of Islam into environmental education as an Element of Cross-Curriculum (ECC)? Therefore, on the basis of this awareness, Islamic Education which is a core subject in schools should be used to strengthen the understanding of environmental education through the lens of religion. In this context, Abu Bakar (2007) have highlighted that formal education is deemed influential in tackling the environmental crisis by accentuating divine aspects that have been long marginalised. Therefore, the inconsistent integration of environmental education elements into the teaching of Islamic Education in schools can result in the perpetuation of a dichotomy of knowledge, where there is a lack of cohesion between religious and contemporary knowledge among students. This can contribute to the perception that the Malaysian education system remains retrospective, endorsing the ideology of secularism.

Subsequently, Islamic Education Teachers (IET), as a driving force behind the national education agenda and vision, need to bolster the integration of environmental education aspects into the teaching of Islamic Education in schools (Yusop & Sidek, 2010). With regard to the integration of elements of science by IET, the study of Rashed et al. (2016) found that the emphasis on integration has been effective in expanding students' horizons, cultivating holistic individuals, fostering proficiency in the Quran and other subjects, establishing connections with daily life practices, and facilitating self-awareness and

recognition of the Creator. In addition, Rahman et al. (2018) also highlighting the pivotal role of IET entails recognising their profound capability to intricately infuse Islamic-based eco-spiritual elements into educational frameworks. These encompass delving into the profound relationship between the Creator and His creation, navigating the intricate interplay of human and natural phenomena, contemplating the awe-inspiring wonders of the natural world, discerning the profound implications of nature's creation on the Day of Resurrection (*Yaum al-Akhirah*), and championing sustainability initiatives that foster harmonious symbiosis between humanity and nature.

The proficiency across diverse disciplines within IET, especially those pertaining to the environment, not only facilitates personal knowledge enrichment but also yields substantial advantages for students when conveyed by IET during teaching and learning endeavours. In addition, each IET should also strive to achieve the first standard set out in the Teacher Standards Malaysia (SGM), namely the practice of teacher professionalism that emphasises the social domain (the value of love for the environment) as explained by the Teacher Education Division (2009), namely "teachers should show love for the environment by ensuring schools, classrooms and a conducive teaching and learning climate. Teachers should also be involved in the preservation and conservation of the environment. The elements of cleanliness, health, and environmental safety are always preserved".

Multiple studies have advocated for the prioritisation of the social domain. For instance, a study by Salleh (2018) revealed that three experts interviewed unanimously agreed on the inclusion of environmental conservation aspects in the IET moral self-assessment instrument. In the realm of pedagogy, a study by Ramlie et al. (2016) unveiled that 78.5% of IET respondents in Kelantan concurred on the necessity of linking teaching with the creations of Allah. Therefore, from these two studies it can be justified that IET plays an important role as an agent of environmental sustainability empowerment in school. In Malaysia, environmental education was introduced in schools only as an Element of Cross-Curricular (ECC) rather than as a specific subject. Thus, IET played a critical role in the process of embedding the CCE into their teaching. Nonetheless, scholars are engaged in ongoing debates regarding the integration of environmental education and its incorporation into Islamic Education teaching. A critical issue that requires attention is ensuring that this integration is synchronised with Malaysia's educational transformation agenda. Factors such as the roles of teachers, student autonomy, and instructional approaches seem to present challenges to this agenda.

The instructional approach is divided into two categories. First, a teacher-centred approach. It refers to a traditional approach that the teacher serves as a transmitter of knowledge to students, where teachers use several methods or strategies such as lectures, speeches and socratic (Moore, 2001; Pratt, 1998; Zohar, 2004). In other words, the student receives knowledge passively from the teacher. Second, the student-centred approach that refers to active teaching is the teacher's role as a facilitator and students actively build knowledge with the encouragement of teachers in or outside the classroom (Gibbs, 1995; Glasgow,

1997). In accordance with the principles of 21st-century learning aimed at nurturing environmentally literate individuals, a student-centred learning approach is highly encouraged. This fundamental characteristic of active learning theory (Booyse & Chetty, 2016; Brooks & Brooks, 1999; Dagar & Yadav, 2016; Gordon, 2009; Liu & Matthews, 2005; Vygotsky, 1978) is described as follows:

1. Knowledge is not acquired in a mechanical process that is likened to a machine to be programmed, but is obtained through a process in which students are responsible for building, forming, arranging, searching, organising, modifying, creating and interpreting knowledge actively.

2. The diversity of perspectives, interpretations, truths and realities that exist are not 'copied' or 'absorbed' passively by the student's mind from the outside, but are constructed the mind actively.

3. Students use their creativity, intellectual and capacity to build their own understanding through social interaction and the world around them so that the knowledge and skills they develop are more meaningful to themselves.

4. Each student has a subjective, dynamic and different scheme of experience, so each past experience and knowledge is important and valuable either to be assimilated or accommodated with existing knowledge leading to a balance of understanding and knowledge of new contexts.

Although the fundamental tenets of active learning theory, as elucidated, primarily focus on fostering knowledge acquisition among students, teachers also play a direct role in providing the requisite space, encouragement, opportunities, and autonomy for students to actively engage in exploration and knowledge construction (Dagar & Yadav, 2016; Kustyarini, 2020; Neto & Amaral, 2024; Wang, 2020). In this context, teachers often assume roles akin to mentors and must meticulously plan and design lessons within a conducive and constructive environment, while taking into consideration the principles and fundamental characteristics of Constructivist theory (Gordon, 2009; Jones & Brader-Araje, 2002; Liu & Matthews, 2005). Nevertheless, Gordon (2009) explains a common misinterpretation among educational theorists regarding the roles of teachers and students in the application of Constructivist theory, as they often erroneously equate it with a student-centred approach. Contrary to this misconception, he posits that constructivism advocates for active engagement from both teachers and students in the collaborative process of knowledge construction, thereby emphasising the multifaceted role of teachers.

Thus, an exploration of the instructional approach employed by IET is warranted. In the context of this study, we will delve into the instructional approach of IET involved in the Sustainable Schools-Environmental Awards program (SSEAP), focusing specifically on the integration of Islamic Education with environmental education.

METHODS

An understanding of the philosophy of research methodology has helped researchers identify appropriate designs to be adapted in the context of the study. Technically, the constructivism paradigm in conjunction with the interpretivism paradigm is appropriate for this study design (Creswell, 2014; Stake, 2010). Based on this philosophy, each individual has multiple kinds of experiential reality that are not static and are formed meaningfully through social contact (Guba & Lincoln, 1994). Each IET informant in the SSEAP has a unique perspective on the integration of environmental education and Islamic Education in the setting of this study. Therefore, a qualitative research approach is reasonably applicable to this study. Even qualitative studies also conform to the paradigm of constructivism and interpretivism from the aspects of epistemology, ontology and axiology.

Participants

A multi-case study technique is used in this study. Each case study featured a National Secondary School from Malaysia's Southern, Central, and Northern zones that had received a SSEAP at the national level. The study sample consisted of three IET informants from each of the three schools. The sample size of three individuals adhered to the norms of qualitative research in the field of education (Merriam & Tisdell, 2016). When informants are chosen based on the criteria that have been established, and the information obtained from them is capable of contributing to a deep understanding of a phenomenon/case studied, the informant is sufficient to be sampled even if the number is small (Creswell, 2016; Merriam & Tisdell, 2016; Yin, 2018).

The selection of these informants was based on a purposive sampling approach. Three informant criteria were determined based on the research objectives and literature highlights as described in Table 1.

Table 1. Criteria of the informants

No	Informant	Criteria
1	The IET is a teacher from a school that was recognised with the SSEAP at the national level	The rationale for selecting teachers from schools with this recognition is because driver-barrier factors at the school may impede or inspire the formation of IET teaching practices and beliefs on the integration of environmental education with Islamic Education (Buehl & Beck, 2015).

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Table 1 *(Continued)*

No	Informant	Criteria
2	The IET teaches Islamic Education subjects in at least two classes at the lower secondary level	The rationale for selection at the lower secondary level because at this age, students' enthusiasm for environmental sustainability will be reduced from one level to another as reported by Eames et al. (2018, p. 12) in his findings "as they grew into their teenage years (13–15 years of age), attending secondary school, that their enthusiasm for the environment waned to some extent". Therefore, IET's beliefs and teaching practices on the integration of environmental education at this level needs to be explored.
3	The IET is a teacher who is or has served in the school for at least five years before gaining SSEAP recognition at the national level in 2015	The rationale for establishing a timeframe is that teachers' beliefs and teaching practices will begin to change throughout that period after obtaining continuous professional development training (Tam, 2015). If the IET has served at the school for less than five years or is newly transferred, the disclosure about environmental education and the concept of the sustainable school program is still regarded dubious.

Data Collection

This study uses a variety of data collection methods to obtain triangulated data to improve the reliability of the results of the study. The uniqueness of this triangulation method is not only to increase the reliability of the data, but also to contribute to the finding of deep and meaningful studies (Creswell, 2014, 2016; Merriam & Tisdell, 2016). The data collection methods are described as follows:

Interview

Three semi-structured interview sessions were conducted. The researcher also reviewed the documents and academic journals to strengthen the interview data. For example, upon completion of the interview session 1, the researchers will access several relevant academic articles and institutional documents to be researched. If the author wishes to seek further clarification, the author will ask follow-up questions at the next interview session. Thus, the number of these three sessions was enough to contribute to the saturation of the study data because there were several repetitions of responses from the informants when interviewed. According to Merriam and Tisdell (2016), reaching a point of saturation or redundancy means that you begin hearing the same responses to your interview questions.

Observation

Three observation sessions were conducted. This number of observations reached a level of data saturation because there were several repetitions of the informant's practice during the lesson (Merriam & Tisdell, 2016). During the observation session, the researchers obtained records of Lesson Plans (LP) from the informants and examined them before they began teaching. Some informants also included teaching materials with LP, and some handed over after the end of the lesson. This is to get an initial idea of the teaching content. At the same time the researchers have informed the informants to conduct teaching sessions as usual (natural) and ignore the existence of the researchers as the observers.

Document review

Various compilations of documents were obtained from the three informants. The documents were obtained with the permission of informants either by hand (hardcopy or softcopy), e-mail or via the telegram application. In relation to visual documents or images, the researchers have applied for permission before recording the photographs to comply with research ethics. Information on the date and source of the document obtained is also recorded in the checklist form, which is the instrument used in this document research method.

Data Analysis

This study applies the multiple data unit analysis framework (Yin, 2018). This framework suggests that data analysis be done on one case study (within case analysis) as a whole first before analysing the findings of other case studies. Each case study, there are three types of data, namely interview, observation and document data. These three types of data were analysed in an integrated manner to obtain a real picture of the instructional approach of IET in the integration of environmental education. However, interview data are primary data while observation data and document content are supporting data. Regarding the interview data, the statements provided by the informants were quoted verbatim and subsequently translated into English, while simultaneously preserving the original context and content. Hence, this triangulation data was analysed inductively based on the qualitative data analysis process proposed by Merriam and Tisdell (2016). The process consists of three main stages: first, determining the category. Second, structuring the categories under the main category (theme) and third, presenting the data in a visual and interpretive form.

RESULTS AND FINDINGS

Based on inductive analysis, two main themes have emerged to answer the objectives of this study, namely the first theme is the application of student-centred instructional approach, and the second theme is the application of teacher-centred instructional approach in

integrating environmental education with Islamic Education. Both approaches are seen as significant to informants to gearing up future Muslim generation with environmental education. The three informants were introduced as IET1 from the South Zone, IET2 from the middle zone and IET3 from the North Zone of Peninsular Malaysia.

Theme 1: The Application of Student-Centred Instructional Approach

This first theme appears as the main theme of the IET1 and IET2 instructional approaches. The main theme includes two sub-themes, namely the role of teachers in active teaching and interactive teaching methods in integrating environmental education with Islamic Education.

The role of teachers in active teaching

The role of IET1 and IET2 in applying active teaching is described in Table 2 based on evidence triangulated data (interviews, observations, and documents).

Table 2. The role of teachers in active teaching

The first role of IET: Coordinator and facilitator	
Source of data	Evidence
Interview	"We are trying to help but we are not spoon-feeders, we are only helpers, facilitators" (IET1).
	"Students prefer to learn through activities. When we talk a lot, we teach a lot, the teacher only talks, the student will be boring and sleep, but when the students themself do the activities and we set a time, a few minutes, for example we provoke them with time limit, we will teach them how to work as a team and be punctual. We'll look at that closely, meaning, when the teaching and learning process is more student-centred, we encourage the students to move on their own. We are only facilitators. We'll see, if there's a group that doesn't move, there's nothing to do, we'll go, we'll ask them what's wrong" (IET1).
	"Students are really enjoying themselves, having a great time. When a teacher teaches alone, students become passive and unable to voice their thoughts; but, when students lead discussions with their peers, everyone is able to share their opinions" (IET2).

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Table 2 (*Continued*)

The first role of IET: Coordinator and facilitator	
Source of data	Evidence
Observation	The role of the teacher can be seen during the observation of the teaching (the first, second and third episodes) in the Islamic Religious Education Room and the school open hall (IET1) when integrating Islamic Education with environmental education.
	The role of teachers can be seen in the observation of the teaching (the first and second episodes) in the schools' prayer room when integrating Islamic Education with environmental education (IET2).
Document	The role of teacher was illustrated in the writing of the lesson plan (IET1 and IET 2).
The second role of IET: The booster of critical thinking	
Interview	"I want to develop thinking skills, regardless of whether the students are from lower to higher classes, the important thing is that they have basic thinking skills, so, through the questions we ask, it can help them to think as much as possible..." (IET1).
	"I like my students to think. The students didn't ask much about the facts. So, I try to help my students think. So, when there is an exam question to test their thinking skills, they can answer. They just don't know what to do. Sometimes, they even have their own good ideas" (IET1).
	"I prefer students to have thinking skills, because when a person can think, when a person has thinking skills, he can think about what is good, what is bad. That's why during my teaching and learning process, I prefer to ask questions, because I want my students to think, based on the Quran and Prophetic traditions, which means thinking in a good direction. So, he can tell the difference between what is good and what is bad" (IET1).

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Table 2 *(Continued)*

The second role of IET: The booster of critical thinking	
Source of data	Evidence
Observation	The role was seen when observations were carried out during the teaching of the first, second and third episodes in the Islamic Religious Education room and the school open hall while conducting a question-and-answer session on environmental issues (IET1).
Document	There are clippings of question papers (teaching aids) on the issue of food waste during the month of Ramadan containing questions in the form of higher-order thinking skills (IET1).

Interactive teaching methods

Active teaching methods for IET1 and IET2 are described in Table 3 based on evidence triangulated data (interviews, observations and documents).

Table 3. Active teaching strategies

The first strategy: Problem-based learning (PBL)	
Type of data	Evidence
Interview	"I thought about the waste during iftar and suhoor because it must involve food. So, during iftar, from my observation, even in our own family or wherever we go to eat at the stalls, we see a lot of waste, one person drinks up to three types of water. Although only one person, a lot of food, and finally everything is thrown in the trash. I read a newspaper about food waste. So, I came up with the idea to draw students' attention to the leftovers during Ramadan based on the students' own experiences. So, we're just going to try to pull it off with a quick fix. Now it's a fast month, so, they break their fast with a lot of food, is that a waste? so that's where I try to focus my attention on the environment..." (IET1).
Observation	Based on the observation notes of the researchers, this method is manifested in the teaching of the second episode of IET1, which focuses on Higher-Order Thinking Skills questions related to the problem of waste in the month of Ramadan.
Document	This method is described in the writing of the lesson plan (IET1).

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Table 3 (*Continued*)

The second strategy: Collaborative approach	
Type of data	Evidence
Interview	"In the group, students will be assigned tasks. Who will conduct the presentation? From there, they will learn how to manage the group. So, every group actually, there will be a leader, if there's any problem, I'll find their leader. If the material or equipment for the presentation is not ready, I will ask the leaders, "What are the weaknesses of their group..." (IET1). "...from the discussion, students are more active, all students will be able to issue ideas and from there, we can assess the cooperation level among them" (IET2).
Observation	In reference to the images captured during the observations, a collaborative approach was applied by IET1 for all three of its teaching episodes. For example, in the first and second episodes of the lesson, students sit on the floor in groups with a minimum number of members of four people and a maximum number of five people. In terms of group breakdown, a total of four groups have been formed (IET1). Referring to the images recorded during the observation shows that a collaborative approach has been used in the observation of the first and second episodes of the teaching. IET2 believes that such methods can support its efforts to integrate environmental elements with Islamic Education. In the first episode of the lesson, all students were among girls, a total of 14 students who were broken into four groups. Each group was given a different sheet of paper to discuss (IET2).
Document	Sheet of paper (teaching aid) containing instructions for discussion in groups about figures who contribute to the science of the universe (IET2).
The third strategy: Presentation	
Interview	"I prefer students to do presentations because it is one of the ways to train students to speak and train students to be brave. Sometimes, when students do presentations, they will come up with their own ideas. If the student does not explain clearly, we can ask some questions until they can elaborate the idea in depth" (IET1). "I like the presentation activities; it is important to realise the 21st century education that is demanded by the ministry today" (IET2).

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Table 3 (*Continued*)

The third strategy: Presentation	
Type of data	Evidence
Observation	Based on the observation notes of the researcher and the analysis of the images sketched in the field notes, IET1 has applied the method of presentation in the second and third episodes during the integration of the value of environmental education with Islamic Education (IET1). Based on the observation (the first episode of the lesson), the paper sheet namely "explain the relationship between the nature below (pictures of the sun, fish, earth and sky) with the power, strength and unity of God". Before the presentation session began, a representative of the group members had first typed their answers on the computer. Then, the other two members presented the results which were displayed on the screen. Upon completion of the presentation, IET2 has opened a question and answer (Q&A) session. The researchers found that students actively asked questions and at the same time IET2 also checked their answers, while also inserting elements of humour (IET2).
Document	In the second episode of teaching observation, mahjong paper (teaching aids) was used by each group to sketch students' ideas/ answers on the issue of food waste. Among the sketches of the students' answers to the questions were "excess food is made into organic fertiliser", "holding a campaign for the month of Ramadan as a saving month" and "controlling greed and lust". Upon completion of the sketch, each group presents their work in front of the rest of the students (IET1).

Theme Two: The Application of Teacher-Centred Instructional Approach

This theme has emerged as a central theme of the teaching approach. The main theme includes two sub-themes, namely the role of teachers in focused teaching and traditional teaching methods in integrating environmental education with Islamic Education.

The role of the teacher in focused learning strategy

The role of IET3 in applying focused learning strategy is described in Table 4 evidence-based triangulated data (interviews, observations and documents).

Table 4. The role of teachers in focused learning strategy

The first role of IET: Information provider and instructor (*murabbi* and *mu'allim*)	
Type of data	Evidence
Interview	"As these students are lower secondary students, their ideas are still lacking, so as a teacher, the instructional approach should be more towards explanation because the student has no idea, and he/she does not understand something if the teacher does not tell him/her first. Not only the subject of Islamic Education, other subjects as well, indeed the teacher will speak louder than the upper secondary students to give ideas, that's the reason" (IET3).
Observation	Based on the record of observation records, IET3 has played the role of *murabbi* and *mu'allim* in both teaching episodes. For the role of *murabbi* and *mu'allim*, he always provides information and explains to students about the environmental values that are integrated with Islamic Education.
Document	This role is described in the lesson plan (IET3).
The second role of IET: Role model (*qudwah hasanah*)	
Type of data	Evidence
Interview	"First of all, we want our students to be role models. That's what matters. This discipline comes from our religion. Discipline comes from morals, getting up early, praying 5 times a day, respecting elders, not damaging school property..." (IET3). "A teacher is like a farmer, if he plants many trees, even though there are trees that do not grow well, but the trees are still alive, that's one of the gifts too, God has given life, that's how a teacher is, he is like a farmer, planting seeds. Sometimes this knowledge succeeds not necessarily by speech, it succeeds by action" (IET3).
Observation	This role was manifested at the beginning of the lesson, while in the classroom where although he had instructed students to clean the class, he himself participated in collecting garbage with students, even during a trip to prayer room, the researchers found he himself had collected pieces of plastic garbage on the road.
Document	-

Traditional teaching methods

Traditional teaching methods for IET3 are described in Table 5 based on evidence triangulated data (interviews, observations and documents).

Table 5. Traditional teaching methods

The first method: Explanations in the lecture	
Type of data	Evidence
Interview	"Teachers must give information and explanation first, about the nature of God in contrast to creation, the concept of knowing God is to know the attributes of God. We cannot know God as we know our father. When people ask, "What are your parents' characteristics?" We can answer "My father has a moustache, there is a beard,". What if people ask God? The Prophet answered this kind of question by reciting surah Al-Ikhlas. The Prophet taught the concept of knowing God by teaching the nature of God. So, the concept should first of all be given an explanation of the difference between the nature of God and the nature of being" (IET3). "Students rarely ask questions in the tawhid chapter because they are terrified, because they will accept directly, and because the tawhid chapter is not contrived, but in learning, they can actually ask questions, and the teachers will explain. Students typically ask more questions concerning fiqh issues, such as prayer issues" (IET3).
Observation	Based on the researchers' observation records, IET3 has applied lectures as an instructional approach. In expanding the content of the lesson, IET3 has read the sermon text (khutbah) related to self-respect and the environment as a preacher reads a sermon during Friday prayers. After reading his sermon, he explained to the students the essence of environmental values in the text. Then, IET3 asked two male students in the first episode of the lesson and three students (two boys and one girl) in the second episode of the lesson to recite the manners in the mosque contained in the textbook. From the researchers' observation on the situation of these two teaching episodes, IET3 dominantly provides information to students during the integration of environmental education. Although some students have been involved, they just read the contents of the textbook without describing it according to their views (IET3).
Document	This method is described in the writing of the lesson plan (IET3).

DISCUSSION

In the contemporary era, the global education system has undergone significant transformations. Among these changes, the cultivation of environmentally literate future

generations stands out prominently. Active engagement of students, whether through formal or informal educational activities, is deemed essential for the preservation of the Earth. In light of these findings, IETs have implemented two instructional approaches for integrating Islamic Education with environmental education: the student-centred and teacher-centred approaches.

Both IET1 and IET2 have been suggested to take on the roles of coordinator, facilitator, and booster of critical thinking in integrating environmental education. These roles have facilitated the espousal of a student-centred approach, as evidenced by the use of collaborative and presentation strategies during observation sessions. For instance, IET1 implemented a collaborative strategy wherein students engaged in group discussions on environmental issues, explicitly addressing the problem of food waste during Ramadan. This approach facilitated the enhancement of various soft skills among students, including communication and critical thinking. Moreover, it encouraged reciprocal interaction among peers and between students and teachers. Similarly, IET2 employed a similar strategy, which further deepened students' appreciation of the evidence of divine power as they collaboratively analysed provided materials in groups.

From the perspective of their roles in facilitating collaborative strategies, both informants actively monitored group discussions to ensure smooth proceedings while guiding students to actively participate. Furthermore, the presentation strategy, arising from students' discussions on environmental values, encouraged students' confidence in articulating ideas and presenting them to their peers. This presentation session enriched the pedagogical process by nurturing the generation of novel ideas and collaborative problem-solving. In addition to these strategies, IET1 incorporated problem-based learning by analysing newspaper articles related to environmental issues. This approach raised empathy among students towards environmental sustainability, in that way enhancing their environmental awareness.

Contrarily, IET3 have been suggested to take on the roles of *mu'allim* (a transmitter of knowledge), *murabbi* (a trainer of souls and personalities), and *qudwah hasanah* (a role model) in integrating environmental education, adopting a teacher-centred approach. Despite the predominant use of this approach, IET3 recognised the need to facilitate student interaction with environmental elements before initiating the pedagogical process. Moreover, this approach aligned with the utilisation of sermon texts, necessitating detailed explanation and lecture by the IET3. Although student involvement was somewhat limited, particularly in knowledge construction, IET3's approach was deemed suitable for Form One students' comprehension levels. Furthermore, through Q&A sessions, IET3 ensured that student engagement remained focused on achieving predetermined pedagogical objectives, demonstrating a commitment to effective learning outcomes despite the teacher-centred approach.

The application of teacher- and student-centred approaches in the context of Islamic Education has sparked debate. Nawi (2011) contends that both approaches are necessary, aligning with the hierarchy and classification of knowledge. He argues that for knowledge pertaining to *fardhu ain*, a teacher-centred approach is not only compatible but essential. Without it, the integrity and completeness of religious knowledge are compromised. Conversely, Jasmi (2017) asserts that when teaching Islamic Education based on facts and revelations, IETs tend to avoid employing a student-centred approach. This avoidance stems from the belief that the transmission of Islamic teachings, rooted in divine revelations, must occur exclusively from teacher to student. This perspective is guided by the principle of 'learning without a teacher, the teacher is the devil'.

Jasmi (2017) contends that IETs may misconstrue the student-centred approach, mistakenly assuming that it grants students full autonomy. He argues that teachers still hold a guiding role, steering students towards exploring the meaning of knowledge. He even illustrates this principle by referencing a hadith narrated by al-Thirmidhi (no. Hadith, 2606), wherein a student (*tabi'in*) sought to verify a Hadith and sought confirmation from his teacher, who was also his friend (Abu Darda'). Despite differing perspectives, Nawi (2011) does not outright dismiss the use of the student-centred approach in Islamic Education. Instead, he advocates for its selective application, particularly in certain categories of knowledge. Moreover, while the student-centred approach is often perceived as a novel concept in Islamic Education, it is noteworthy that methods such as problem-solving, dialogue, and discussion have long been practiced by Islamic scholars of the past (Tan & Abbas, 2009).

Baba *et al.* (2015) posit that the concept of integrated Islamic Education leans towards being teacher-centred, as it is derived from the essence of the Quran. They assert that teachers, serving as role models (*qudwah hasanah*), are tasked with orchestrating teaching resources and bridging them to students through five learning processes: memorisation, understanding, articulation, internalisation, and manifestation. From a researcher's standpoint, this concept effectively amalgamates two predominant approaches, predominantly teacher-centred while also incorporating elements of a student-centred approach. This amalgamation is evident as all five processes entail active learning, emphasising observation, critical thinking, and necessitating students to analyse and compare teaching resources (Baba et al., 2015).

Western scholars have engaged in debates regarding the appropriateness of both instructional approaches within the broader educational landscape. Notably, Kirschner et al. (2006) argue that instructional methods lacking teacher guidance (student-centred), such as those based on constructivist principles, inquiry-based learning, problem-solving, discovery, and experiential learning, are deemed unsuccessful and less effective compared to teacher-centred approaches. Their assertion stems from their analysis of various empirical studies. They contend that approaches minimising teacher guidance neglect the cognitive structures of students, who require instructional direction. They posit that the need for guidance diminishes when students possess sufficient prior knowledge, enabling internal cognitive guidance.

However, just a year following the publication of their claims in the Journal of Educational Psychologist, criticisms emerged. Hmelo-Silver et al. 2007) challenge Kirschner et al. (2006), asserting imprecisions in their argument. They argue that the student-centred approach proves more effective, primarily due to the presence of scaffolding—a process wherein teachers provide support and encouragement to students, enabling them to actively engage in problem-solving. This scaffolding, in turn, alleviates the cognitive load on students, facilitating exploration across various complex domains. Similarly, Schmidt et al. (2007) echo the sentiments of Hmelo-Silver et al. (2007) and refute the claim, arguing that the student-centred approach allows for flexible adaptation of guidance to suit individual students and aligns with their cognitive structures. Additionally, Kuhn (2007) also questions the assertion but endeavours to balance the debate by emphasising that any approach chosen by teachers should consider students' motivation and aid them in achieving their goals.

Although there is debate among academics, within the context of this study, the two instructional approaches used to integrate Islamic Education and environmental education are key components of IETs' experience in the SSEAP. They possess a deeper understanding of the conditions, environment, and educational demands of students. Though there are two distinct approaches to teaching students how to develop cognitive, affective, and psychomotor skills in relation to environmental education, the method that is deemed the best by IETs is the one that emphasises the significance of realising the role of *khalifatullah* (stewardship) on earth. Haddad (2006) has drawn Quranic verses from *Tafsir al-Jalalain* that discuss Islamic concepts of Environmental Education to facilitate this understanding. Three basic domains have been highlighted, closely related to each other, as outlined below:

1. Knowledge and understanding (cognitive): The Quran is a source of knowledge and understanding to environmental education. By using all the functions of the senses, such as interpreting, listening, seeing, and observing nature, the knowledge and understanding of the individual will also grow. Through knowledge and understanding of science, individuals can distinguish between good and bad deeds on the environment.

2. Belief and morals (affective): In Islam, faith or belief has to do with the attitudes and morals of individual Muslims. Love of the environment is one of the proofs of faith in God. This will be manifested when the Muslim individual believes that man and the environment are complementary creatures of God, and he needs to love the environment. It is the reward of the righteous in this world and in the hereafter.

3. Manifestation or realisation by practice (psychomotor): Every Muslim should do environmentally friendly practices in everyday life and not do anything destructive. This sustainable practice is also a manifestation of faith in Allah, so the sustainable

> practice that is carried out must be in accordance with the commands of Allah and follow the example of the prophets, messengers, and scholars.

Hence, numerous Islamic scholars also emphasise these three basic domains, positing that Muslims must maintain steadfastness (*istiqamah*) in environmental stewardship and displaying compassion towards all of God's creations (Al-Qaraḍāwī, 2001; Al-Sahaybānī, 2008; Izzi Dien, 1997, 2000). If these three domains become imbalanced within an individual, there exists a concern that the individual may incline towards behaviours detrimental to the environment. One of the identified factors contributing to this lack of appreciation for environmental sustainability among humans is their failure to comprehend the role of the caliph endowed with intellect and conscience (Kamali, 2012; Mohamed, 2014). Thus, notwithstanding the varied instructional approaches employed in the SSEAP, IETs must adhere to the learning objectives and maximise the potential inherent in these three domains to nurture a future Muslim generation that is environmentally sensitive.

CONCLUSION

The implications of this study regarding pedagogy suggest that the instructional approaches utilised by IETs within the SSEAP are grounded in their unique rationale for fostering a sense of environmental stewardship among Muslim students. These approaches serve to accommodate the diverse contexts of students while harmonising Islamic Education with environmental principles. This viewpoint resonances the understanding that there is no one-size-fits-all approach, and no inherent superiority or inferiority among methods. The efficacy of an instructional approach depends heavily on the adept execution by the teacher, customised to the unique circumstances of their students, particularly in the seamless integration of Islamic teachings with Environmental Education. However, in tandem with the global educational reforms promoting the constructivist learning theory, IETs must also consider fostering an environment conducive to active learning, which lies at the heart of this theory. Indeed, the constructivist learning theory has been officially endorsed and encouraged in the implementation of Islamic Education within Malaysian schools (Curriculum Development Division, 2017).

Furthermore, Tengku Kasim (2012) also discovered that the principles of constructivist learning align with the Islamic perspective on education in three key areas. Firstly, Islam advocates for active student engagement in the learning process. Secondly, it emphasises the pivotal role of teachers in guiding students towards the construction of knowledge, personality, and skills. Finally, it underlines the imperative of employing active teaching strategies to effectively impart knowledge, as observed in the Islamic tradition. Stakeholders must earnestly undertake efforts to empower active learning for integrating Islamic Education with Environmental Education. It is important to recognise Elkind's (2004) identification of three key factors that could impede the effective implementation of active learning strategies. Firstly, the lack of exposure among teachers; secondly, curriculum

limitations that fail to encompass a diverse range of skills for student exploration; and thirdly, social readiness factors, such as national education policies and schools' readiness to accept the constructivist educational paradigm. Each of these factors demands careful consideration for any substantive educational reform to take place.

In conclusion, this study has significantly advanced our understanding of specific aspects; however, further exploration within a multidimensional context is necessary to fully comprehend the landscape of thought, experience, culture, and narrative variations. Nevertheless, there are limitations to this study from a methodological standpoint, particularly in determining the criteria for informants. The authors suggest additional studies to address this gap. Primarily, this study solely involved IETs teaching at the lower secondary level. Therefore, any discussion regarding the findings must be contextualised within the specific experiences of IETs at this educational tier. However, there is a crucial need for further research that encompasses a broader range of informants. This expanded scope should include students, parents, mosque imams, teachers from *pondok* and *tahfiz* educational institutions, as well as educators from various subjects in Muslim schools. Incorporating these diverse perspectives is imperative to thoroughly investigate their views, appreciation, and interpretations concerning the amalgamation of Islamic values and the environment. It also aims to identify the nexus between basic religious beliefs and their contribution to addressing environmental issues at both local and national levels. Finally, there is potential for comparative analysis of experiences among Muslim school teachers across Southeast Asia in integrating environmental values. Such investigations could elucidate how religious factors intersect with sociocultural influences to shape educators' practices within sustainable school programmes.

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