

Implementation of A Student-Center Approach in Cambodia

Ouch Sreypouv

*Graduate School of Humanities and Social Sciences, Hiroshima University, Higashi-Hiroshima, Japan,
Correspondent's email: ouchsreypouv@gmail.com*

Received: December 22, 2021/ Accepted: May 08, 2022

Abstract

To prepare human resources for the 21st-century workforce and to be aligned with the Education Strategic Plan (ESP) 2019–2023, teaching quality has become the prior endeavor of educational development for Cambodia. Teaching methods and approaches are the major concerns at public schools. To strengthen teaching quality, a comprehensive understanding of teaching methods and approaches that are currently implemented through various education strategies and policies is crucial for teachers and relevant stakeholders to note and learn. Therefore, this review paper aimed to discuss in-depth the adoption of the student-center approach as a teaching approach which embedded in strategies, practices and emerging education policies in the teacher reform era in Cambodia. Content analysis was utilized to analyze the data. The data consisted of policy documents and published research papers. This study offered core insights into the history and development of how the student-center approach has been introduced and integrated into teaching practices in Cambodian schools. The findings revealed a gap in its implementation and acknowledge some positive changes in terms of the initiative of the school curriculum. It also revealed some challenges that teachers have been facing, including teachers' understanding of the approach and the lack of systematic monitoring of teachers' practices at the school level.

Keywords: Student-center approach; Education policy; Teacher; Teaching quality, Cambodia

1. Background

Cambodia is located in Southeast Asia and is bordered by Thailand, Vietnam, and Laos. It is considered one of the least urbanized countries in Southeast Asia with rich history and culture. The Cambodian population is 16.4 million with three-quarters living in the countryside. The economy is mainly based on agriculture, garment manufacturing, tourism, and investment. It

has produced a nominal gross domestic product (GDP) of 27.0 billion dollars by 2022 (ADB, 2022). With this rapid growth, Cambodia has built school buildings and increased the number of teachers throughout the country. There are 4563 kindergarten schools, 7306 primary schools, 1253 lower secondary schools, and 559 upper secondary schools based on the statistic report by MoEYS for the schooling year 2021-2022. The schooling from kindergarten up to upper secondary school is free and supported by the government fund. Up to present the total number of teachers who are currently teaching at school is notable. There are 5934 preschool teachers, 58 040 primary school teachers, 33 386 lower secondary school teachers, and 18 189 upper secondary school teachers (MoEYS, 2021a). However, before reaching this movement, Cambodia had passed through several political regimes which affected its education structure and practices.

During the Khmer Rouge regime (1975–1979), most of the educational infrastructures and approximately three million people, including educated people such as teachers and professors, and students were killed (Collins, 2009). That regime turned schools into prisons and storage sheds. The teaching and training were completely shut down everywhere (Ayres, 2000). In the post-Khmer rouge regime from the 1980s, the country had to make a fresh start and developed from scratches with whatever remained from the genocidal regime and civil war in all sectors to rebuild the country, especially in education and economy.

Due to the instability of the country's politics, a significant rebalance of education started in 1993 after the first national election was successfully implemented with the support of the United Nation. From 1979 to 1986, Cambodia implemented a ten-year education system by dividing its education into four years for primary education, three years for lower secondary education, and three years for upper secondary education. From 1986 to 1996, it transformed its primary education from four to five years, whereas other educational levels remained. In 1996, the education system structure was again transformed into a 12-year education system with six years of primary education (grades 1–6), three years of lower secondary education (grades 7–9), and three years of upper secondary education (grades 9–12). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) framework and the Education Law of Cambodia, all children should have completed at least a basic education, which consists of nine years of schooling. It shall be free and supported by the government (Dy & Ninomiya, 2003).

2. The origin of the student-center approach in Cambodian education

In 1993, the Ministry of Education, Youth, and Sport (MoEYS) piloted the Child-Friendly School (CFS) program for the first time. The Child-friendly schools were the school that implemented child-center approach or student-center approach. The implementation was supported by the United Nations International Children's Emergency Fund (UNICEF), Save the Children Norway (SCN), and Kampuchea Action to Promote Education (KAPE).

The concept of CFS focuses on the school that recognizes and nurtures the achievement of children's basic rights. This school framework is based on six dimensions such as (1) all children have access to schooling, (2) effective learning, (3) health, safety, and protection of children, (4) gender responsiveness, (5) the participation of their children, family, and community for running their school, and (6) the national education system support and encourage the school to become more child-friendly. According second dimension, it was the first time that Cambodia started implementing a child-center approach to elementary education. The program was implemented in Kampong Thom, Kampong Speu, Prey Veng, Svay Rieng, Steong Treng, Oudor Meanchey, Siem Reap, Kampong Chnang, Kampong Cham, Pursat, Preah Vihear, and Phnom Penh.

The CFS aimed to create effective learning by developing teachers' proficiency so that they had both theoretical and practical knowledge to conduct and promote a child-center approach in classrooms. The child-center approach was characterized by teaching and learning through creative ideas, participation and cooperative learning, research, analysis critical thinking, problem-solving, and innovation and encouragement of creative ideas. This approach covered a bunch of activities in the classroom which are grounded in the Constructivist theory of learning-that to say is consistent with the constructivist teaching approach (Matthews, 2003). This program applied to the cluster schools, which were created by six to nine elementary schools nearby. Every Thursday, the teachers held a cluster-level meeting by sharing the problem and improving teachers' capacity. However, this pilot program could reach only some elementary cluster schools in 11 provinces due to its limitations, including a lack of trained teachers in the child-center approach and budget support.

Moreover, the first trial of conducting a CFS was found to be more effective in school construction and school allocation than some changes in teaching practices (Wheeler, 1998). In 2001, MoEYS expanded the CFS program nationwide at lower secondary schools. By 2007, a pilot program attached 37 lower secondary schools to random elementary CFS across

Cambodia. After the expansion of the CFS pilot program, MoEYS established a national CFS policy in 2007. The policy was revisited and updated in 2011. The policy has become a crucial means to improve teaching and learning. Consequently, the student-center approach has been introduced nationwide at elementary and lower secondary levels in 2007. Then, the promotion of a student-center approach has become a prioritized key for improving teaching and learning quality in Cambodia especially in science education as indicated in the Education Strategic Plan 2019-2023, and other related policies (Stage 4 Rectangle Strategies 2018-2023, Roadmap for Cambodia Education Year 2030). Because, student-center approach implementation relies heavily on the quality of teachers it is deemed a vital current education reform agenda as stated in the Teacher Policy Action Plan (TPAP) (MoEYS, 2015). The government has implemented the TPAP policy and action plan from 2015 to 2020 which uses a budget of about 2,945 million dollars under collaboration with JICA, UNESCO, UNICEF, World Bank, EU, and SIDA. One priority activity in The TPAP matrix was indicated about the improvement of teacher professional development (ensure pre-service and in-service teacher training) and the related factor which enhances teachers' practice of student-center approach at the school level. However, there is little known from the other policy documents or other relevant documents about to what extent Cambodian teachers get familiar with this approach and how the student-center approach has been implemented in teaching and learning at the secondary level.

3. Methods

To have a rigorous understanding of the current state of the student-center approach implementation and teachers' challenges in practicing this approach, this review needs to look back at the previous literature and research studies on this certain topic, especially the local literature. Therefore, the selection of documents for this review taps into three criteria:

3.1 Document type and scope of content

The selected documents for this review were generated from government policy documents, international partners' reports in the education sector, and certain research articles published on the topic of the "student-center approach in Cambodia".

That would provide a comprehensive review and in-depth discussion of the adoption of the student-center approach and how it is integrated into teaching practices with various support strategies, projects, and policies. Moreover, it could provide historical insights on the development and the current progress of the implementation of the student-center approach at school levels. Those documents provided relevant perspectives for critical synthesis about the

implementation of the student-center approach in the context of Cambodia. The majority of the documents were policy-oriented on perspectives, practices, and training on the student-center approach. The sources of the selected documents were from various active educational stakeholders, including JICA, VVOB, ADB, WB, and UNESCO. These educational partners play a major role in education reform in Cambodia and contribute continuously to the projects from baseline to the evaluation of the project. The findings from their studies enable the current study to have an in-depth discussion on the status of student-center approach implementation and a call for solid policy practices to promote it.

3.2 Timeline of publishing

All the documents ranged from 1996 up to the present. This determination is based on the education structure of Cambodia started 12 years of the education system in 1996, which was the time of pioneering the student-center approach in Cambodia as well.

3.3 Free access from the website

The author didn't choose the document which cannot access online, all the documents were able to be accessed from the MoEYS website, the JICA website, and other educational websites. The author got four government documents, international partner report 1 which covers three different stages of the project, and two research studies written in journal articles as illustrated in Table 1.

3.4 Data analysis

Content analysis was employed to analyze the data. Specifically, rational content analysis was used to analyze the texts extracted from the selected documents that were indexed into three main themes (prior structural themes) which were confirmed before reading the content of the reviewed document. Those themes were 1) teacher training on the student-center approach, 2) supported school policy on the student-center approach, and 3) research on the student-center approach implementation. The concepts or units related to the coded initial referential units were explored and gathered by allocating them to the three themes mentioned above. The referential units represented the three main concepts or units and were used for the discussions in this study. The sub-themes would determine after the actual reading of the contents of each document.

Table 1. Summary of the selected documents.

Author and years of publication	Criteria/Title	Document types	Scope of contents	Samples
JICA (2005, 2012, 2016)	STEPSAM 1-2-3	Report (Baseline survey)	Developing science teaching manual/ inquiry-based learning/lesson study	Science secondary school teachers/ Teacher trainers/educators
MoEYS (2008)	Secondary Resource School	Book	Educational policy	Secondary education
USAID (2010)	Active-Learning Pedagogies as a Reform Initiative: The Case of Cambodia	Report	Progress of promotion student-center in education reform	Public Education
VVOB and MoEYS (2012)	SEAL	Manual	Analogy/Education Game/scientific method Chemistry/Biology Physics/Earth environment	Pre-service science secondary school teachers/teacher trainers
Song (2015)	Cambodian teachers' responses to child-centered instructional policies	Research article	Student-center practice belief and practice	Elementary school teachers
Song (2015)	Cambodian teachers' responses to child-centered instructional policies	Research article	Student-center practice belief and practice	Elementary school teachers
MoEYS (2016)	New Generation School	Book	Educational policy	Primary/Secondary education
King (2018)	CFS policy and Cambodian teacher education and training	Research article	Educational policy implementation	Primary school teachers
MoEYS (2021)	Teacher Career Pathway	Book	Systematic in-service training	All educators
MoEYS (2021)	Professional Learning Communities	Book	Teaching strategies guiding	Elementary/secondary school teachers
King (2021)	Translating policy into practice: Cambodian primary schoolteachers' sense-making of the Child-Friendly Schools policy	Research article	Child-friendly policy practice	Primary school teachers

4. Results and discussions

In the last two decades, the Cambodian government has cooperated with national and international stakeholders to strengthen the quality of public education, especially aiming to increase students' learning achievements. Teachers play a critical role in educational development and reform through their teaching practices. It was found that policies and action plans have been initiated to improve teachers' quality. It has been conducted in the form of short- and long-term training programs, seminars, workshops, and conferences. The sections below corresponded to the main questions "how is the student-center approach introduced for Cambodian teachers and "To what extent is the challenge for teachers to implement the student-center approach?". Responding to the first question, the findings illustrated a snapshot of students-center approach training and supported projects/policies at the school level. The second question corresponded with the findings from research studies of student-center approach implementation at the school level.

4.1 A snapshot of the type of teachers' training regarding the student-center approach

According to the public statistics and indicators for the academic year 2021-2022 (MoEYS, 2021c), the total number of teachers who were currently teaching in public schools was 94, 718 of which 72, 093 of them working in rural areas. Among those teachers, there was no clear single source indicating how many teachers were involved in student-center approach training or what level of student-center approach they had implemented in their teaching. However, there were some indicators illustrating some practical training that involved a large number of teacher educators, teacher trainers, pre-service teachers, and in-service teachers. The training was generally supported by the development partners such as the Japan International Cooperation Association (JICA), the Flemish Association for Development Cooperation and Technical Assistance (VVOB), and others.

4.1.1 STEPSAM

The Secondary School Teacher Training Project in Science and Mathematics (STEPSAM) project has been implemented in Cambodia in three phases: STEPSAM 1 from 2000 to 2005, STEPSAM 2 from 2009 to 2012, and STEPSAM 3 from 2013 to 2016. Each project phase had different objectives for implementation. However, the overall and common goal was to improve science teachers' quality and science teaching practices in secondary education in Cambodia. From 2000 to 2005, the project targeted science and mathematics teachers at the National Institute of Education (NIE). The core aim of the training was to enhance science and

mathematics teachers' capacity, provided training for in-service teachers, and distributed science and mathematics manuals. From 2009 to 2012, the second round of the project introduced the Lesson Study (LS) and Inquiry-Based Learning (IBL) to all pre-service teachers at all Regional Teacher Training Centers (RTTCs) and other 18 Provincial Teacher Training Centers (PTTCs). From 2013 to 2016, the project shifted the focus to developing teachers' guides in science and mathematics from grades 7 to 9 and provided training for teachers' trainers in six RTTCs. The training provided a training course to strengthen content knowledge, scientific skills, and teaching methods such as problem-solving, Inquiry-based learning (IBL), interactive learning, and concept mapping by using a student-center approach in classrooms. It also encouraged teacher trainers to share knowledge that they gained from the training with in-service teachers in their areas. If there was a possibility that the teacher trainers could carry out the training for lower secondary school teachers, the trainers should guide in-service teachers to have a better understanding of using teachers' guidebooks. This guidance should include three important suggestions, namely (1) emphasize how to develop lesson plans and teaching materials for science experiments, and (2) encourage the teacher to include an assessment from teachers' guidebooks into examination to change students' learning norm from memorizing to higher order thinking and solving-problem, and (3) implement lesson study or inquiry-based learning in teaching practices to promote a student-center approach (JICA, 2005, 2016).

4.1.2 The SEAL projects

The pre-service teacher training program for improved teaching and learning of Science Education, *Environmental education*, and *Agricultural Life skills* in basic education (SEAL) project through the VVOB program was run from 2008 to 2013. It focused on building and stimulating a learner-centered approach to science education in Cambodia. The SEAL project trained pre-service teachers in Teacher Training Center (TTCs) and four other attached primary- and lower-secondary-school teachers in Kandal province. Attached primary schools refer to the primary school that are in the cluster with TTCs, the students' teachers from TTCs would do practicum in those attached primary schools. With this project, the selected both pre-service and in-service teachers were given a chance to improve their understanding of the learner-center approach, how to conduct low-cost experiments, and how to stimulate problem-solving skills. The program aimed to develop six manuals, including (1) reading and writing skills in science lessons, (2) science reasoning skills, (3) teaching the scientific methods, (4) conceptual science teaching, (5) model and analogies, and (6) educational games. The project conducted the workshop and introduced all of these manuals to teacher trainers. All contents

were illustrated in Chemistry, Physics, Biology, and Earth Science for the secondary education level. It was expected that they tried out and delivered this knowledge to pre-service teachers at their schools and encouraged them to share it with other teachers of their attached schools (MoEYS, 2013).

4.1.3 Professional development course in teaching methodology

There was a two-month program training course conducted at the National Institute of Education (NIE) and the Nanyang Technological University in Singapore in line with the memorandum of understanding between MoEYS and NIE of Singapore. The training program selected 40 teacher trainers and science teachers to train on various topics in promoting student-center practices, including science inquiry-based teaching methods, social science inquiry-based teaching methods, and concept-based curriculum development. The program provided participants with the knowledge of writing a lesson plan following the IBL concept. Although in-service teachers were trained with these types of content, there are some emerging gaps in its efficiency. The contents of the training might not fulfill the need of the participants. It has been observed that the training was conducted by different development partners with distinct objectives and contents. Most trainings were not well-designed to meet teachers' needs to use in their actual teaching within variations of classroom contexts.

Despite the training on a student-center approach, there have been other initiatives such as policies and the development of teaching manuals that aim to enhance the quality of teaching and learning and promote a constructivist approach. For instance, under the support of the Belgium Development and Cooperation project and the support of the Government of Flanders, the Teacher Training Department of MoEYS has developed science teaching manuals to guide teachers to teach science lessons effectively. The book aims to help science teachers to be able to conduct science lessons following the IBL. A sample lesson plan for Chemistry and Physics lessons is provided in the book along with an explanation of the scientific method (MoEYS, 2016b). Moreover, MoEYS established the Professional Learning Communities (PLC) and Teacher Career Pathway policy in 2021. The PLC aims to create various groups of teachers in teacher training centers, secondary schools, and elementary schools to share their skills and knowledge to improve their teaching. These groups of teachers could develop their career professional development plan by conducting regular meetings upon their agreed schedules. For example, teachers at elementary school can conduct a meeting every Thursday for about three hours, face-to-face or online. The meeting aims to share effective strategies or solutions

to the problems that they have been facing in teaching at schools. It can be the class observation that novice teachers teach and their peers with better teaching experience observe to give practical feedback. It is not limited to only new teachers' class observation. The teaching demonstration can involve experts or experienced teachers who have good teaching experience to share their teaching practices with the other teachers in the same communities, especially on teaching strategies in implementing a student-center approach in public school classrooms. The Teacher Career Pathway policy (MoEYS, 2018) is one of the significant career professional developments that encourage teachers to improve their teaching practices for better student learning outcomes. Students' involvement is always a central focus. Through this policy, teachers or other educational staff are given incentives and extra benefits if they can create a friendly and positive learning environment for learners and generate a high-level learning outcome that meets the country's development goals and visions.

The snapshot of various teacher training on the student-center approach in this review has approached in-service, pre-service teachers, and teachers' trainers on the topic of the student-center approach. Drawing from various training as described above, two critical points of the training can be highlighted 1) content and 2) consistency of each training. The "content" of each training provided the understanding of various teaching strategies and the development of teachers' guidebooks, especially science manuals. Thus, the common teaching strategy that has been guided for Cambodian teachers was inquiry-based learning (IBL), which is incorporated through teacher training supported by government and international partners. While (Richardson, 2003) pointed out the necessity of understanding concisely of constructivism theory and its mechanism first before getting into the various teaching strategies such as IBL, problem-based learning, etc. Because understanding the inside of constructivism theory provides the nuance of mechanism which allow the teacher to apply the various teaching strategies according to their classroom context and culture rather than focus only on one specific teaching strategy. The procedure of training regardless of the content of various teaching strategies or developing manuals should be consistent to endure the quality of the implementation of the training. While most of the professional development or teacher training for Cambodian teachers from international partners could only be conducted in specific projects.

4.2 Supported policies on student-center approach at the school level

Building a high-quality education system requires a strong foundation of teaching quality at the classroom level. In the 21st century, education emphasizes leading students to think and learn rather than only receiving information or knowledge from teachers as the means of learning. Following this mechanism, the constructivism approach ensures that students think and solve problems, leading them to construct essential skills such as critical thinking, problem-solving, cooperative learning, creative, and analytical skills. Therefore, the MoEYS has put a strong effort to develop various types of schools and policies to achieve these visions.

4.2.1 Secondary Resource School Policy (SRS)

MoEYS established a policy on Secondary Resource Schools in 2008. The Secondary Resource Schools (SRS) have been regarded as a school model for other schools in Cambodia. They are defined as schools equipped with a laboratory, library, computer room, and source of electricity and water. Besides the dominant development of the infrastructure, SRS plays an important role in promoting professional development for teachers. They include sharing experiences of teaching and learning, strengthening leadership and management, and developing teacher competency amongst school networks in the communities (MoEYS, 2008). This has been advised and supported by the Asia Development Bank (ADB) through the Upper Secondary Education Sector Development Project (USESDP) I and II. One of the main goals of SRS is to adopt powerful teaching and learning methodologies and approaches, specifically the constructivist approach. Because SRS is supposed to conduct demonstration classes and micro-teaching classes on specific topics in their network schools, they help teachers not only from SRS but also from network schools to learn about simple experiments and be able to use the local or supporting materials to do experiments for science classes. A report from the USESDP II (ADB, 2019) showed that the number of SRS has reached 137 schools where 50 schools are SRS and other 87 schools are the network schools.

4.2.2 New Generation School Policy (NGS)

The New Generation Schools (NGS) are a type of school that were developed in line with the Child-Friendly School with a higher standard and focus on a student-center approach. NGS is a nascent initiative and the Cambodian equivalent of charter school in the United State. The Cambodian government has thought to build the autonomous public schools that flexible enough to equip students with the quality education. The NGS was established through the establishment of the NGS policy developed in 2016 (MoEYS, 2016a). There have been 11

schools that have been transformed into NGS across the country. Seven schools are located in rural areas, namely Svay Pro Hout Primary School in Svay Rieng province, Kauk Pring Lower Secondary School in Svay Rieng province, Samdach Chea Sim Prek Anchanh High School in Kandal province, Angkor Ban Primary School in Kampong Cham province, Hun Sen Peam Chi Kang High School in Kampong Cham province, Bun Rany Hun Sen Ampor Voan Upper Secondary School in Thbong Khmum province, and Preah Reach Akeakmohesei Primary School in Kampong Speu province. The other four schools are located in urban areas such as Preah Sisovath High School and Prek Leap High School in Phnom Penh and Hun Sen kampong Cham Primary School and Hun Sen Kampong Cham High School in Kampong Cham province.

A primary objective of the establishment of NGS is to improve teaching standards by adopting new teaching and learning approaches. For instance, a problem-based learning methodology has been integrated with new educational software for teaching and learning science subjects, for example, a 3D classroom. According to Grobler (2015), NGS allow each class to reduce the number of students so that it increases the opportunity for individual student's learning activities and involvement in the teaching and learning process. The smaller class size provides an advantage to both students and teachers to wander around the assigned tasks effectively (Jones, 2007). They also enable teachers to keep tracking each student's learning. It allows students to have a chance to speak and listen to their peers. Moreover, NGS aims to ensure increasing the number of hours of instruction for students to 40 hours per week for the secondary level and 34 hours for the primary level. Teachers in NGS are required to be well-prepared for the lessons and ensure that teachers do not require students to pay for any handouts or documents. The most distinctive and unique feature of SRS is the abolishment of private tutoring classes that are commonly practiced in Cambodian public schools (Nhem & Kobakhidze, 2022). Moreover, teachers receive an extra budget in addition to their regular monthly salary. The support budget is supported by the government, development partners, international organizations, and especially the communities (such as parents).

That was a positive change in the effort of improving student-center practice at the school level in Cambodia through the initiation of the NGS policy and SRS policy. These policies were drawn from the school-Based Management compliance (MoEYS, 2021b), which aims to improve education at the school level through decentralization, autonomy, leadership, capacity, and accountability. However, the number of NGS schools is still limited and the assessment of outcome still needs to investigate.

4.3 Research on student-center approach implementation at the school level

Besides implementing policies and practicing a student-center approach at public schools, the government has collaborated with relevant stakeholders in the education sector to establish more support initiatives to ensure that a student-center approach is practically implemented. Those initiatives are in the form of research, project monitoring and evaluation, and assessments. The following sections highlight some findings from previous research on student-center-approach practices in the context of Cambodia.

A study by Song (2015) denoted that primary school teachers from two districts in Cambodia who were interviewed about their beliefs and the implementation of a student-center approach in their teaching believed that the student-center approach and teacher-center approach benefited students in different ways. The findings of the study reported that although a student-center approach was claimed to be used in the classrooms, a teacher approach was found to be commonly employed in engaging students in teaching and learning activities. For example, in mathematics lessons, the common activities were in the form of solving the computational exercises on the blackboard. Moreover, teachers tended to ask students to only memorize the rules, while other activities, including working in a small group, solving and discussing with peers, making a conjecture, and posing a problem were not commonly initiated. Therefore, the study claimed that the implementation of a student-center approach in primary education did not exist. Although teachers had a strong belief in the effectiveness of the approach, their instruction mostly followed the conventional approach. It was denoted that this issue happened due to several constraints, including variations in students' ability, large classes, scarcity of teaching resources, and the disproportionate contents of the curriculum.

Moreover, the study of student-center-approach implementation in secondary education has been revealed in the study of (Khieng & Dahles, 2015). They commonly found that students' skills and knowledge did not meet the needs of the 21st-century-job market such as critical thinking skills, teamwork skills, and problem-solving skills. These results significantly marked that the teaching quality, the implementation of a student-center approach, and guidance on critical thinking and problem-solving skills were inadequate. Furthermore, some teachers in the King's (2018) study claimed that they had uncertainty about how to teach his/her students using a student-center approach. He/she elaborated "I am not sure how to teach, and I want to learn more about new methodology". I think "I lack the knowledge and skills to teach and I need further training on the student-center approach. A recent study by (E. King, 2021) has revealed how Cambodian primary school teachers connect CFS to their teaching

practice-that to say they constructed the student-center approach (child-friendly approach) within the framework of their prior knowledge, pedagogical knowledge, and worldview. For example, some teachers in the study said that “I use the old methodology in my lessons”, or “calling some students to the front to write on the chalk”, and sometimes “I face difficulties to perform the experiment, especially in science subjects”.

To some extent the research on student-center implementation in Cambodia is not yet resourceful to draw solid perspectives and challenges, however, from these main reviewed local articles, there were few points to consider. First, the challenge of implementing a student-center approach has been placed on elementary teachers. They have to deal with many subjects teaching and require much understanding of various subject matter knowledge (Richardson, 2003), and the teachers at the secondary level still expressed their low self-esteem of performing this approach and concern about the right way of doing it (Nith et al., 2010).

5. Conclusions and recommendations

It has been observed that the improvement in teacher quality has become a central focus of the government, especially on teaching methods and approaches. There are various positive changes to teaching practices that are often regarded as traditional and a teacher-center cornerstone. With the initiatives in the form of trainings and policy support, Cambodian teachers were found to become familiar with the student-center approach with a specific understanding to some teaching approaches such as IBL, and problem-based learning and have a strong belief in its applications.

However, it remains many challenges remain in the actual teaching practices in schools, especially with regard to the teachers’ capacity and attitudes toward the student-center approach. Some teachers expressed their low confidence in integrating and implementing this approach because they did not have sufficient knowledge and skills. In this regard, the government, through MoEYS should set out appropriate interventions that encourage and enable teachers to effectively adopt and use the student-center approach in their teaching practices. It can be done by strengthening related education policies through project activities, developing teaching manuals and guidebooks by integrating student-center support activities and tasks in each lesson, and providing more training that mainly emphasizes teaching methods with a cornerstone of the student-center approach. It is advised that cooperation and collaboration with school principals are crucial to monitoring teachers’ teaching practices. This study suggests that there should be more empirical studies at the school level on student-center

implementation with a strong focus on how teachers of different subject areas both science and social studies manage to implement this approach. In particular, a study on best practices of the student-center approach at all levels is deemed an important mirror for other teachers.

6. References

- ADB. (2022). *Basic Statistics. Statistics and Data Innovation Unit.*
- Ayres, D. M. (2000). Tradition, modernity, and the development of education in Cambodia. *Comparative Education Review, 44*(4), 440–463.
- Bunlay Wayne Wright Hor Sophea Kurt Bredenburg, N. E., Singh, M., Joseph Kennedy, T. P., & Foundation, J. (2010). *Active-Learning Pedagogies as a Reform Initiative: The Case of Cambodia.*
- Collins, J. M. (2009). *Reconstructing access in the Cambodian education system.* In D. B. Holsinger & W. J. Jacob (Eds.), *Inequality in education: Comparative and international perspectives.* Springer.
- Dy, S. S., & Ninomiya, A. (2003). Basic education in Cambodia: The impact of UNESCO on policies in the 1990s. *Education Policy Analysis Archives, 11*, 1–20.
<https://doi.org/10.14507/epaa.v11n48.2003>
- Grobler, H. (2015). *The Student-Centered Classroom The Student-Centered Classroom.*
- JICA. (2005). *Summary of Synthesis Study of 'Evaluation in Science and Mathematics Education Project 1.*
- JICA. (2016). *STEPSAM 3.*
- Jones, Leo. (2007). *The student-centered classroom.* Cambridge University Press.
- Khieng, S., & Dahles, H. (2015). Resource Dependence and Effects of Funding Diversification Strategies Among NGOs in Cambodia. *Voluntas, 26*(4), 1412–1437.
<https://doi.org/10.1007/s11266-014-9485-7>
- King, E. (2021). Translating policy into practice: Cambodian primary schoolteachers' sense-making of the Child Friendly Schools policy. *Compare, 00*(00), 1–18.
<https://doi.org/10.1080/03057925.2020.1866495>
- King, E. F. (2018). CFS policy and Cambodian teacher education and training: Beeby revisited. *International Education Journal, 17*(2), 16–29.
- Matthews, W. J. (2003). Constructivism in the Classroom: Epistemology, History, and Empirical Evidence. *Teacher Education Quarterly, 30*(3). <https://about.jstor.org/terms>

- MoEYS. (2008). *Secondary Resource Schools Policy*.
- MoEYS. (2013). *Student Centred Approaches for Science Education*.
- MoEYS. (2015). *Teacher Policy Action Plan*.
- MoEYS. (2016a). *Policy Guidelines for New Generation Schools. September*.
- MoEYS. (2016b). *Teaching manual: teaching and learning science effectively*. Teacher Training Department.
- MoEYS. (2018). *Policy Framework on Teacher Career Pathways*.
- MoEYS. (2021a). *Education Statistics and Indicators*. Ministry of Education Youth and Sport, Cambodia.
- MoEYS. (2021b). *Implementing School-based Management*.
- MoEYS. (2021c). *Public Education Statistics & Indicators*.
- Nhem, D., & Kobakhidze, M. N. (2022). New Generation Schools in Cambodia: a farewell to shadow education? *Asia Pacific Journal of Education*.
- Richardson, V. (2003). Constructivist Pedagogy. *Teachers College Record*, 105(9), 1623–1640. <https://doi.org/10.1046/j.1467-9620.2003.00303.x>
- Song, S. (2015). Cambodian teachers' responses to child-centered instructional policies: A mismatch between beliefs and practices. *Teaching and Teacher Education*, 50, 36–45. <https://doi.org/10.1016/j.tate.2015.04.004>
- Wheeler, C. (1998). *Rebuilding Technical Capacity in UNICEF/Sida Supported School Clusters: A Study of UNICEF's Capacity-Building (Education) Project 01*.