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Engaging Secondary School Students' Lifelong Learning: Teachers' Perceptions, Challenges, and Strategies

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Due to the ever-changing society, students' school-learned knowledge will become obsolete. That said, if students are lifelong learners, they regularly update their knowledge in response to a constantly changing reality. Teachers, hence, must promote students' lifelong learning (LLL) to help them become lifelong learners who can deal with prospective challenges throughout their lifespan. This study sought to investigate Cambodian secondary school teachers' perceptions of LLL, the challenges they encountered, and the strategies they have employed to engage students in pursuing LLL. The data were collected from 21 teachers teaching at public secondary schools across Cambodia through semi-structured interviews. The results revealed that teachers were aware of the significance of LLL for their personal and professional development; however, three teachers did not understand the concept of LLL. What's more, they had a positive attitude towards LLL as a continuous development of their expertise. The study also found some challenges in engaging students with LLL, namely a lack of motivation, poor learning environment and resources, overdependence on teachers, limited research skills, and time constraints. To this end, the findings of this study indicated some strategies to promote LLL among students, such as motivation, teacher-parent engagement, technology-enhanced learning, and student self-directed learning.

Keywords: Cambodian secondary school, perception, lifelong learning, student motivation, student self-directed learning

INTRODUCTION

Lifelong education has become a solution concept to address the evolving technological demands of human life (Aykaç et al., 2020). Thus, students should be aware of lifelong learning (LLL), as they will benefit from it throughout their lives, and teachers play a crucial role in helping students adapt to such a society. To manage their learning plans, adapt to changing skill requirements, and remain in the labour market longer, learners also need pathways and recognition systems(UNESCO Institute for Lifelong Learning, 2022). Teachers must help their students develop LLL habits so that they can be versatile to the changes they will encounter in life. In addition, the European Union is

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considering the scale of the economic miracle and social change, enabling a rapid transition to a knowledge- based society which demands a new approach to education and training, within a framework of LLL (Chiţiba, 2012). In the UK, LLL is often seen as a key to both economic competitiveness and social cohesion (Green, 2006). In Thailand, the main objective for LLL is to provide people with fundamental knowledge and necessary skills that support them to enhance their careers and improve their well-being (Luka & Sungsri, 2015). In Cambodia, the National Policy on Lifelong Learning was established to ensure learners have literacy and numeracy skills, technical skills, and 21st-century skills that they can learn anywhere and by any means, especially via the use of Information and Communication Technology (ICT) to support learning activities (Royal Government of Cambodia, 2019).

Engaging secondary school students in LLL can be challenging because they often focus primarily on school subjects that are necessary for their exams. It is believed that exam-focused learning is a fundamental approach that encourages students to learn how to take the exam or achieve a good grade (Bryce & Withers, 2003). However, learning for the exam doesn't equip students with the necessary skills for the 21st-century era; it just prepares them to seek jobs. LLL is a global concern, and schools are an essential but neglected context to boost LLL(Landberg & Partsch, 2023). Teachers are seen as key agents, on the one hand, to provide systematic support in the LLL pathway; on the other hand, they should also promote LLL competences among their students (Finsterwald et al., 2013). At the same time, the policy for LLL has been related to the personal and democratic function that addresses economic development and a knowledge-based society (Biesta, 2006).

In Cambodia, the Ministry of Education, Youth and Sport (MoEYS) has also included LLL in its *Strategic Education Plan 2024-208* (MoEYS, 2024). In classroom practice, teachers play a more crucial role than others do. Accordingly, existing studies have investigated classroom practice (Bon, 2022; Bon & Inpin, 2024; Bon & Inpin, 2025). However, less research has been conducted to investigate teachers' perceptions of this construct, the challenges they encounter, and the coping strategies when integrating LLL in their classroom instruction. Therefore, this study contributes to the need for teacher professional development through LLL and highlights the role of teachers in engaging students in LLL. Promoting LLL equips students with the knowledge and skills needed to thrive in an increasingly complex and rapidly changing world. Given its importance, the study sought to investigate Cambodian secondary school teachers' perceptions of LLL, challenges, and strategies to promote their students' LLL.

Research objectives and questions

The current study aimed to examine teachers' perceptions, challenges, and strategies in promoting LLL among secondary school students. To achieve the mentioned objectives, the study planned to address the following questions. First, the study investigates Cambodian secondary school teachers' perceptions of LLL. Second, it explores the challenges they have encountered in engaging LLL among secondary school students. Finally, it examines the strategies teachers have employed to foster LLL among secondary school students.

LITERATURE REVIEW

Lifelong learning (LLL)

The concept of LLL was first presented at a UNESCO conference in Hamburg (Ocak & Karakuyu, 2022). It can be described as any type of learning that occurs throughout a person's life (Hidayat et al., 2022). LLL is an ongoing process that enhances people's knowledge, skills, and talents throughout their lives (Ocak & Karakuyu, 2022). LLL is considered a beneficial educational instrument that contributes to the well-being of youth and adults, enables them to understand their rights, and helps them respond to increasing job market demands, and is defined a learning process, which covers formal, non-formal and informal modalities throughout a lifetime (UNESCO Institute for Lifelong Learning, 2023). LLL is a concept stemming from lifelong education, adult education, and constant education, that is aimed at promoting the 21st-century knowledge economy (Lee, 2014). Chiţiba (2012) argued that LLL is the continuous development and advancement of knowledge and skills needed for employment and personal accomplishment through formal and informal learning activities. Drawing on the above-mentioned definitions, LLL can be described as the process of learning throughout a person's life to help them solve real-life problems, make them more willing and eager to learn, and improve their overall set of life skills.

Significance of LLL

LLL has enormous promise for assisting pupils in overcoming future obstacles. In the 21st century, LLL is crucial to people's daily lives (Hidayat et al., 2022). The right to education starts at birth and continues throughout one's entire life; therefore, the principle of LLL guides SDG4-Education2030 (UNESCO, 2015). It is designed to cultivate the knowledge, skills, and competencies needed to deal with crises arising, as well as improve preparedness for future crises (UNESCO Institute for Lifelong Learning, 2022). In addition, LLL has three major goals, namely contributing to individual development by creating new learning opportunities, assisting in the establishment of social cohesiveness, and fostering economic development (Ocak & Karakuyu, 2022). In recent decades, LLL has emerged as a critical policy priority at global, national, and local levels (UNESCO Institute for Lifelong Learning, 2022). LLL has become increasingly important, requiring individuals to continuously reskill and upskill in their areas of specialization to meet the evolving demands of the labour market and emerging occupations. Due to its importance, MoEYS (2024) initiated an LLL centre to ensure learning can be taken not only within school, but also offers more opportunities for individuals to pursue professional development.

Teachers' perceptions of LLL

LLL must be a foundation of personal growth, professional development, and active citizenship, ensuring that learners continue to seek knowledge beyond formal schooling. Teachers are viewed as key agents of LLL in equipping their students with LLL skills that encourage them to become lifelong learners (Woonsun, 2014). It is crystal clear that teachers need to help learners become aware of LLL, draw their attention, and guide them to achieve their goals (Koç, 2024). Landberg and Partsch (2023)

acknowledged that teachers can foster a growth mindset within students, which is beneficial for their future achievement. In other words, teachers' mindsets can influence students' motivations, engagement, and achievement (Muenks et al., 2020). In this sense, teachers' attitude towards the practice of LLL is positively related to fostering LLL in their students and to achieving expected outcomes (Landberg & Partsch, 2023). Bolat and Kıyak (2024) indicated that teachers are not only individuals who disseminate knowledge to learners but also lifelong learners who constantly develop themselves and obtain new knowledge and skills.

Challenges in engaging secondary school students' LLL

LLL has grown as one of the main challenges for the global knowledge of society in the future (Collins, 2009). Learners' attitudes and motivations can be seen as barriers to pursuing LLL. There are also some challenges, such as parents' attitudes, teachers' beliefs related to competition, summative assessment, and the school system's effect(Bryce & Withers, 2003). Collins (2009) stated that issues related to the lack of motivation, time, and sufficient resources can affect an individual's LLL.

The study further suggested that LLL has some barriers, namely, situational, institutional, and dispositional (Cross, 1992) and the barriers will vary depending on circumstances (Laal & Laal, 2012). At the same time, another study suggested that one of the LLL issues is political will (Power & Maclean, 2013). This could be a primary factor in tackling LLL challenges. Furthermore, the issues of government regulation and struggles to recognize the qualifications of LLL can lead to discouragement in attracting learners to participate in it (English & Mayo, 2019). That is, the study further mentioned that a lack of sufficient funding and ambiguous government policy are seen as significant factors in promoting LLL (Álvarez-Mendiola, 2006). At the same time, cultural practice can enrich every student's learning (Lapada, 2026). However, one of the challenges in promoting LLL is a lack of LLL culture that addresses not just skills but also the mindset needed for LLL (Echcharfy, 2026)

Strategies for engaging secondary school students' LLL

Promoting LLL has gained enormous attention lately from the educational to business communities because it enables individuals to constantly and technologically become competent workforces that can compete in global markets (McCombs, 1991). Furthermore, the provision of multiple and flexible learning pathways at all ages and all educational levels is linked between formal and non-formal structures, validation, and accreditation of knowledge, skills, and competences acquired through non-formal and informal education (UNESCO, 2015). Teaching strategies encompass the specific approaches and methods to bolster learners (Van den Broeck et al., 2024). Problem-based learning (PBL) is an approach that encourages learners to learn through engagement(Tshering et al., 2026), addressing real-world problems in compliance with collaboration, leadership, and critical thinking skills (Bidokht & Assareh, 2011; Dunlap & Grabinger, 2003). In addition, the study suggested that motivation and self-directed learning strategies could be forms of promoting LLL in secondary school students (Klug et al., 2016). That is, LLL should be promoted, as it is constant, collaborative,

self-reliant, and independent learning to enhance an individual's profession as well as all aspects of life (Collins, 2009).

METHOD

Research design

According to Mertens (2019), qualitative research is designed to provide an in-depth explanation of a specific program, practice or setting. It relies on text and image data and has unique steps in analysing data, drawing on various designs (Creswell & Creswell, 2018). The participants' 'profiles are shown in Table 1.

Research sites and participants

This study included 21 public secondary school teachers working at 18 public secondary schools located in one capital city and 10 provinces, across 10 different school disciplines nationwide. The participants were selected using convenience methods because it was accessible, cooperative, and relevant to the data collection. In addition, the participants were purposely drawn from diverse educational contexts across Cambodia to capture a range of experiences and perspectives of individuals rather than produce statistical generalizations of them.

Table 1
Participants' demographic information

Participants 'pseudonym	Genders	Majors
P1	Male	Physics
P2	Female	English
P3	Male	Earth Science
P4	Male	Khmer Literature
P5	Female	Khmer Literature
P6	Male	English
P7	Female	Khmer Literature
P8	Male	History
P9	Female	English
P10	Male	English
P11	Male	History
P12	Male	English
P13	Male	Moral-Civic
P14	Male	Mathematics
P15	Female	Chemistry
P16	Female	English
P17	Male	Mechanics
P18	Male	ICT
P19	Female	Chemistry
P20	Female	Chemistry
P21	Female	Khmer Literature

Instruments

The semi-structured interview was employed to collect the data. The interview questions were developed from the study's objectives and relevant literature. Interviews were conducted through the Zoom platform. The interview with each participant took approximately 40 minutes. The interview was conducted in participants' native language (Khmer) as it allowed them to articulate their ideas clearly and efficiently. Two researchers conducted the transcription and translation of the data into English. The participants were coded as P1 (e.g., Participant 1), P2, P3, and so on, to ensure confidentiality. The participants were invited and informed that they could refuse to participate if they wished to. The interview involved taking notes and recording audio and video. These methods helped researchers ensure that all data were captured and kept for data analysis.

Data analysis

This study employed thematic analysis. Braun and Clarke (2006) stated that thematic analysis has six steps. First, all interview data were transcribed verbatim and read repeatedly to achieve familiarity with the data. Second, initial codes were generated across the dataset and organized into broader categories based on patterns and meanings. Third, these categories were identified as potential themes. Fourth, preliminary themes were reviewed and refined to address the research questions. Fifth, the themes were defined and named through an iterative process of comparing them with original transcripts. Finally, themes were interpreted and reported to present the study's findings. The interview transcripts were imported from Microsoft Word to MAXQDA to facilitate systematic coding, data organization, and theme development. MAXQDA is utilized, as it provides a logical reason for qualitative data analysis over hand coding, as suggested by (Creswell & Creswell, 2018).

Reliability and validity

The research is effective when it is valid, while its reliability reflects consistent and replicable results across different times, instruments, and respondent groups (Cohen et al., 2018). In other words, according to Creswell and Creswell (2018), the validity is one of the strengths of qualitative research, as it ensures the accuracy, trustworthiness, and credibility of the findings, while reliability concerns consistency, and this is achieved through methods such as transcript checks, cross-check codes, and theme development. In this study, credibility was enhanced through the use of semi-structured interview transcripts, verbatim transcripts, and continuous comparison of potential themes with original data. Dependability was strengthened by Braun and Clarke (2006) while using MAXDA to systematically organize, code, and manage the data. Confirmability was obtained, as themes were derived directly from participants' responses, thereby minimizing research bias and enhancing the trustworthiness of the findings.

FINDINGS

Teachers' perceptions of LLL

The first objective was to investigate teachers' perceptions of LLL, including meanings, benefits, and attitudes. Table 2 presents the summary of the findings regarding the first objective of this study.

Table 2
The first objective

Theme	Participants	Exemplary Quotes
Lifetime' Learning	P10, P16, P15, P7	"We never stop learning. Once we stop learning, we start dying" (P16)
Professional Development	P19, P8, P4,	"I have improved my knowledge regarding my skill because I continue to do some research, such as reading books, watching YouTube to find lessons for my teaching and especially for doing slide presentations." (P8)
Positive attitude towards LLL	P3, P13	"I commit to learning and improving my skills. I am always keen on learning and exploring new things" (P13)

As seen in Table 2, concerning teachers' perceptions, three themes have emerged, including lifetime learning, professional development, and positive attitude toward lifelong learning.

For the meaning of LLL, they defined it as "Lifetime learning." Teachers noted that as long as we are alive, we need to learn. For instance, when asked to share their understanding of the concept of lifelong learning, P16 remarked, "We never stop learning. Once we stop learning, we start dying".

Regarding professional development, teachers believed that LLL is important. They reported that it is useful to their professional development. Given the fact that LLL is crucial to improve the knowledge and skills of individual professionals through continuous learning, it has the backbone of career readiness in the changing world. P15 stated that "I have gained experience in teaching […] I have applied different teaching methods in accordance with the needs of students, such as IBL and PBL". (P7)

In addition, the teachers demonstrated a positive attitude toward LLL. They see the opportunity to improve their knowledge and skills to build upon their personal and professional development, as mentioned in Table 2.

However, three teachers did not know the meaning of LLL. For example, "I am not sure what lifelong learning is … (P6)".

Challenges

The second objective of the study sought to explore the challenges encountered by teachers when trying to integrate the LLL concept in their teaching.

Table 3
The second objective

Theme	Participants	Exemplary Quotes
Lack of Motivation	P15, P16, P2, P21, P17	"Students don't pay enough attention, are unmotivated to study, are not interested in learning, don't see value of the study." (P15)
Poor Learning Environment and Resources	P4, P5, P9, P14	"Learning environment isn't good for students to study." (P5)
Overdependence on teachers and limited research skills	P16, P4, P12	"Students' competency in finding documents to study is still low. It literally means they don't know how to find information or documents to study." (P4)
Time Constraints	P2, P4, P14	"I don't have enough time…" (P2)

As seen in Table 3, there are four themes: lack of motivation, poor learning environment and resources, students' overdependence on teachers, limited research skills, and time constraints.

Table 3 indicates that lack of motivation was the most frequently mentioned. The majority of teachers demonstrated that students are not involved in LLL because they seem to focus on exam-oriented learning. P21 explained that they are not motivated to participate in LLL because it doesn't improve test scores at all. In addition, the other teacher also said, "Students don't pay enough attention, are unmotivated to study, are not interested in learning, don't see value in the study (P15)".

Poor learning environment was the second most frequently mentioned. A learning atmosphere is quite essential to bring about the quality of education. For instance, one participant said, "The learning environment isn't good for students to study (P5)". Likewise, P4 remarked, "There is a library in school. However, it doesn't have lots of books…"

Overdependence on teachers and limited research skills were the third most frequently mentioned. Teachers reported that some students don't engage in self-directed learning; they depend on teachers so much. In other words, they reported that students heavily relied on teachers' instruction and lessons given rather than engaging in self-directed learning. For example, P16 said, "Students' competency in finding documents to study is still low."

Time constraint was also one of the crucial challenges mentioned. Teachers informed that they were busy with their other work and household chores, so they didn't have time to lead any extra activities with students. They often just come to teach in the class and get home quickly because they rush to do other things. Regarding this, P2 indicated that. "I don't have enough time [….] Additionally, I am busy with other work, especially my family."

Strategies

The last objective was explored through four themes as key strategies to promote LLL among secondary school students.

Table 4
The third objective

Theme	Participants	Exemplary Quotes
Motivation	P11, P16, P7, P15, P21	"I motivate students to read more. Learning isn't about doing the test, but it is about learning to live in society." (P7)
Parent-teacher engagement	P7, P6, P14, P21	"I have a good relationship with students. I empower students, and I also keep in touch with students' parents." (P7)
Technology-enhanced learning	P17, P18, P2	"I integrate technology into my instruction to engage them to enjoy my lesson." (P17)
Self-directed learning	P10, P2, P20	I encourage students to do extensive reading, self-study, assign them some research related to grammar or other topics, and assign them to do projects." (P10)

As seen in Table 4, there are four themes, namely motivation, parent-teacher engagement, technology-enhanced learning, and self-directed learning.

Motivation is one of the key priority strategies to engage LLL among students. One teacher remarked, "I suggest students read books, find new documents, and encourage them to participate in the national outstanding student competition (P11)." Likewise, P16 said, "I usually tell them to read books […]". The other teacher shared a similar idea, "I motivate students to read more. Learning isn't about doing the test, but it is about learning to live in society (P7)."

Parent-teacher engagement plays an important role in building bonds and trust with each other. (P7) explained that, "I have a good relationship with students. I empower students, and I also keep in touch with students' parents."

Technology-enhanced learning is also paramount because technology can engage students to learn actively. It supports students to learn in schools and elsewhere, which can lead them to have curiosity about their learning. For example, P17 pointed out that, "I integrate technology into my instruction to engage them to enjoy the lesson."

Self-directed learning is perhaps the most important thing among them. Work has become less secure since the world is changing fast. Pursuing LLL is the key to making sure that you are always ready for new job developments. Concerning this, P2 shared her experience in teaching the English subject. She said, "I sometimes integrate lifelong learning in my classroom, such as asking students to read books at home or at school, self-study, homework […]". P10 also shared the comparative experience. He mentioned that he encouraged his students to do extensive reading, self-study, and assign them some research related to grammar or other topics, and assign them to do projects.

DISCUSSION

Teachers' perceptions are indispensable because they are agents of success for all students. Their perceptions could determine their teaching practice (Bon & Charubusp, 2024). In the same vein, LLL is key to equipping individuals to become well-rounded, global citizens. In this regard, MOEYS laid out its policy priorities to allow students to

pursue LLL to prepare them to stay updated with emerging jobs, and they will become catalysts for socio-economic development (MoEYS, 2019b). Most teachers understood the concepts of LLL. They were familiar with the concept of LLL and thought LLL was overarching since it allowed them to gain new knowledge, skills, and necessary information that kept them connected with the changing world. Teachers' perceptions of LLL demonstrate that they have a positive attitude towards life, and learning is important (Adams, 2007). The teachers in the study believed that LLL is essential for them, as it enhances their knowledge, skills, and, especially, their teaching methods. These findings are in line with Koç (2024) who found that LLL involves all types of learning activities and personal development, enhancing knowledge and skills as well as transforming students into competent people.

Since teachers acknowledged the significance of LLL, they made an effort to integrate LLL into their teaching practice. However, engaging LLL among secondary school students posed several challenges. The lack of motivation, time, and adequate resources can influence an individual's success in pursuing LLL(Collins, 2009). That is, learners are unmotivated to pursue LLL as there is no supportive system and framework. Moreover, they relied heavily on teachers to provide them with lessons and study materials, as they were unlikely to engage in self-directed learning. In this regard, they often depend on their teachers. A poor learning environment could cause students not to pursue LLL. The library is old-fashioned and doesn't have resources for students to do research or self-study. Similarly, a study indicated that the role of the classroom environment can play an important role in supporting students to emerge as lifelong learners (Stefanou et al., 2012). Furthermore, they often have no or an unstable internet connection, which prevents them from exploring and discovering new things on the internet. In this regard, some challenges for LLL are environmental and financial factors (see Laal & Laal, 2012).

The current study suggested some key strategies to engage secondary school students to pursue LLL. As the existing studies suggested that motivation is a key component to encourage students to pursue LLL because, no matter what notion it is, motivation is indispensable (Dunlap & Grabinger, 2003; Van den Broeck et al., 2024). Similarly, another study found that motivation underscores students' engagement (Huang & Huang, 2026). A few studies further indicated that Cambodian students are driven and empowered by strong motivation, whether from their parents or teachers (Bon et al., 2022; Sor et al., 2022). While motivation is found to promote LLL in this study, PBL is seen as a factor that can help students to engage in learning (Tshering et al., 2026). This study also found that self-directed learning is essential for students, enabling them not only to succeed in examinations but also to support LLL. Similarly, a study indicated that self-regulated learning is considered to be effective in engaging students to pursue LLL(Bon et al., 2026; Klug et al., 2016). In line with these findings, MoEYS (2024) highlighted that independent learning is necessary for all learners to pursue their studies and develop knowledge and skills. The current study found technology integration could help students engage with LLL. Whether learning in class or elsewhere, technology-enhanced learning is crucial to help individuals to learn actively and effectively. To support this, Luo (2026) also highlighted the importance of technology integration in enhancing students' engagement in learning. Technology-enhanced

learning has also been emphasized by MoEYS (2018), which stated that implementing and incorporating Information and Communication Technology (ICT) into teaching can enhance lesson delivery and enrich students' learning experience. Finally, Parent-teacher engagement is inevitably essential because education takes place anywhere. Parental involvement plays an important role in engaging children's learning. In line with this, Jones et al. (2026) found that parental engagement is seen as a positive influence on children's learning outcomes. In other words, this suggests parental involvement plays a crucial role in encouraging their kids to engage in learning activities, as it enhances their personal and professional development.

CONCLUSION

Engaging students in the pursuit of LLL is the cornerstone of equipping them with the skills needed for future-ready employment and helping them to reskill and upskill to tackle the changing world. That is, teachers are essential actors who are the backbone of motivating students to enjoy learning at school and to continue learning throughout their lives. Based on insights from this study, it is believed that teachers' perceptions, the challenges they encountered, and the strategies they employed to promote LLL among secondary school students in Cambodia provide important theoretical and practical implications for improving LLL in secondary education. These findings also show the current understanding of LLL within a developing educational context, where inadequate technological infrastructure, limited resources, and students' low motivation remain major obstacles. The findings also suggest significant practical implications. Teachers should adopt learner-centred pedagogical approaches that foster students' self-directed learning, critical thinking, motivation, and leadership. School leaders should establish a safe and supportive learning environment that can enable students to learn actively and effectively. At the policy level, the Ministry of Education, Youth and Sport should continue investing in digital infrastructure, expanding accessibility to Information and Communication Technology, and developing policies that boost LLL and technology-enhanced learning across schools. Such initiatives, it will equip students with the knowledge, skills, and attitudes required for LLL in the 21st century.

This study can be utilized for further investigation. This study employed a semi-structured interview. It used only a qualitative method. For further studies, quantitative or mixed methods can be used to provide broader evidence and enhance the generalization of the findings. In addition, prospective research could focus on subjects, genders, teaching experiences, and location.

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