

# Professional Learning Needs of Teacher Educators of the National Institute of Education, Cambodia

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## Abstract

Teacher educators at the National Institute of Education, Cambodia, have not been formally prepared or trained as teacher educators whose professional learning needs are crucial for characterizing daily practices. This study examines and elaborates on the desirable needs of teacher educators' professional learning activities and the perception on their professional role. This study employs an explanatory mixed methods research design in which data was collected: (a) in the quantitative phase, from 89 teacher educators who completed a web-based survey, and (b) during the qualitative phase, from 13 teacher educators, who were interviewed regarding their professional learning activities and perceived needs to further their profession. The findings indicated that most teacher educators prioritize "pedagogy of teacher education" and "research knowledge and skills" as desirable needs. To achieve these needs, postgraduate education, would be required. Regarding their perceived roles, teacher educators reported that they viewed themselves as both teachers in a school context and teacher educators. This study addresses a knowledge gap in the field of teacher educators' professional development and learning and highlights how professional learning activities and needs in the Cambodian context can be made transparent to stakeholders to achieve cost-effective and efficient professional learning.

**Key Words:** Explanatory mixed methods, National Institute of Education Cambodia, professional development, professional learning need, teacher educator

## Introduction

To promote and develop human capital, the Ministry of Education, Youth and Sport (MoEYS) of Cambodia introduced several reforms in different sub-sectors such as higher education, teacher education, general education, and more (MoEYS 2021). Teacher education, a significant factor, involves National Institute of Education (NIE) in producing qualified teachers. Historically, the NIE's teacher educator recruitment by the MoEYS followed various sources, including ministry nomination and recommendations and suggestions from central management, often due to the lack of civil servants in higher educational settings. However, clear requirements or specific training mandates for effective teacher educators are absent.

There is a strong association between the roles (Lunenberg, Dengerink, & Kort-hagen 2014) and responsibilities of teacher educators and professional development (Bain & Gray 2018; Berry 2021; Boei et al., 2015; MacPhail et al., 2018). Teacher educators are required to upgrade their profession to support and enhance teachers'

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quality and profession (Van der Klink et al., 2017). An individual can become a teacher educator through two common processes or routes based on the requirements of each country (Morberg & Eisenschmidt 2009). One route is through academics, in which teacher educators obtain a postgraduate degree, such as a Master's or a Ph.D., with research skills, but no prior teaching experience. The second route is through teaching, in which the teacher educators have practical experience gained from teaching in primary, secondary, and even university education throughout their teaching profession (Berry 2021; Morberg & Eisenschmidt 2009; White 2019).

Professional learning needs for teacher educators in various specializations, such as mathematics or physical education, and different career stages, such as beginner teacher educators, have been increasingly studied and documented in recent years. However, these few studies, which were mainly conducted in Northern Europe and the Middle East (Boei et al., 2015; Lunenberg et al., 2014; MacPhail et al., 2018; Margolin 2011; Murray et al., 2021; Swennen & Amsterdam 2005; Zaslavsky & Leikin 2003), are mostly based on individuals' life stories or self-report studies of professional learning and growth at the individual level. Moreover, these studies were conducted on conceptual models, roles, identity, and professional development of teacher educators.

The study on the professional learning needs of teacher educators is still new and under-researched (Murray et al., 2021). To the best of our knowledge, understanding teacher educators' professional learning activities and needs has not garnered significant attention or emphasis in the Cambodian context. Consequently, this study aimed to partially fill the knowledge gap in the field of teacher educators' professional development and learning and teacher education. In addition, informing the policy-makers about the characteristics and status of teacher educators' professional learning and, in turn, focusing on the support and working environment is essential. Therefore, this study aimed to identify the professional learning needs that are desirable for the NIE teacher educators through their experience and knowledge as teacher educators, and whether they are newly inducted or experienced, serving in pre-service and/or in-service professional development programs of teacher preparation. This study sought to answer the following research questions:

- What perceptions of professional roles and learning activities do teacher educators of the National Institute of Education, Cambodia have?
- What are the desirable professional learning needs of the NIE teacher educators?

## **Literature Review**

### **Teacher Educators' Roles and Responsibilities**

A teacher educator is defined as an individual teaching and supervising student teachers at a teacher education institute or school (Murray et al., 2021). This definition

denotes those who formally teach teachers in higher or general education. However, this “formal” role of teacher educators appears to neglect a third group—community-based teacher educators (Berry 2021; White 2019).

This current research employs the term “teacher educator” in a formal and direct manner, referring specifically to the orientation and professional advancement of student teachers through both pre-service and in-service educational programs offered by institutions of higher education.

The professed “second-order teaching” of teacher educators by Murray and Male (2005) inducts and develops fresh perspectives on student teachers. The roles of teacher educators have identified into six categories: teaching teachers, conducting research, coaching, designing curriculum, acting as gatekeepers, and serving as brokers (Lunenberg et al., 2014). Teacher educators teach student teachers attitudes, impart skills and knowledge of the specialization and pedagogy, develop and improve the curriculum, conduct research, foster partnerships with other individuals, institutions, and communities internally and externally, and induct new teachers. Teacher educators perform multiple roles and work in different settings such as schools, institutes, and communities with varied individuals and stakeholders nationwide and internationally. Therefore, their work and duties require them to have adequate and effective personal and professional backgrounds and qualities to develop their professions further.

### **Needs of Professional Learning of Teacher Educators**

The terms “professional learning” and “professional development” often confuse readers. MacPhail (MacPhail 2011; MacPhail et al., 2018) referred to “professional development” as a “formal course” or “organized program,” implying a passivity and less support and follow-up. Berry (2021) suggested shifting from training and upskilling associated with “professional development” to “professional learning,” which is an ongoing, situated, and constructed process in which teacher educators are active constructors of knowledge and practice. According to Berry (2021), these two terms differ. Correspondingly, “professional development” and “professional learning” were combined to improve professional practices both formally and informally throughout a teacher educator’s career (Czerniawski, Guberman, & MacPhail 2017).

Recent studies explored teacher educators’ professional development (Bain & Gray 2018; Boei et al., 2015; Gupta 2014; Lunenberg et al., 2014; Murray et al., 2021). This development is essential for both novice and experienced teacher educators. While inducted into the institution and career, novices seek mentorship opportunities and to reflect on their new experiences, while the experienced ones desire information, help, reflection, class observation, and collaboration from colleagues for continuous professional development (Gong, Young, & MacPhail 2021; Van Velzen et al., 2010).

Teacher educators often lack preparation, orientation and induction to the professional career, and unclear identity, which leads to an ill-defined and uncertain or even

under-valued sense as a teacher educator (Douglas 2021; Gong et al., 2021; Van der Klink et al., 2017; Tack et al., 2018). Moreover, learning requires interaction between the sharers, teachers, instructors, recipients, and students and/or pupils. Learning communities are vital for professional learning, alongside a conducive working atmosphere (Berry 2021; Czerniawski et al., 2017; MacPhail 2011; Zaslavsky & Leikin 2003). Finally, every activity requires sufficient time; therefore, the time for professional learning activities of teacher educators becomes vital (Czerniawski et al., 2017).

Previous studies mainly focused on the crucial role of teacher educators in developing the profession of student teachers; however, studies on how teacher educators professionally learn and develop themselves have been scarce until recently (Czerniawski et al., 2017; Lunenberg et al., 2014; Tack et al., 2018).

## **Methodology**

### **Research Design**

This study used an explanatory sequential mixed methods design in which quantitative data was initially collected and analyzed. Following this, the quantitative results were used for the second-phase (qualitative) data collection and analysis (Creswell & Creswell 2018). A web-based survey (Bowen, Rose, & Pilkington 2017) was employed to collect data regarding the experience with professional learning activities and needs of teacher educators. In the next phase, during the formal and informal conversation (Bowen et al., 2017), semi-structured interviews were conducted to collect qualitative data to more comprehensively explain the quantitative data, especially to follow up on the professional learning activities and needs.

This design served two fundamental purposes. First, the sequential explanatory mixed methods design was selected for in-depth observation of professional learning activities and their needs in teacher educators' contexts. Their perceptions of professional roles of teacher educators, their experience with learning activities and prioritized learning needs laid the foundation for the subsequent qualitative exploration. Specifically, qualitative questions were formulated to explore these above specific aspects suggested by the quantitative analysis, but could not be completely explained by the quantitative data alone. This sequencing was intentional, aiming at explaining details suggested by the quantitative results. Likewise, this research design is appropriate as a single researcher can divide the task into two manageable tasks in a period-of-term investigation.

### **Sampling Method**

In the quantitative phase, all 105 teacher educators from both science and social science disciplines were requested to complete the online survey. For the qualitative phase, purposive sampling, intensity sampling, and criterion sampling were combined

and applied (Gay, Mills, & Airasian 2012). The volunteer participants were intensively and purposively selected from the following fields: Mathematics, Physics, Chemistry, Biology and Earth Science, English, Khmer Literature, History, and Educational Sciences and Arts.

### **Participants**

In total, a number of 89 (85%) out of 105 teacher educators volunteered to complete the digital survey questionnaire. Of these, 13 teacher educators participated in the semi-structured interview. All participating teacher educators provided informed consent by completing consent forms in English and Khmer language for both the survey and the interview. More than half of the participants were male, and half of the participants were middle-aged adults. Approximately 50% of the participants had been working at the NIE for more than ten years. The majority held a Master's degree (91%) as their highest qualification, worked full time (96%), and three-fourths worked in pre-service teacher education. The majority of teacher educators provided professional development to student teachers in a pre-service Bachelor + 1 program (n = 82; 92.1%), with fewer teacher educators in the Bachelor + 2 program (n = 24; 27%). Nearly one-fourth worked in both services. Nearly half of the teacher educators had previous school teaching experience as schoolteachers or the head of teachers, mainly at the high school level. More than half of the teacher educators (56%) were responsible for teaching "teaching methodology," while 53% taught "specialized" subjects.

### **Data Collection**

#### ***Procedure***

In the quantitative phase, an online Google survey form was administered to all 105 teacher educators with the support of the head of the department through a telegram group of the NIE teacher educators from September 19 to October 19, 2022. During the four weeks of administration, the author followed up with the participants once a week. For instance, after the first general information, the author gently reminded all teacher educators about the survey. In the third week, the author reminded the non-respondents individually. A total of 89 respondents returned the questionnaire, all of which were accepted for data analysis. During the qualitative phase, from December 26, 2022, to January 16, 2023, 13 respondents volunteered for a one-on-one interview and were approached individually at the NIE facilities for data collection. To build a good rapport with the interviewees, they were ensured confidentiality (Leech 2002) and informed about the research purpose and its benefits for freely expressing their views on the questions. The interview only started after recording permission had been granted. During the process of interviewing, a new identity for each respondent was coded (i.e., TE1, TE3, ...), which was used in place of their actual names. The co-

des were randomly generated and assigned in order to not hold any connection to the personal information. The coding process was to ensure their confidentiality.

### ***Instrument***

The first part of the survey questionnaire included six questions regarding life as a teacher educator, followed by seven questions regarding professional learning activities/opportunities. In addition, eight questions comprised demographic background information of the participants. Regarding professional learning opportunities/activities, the respondents rated their experienced level of satisfaction to date, level of value on professional learning activities, degree of significance of factors influencing their engagement in professional learning, level of likes in receiving further professional learning areas, and degree of value on professional learning opportunities to develop own pedagogy within the teacher education context. The rating scale was a 5-point Likert scale, with 1 being the lowest and 5 being the highest.

This questionnaire was based on MacPhail et al. (2018), with the country-related sections modified. During the modification of the survey questionnaire, the author consulted with their professor and colleagues, who are conducting research on similar topics, from a number of different countries. The survey questionnaire was translated into Khmer, the native language of the teacher educators, to maximize their understanding of the questions. Two other researchers and teacher educators, who are also linguists, were consulted to focus on the comprehensibility of the Khmer language used, which resulted in adjusted native wording in the translated version of the survey questionnaire. Twenty Cambodian graduate students who are teacher educators, at regional teacher training centers, at teacher education colleges, and at the NIE, pilot tested the questionnaire. Cronbach's alpha computed the reliability of scales at a highly acceptable level ( $\alpha = .956$ ), which means the instrument is reliable. Based on the feedback from the pilot test, some wordings in the questionnaire set were revised. The finalized questionnaire consisted of 38 items for the professional learning activity part.

Regarding the semi-structured interview, the protocols and questions were brainstormed and developed based on the two research questions and focused on professional learning needs. The probing questions included: "What professional learning activity areas should be provided to improve your content knowledge and teaching skills?"; "Why do you need 'pedagogy of teacher education'?"; "What do you mean by 'need research'?" These protocols and questions were translated into the Khmer language. The pilot interview was conducted to cross-check the interview questions. Consequently, the interview questions were updated and improved before interviewing participants. The interview was recorded with permission, and transcribed in Khmer, the native language of the researcher and participants. The researcher obtained informed consent from all the participants, and the study protocol was approved by the Research Ethics Review Board of Hiroshima University (Approval Number:

HR-ES-000453), in ensuring the content validity of the instruments and protecting the research participants' confidentiality and privacy.

### ***Data Analysis***

Regarding the descriptive statistics, the Statistical Package for Social Sciences (SPSS) Version 25 was used to understand the teacher educators' involvement in professional learning activities and their roles and satisfaction experienced during professional learning activities.

The interview data were manually transcribed for coding and categorized based on the research questions' themes using Nvivo11 software. Thematic analysis (Creswell & Baez 2021; Gay et al., 2012; Guest, MacQueen, & Namey 2014) was used to identify and code the repeated keywords and phrases describing feelings, experiences, or responses. Following this, they (words, phrases, sentences, or paragraphs) were categorized and labeled into themes and patterns. Conceptually, the data was approached with preconceived categories and assumptions based on the quantitative phase (Gay et al., 2012). The researcher initially read the transcripts to develop a codebook of the main themes, and coded the transcript, while revising and adding codes. Finally, the emerged themes were critically checked with the professor and the authors' colleagues during the Ph.D. seminar.

### ***Limitations***

Recognizing the small sample size and only one research site, the National Institute of Education, current findings are not generalizable across teacher educators as well as teacher education institutions in Cambodia and international sectors. In Cambodia, the NIE is the highest teacher education institution employing teacher educators with various backgrounds and profiles, therefore, the voices from them represent various experiences of teacher educators. The trustworthiness of the data and findings were established through triangulation across the survey questionnaire and the semi-structured interviews.

### ***Findings***

Guided by these two research questions:

- What perceptions of professional roles and learning activities do teacher educators of the National Institute of Education, Cambodia have?
- What are the desirable professional learning needs of the NIE teacher educators?, the findings are structured into two separate sections: the Quantitative phase—delving into the numerical data analysed using descriptive statistics, and the Qualitative Phase—presenting the insights getting from the in-depth interviews. The first quantitative phase section is classified into two subsections regarding the perceptions toward professional roles and learning activities, and the professional learning needs.

Similarly, with the supporting comments from the respondents, the underlying sub-sections of the qualitative phase section are presented within the themes corresponding to the findings in the quantitative phase.

### **Quantitative Phase**

In this phase, the total teacher educators, the participants in this current study, were asked to complete the google form survey (Bowen et al., 2017) regarding their professional learning activities such as about their professional life, learning activities and needs.

#### ***Professional Role Perceived and Professional Learning Activities***

The teacher educators were asked to describe how they viewed themselves, using the ratings 1 = best; 2 = better; 3 = average; 4 = less; and 5 = least. Most teacher educators perceived themselves as teachers (best = 85.4%; better = 10.1%), followed by teacher educators/trainers (best = 77.5%; better = 16.9%). The findings indicated that most teacher educators still considered themselves as teachers while they were “officially” teacher educators working at teacher education institutions. In other words, identifying their role as teacher educators might have been an issue or a difficulty. However, this phenomenon also highlighted that in teacher education, role identification is sometimes challenging (Dinkelman, Margolis, & Sikkenga 2006).

When respondents were asked to rate the professional learning activities experienced with a score ranging from 1 = least value to 5 = most value, the majority (93.3%) gave a high value, with a score ranging from 3 to 5. This finding implied that the respondents needed to develop professionalism. Among 14 professional learning activities, “award bearing” (Mean = 4.04; SD = .852) was highly valued, followed by “international exchange/visit” (Mean = 3.98; SD = .812). The respondents provided an average value to the activity of “visiting other schools/teacher education institutions” (Mean = 3.88; SD = .877). These numbers indicated that NIE teacher educators appreciated and required a quality assurance course marked and certified by an institution or a university providing professional learning activities (Kennedy 2005). This study also revealed that the NIE teacher educators desired to improve their professional knowledge, skills, and attitude by learning and exchanging knowledge and experience with other professional bodies of relevant teacher education institutions such as teacher education colleges, teacher training centers, general education schools, and vocational training centers. Additionally, it can be inferred from the find that the NIE teacher educators wanted to be valued as effective educators and life-long learners (European Commission 2013; Hadar & Brody 2017).

In essence, most teacher educators perceived themselves as teachers, though they simultaneously consider themselves as teacher educators and trainers. With high importance placed on professional learning activities, the teacher educators granted sig-

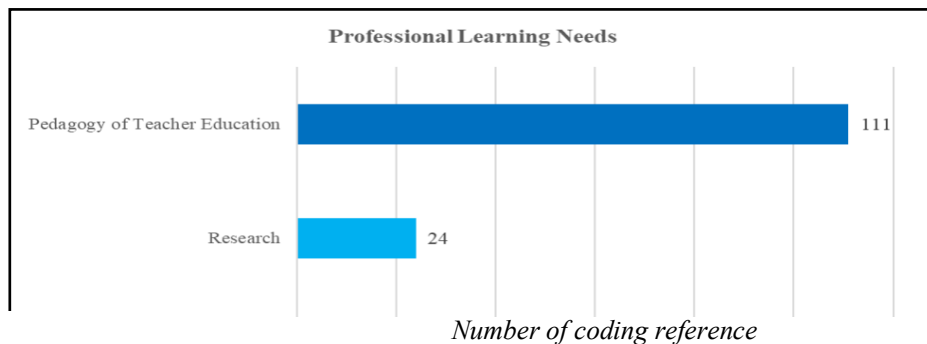


nificance to degree courses and visits/exchanges to local or international schools or teacher education institutions.

### ***Professional Learning Needs***

While developing their profession, teacher educators aspired to further improve their professional learning (Mean = 4.12; SD = .47). Especially, among the eight professional learning areas, the teacher educators desired further learning in the field of “subject knowledge” (Mean = 4.46; SD = .62), followed by “current development in teacher education” (Mean = 4.40; SD = .57), “curriculum development” (Mean = 4.37; SD = .59), and “integrating technology into teaching and learning strategies” (Mean = 4.36; SD = .62). This finding aligned with teacher educators’ professional learning activities suggesting that they need to be well-informed with the trending change in teacher education and meet the 21st-century teaching and learning requirements.

The respondents were also asked to list the two most important professional learning needs, which were analyzed using Nvivo11 to identify the emerged themes. Figure 1 presents the number of coding references of the expressed professional learning needs.



**Figure 1.** Current Most Important Professional Learning Needs

The results indicated that most teacher educators expressed their need to develop the teacher education pedagogy, such as teaching and learning strategies, classroom management, technology integration into the teaching process, and the re-experience of teaching practice as a general teacher. This was followed by the need to enhance teacher educators’ research knowledge and skills to develop themselves professionally. The NIE teacher educators’ priority needs corresponded with those of other teacher educators internationally (Czerniawski et al., 2021).

### **Qualitative Phase**

In the present study, the teacher educators were asked to describe how they perce-

ived their roles and elaborated on the surveyed response. The thematic analysis (Guest et al., 2014), in which the main themes from the transcripts were extracted, was performed and repeated thrice to categorize other themes. To explain the key themes, direct quotes from the interviewees were used to exemplify and provide support.

### ***Perceived Role and Professional Learning Engagement***

The qualitative results were, to some extent, similar to the view of Williams et al. (2012) stating that teacher educators first view themselves as ordinary teachers and then as teachers of other teachers. This study discovered that teacher educators believed that they were ordinary first-order teachers and not teacher educators. A teacher educator verbalized confirmatory statements related to this belief:

“...my naive working capacity still makes me think that I am an ordinary teacher despite being officially called a teacher educator. I think that I am an ordinary teacher who understands that my work and role is to train Bachelor holders who come here to study BA + 1. We [I] are still ordinary teachers.” (TE12)

In contrast, teacher educators with significant experience in their role perceived their role as beyond a “first-order teacher.”

“...whenever we are a teacher, the teacher techniques are ways of teaching to make students receive, express, and learn grammar. When we are teacher educators, we use pedagogy or teaching methodologies to teach grammar. While teaching for teacher education, [we] think of ways to teach grammar and make teachers understand those ways. These are distinct points.” (TE6)

This account indicated that some teacher educators clearly observe the different roles of first- and second-order teaching. The NIE teacher educators began their work with different profiles, such as diverse perceptions of their roles and responsibilities. This view is evident in professional role change; role formation is a process (Dinkelman et al., 2006; Williams et al., 2012). Seeing oneself in both roles—a teacher educator and an ordinary school teacher—may assist in linking the theories to the teaching practices of teacher educators (Czerniawski et al., 2021; Ping 2020; Ping, Schellings, & Beijaard 2018).

Regarding professional learning engagement, this study found that the teacher educators expressed sincere satisfaction with the experienced professional learning activities. The following statements show teacher educators’ appreciation of professional learning activities:

“If talking about satisfaction regarding the professional learning activities experienced so far, I am satisfied till level 8 or 9 out of 10 because whatever learned is a skill that I can use while working at the NIE. It matches my work and passion.” (TE12)

“Actually, I think all the professional activities that I attended are very useful for a job as a teacher [educator]; I have received various experiences, mainly in teaching methodologies.” (TE8)

Furthermore, as the following statement shows, the professional learning engagement requested by the teacher educators was a prerequisite for experts whose knowledge, skills, and experience fit their specialization, expectation, and requirement. According to a teacher educator’s affirmation, the profile and experience of the knowledge provider—the so-called “expert”—is important to meet the teacher educators’ requirements in developing professional practices.

“For this, an expert should be there to help with technical matters—developing a curriculum suitable to the context. If we do it by ourselves, some search for and refer to documents that do not align—meaning that what we teach to student teachers is not the same because, as I obtain information from different places, others can also acquire it from elsewhere.” (TE6)

This echoes the results of the previous survey showing the demand for experts in providing workshops, training, coaching, mentoring, or knowledge and experience sharing. It also shows that the NIE teacher educators were similar to many other teacher educators who previously considered that they require expertise due to their different backgrounds (Murray & Male 2005), profile, knowledge, and skill in teacher education (Czerniawski et al., 2017).

### ***Pedagogy of Teacher Education***

While some teacher educators believed that they still lacked subject-specific knowledge, most emphasized that the “pedagogy of teacher educator” was the first priority. This need was fairly consistent across the NIE teacher educators from different areas, as evidenced by their views and thoughts:

“...because ‘pedagogy of teacher education’ is like a cooking book... . This cooking book has to be well prepared. All student teachers are similar to chefs... They collect all the pedagogy from us; they digest it to make food for their students, who are the clients.” (TE2)

“[we] still need [pedagogy] because it is not enough. From the beginning, we had learned pedagogy, but that pedagogy seemed very traditional, having few teaching methodologies; we followed those few. While teaching school-context students, we did not apply many methodologies. However, we have begun to incorporate additional methodologies with student teachers.” (TE4)

This need encompasses the worldview of teacher education, teaching theories and practices, and research (Hadar & Brody 2017). The requirements for professional learning comprise enhancing expertise in new pedagogies associated with specific subjects, refining overall teaching and learning techniques, such as active teaching methods, combining theory and practice, self-directed learning, feedback, and flipping the classroom. Additionally, it involves addressing class management aspects, such as handling large class sizes, catering to diverse learning needs, and accommodating different populations like disadvantaged students. The need to generate or refresh classroom expertise and teaching knowledge could be achieved by visiting a school for a certain period to experience standard practices as a teacher (Czerniawski et al., 2021; Ping 2020; Ping et al., 2018).

### ***Research Linkage to Professional Learning***

Across the respondents, the second prioritized need was research knowledge and skills. The NIE teacher educators tended to be considered and valued as outstanding performers regarding teaching and researching to fulfill their daily work. They may also be more aware of the value of research in professional learning and development opportunities to promote teaching quality in the research and academic field. The important linkage of research to professional learning was illustrated in these quotes provided by some of the interviewees:

“It is really significant for teacher educators; for instance, we link research with teaching methodologies or pedagogy, and after we get trained, we want to know the effectiveness of the methodologies or pedagogy. We research the trained methodologies and observe whether the student teachers are satisfied or have applied what they learned.” (TE6)

“I value research very much. Development occurs with research. Therefore, research is especially important for all teacher educators for their specialization and teaching methodologies. A researcher is a skilled person.” (TE3)

According to these interviewees’ perspectives, research knowledge and skills should be applied to the teaching-learning context. This finding highlights the importance of research in developing teacher educators’ profession, improving teacher education quality, and the effectiveness of general education, which is central to and crucial for the success of teacher educators (Smith 2020). If this need is met, teacher educators could practice their daily teaching with research-informed data.

In addition to role of research in improving professionalism, research is a prerequisite for promoting the teacher educator’s status (NIE 2022). One of the teacher educators further noted:

“... it [research] is the need for the future and fits with the conditions and requirement of MoEYS, say, in entitling a teacher educator or equivalent to professor. Consequently, research publication is needed.” (TE8)

The following quote provided by an interviewee showed that further research must be conducted to solve the problem:

“Research is a way to pursue new knowledge and solve problems. We try to incorporate action research nowadays. Action research is a very practical way to solve problems ... such as in our classroom, what are the problems, what are the effective solutions to the problems, and what can be applied for effective teaching and learning?” (TE11)

Teacher educators might find research, mainly action research, useful for informing their teaching and learning effectiveness and its impact. For teacher educators to know their students better, what is best for prospective teachers, understand the complexity of various roles of teacher educators, and develop teacher education research is necessary (Boei et al., 2015; Smith 2020).

The responses from the survey and the interviews suggested that Cambodian NIE teacher educators valued research as a quality aspect of an effective teacher educator. They required research to assess their daily practices to some extent, solve their teaching and learning problems, and improve the current situation. This finding resonates with previous studies regarding the role of research for teacher educators (Bain & Gray 2018; Boei et al., 2015; Kyaw 2021; Smith 2020).

## **Discussion**

In answering to the research question about the teacher educators' perceived role as teacher educators, both the quantitative and qualitative data revealed a consistent trend, of which a majority of the teacher educators viewed their roles as a school context teacher, trainer, as well as a researcher. This finding is congruent with the qualitative description, where the teacher educators consistently mentioned the mixed roles, highlighting the necessity to improve pedagogical expertise with research skills in teaching the student teachers. The current study highlighted mixed perceptions about their roles as held by the NIE teacher educators who participated in this study. Some NIE teacher educators experience difficulties in viewing themselves fully as a teacher educator. This result reflects that at the NIE, teacher educators might find it difficult and time-consuming to develop a main role, i.e., as a teacher educator (Boei et al., 2015; Dinkelman et al., 2006). Teacher educators considering themselves first-order teachers contended with previous findings in most other countries, including European countries (Dinkelman et al., 2006; Murray & Male 2005). Contrarily, this finding affirms that when teacher educators are not prepared or oriented into the profession and institution, they struggle to find their professional identity (Boei et al., 2015;

Dinkelman et al., 2006; Douglas 2021; Gong et al., 2021). The professional role of a teacher educator is a personal interpretation of the position based on the surrounding expectation and the knowledge base (Lunenberg et al., 2014; Murray & Male 2005). Its development is a time-bound process referred to as “transition” from “a first-order practitioner, i.e., schoolteacher, to a second-order practitioner, i.e., teacher educator.” This resulted in some NIE teacher educators believing that they were not teacher educators but ordinary school context teachers.

Due to the need to fulfill several, often incompatible expectations and standards, these roles mixtures could give rise to tensions and conflicts (Lunenberg et al., 2014). Though teacher educators perform multifaceted and dynamic roles, they, as a professional group, are frequently overlooked, underappreciated, and marginalized (Lunenberg et al., 2014). It also appears that there is little agreement on who is recognized and valued as a teacher educator, who recognizes and values themselves as teacher educators, and if teacher educators should be recognized as a professional organization at all.

Regardless of their perception of their roles or identities, teacher educators were proactive in developing themselves as teacher educators, valuing any professional learning opportunities available to them. Teacher educators have been satisfied with the experienced professional learning activities. When the NIE teacher educators commence and continue their profession from various backgrounds and have different needs, even without formal preparation, the teacher educators believe that they possess the qualities necessary to be professional teacher educators (MacPhail et al., 2018). As these teacher educators are expected to perform their roles and responsibilities effectively (Ping et al., 2018), consciously or subconsciously, they become self-determined to improve themselves. This result aligns with the conclusions drawn by MacPhail and colleagues (2018), regarding the aspects conducive to professional development—self-initiated endeavors to advance professionally and collaboration with colleagues. Moreover, institutional quality assurance and assessment compel teacher educators to update themselves in addition to the cause and effect of the recent MoEYS reforms (MoEYS 2021; NIE 2022).

Likewise, when examining the professional learning activities that the teacher educators have experienced, the quantitative analysis pointed to the demand of expertise, such as workshops, training, coaching, mentoring, or knowledge and experience sharing, was the most impactful factors in developing themselves. This variety was further explained through qualitative discussions, where teacher educators explained on the value of education fellows providing hands-on workshops and trainings in enhancing teaching skills and benefit of research. The findings reflect that teaching educators become more competent in performing their roles and responsibilities whenever their job requirements and the right competencies or profiles align (Shet, Patil, & Chandawarkar 2019). However, becoming an expert in any field involves time and costs. By studying or working with an expert, teacher educators can obtain a specific

set of important knowledge and skills in a short period of time and save on costs. Moreover, the expert may play a role as a professional role model that teacher educators can learn from to fulfill their shortcomings (Blašková, Blaško, & Kucharčíková 2014; Loughran & Hamilton 2016; Swennen, Jones, & Volman 2010).

Notably, the quantitative finding exhibited a strong agreement on the prioritized professional learning needs of namely “pedagogy of teacher education” and “research”. In the qualitative phase, the investigation unearthed the reasons underlying these priorities, informing about their motives to improve their pedagogy of teacher education and be skillful in research. Regarding the professional learning needs of the NIE teacher educators, “pedagogy of teacher education” was the most prevalent. This aspect may imply that the NIE teacher educators wish to become pedagogical specialists. The NIE’s vision is to become an excellent center for producing quality teachers and educational officers for both pedagogical and managerial positions (NIE 2022). The NIE’s vision and mission regarding teacher educators are aligned with the claims and suggestions of most researchers in this field. As a teacher educator, one has to be knowledgeable and skillful in two main aspects (Loughran 2014): learning about teaching and teaching how to teach. In educating student teachers, teacher educators must know what, why, and how student teachers learn about teaching. Moreover, teacher educators must apply the theory into practice or previous practice with current experience. They must develop careful and precise teaching thoughts and methods as a model for prospective teachers (MacPhail et al., 2018). Therefore, teacher educators must be equipped with the required knowledge, skills, and decision aptitude to reflect on their educational beliefs, values, and missions.

Teacher educators’ role changes suggest particular professional learning needs (Bullock & Ritter 2011). These changes predominantly address the expectations of school stakeholders, including students, administrators, and mentor teachers, and provide future teachers with pedagogical modeling (Hadar & Brody 2017). This categorical need supports previous studies and is expected to embrace the worldview of teacher education as well as teaching theories, methods, and research (Czerniawski et al., 2017; Hadar & Brody 2017; Loughran & Hamilton 2016).

Research knowledge and skills are regarded as essential among teacher educators. Although not ranked first, suggesting that research needs are not as important as the pedagogy of teacher education would be misleading. While most teacher educators did not actively describe themselves as “researchers,” this study’s findings regarding research needs confirmed previous studies’ findings (Kyaw 2021; Loughran 2014; Oancea et al., 2021). Similarly, the working institutions of teacher educators are expected to engage in research as a critique and inquirer (Loughran 2014; Oancea et al., 2021). Research has been one of the main criteria in ranking the status of higher education institutions and generating fame and popularity in attracting students (Livingston, McCall, & Morgado 2009). Accordingly, teacher educators working in higher education ins-

tutions, including the NIE, are expected to get involved in research. Consequently, teacher educators need research knowledge and skills to be able to engage research initiatives (Borg & Alshumaimeri 2012; Kyaw 2021). They must be good at reading research articles, books, and other materials to obtain information about teaching and enhance their specific subject knowledge. They can attend research conferences both nationally and internationally and, in return, can present their research findings. In addition, as suggested by Cochran-Smith (2005) and Lunenberg et al. (2014), teacher educators are expected to conduct research to contribute to the knowledge and experience in the field of teacher education and the community. The NIE teacher educators might be made aware of their actual practices to help discover new ways of teaching and upgrading the current teaching system. As a teacher educator, one must have at least higher knowledge than student teachers and has to continue learning and become a life-long learner. This notion requires a teacher educator to be active in conducting research (Lunenberg, Korthagen, & Swennen 2007). Thus, the research aspect continues to be crucial in professional learning and duties as a teacher educator.

### **Conclusion and Implications**

The integration of quantitative and qualitative insights validated each other and offered a comprehensive view of the study subject. The harmony of findings between the quantitative analysis and qualitative inquiry reinforces the validity of this conclusion. This study regarding the professional learning needs of the NIE teacher educators reveals a further understanding of the important role and diverse professional learning activities and needs of the teacher educators and their working environment. It reflects the professional learning activities and needs from the teacher educators' experience and perspectives. This study sheds light on the professional roles of teachers in a school context and teacher educators. Further, specific professional learning needs, namely "pedagogy of teacher education" and "research", were prioritized. The roles of professional learning activities are of utmost importance for enhancing teacher educators' knowledge and skills in their daily job practices. Therefore, teacher educators should be dynamic or life-long learners through self-reflection and an inquiry-based stance, in which self-satisfaction or motivation has to be actively engaged and promoted to enhance specialization or instructional skills. Moreover, teacher educators must consider pedagogical aspects of teacher education, which require various techniques and methods regarding teaching.

To fulfill the aspects mentioned above, knowledge expertise or experts in different subjects from different sources are required. A teacher educator is identified as a researcher, which is a vital requirement of becoming an effective teacher educator. Therefore, teacher educators must participate in and conduct research in both academics and the teacher education field. Teacher educators must be well-versed in research knowledge and skills to stay updated with the current changing and evolving teacher



education theories and practices. Currently, knowledge and skills in both teaching and research are required.

Professional learning activities and needs should be paid significant attention to by teacher educators and management. Management's role is significant in providing favorable conditions and resources conducive to professional learning and development, such as providing opportunities and financial support for long-term degree-bearing education, both domestically and abroad. Additionally, teacher educators require communities and environments which can support their professional learning, seminars, and workshops related to teacher education, teaching pedagogy, information and communications technology skills, or language education to skillfully conduct their roles and responsibilities. More specifically, teacher educators must be promoted and encouraged to engage with and in research activities to develop themselves professionally, and meet the current and future expectations and requirements in the field of teacher education and teacher education institutions.

This study has a number of limitations. Firstly, it solely focused on the NIE teacher educators. Future studies should consider the teacher educators' and the stakeholders' viewpoints, particularly from management's perspectives on how teacher educators' professional learning activities, including their research activity engagement, are supported and promoted. Secondly, this study was confined to the NIE as the research location; it would be valuable to conduct a similar study at other teacher education institutions whose teacher educators play similar professional roles and responsibilities in providing pre- and in- service professional development for future teachers.

In summary, whatever role or identity teacher educators perceive or identify with, they should have a clear and shared understanding of their main responsibilities and desired professional learning needs to ensure teaching quality. Moreover, as professional learning is vital in the daily lives of teacher educators, the activities and needs must be acknowledged by other stakeholders to realize their professional learning through a cost-saving and effective approach. This is crucial if we as a community of teacher educators are to better identify our professional learning and development needs, get the support we need, and contribute to an active community of practice.

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