

The Annual Follow-Up Seminar serves as a platform for recent graduates from Hiroshima University in Japan and both novice and experienced researchers to exchange their research findings with students, researchers, policymakers, development partners, and other educational stakeholders. This collaborative effort contributes to the ongoing development of education in Cambodia.

Through this seminar, participants gain insights into the diverse challenges faced in educational development in Cambodia and explore practical implications for addressing these challenges. Presenters and participants will also be introduced to the Cambodian Journal of Educational Development, a peer-reviewed journal in the field of education publishing a single volume annually.

For more detailed information about publications, please join us on 1st December, 2023 at Phnom Penh Teacher Education (PTEC) in Cambodia and visit our website at https://cjed.hiroshima-u.ac.jp.



Carrier Telegram: 012 594 488



cjed.organizer@gmail.com











Scan to Register! the Proceeding

The research follow-up seminar has been a longstanding tradition, spanning over six years since its inception in 2014. Initially designed for current master's students and master's graduates from Hiroshima University (HU) under the Project for Human Resource Development Scholarship by Japanese Grant Aid (JDS) to share their theses or research studies conducted after graduation, the seminar has evolved significantly. Innitaially, its primary objective is to foster a research culture among JDS current master's students and master's graduates and promote their academic and professional development. The seminar's scope has recently broadened to welcome presenters from other programs, such as the Special Program for International Students in Education (SPIES) and JICA Long-term Training.

Historically, the seminar focused exclusively on education, JDS current master's students and master's graduates and others (SPIES and JICA Long Term Training) were informed and invited to present their research findings after graduation. Typically held as a single-day event, each presenter is allocated 20 minutes for their presentation, including 10 minutes for a question-and-answer session. The seminar has been annually organized by an operating committee consisting of professors from HU.

During the 2019 JDS follow-up seminar, the operating committee decided to transfer the responsibility of organizing the seminar to fresh graduates from HU, aiming to enhance autonomy and sustainability. Therefore, HU newly graduated students from each year are responsible for organizing the seminar every year. This year seminar is organized by 2023 graduates from HU.

Simultaneously, in 2019, the committee also proposed publishing research studies presented in the seminar to disseminate results nationally and internationally, serving as valuable scientific evidence for researchers, academicians, and policymakers. Consequently, the "Cambodian Journal of Educational Development (CJED)" was established with direct support from HU. The journal comprises eight committee members with diverse backgrounds in education. Starting in 2020, the seminar expanded its scope to include opportunities for not only JDS, SPIES, and JICA Long Term Training students and graduates but also Cambodian researchers and academicians (from master's to Ph.D. students) to present and publish their research through the JDS follow-up seminar in collaboration with CJED.

### **About CJED**

The Cambodian Journal of Educational Development (CJED) is a peer-reviewed journal dedicated to publishing research manuscripts in the field of education. The journal focuses on disseminating empirical research studies that hold clear significance for educational development prospects. By submitting manuscripts, authors affirm that the work has not been previously published, is not under consideration elsewhere, and has received approval from all co-authors and relevant authorities at the institute where the study was conducted. The publisher assumes no legal responsibility for compensation claims.

To ensure timely and high-quality publication, CJED follows a single-blind peer-review process. Researchers interested in publishing their studies with us are encouraged to submit their manuscripts to <a href="mailto:cameditorialboard@gmail.com">cameditorialboard@gmail.com</a> before the specified deadlines.

Established in 2019 with direct support from Hiroshima University, Japan, CJED is managed by an editorial board comprising Cambodian graduates and Japanese professors from Hiroshima University.

Official website: https://cjed.hiroshima-u.ac.jp/

Official Facebook page: <u>Cambodian Journal of Educational Development-CJED</u>

### **Seminar Program**

**Date:** Friday, December 1, 2023

**Time:** 8:00 am - 18:00 pm

**Venue:** Phnom Penh Teacher Education College (PTEC)

Time	Agenda
8:00 – 8:30	Registration
8:30 – 8:35	Starting the program (MC)
8:35 - 8:55	Wecome remarks by:
	H.E. Assoc. Prof. Dr. Set Seng
	Director, Phnom Penh Teacher Education College, Cambodia
	Opening remarks by:
	Dr. Kinya Shimizu
	Professor, Graduate School of Humanities and Social Sciences,
	Hiroshima University, Japan
8:55 – 9:15	Presenter 1: Dy Chanpiseth
	2023 Master's Graduate, Graduate School of Humanities and
	Social Sciences, Hiroshima University, Japan
	Topic: Measuring Cambodian Teacher Educators' Digital
	Competence

9:15 - 9:35	Presenter 2: Prean Sopheak
	2023 Master's Graduate, Graduate School of Humanities and
	Social Sciences, Hiroshima University, Japan
	<b>Topic:</b> Pre-service Teachers' Critical Thinking Disposition
	Barriers and Teaching Styles in Cambodia
9:35 - 9:55	Presenter 3: Phou Sophal
	2023 Master's Graduate, Graduate School of Humanities and
	Social Sciences, Hiroshima University, Japan
	<b>Topic:</b> Teachers' Perceptions of Active Learning Approach and
	Their Practices in Social Studies Classes at Lower Secondary
	Schools in Battambang, Cambodia
9:55 - 10:15	Procentor 4: Long Kanha
9.55 – 10.15	Presenter 4: Long Kanha
9.55 - 10.15	Teacher Trainee, Phnom Penh Teacher Education College,
9.55 - 10.15	
9.33 – 10.13	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia
9.33 – 10.13	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking
	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking Skills for grade 7: A Case study of Cryptogam Lesson in Biology
10:15 - 10:30	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking
	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking Skills for grade 7: A Case study of Cryptogam Lesson in Biology
10:15 - 10:30	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking Skills for grade 7: A Case study of Cryptogam Lesson in Biology Tea break
	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking Skills for grade 7: A Case study of Cryptogam Lesson in Biology Tea break  Presenter 5: Eng Mey
10:15 - 10:30	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking Skills for grade 7: A Case study of Cryptogam Lesson in Biology Tea break  Presenter 5: Eng Mey 2023 Master's Graduate, Graduate School of Humanities and
10:15 - 10:30	Teacher Trainee, Phnom Penh Teacher Education College, Cambodia  Topic: Using Think-Pair-Share to Improve students' Speaking Skills for grade 7: A Case study of Cryptogam Lesson in Biology Tea break  Presenter 5: Eng Mey

13:50 - 14:10	Presenter 9: Ouch Sreypouv
	PhD Candidate, Graduate School of Humanities and Social
	Sciences, Hiroshima University, Japan
	,, ,
	<b>Topic:</b> Identification of Science Teachers' Questioning during
	IRE/F Dialogue at Junior High School Classes in Cambodia
14:10 - 14:30	Presenter 10: Nhim Channthol
0	Teacher Trainee, Phnom Penh Teacher Education College,
	Cambodia
	<b>Topic:</b> Using Positive Non-verbal Communication to Enhance
	Teacher-Pupil Interaction in the Mathematics Class of Grade 7
14:30 – 14:50	Presenter 11: Sengsoulintha Khampheng
14.50	PhD Candidate, Graduate School of Humanities and Social
	Sciences, Hiroshima University, Japan
	Sciences, imosimia omversity, Japan
	<b>Topic:</b> Professional Development of Teacher Educators in Laos:
	Focusing on Teacher Training Colleges
14:50 – 15:10	Presenter 12: Un Sreynet
14.50 15.10	PhD Candidate, Graduate School of Humanities and Social
	Sciences, Hiroshima University, Japan
	Sciences, imosimia omversity, Japan
	<b>Topic:</b> Integrating Digital Citizenship Education in Cambodian
	Junior High School Curriculum
<b>15:10 – 15:30</b>	Presenter 13: Seng Sovath
13.10 - 13.30	PhD Candidate, Graduate School of Humanities and Social
	Sciences, Hiroshima University, Japan

	Topic: Development of School Principal Preparation and
	Professional Development Programs in Cambodia
15:30 – 15:45	Tea break
15:45 – 16:05	Presenter 14: Chann Sulen
	Teacher Trainee, Phnom Penh Teacher Education College,
	Cambodia
	<b>Topic:</b> Using Concept Cartoons to Enhance Student Learning
	Outcomes: A Case Study of Instantaneous Velocity and
	Acceleration in 8th Grade Physics
16:05 – 16:25	Presenter 15: Say Sokunpharoth
	2023 Master's Graduate, Graduate School of Humanities and
	Social Sciences, Hiroshima University, Japan
	<b>Topic:</b> Community Participation in School Management
	Contributing to Promotion Rates in Primary Schools in
	Cambodia: A Case of Kampong Thom Province
16:25 – 17:00	Commentary session
	Dr. Kinya Shimizu
	Professor, Graduate School of Humanities and Social Sciences,
	Hiroshima University, Japan
	Dr. Takayoshi Maki
	Associate Professor, Graduate School of Humanities and Social
	Sciences, Hiroshima University, Japan

17:00 – 17:30	Introduction to Cambodian Journal of Educational
	Development (CJED)
17:30- 18:00	Present Certificates to Presenters by:
	Dr. Kinya Shimizu
	Dr. Takayoshi Maki
	Group Photo Session

#### Note:

- This schedule is subject to change.
- Each presentation takes **20** minutes, including **10** minutes for a presentation and **10** minutes for a question-and-answer session.

#### **Abstract**

#### **Presenters**

#### 1. DY Chanpisith

2023 Master's
Graduate,
Graduate School of
Humanities and
Social Sciences,
Hiroshima
University, Japan

#### **Abstract**

### Measuring Cambodian Teacher Educators' Digital Competence

Successful ICT integration in education requires teacher education reforms to enhance teachers' digital competence. However, limited research exists on the digital competence of teacher educators in Cambodia. The survey design of this study aims to address this gap by examining the digital competence of 121 Cambodian teacher educators using the DigCompEdu framework. The findings indicate that Cambodian teacher educators perceive themselves at a moderate level of digital competence. The study reveals significant differences in digital competence based on educational background and teaching subjects, while gender, age, and teaching experience are independent. Furthermore, the study highlights the importance of ICT training and institutional support, including the promotion of ICT in education, continuous professional development, technological infrastructure, and internet connectivity, in predicting the level of digital competence among teacher educators. The implications of this study emphasize the need for intervention and policy approaches to develop teacher educators' digital competence in Cambodia. Specifically, professional development programs should incorporate ICT training focused on using digital tools for teaching, and institutions should offer support to improve technical and professional skills. Future research should consider objective assessments of teacher educators' digital skills and expand the participant selection criteria to comprehensively understand Cambodian teacher educators' digital competence.

Keywords: Digital competence, ICT in education, Teacher educators, Teacher education, Cambodia

#### 2. Prean Sopheak

2023 Master's
Graduate,
Graduate School of
Humanities and
Social Sciences,
Hiroshima
University, Japan

## **Pre-service Teachers' Critical Thinking Disposition Barriers** and Teaching Styles in Cambodia

Teacher education refers to a formal program that was created to prepare and train teachers. Teaching styles are the ways in which students and teachers interact in the classroom. To select a good teaching style, critical thinking is essential. Critical thinking is reasonable and reflective thinking focused on deciding what to do or believe. Therefore, the study of critical thinking disposition barriers and pre-service teachers' teaching styles was conducted at Phnom Penh and Battambang Teacher Education Colleges in Cambodia to identify the relationship between critical thinking disposition and teaching styles. The two hypotheses formulated for this study were as follows. "There are three factors governing pre-service teachers' critical thinking disposition barriers" and "There are five pre-service teachers' teaching style". There were 414 pre-service teachers of year three who joined the project. The result found that there are two factors of critical thinking disposition barriers and three teaching styles of pre-service teachers. In the regression model, avoidance of responsibility showed a strong relationship of teaching as leader with expertise and teaching as authority. While existing value and authority showed the high relationship of teaching as guide and teaching as leaders with expertise. This meant that critical thinking disposition barriers can predict the teaching styles of pre-service teachers. The stronger tendency of "avoidance of responsibility", the somewhat weaker "teaching as guide", and the stronger the tendency of "inclination to existing value", the stronger "teaching as guide".

Keywords: Pre-service teacher, Teaching styles, Critical thinking disposition

#### 3. Phou Sophal

2023 Master's
Graduate,
Graduate School of
Humanities and
Social Sciences,
Hiroshima
University, Japan

#### Teachers' Perceptions of Active Learning Approach and Their Practices in Social Studies Classes at Lower Secondary Schools in Battambang, Cambodia

This study investigates lower secondary school social studies teachers' perceptions and practices of active learning (AL) in Battambang, Cambodia. It employed mixed method, using a questionnaire survey of one hundred and five social studies teachers, a semi-structured interview with seven teachers, and six classroom observations. Accordingly, most of the teachers held a positive perception of AL, but their AL practices in their classrooms are on average. Challenges of AL practice related to large class sizes, lack of materials and resources, time constraints, overloaded content, inadequate teacher training, and students' low learning interest and ability. In line with results from the questionnaire survey and interview, the classroom observations showed that the teachers mostly used question-answer, homework, group work, and visual aid teaching methods, using the lecture method only supplementarily. Indeed, policymakers and curriculum developers should create a curriculum that supports AL practices and publish manuals and guidelines with clear instructions for practicing AL. Additionally, the guidelines should be integrated into pre- and in-service teacher training, as relevant to AL. Moreover, teachers should enhance their teaching skills relevant to AL through personal and professional development.

Keywords: Perception, Practice, Active learning, Social studies, Lower secondary school

### 4. Kanha Long and Kimsron Srieng

Teacher Trainees, Phnom Penh Teacher Education College, Cambodia

## Using Think-Pair-Share to Improve students' Speaking Skill for grade 7: A Case study of Cryptogam Lesson in Biology

The study about "Using Think-Pair-Share to Improve students' Speaking Skill for grade 7" has two objectives: (1) identify about the challenges of students' speaking skill (2) Evaluate students' speaking skill after practiced Think-Pair-Share strategy. This study conducted for 10 weeks at Chea Sim Samaki High School in grade7 of the academic year 2022-2023 by selected 140 samples, including 86 students and 54 teacher practicums from Phnom Penh Teacher Education College. This research used mix methods which had research tools such as a questionnaire on student challenge, observation form, an interview questionnaire, and perception survey by 5 points Likert scale. Quantitative data used SPSS (IBM SPSS statistic 22) and Microsoft Excel 2019 to analyzed data and qualitative data analyzed by situation context. The study found that the challenges of students' speaking skill were i) students had not enough opportunities for speaking, ii) students did not perform good selfintroduction, iii) students could not use words appropriately, iv) students useless body gestures, v) students did not know the concept of explanation and students had less confidence. By the result of observation and interview, the implementation of Think-Pair-Share strategy was positive impacts of students' speaking skill.

Keywords: Think-pair-share strategy, Speaking skill

#### 5. Eng Mey

2023 Master's
Graduate,
Graduate School of
Humanities and
Social Sciences,
Hiroshima
University, Japan

## Student Teachers' Learning during Teaching Practicum at Regional Teacher Training Centers in Cambodia

Teaching practicum plays a crucial role in strengthening the teaching skills of student teachers in language education (Nguyen, L., 2014; Nguyen, H.T.M., 2017). However, empirical evidence on practical knowledge gained by preservice language teachers during teaching practicum is limited (Tang, 2013; Wyatt & Borg, 2011). Additionally, there is a current gap in understanding the learning experiences of EFL student teachers during practicum. This study aims to explore the learning process of EFL student teachers throughout their practicum, by using a qualitative case study and investigating three research questions: (1) What did EFL student teachers expect to learn from teaching practicum? (2) What did EFL student teachers learn during the teaching practicum? (3) How did EFL student teachers learn during their teaching practicum? Data collection involved observations, reflection, and interviews, with subsequent analysis conducted using theme analysis. The study revealed that EFL student teachers actively improved lesson planning, teaching strategies, and classroom management during practicum. They enhanced teaching abilities through participation in planning, delivering lessons, and administrative tasks. They acquired instructional techniques, classroom management, and enhanced communication and time management abilities. The utilization of online resources, observation of fellow student teachers, and close collaboration with mentors further enriched their learning experiences.

Keywords: Teaching practicum, RTTC supervisor, School mentor, Student teacher

#### 6. Bun Pichchenda

2023 Master's
Graduate,
Graduate School of
Humanities and
Social Sciences,
Hiroshima
University, Japan

### **Teacher Training in Inquiry-Based Learning Approach in Social Studies in Cambodia**

This case study aimed to explore the characteristics, level of implementation, and challenges of training Inquiry-Based Learning (IBL) in Cambodia, specifically focusing on the social studies subject used in Provincial Teacher Training Centers (PTTCs) and Primary Schools. This study, researcher focuses on mix group are teacher trainers and initial primary school teachers. Researcher have put forward a hypothesis stating that an inquiry-based learning model addresses the limitations found in traditional learning methods. This study, researcher found that both teacher trainers and initial primary school teachers held a positive perception of the IBL approach due to its ability to promote critical thinking and students' engagement. In teacher training centers, the level of IBL implementation in social studies was primarily at level 2, known as "guided inquiry." In primary schools, the level of IBL implementation in social studies was mostly at level 1, referred to as "structured inquiry." In conclusion, social studies, as a subject area, deals with complex and real-world issues, making it an excellent domain for implementing IBL. Through inquiry-based learning, students can explore historical events, analyze societal structures, and understand global challenges in a more engaging and interactive manner.

Keywords: Social studies, Inquiry-based learning, Teacher training center, Teacher trainers, Trainees, Initial primary school teacher

#### 7. Phearun Reth, Sopheak Oeurn, Phakdey Khlout, and Raksmey Thin

Teacher Trainees, Phnom Penh Teacher Education College, Cambodia

## Titration and pH Measurement on Consume Acids Analysis by Nernst Equation

Chemistry procedures frequently employ the typical method of acid-base titration. Even though titration is crucial, it would not function properly without pH measurement. The purpose of this study was to examine 1) the accuracy of pH measurement using a pH meter versus pH papers when compared to the theoretical pH computed using the Nernst equation, and 2) the calculation of the concentration of organic acids in daily life. The results showed that the pH values of the three acids-acetic acid in vinegar, acetyl salicylic acid in aspirin, and citric acid in lemon were calculated with greater accuracy and were found to be, respectively, 9.000/9.780, 9.000/9.310, and 9.000/8.770 using an accurate and secure experiment using a pH paper and pH meter. In an accurate and secure experiment using a pH paper and pH meter the concentrations of acetic acid in vinegar, acetyl salicylic acid in aspirin, and citric acid in lemon were determined to be 0.180M/0.184M, 0.021M/0.020M, and 0.033M/0.037M, respectively. In contrast, the descriptive statistic P>0.05 showed no significant difference when pH was measured in the lab using a pH meter and pH paper. Further research should concentrate on identifying additional acids that are prevalent in daily life.

Keywords: Titration, Potential of Hydrogen (pH), Consume acids, Nernst equation

#### 8. Khut Sokha

PhD Candidate, Graduate School of Humanities and Social Sciences, Hiroshima University, Japan

# Development and Validation of the TSTSIS Instrument to Measure Teachers' Self-Efficacy to Teach Science Through Integrated STEM Approach

This study aimed to develop an instrument with acceptable validity and reliability for assessing two key aspects among science teachers: their self-efficacy in teaching science through an integrated STEM approach and their outcome expectancy when employing this approach, which we refer to as TSTSIS. We administered this tool to 109 science teachers in Phnom Penh city and various provinces in Cambodia. The results revealed that self-efficacy in teaching science through an integrated STEM method (STSIS) can be broken down into six essential latent factors. Among these factors, five are grouped under the theme of "Integrated STEM Instructional Self-Efficacy," covering problem-based, robots-based, inquirybased, engineering-based, and technology-based instructional self-efficacy. The sixth factor relates to teachers' self-efficacy in terms of accessing personnel and materials. The author formulated the subscale "Expectations of High Students' Achievement in Science" as the factor representing the Integrated STEM Teaching Outcome Expectation component (OETSIS). Scores on the TSTSIS subscales offered evidence of its criterion validity, with significant differences observed across various teacher-related variables. These variables include teachers' teaching qualifications, school types, teachers from schools where STEM education and an integrated STEM approach are part of the school's objectives, and correlation with instructors' teaching experience. The TSTSIS subscale serves as a valuable tool, benefiting both the psychological and professional aspects of assessing science teachers' self-efficacy in implementing integrated STEM approaches. It also lays the groundwork for designing STEM training programs tailored to the needs of science instructors.

Keywords: Integrated STEM, Self-efficacy, Science teaching, Scale validity

#### 9. Ouch Sreypouv

PhD Candidate, Graduate School of Humanities and Social Sciences, Hiroshima University, Japan

## Identification of Science Teachers' Questioning during IRE/F Dialogue at Junior High School Classes in Cambodia

In science class, teachers' questioning is the fundamental tool, pedagogy practice, for promoting students' thinking skills by guiding them to explore a range of logical outcomes rather than lecturing them on what is right or wrong. Therefore, to describe a situation through a specific example, this study aimed to learn and explore the typical type of questions and how they are allocated for teaching science lessons practiced by various experienced teachers in Cambodia at the junior high school level. Five teachers from a school in the province and a school in the city were selected for class observation and video lesson recording of their chemistry class in grade 7th. All adjacency pairs of questions during the Initiated-Response-Evaluation/Feedback dialogue from the transcribed video lesson were analyzed using a coding framework developed by the author, which adapted the model from Bloom's taxonomy, Oliveira, and Mehan. The findings showed that the teachers used 87% of lower-order questions with 13% of higher-order ones in the application level of Bloom's taxonomy for teaching an hour chemistry lesson. The classroom dialogue followed the IRE rather than the IRF sequence, evidenced by the frequent praise of the correct answer and the fewer prompt questions after the students answered incorrectly. The study suggested that to enhance students' thinking skills, teachers should better understand the cognitive role of each question type rather than employ the questions to get only the correct responses to the concept.

Keywords: Science lesson, Teachers' questioning, IRE/F dialogue, Bloom's taxonomy, student's thinking skill

### 10. Nhim Channthol

Teacher Trainee, Phnom Penh Teacher Education College, Cambodia

# Using Positive Non-verbal Communication to Enhance Teacher-Pupil Interaction in The Mathematics Class of Grade 7

The study aims to investigate the effectiveness of teachers' use of positive non-verbal communication (NVC) with students and how it enhances teacher-pupil interaction in math class. In this research, three students from Grade 7 were selected from a total of forty-three students at Chea Sim Samaky High School in Phnom Penh by using a qualitative research method. The researchers used observation and interviewing as data collection tools by observing three students four times and interviewing three students for 10 to 15 minutes each. The researcher analyzed the interview questions using the six steps of thematic analysis. Based on the results of this research, the researcher can conclude that the use of positive non-verbal communication in the classroom influences the interaction between teachers and students and can help motivate students to be closer to the teacher, increase student interest in learning, support student engagement, and help reach the emotional support of students as well. Finally, it is possibly suggesting further research on positive non-verbal communication be conducted at all levels of education based on the study's findings. After employing positive non-verbal communication in mathematics class, the researcher proposed that other teachers do it with greater frequency. Later, researchers should use this method on other subjects as well.

Keywords: Non-verbal communication, Teacher-student interaction

### 11. Sengsoulintha Khampheng

PhD Candidate, Graduate School of Humanities and Social Sciences, Hiroshima University, Japan

# **Professional Development of Teacher Educators in Laos:** Focusing on Teacher Training Colleges

Most of teacher educators have had the overloaded works and collaboration barriers in working (DTTC QA report, 2017). Therefore, this research aims to (1) identify the required qualifications and roles of teacher educators in Laos (2) clarify the significance and challenges of the existing systems and policies in supporting the professional learning and growth of teacher educators in Laos, and (3) develop the ideal measures and functional systems in supporting the professional development of teacher educators in Laos by a comprehensive examination of the results of research questions 1 and 2 from the perspectives of international comparison, along with examples from other countries. This qualitative research includes a non-probability sampling or convenient sample, Longitudinal design, the interpretivism design. This study examines and analyzes the multilayered documents, ranging from policy, relevant laws, regulations, and announcements to open recruitment for teacher educators to understand their status and roles. Then, the study will further explore the realities of difficulties and challenges the teacher educators in Laos are facing, particularly in developing their profession. The research data will be from a questionnaire survey, observations of activities and tasks relating to the professional growths, and the semistructured interview with teacher educators, administrators, and other stakeholders.

Keywords: Teacher educator, Teacher training college, professional development, Professional learning and growth

#### 12. Un Sreynet

PhD Candidate, Graduate School of Humanities and Social Sciences, Hiroshima University, Japan

### **Integrating Digital Citizenship Education in Cambodian Junior High School Curriculum**

In the contemporary world, digital realm engagements in education have significantly urged to contribute to building a resilient education system and its transformation. Digital citizenship education becomes highly worthy of attention to promote a more effective, responsible, and ethical virtual environment in education. Meanwhile, the concept and practices of digital citizenship education remained lagged behind in the Cambodian context. In Cambodia, online safety, media literacy, and digital literacy among adolescents remain a pressing issue. Therefore, the present study aims to examine the challenges and effective approaches to incorporate digital citizenship education in Cambodian junior high school education curriculum to address the potential risks of digital technology in education. The study employs a mixed-methods design. A survey questionnaire will be administered to measure students' digital citizenship skills and explore their perceptions and experiences towards digital citizenship skills. Subsequently, A competency-based curriculum for digital citizenship education will be developed and piloted to analyze its effects through mixed experimental design. Lastly, the study undertakes case study designs to identify the pivotal challenges/barriers that disrupted the implementation through semi-structured interviews with key stakeholders and explore heterogeneous cases of best practices of digital citizenship education. The consequences of the study will contribute to optimizing the curriculum by integrating digital citizenship education to nurture tech-savvy and conscientious digital adolescents in the Cambodian context.

Keywords: Digital citizenship, Digital citizenship education, Junior high school, Curriculum, Cambodia

#### 13. Seng Sovath

PhD Candidate, Graduate School of Humanities and Social Sciences, Hiroshima University, Japan

## **Development of School Principal Preparation and Professional Development Programs in Cambodia**

In Cambodian context, school principals have never been ready before they become principals. Classroom teachers are promoted as school principal without any specific training program. School principal preparation and professional development programs are under the preliminary initiation in line with the current educational reform. National Institute of Education (NIE) introduced its first official and professional training program for upper-secondary school principals aiming to promote effective school leadership (MoEYS, 2018). The program has been run for six years now and produce hundreds of graduate for future principals. However, based on observation, the trend of recruitment has been dramatically dropped for the last few years. There has never been any specific study on the school principal preparation and professional development programs. This study is to identify the strengths and limitations of the current existing preparation programs and professional development policies and measures of school principals in Cambodia. This is a case study employing a qualitative method using document analysis and interview key stakeholders to collect data. Training manual and supporting policy framework for school principals will be reviewed and the program graduates, trainers, program developers and policy makers will be selected to join the interview. The result of the study will provide practical information for policy makers, program developers for improving school principal training program, future professional development program and supporting policy framework.

Keywords: Principal, Preparation program, Professional development, Cambodia, School leadership

#### 14. Chann Sulen

Teacher Trainee, Phnom Penh Teacher Education College, Cambodia

# Using Concept Cartoons to Enhance Student Learning Outcomes: A Case Study of Instantaneous Velocity and Acceleration in 8th Grade Physics

The research report consists of two primary objectives: 1). Compare the learning outcome of using Concept cartoons in Inquiry-Based Learning (IBL) with Inquiry-Based Learning (IBL). 2) Figure out the perceptions of male and female students in Inquiry-Based Learning (IBL) with a concept cartoon. Quantitative research is used to illustrate the data in this research. The researcher selected a sample of 48 students using purposive sampling, with 23 in a control group (CG) and 25 in an experimental group (EG), using IBL with Concept Cartoon. The data collection process comprises two stages. In the first stage, researchers administered a pre-test to both groups, revealing similar abilities in the CG (M=5.61) and the EG (M=6.68) (p> 0.05). The researchers conducted a post-test on both groups, finding that the EG (M = 16.88) scored significantly higher than the CG (M = 12.74), indicating a significant difference in their performance (M = 12.74). The results show that the use of Concept Cartoon really enhanced students' learning outcomes, and the perceptions in learning activities between male and female students in the EG did not differ.

Keywords: Inquiry-based learning, Concept cartoon

## 15. Say Sokunpharoth

2023 Master's
Graduate,
Graduate School of
Humanities and
Social Sciences,
Hiroshima
University, Japan

## **Community Involvement in School Functioning Enhancing Student Learning in Cambodia**

After the introduction of School-Based Management in Cambodia in 2018, the role of the community in school management has been more emphasized than before. However, the percentages of schools obtaining funds and other activities from the community are largely different among schools. This study aimed to explore the effects of community participation in school management that contribute to student promotion rates. SMCs actively participated in developing school improvement and annual budget plans, strongly helped collect school-aged children, educated the local people to send them to school and closely monitored the school. However, they had difficulties strengthening financial management skills, raising funds from the local community to build more facilities, and holding regular meetings. Some activities, such as supporting children to send to schools and better learning environments, directly influenced promotion rates. In contrast, some activities, such as school planning and budget management, indirectly affected promotion rates.

Keywords: Community participation, School management, Promotion rate, Primary school, Cambodia