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Identifying the Optimal Mechanisms for the Professional Development of Academic Staff at the Royal University of Phnom Penh

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Abstract

Academic staff's ongoing professional development is being given increasing importance in countries all around the world. In Cambodia, there is an increasing public and government focus on the effectiveness and quality of teaching staff. Yet, even though they are considered the most crucial actors in implementing all instructional reforms and they are the direct forces serving the university functions of teaching, research and community services at the grassroots level, little is known about the professional development needs of academic staff in higher education. This study employs a mixed-methods sequential exploratory design. Research instruments comprising the survey questionnaire and semi-structured interviews were used to obtain data for the study. In the first phase of the study, 148 survey questionnaires were completed by academic staff at the Royal University of Phnom Penh (RUPP). In the second phase, eight teaching staff and 13 senior administrators were selected for semi-structured interviews. Descriptive statistics such as percentages, mean and standard deviation were used in analyzing the questionnaire data while the interview data was analyzed using themes. It was found that these academic staff highly appreciated the professional development programs that they had engaged in the last three years. They also highlighted the connection between the frequency of professional development programs

offered and the positive impact on their instruction. However, they reported that they did not have access to regular professional development programs. They further revealed that there were a number of obstacles that hindered them from fully participating in the professional development programs offered. The findings of the current study have various implications for policy and implementation and practice in relation to the optimal mechanisms for the professional development of academic staff in a tertiary setting.

Key Words: Professional development, outcomes-based assessment, reflective practice, action research

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Introduction

The changing nature of higher education in the 21st century requires academic staff to constantly improve their knowledge and skills and to develop the effective and efficient delivery of their pedagogical instruction and outcomes-based assessment (Tao, 2016). Academic staff also play a critical role in developing the quality of universities, as they are the direct forces serving many of the university's functions including teaching, research and community services (Zepeda, 2012). They, therefore, must have the up-to-date, relevant knowledge and skills in their subject areas including curricula, pedagogies, outcomes-based assessments and research. In other words, the quality of education depends largely on the academic staff's abilities and performances (Steward, 2009). In this context, academic staff need continuous professional development programs to stay abreast with the changing needs of their profession. In-service professional development training can help academic staff to become qualified and proficient in performing their pedagogical instruction and outcomes-based assessments in order to fulfill their students' needs through equipping them with up-to-date knowledge and skills in their subject areas (Badri, Alnuaimi, Mohaidat, Yang & Rashedi, 2016). Research has shown that one of the most important factors in student learning achievement is closely related to the academic staff's effectiveness (i.e., having up-to-date and relevant subject knowledge and

pedagogies) (OECD, 2011). It has been stated that ongoing professional development is the key building block for developing effective academic staff. However, Donkor and Banki (2017) found that a lack of access to professional development training results in crippling the development of academic staff and student learning in Ghana. The study concluded that the academic staff employed the same teaching approaches in their classes as they did not have the opportunities to acquire new subject knowledge and teaching methods (Donkor & Banki, 2017).

It has been widely asserted that academic staff's subject matter knowledge, competence, teaching skills and commitment have a positive impact on their instruction and student learning (Steward, 2009; Zepeda, 2012). Such an assertion justifies the urgent need for academic staff's ongoing professional development. In recognition of the fact that there is a positive relationship between academic staff's effectiveness and student achievement, the Royal Government of Cambodia (RGoC) and the Ministry of Education, Youth and Sport (MoEYS) have developed various policy reform measures to improve academic staff's instructional competencies, such as the Teacher Policy Action Plan. In alignment with the commitment of RGoC and MoEYS to improve the quality of academic staff, it is of great importance that the top management of the Royal University of Phnom Penh (RUPP) identify their academic staff's professional development needs as well as the ways in which professional development activities can be effectively implemented in order to enable them to develop quality professional development programs that support the learning and growth of academic staff.

This study explores academic staff's perceptions of the current professional development programs and the barriers to their participation in professional development activities in order to obtain insights for developing quality professional development programs at RUPP. The study also aims to identify the optimal mechanisms for the professional development of academic staff at RUPP. In particular, this study examines academic staff's views on the frequency of their participation in professional development programs and its impact on their instruction, the areas they need professional development programs in, their preferred format, time, numbers of hours, location and trainers' profiles as well as the barriers to participating in their professional development programs.

Conceptualizing Professional Development

Features of Effective Professional Development

Numerous studies have found that effective professional development consists of seven main features: content focus, active learning, collaboration, models of effective practice, coaching and expert support, feedback and reflection, and sustained duration (Buysse, Castro & Peisner-Feinberg, 2010; Buczynski & Hansen, 2010; Allen, Pianta, Gregory, Mikami, & Lun, 2011; Roth, Garnier, Chen, Lemmens, Schwille & Wickler, 2011; Johnson & Fargo, 2014).

The first feature of effective professional development is being content focused. Professional development should emphasize instructional strategies that address specific curriculum content. Having such a focus provides support for academic staff's learning within their own classrooms, as they have the opportunities to examine their students' work, implement the newly acquired knowledge and skills with their students and explore specific pedagogy in the content area (Johnson & Fargo, 2014). For example, Buysse, Castro and Peisner-Feinberg (2010) and Johnson and Fargo (2014) found that designing academic staff's professional learning so that it was context specific, job embedded and content focused was crucial for addressing the diverse needs of academic staff in various settings. The authors concluded that this type of professional development provided academic staff with the opportunity to utilize such teaching content with their own students and thus enhance their students' learning achievement.

The second feature of effective professional development is incorporating active learning. This means designing professional development so that it employs authentic artifacts and interactive activities. When academic staff are actively involved in designing various instructional strategies, they have the opportunity to be involved in the same type of learning they are designing for their students (Daehler, Wong, Shinohara & Miratrix, 2012). Designing professional development through addressing how and what academic staff learn is consistent with theories of adult learning and development (Trotter, 2006). Such theories highlight that adults come to learning with experiences that should be used as resources for their new learning and that they should choose learning opportunities that match their interests and their own classroom experiences and/or needs. In addition to this, reflection and inquiry should be central to their learning and development. For instance, Buczynski and

Hansen (2010) and Heller, Daehler, Wong, Shinohara and Miratrix (2012) found that professional development that engaged academic staff in the same learning activities they were designing for their students through a form of active learning experience was the most effective in supporting academic staff's learning and growth.

The third feature of effective professional development emphasizes supporting collaboration. Through working collaboratively, academic staff can set up their community of learning by means of sharing ideas and working together in their learning. Such collaboration can range from one-on-one or small group interactions to institutional collaboration with other professionals beyond the academic staff's own universities (Allen et al., 2011). Allen et al. (2011) found that professional development that utilized collaborative work could provide a trusting environment for academic staff's inquiry and reflection into their own practices, allowing them to take risks, solve problems and attend to dilemmas in their instructional practices.

The fourth feature of effective professional development is employing models of effective practices. Providing academic staff with curricular models and modeling instruction and outcomes-based assessment (Tao, 2016) can enable them to see a clear picture of what best practices look like. Such models comprise lesson plans, sample student work, observations of peer academic staff and written cases of teaching (Heller et al., 2012). Heller et al. (2012) found that the professional development that incorporates curricular models and/or modeling of effective delivery of content and pedagogical learning for academic staff proved successful in improving student achievement.

The fifth feature of effective professional development is relevant to providing coaching and expert support. Having coaching and expert support can provide academic staff with an opportunity to share expertise about content and evidence-based practices while also addressing individual academic staff's needs (Roth et al., 2011). Studies by Powell, Diamond, Burchinal and Koehler (2010) and Roth et al. (2011) showed that academic staff who received coaching and expert support were more likely to enact desired teaching practices and applied them more appropriately than those receiving more traditional professional development (i.e., courses and lecture-based methods).

The sixth feature of effective professional development is related to offering feedback and reflection. This aspect of professional learning

provides sufficient time for academic staff to think, receive input and make changes to their practices by facilitating reflection and soliciting feedback (Johnson & Fargo, 2010). For example, Johnson and Fargo (2010) and Greenleaf et al. (2011) suggest that professional development programs that leverage feedback and opportunities for reflection had the potential to create richer environments for academic staff's learning.

The last feature of effective professional development is sustained duration. Professional development of sustained duration provides academic staff with an adequate time to learn, practice, implement and reflect upon new instructional strategies that can empower them to make changes in their practices (Johnson & Fargo, 2014). A number of studies (i.e., Doppelt, Schunn, Silk, Mehalik, Reynolds & Ward, 2009; Heller et al., 2012; Johnson & Fargo, 2014) found that professional development that was sustained through providing multiple opportunities for academic staff to engage in learning around a single set of concepts or practices had a greater chance of transforming teaching practices and student learning. This type of professional development was contrasted with one-off workshop professional development that did not offer academic staff meaningful professional learning.

Barriers to Implementing Effective Professional Development

A number of researchers have identified some barriers to the implementation of effective professional development programs (Buczynski & Hansen, 2010; Badri, Alnuaimi, Mohaidat, Yang, & Rashedi, 2016; Tooley & Connally, 2016; Ros & Oleksiyenko, 2017). Buczynski and Hansen (2010) found that the various challenges that academic staff reported included a lack of time allotted to teaching curriculum that uses the newly acquired knowledge and skills, the need to teach mandated curriculum on a pacing guide, a lack of resources (i.e., curriculum materials, technology or science equipment), and classroom management issues. The study concluded that a lack of resources was the largest obstacle to professional development implementation. Badri et al. (2016) identified further barriers that academic staff faced: a lack of employer support, conflict with work schedules, not having time because of work schedules, family responsibilities and a lack of relevant professional development offered. Another study conducted in one public university in Cambodia by Ros and Oleksiyenko (2017) also found that the institutional authorities lacked adequate resources and motivation to organize personnel development programs for academic staff. The study

further revealed that the university lacked both specific policies on professional development and a budget for professional development programs.

Tooley and Connally (2016) have also identified four main obstacles to implementing effective professional development. The first obstacle is identifying professional needs. Academic staff's professional development is usually conducted without first exploring what type of development academic staff actually need. Therefore, academic staff's professional development is considered as ineffective by academic staff as it does not match their needs. The second obstacle is choosing approaches that are most likely to be effective. Most professional development training is implemented in less effective formats like one-off workshops rather than being of sustained duration. Similarly, in their study Ros and Oleksiyenko (2017) reported that academic staff said that most of the departmental professional development workshops they had were spontaneous, eclectic, irregular or irrelevant one-off or recycled short courses and workshops. Despite the fact that one-off professional development workshops are easy to schedule and require less time for implementation, there is a consensus among professional development experts that such workshops are ineffective (Zepeda, 2012; Tooley & Connally, 2016). The third obstacle is implementing approaches with quality and fidelity. Although educators have knowledge of effective professional models, professional implementation presents its own obstacles. Various implementation barriers include the depth of observation, feedback and suggestions for things to try differently, a lack of time and accountability for academic staff to follow through with the recommended next steps, the lack of an integrated, coherent approach to instruction and insufficient capacity. The last obstacle is assessing professional development outcomes. It has been reported that the lack of good systems for monitoring the quality and impact of professional development programs can result in academic staff receiving little meaningful professional learning (Tooley & Connally, 2016).

Methodology and Study Area

The present study employed a mixed-methods approach through integrating quantitative and qualitative methods within a single study to obtain a better understanding of the complexity of research inquiry for exploring academic staff's perceptions of the professional development programs they were offered. A mixed-methods approach was chosen as

neither quantitative nor qualitative methods were adequate for providing an in-depth understanding into the complexities of academic staff's views on their professional development programs. The use of mixed methods complemented the strengths and weaknesses of quantitative and qualitative methods. The current study used a mixed-methods sequential exploratory design comprising two distinct phases. The quantitative phase was a survey questionnaire. The goal of the quantitative phase was to explore the academic staff's views on the frequency of their participation in professional development programs and the programs' impact on their instruction, their current needs for professional development programs, their preferred format, time, number of hours, place, and trainer profile as well as the barriers to participating in their professional development programs. The questionnaire items were based a review of the literature on professional development for academic staff. The qualitative phase included semi-structured interviews, field notes and document analyses. The goal of the qualitative phase was to allow academic staff to respond in an open way so that it was possible to obtain additional perspectives with regard to their experiences and feelings on professional development training activities. This second phase also sought to obtain senior administrators' perspectives on the professional development programs at their university.

To explore the academic staff's perceptions of their professional development programs, the study employed purposive sampling to select RUPP for the current study. The university is the oldest and largest higher education institution in Cambodia and it offers degrees from undergraduate to doctoral programs. It has approximately 78 top management, 307 academic staff, 76 administrative staff and 17,644 students (RUPP, 2018). Hence, this university was selected on the basis that participants' characteristics matched the study's aim and objectives. All academic staff who were working at RUPP's five faculties (Science, Social Science and Humanities, Development Studies, Engineering and Education) and the Institute of Foreign Languages were invited to participate in the first phase of the study by completing the survey questionnaires. Unfortunately, the survey questionnaires could only be administered to teaching staff who were present during a staff meeting at their departments. 180 teaching staff in total took a questionnaire. This could be the limitation of the study due to the fact that the researchers were unable to involve all teaching staff in this study, as some staff were absent during the questionnaire administration period. Teaching staff took the questionnaire from the meeting to complete at their homes and were asked to return the

questionnaires within a one-week period. 148 survey questionnaires were completed and returned to the researchers in phase one, yielding a response rate of 82 percent. In the second phase of the study, eight teaching staff and 13 senior administrators were selected for semi-structured interviews. Of the eight teaching staff, two were from the Faculty of Social Science and Humanities, two from the Institute of Foreign Languages, one from the Faculty of Sciences, one from the Faculty of Development Studies, one from the Faculty of Engineering, and one from the Faculty of Education. The 13 senior administrators included one vice rector and 12 deans/vice deans/department heads from the five faculties and the Institute of Foreign Languages. The selection criteria were based on their experiences with professional development programs, number of years of working experience, number of teaching hours, academic qualifications, disciplines and gender.

The Academic Staff Professional Development Questionnaire was developed based on a thorough literature review related to academic staff professional development. Some items were constructed while some items were adapted from the Teaching and Learning International Survey (TALIS) (2013). The design of the questionnaire also drew from several theories and previous studies on professional development programs. The validity of the questionnaire was examined through a consultative meeting with six potential teaching staff. The Academic Staff Professional Development Questionnaire had six sections. The first section covered the participants' demographic information. The second section focused on professional development activity participation using two four-point rating scales of "never" to "always" and "no impact" to "large impact." The third section emphasized professional development needs, employing a four-point rating scale of "no need" to "high level of need." The fourth section included barriers to professional development participation using a four-point rating scale of "strongly disagree" to "strongly agree." The fifth section explored professional development method preference, employing yes/no statements. The last section included open-ended questions related to sections two to five and also asked for recommendations for improving professional development programs.

The semi-structured face-to-face interviews were conducted after the administration of the questionnaires in phase one of the study. The open-ended questions were developed based on a literature review related to professional development. They were employed to gain deeper understandings and to explore senior administrators' and individual

academic staff's perspectives about the professional development programs. The quantitative data (survey questionnaire) was analyzed using SPSS version 21, focusing on descriptive statistics including percentage, mean scores and standard deviation. Although the data of the senior administrators and academic staff were analyzed separately, constant comparisons were made to provide a generic picture of the perspectives of academic staff with regard to their own professional development programs. The qualitative data (i.e., interviews and field notes) were analyzed using both descriptive and narrative approaches by dividing them into themes. In summary, both quantitative and qualitative data were integrated and discussed to examine the academic staff's perceptions on their professional development programs.

Results and Findings

Participants' Background Characteristics

There were 148 participants who responded to the survey questionnaire of this study. Slightly over 70 percent of them were male. About 77 percent of them were married and 20 percent were single. In relation to the highest educational level, 78 percent reported that they had obtained master's degrees, 13 percent had received doctoral degrees and about 9 percent had a bachelor's degree. Nearly 50 percent reported that they had completed their highest educational level after 2010, followed by 40 percent who had finished between 2000 to 2010. Slightly over three-quarters of the respondents identified themselves as civil servants and less than a quarter of them labeled themselves as contractual staff. Approximately 84 percent were teaching bachelor level programs and 14 percent were teaching both bachelor and master-level programs. The respondents' ages ranged from 21 to 61 years, with a mean age of 37.95 (SD = 8.39). They taught between two and 34 hours per week, with mean teaching hours of 14.83 (SD = 8.57), indicating that the number of teaching hours of some respondents were too much. The respondents also reported that they taught between one and five subjects per semester, with a mean number of teaching subjects of 2.04 (SD = 0.80). Their teaching experience was reported to range from one to 30 years, with a mean teaching experience of 11.53 (SD = 8.07).

Professional Development Activity Participation and its Positive Impact

As Table 1 shows, overall the respondents had participated in professional development activities, with a mean of 2.79 (SD = 0.80). The most

frequent professional development activity that they had participated in was “knowledge and understanding of my subject fields,” with a mean of 3.06 (SD = 0.99), followed by “pedagogical competences in teaching my subject fields,” with a mean of 2.91 (SD = 0.93). The least frequent professional development activity that they attended was associated with “teaching students with special needs,” with a mean of 2.26 (SD = 1.03). This was followed by “student career guidance and counseling,” with a mean of 2.65 (SD = 1.08). A close examination of Table 1 also shows that there was variation in the professional development activities participated in by these respondents, indicating that some of them had frequently attended professional development programs while others had rarely participated in these activities. The respondents reported that the professional development activities they attended had a moderate positive impact on their teaching, with a mean of 3.01 (SD = 0.64). The most moderate impact of professional development activities was reported to be related to “knowledge and understanding of my subject fields,” with a mean of 3.25 (SD = 0.80), followed by “pedagogical competences in teaching my subject fields,” with a mean of 3.22 (SD = 0.71). The professional development activity with the smallest impact was “teaching students with special needs,” with a mean of 2.52 (SD = 1.01). This was followed by “student career guidance and counseling” with a mean of 2.80 (SD = 0.97). Interestingly, the professional development activities that staff had most frequently participated in were reported to have the largest impact on their teaching, whereas the professional development activities they had engaged in the least had the smallest impact on their instruction.

The key informant interviews further revealed that academic staff had participated in several types of professional development training formats including workshops, seminars and conferences. Most of them stated that they had only participated in professional development training on one occasion, while a few of them highlighted that they attended professional development training between three to five times per academic year. All academic staff said that the professional development training they attended was inadequate for them to gain in-depth knowledge and understanding related to their subject fields.

Table 1. Professional development activities participation and their positive impact

Attributes	Participation		Impact	
	Mean	SD	Mean	SD
Knowledge and understanding of my subject field(s)	3.06	0.99	3.25	0.80
Pedagogical competences in teaching my subject field(s)	2.91	0.93	3.22	0.71
Knowledge of the curriculum	2.90	0.92	2.93	0.84
Student behavior and classroom management	2.90	0.98	3.07	0.88
Student evaluation and assessment practice	2.87	0.92	3.12	0.73
Research skills	2.81	0.88	2.90	0.77
Approaches to individualized learning	2.80	1.04	2.98	0.81
ICT skills for teaching	2.79	1.05	2.99	0.92
Teaching cross-curricular skills (e.g., problem-solving)	2.73	0.91	2.94	0.82
Student career guidance and counseling	2.65	1.08	2.80	0.97
Teaching students with special needs	2.26	1.03	2.52	1.01
Overall	2.79	0.80	3.01	0.64

Current Needs for Professional Development Activities

As Table 2 illustrates, overall the respondents indicated their current need for professional development activities was slightly above the moderate level with a mean of 3.20 (SD = 0.54). They pointed out that area with the highest need of professional development activity was related to “knowledge and understanding of my subject fields,” with a mean of 3.40 (SD = 0.74). This was followed by “research skills,” with a mean of 3.38 (SD = 0.69), “approaches to individualized learning,” with a mean of 3.26 (SD = 0.74), “pedagogical competences in teaching my subject field(s),” with a mean of 3.22 (SD = 0.80), “teaching cross-curricular skills,” with a mean of 3.18 (SD = 0.70), “student evaluation and assessment practice,” with a mean of 3.17 (SD = 0.72), “knowledge of the curriculum,” with a mean of 3.13 (SD = 0.74), “student career guidance and counseling,” with a mean of 3.10 (SD = 0.77), “ICT skills for teaching,” with a mean of 3.08

(SD = 0.89), “teaching students with special needs,” with a mean of 3.08 (SD = 0.77), and “student behavior and classroom management,” with a mean of 3.05 (SD = 0.82) respectively.

Table 2. Current need for professional development activities

Attributes	Need level	
	1= No need 2= Low need 3= Moderate need 4= High need	
	Mean	SD
Knowledge and understanding of my subject field(s)	3.40	0.74
Research skills	3.38	0.69
Approaches to individualized learning	3.26	0.74
Pedagogical competences in teaching my subject field(s)	3.22	0.80
Teaching cross-curricular skills (e.g., problem-solving)	3.18	0.70
Student evaluation and assessment practice	3.17	0.72
Knowledge of the curriculum	3.13	0.74
Student career guidance and counseling	3.10	0.77
ICT skills for teaching	3.08	0.89
Teaching students with special needs	3.08	0.77
Student behavior and classroom management	3.05	0.82
Overall	3.20	0.54

The key informant interviews further showed that both academic staff and senior administrators perceived that professional development activities were useful in terms of providing the teaching staff with opportunities to upgrade their knowledge and skills related to their subject fields. Such professional development training had a positive impact on them professionally as it helped them to become lifelong learners. As a result of attending professional development training, academic staff pointed out that they gained confidence in their teaching, as they acquired up-to-date knowledge and skills in their subject areas that they could then utilize in their class. They further stated that professional development training workshops provided them with the opportunity to build up networks with other colleagues that enabled them to learn with and from one another both within and across universities.

Barriers to Professional Development Participation

Table 3 illustrates the barriers to professional development participation reported by the respondents. The barrier that hindered them the most in participating in professional development activities was a lack of incentives for participating in such activities, with a mean of 2.97 (SD = 0.82). This was followed by a lack of employer support, with a mean of 2.75 (SD = 0.93), no relevant professional development being offered, with a mean of 2.66 (SD = 0.83), professional development being too expensive/unaffordable, with a mean of 2.61 (SD = 0.86), professional development conflicting with work schedules, with a mean of 2.54 (SD = 0.77), a lack of time due to family responsibilities, with a mean of 2.44 (SD = 0.78), and not having the pre-requisites, with a mean of 1.71 (SD = 0.78).

Table 3. Barriers to professional development participation

Attributes	Level of agreement	
	Mean	SD
There are no incentives for participating in such activities	2.97	0.82
There is a lack of employer support	2.75	0.93
There is no relevant professional development offered	2.66	0.83
It is too expensive/unaffordable	2.61	0.86
Professional development conflicts with my work schedule	2.54	0.77
I do not have time because of family responsibilities	2.44	0.78
I do not have the pre-requisites (e.g., qualifications, experience, seniority)	1.71	0.78
Overall	2.53	0.49

The key informant interviews further demonstrated that there were a number of obstacles that hampered academic staff from attending PD training programs. These barriers included financial issues (i.e., they were required to pay the fee for professional development training), no appointment from the department heads/faculty deans, lack of incentive (i.e., no connection between professional development participation and promotion/ advancement), lack of support/encouragement, lack of autonomy in choosing the types and topics of professional development

training, irrelevant topics, training covering mostly theories, teaching not on practical topics (i.e., something that could not be implemented in class), previous training workshops discouraging them from attending future workshops (i.e., the speakers/presenters had little expertise in the topics presented), professional development being held at times that conflicted with their teaching schedules (i.e., professional development training occurred during their teaching sessions), and family commitments. The senior administrators also added that professional development training was not compulsory for all teaching staff at each department as there was no professional development policy at the faculty and/or university level. The lack of such a professional development policy meant there was no specific budget amount allocated for professional development training activities for teaching staff. Therefore, the professional development training workshops that were held were instead driven by donors' interest or served the agenda of a particular group rather than fulfilling the actual needs of teaching staff, resulting in their low participation. Consequently, these professional development training workshops had been identified to have very little impact on academic staff due to their donor-driven and one-off nature.

Table 4. Respondents' preferred format of professional development methods

Attributes	Percentage	
	Yes	No
Courses/workshops (e.g., on subject matter or methods and/or other education-related topics)	88.3	11.7
Observational visits to other universities/schools	84.7	15.3
Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues)	75.2	24.8
Qualification programs (e.g., a degree program)	66.7	33.3
Problem-based projects	65.7	34.3
Mentoring/coaching	58.7	41.3
Small study group	46.8	53.2
Other	8.9	91.9

Academic Staff's Preferred Format for Professional Development Methods

Table 4 displays the academic staff's preferred format for professional development methods. Over 80 percent of the respondents favored two professional development formats: courses/workshops and observational visits to other universities/schools. Another 75 percent would like to have education conferences or seminars as the format of their professional development methods. Slightly over 65 percent of them favored qualification programs and problem-based project methods. Nearly 59 and 47 percent preferred their professional development methods to be associated with mentoring/coaching and small study groups respectively.

The key informant interviews further highlighted that the academic staff liked various types of topics to be included in their future professional development training programs. These topics were project-based learning, critical thinking skills, information and communication technology integration in teaching and learning, innovative teaching methodology, innovative assessments for enhancing instruction and learning, curriculum development and research skills.

Academic Staff's Preferred Times for Professional Development

Table 5 shows academic staff's preferred times for professional development. 57 percent and 44 percent of the respondents preferred their professional development to occur on vacation weekdays and vacation weekends respectively. Over one-third wanted their professional development to be offered in the mornings and afternoons on the weekend. Less than 30 percent wanted their professional development to be conducted in the evening weekdays or at lunch time on weekdays.

Table 5. Respondents' preferred times for professional development

Attributes	Percentage	
	Yes	No
On vacation weekday	57.0	43.0
On vacation weekend	44.4	55.6
One weekend mornings and afternoons	35.9	64.1
In the evening on weekdays	29.6	70.4
At lunch time on weekdays	24.1	75.9
Other	7.7	92.3

Academic Staff's Preferred Number of Hours, Places and Trainer Profiles for Professional Development

Table 6 shows the academic staff's preferred number of hours, places and trainer profiles for professional development. 58 percent of the respondents preferred three hours of professional development programs per week, while about 31 percent wanted to engage with their professional development activities for six hours weekly. Nearly 50 percent wanted to have their professional development program located at RUPP, whereas 46 percent indicated they were willing to participate in their professional development activities anywhere suitable. Over-one third reported that they were in favor of trainers who were foreign experts, while more than half of them did not mind whether their trainers were foreign or local experts.

Table 6. Respondents' preferred number of hours, places and trainer profiles for professional development

Attributes		Percentage
Preferred number of hours to undertake professional development per week	3 hours per week	58.3
	6 hours per week	30.6
	9 hours per week	4.2
	12 hours per week	0.7
	15 hours per week	2.8
	More than 15 hours per week	3.5
Preferred place for professional development	At RUPP	47.9
	Elsewhere	6.3
	Anywhere	45.8
Preferred profile of trainers	Foreign expert(s)	35.4
	Local expert(s)	8.3
	Either foreign or local expert(s)	56.3

Academic Staff Need for their Institution to Support their Professional Development Fees

Table 7 shows respondents' opinion as to how much their institution should support their professional development fees. Nearly 70 percent of respondents reported that they needed their university to pay for all of their professional development program fee. Less than 10 percent wanted their university to mostly cover their professional development program fees. Another 16 percent said that they only needed their university to pay for half of their professional development program fees. Interestingly, only 5 percent reported that they could pay for the whole professional development program fees themselves without needing any financial support from their university.

Table 7. Respondents' need for RUPP to financially support their professional development fees

Attribute	Distribution	Percentage
Need RUPP to financially cover the professional development fees	0% (no need at all)	5.0
	25% (partially cover)	2.1
	50% (half cover)	16.4
	75% (mostly cover)	8.6
	100% (completely cover)	67.9

Discussion

Both quantitative and qualitative data revealed that academic staff participated in professional development during the last three years with different levels of frequency. There was a large variation in the frequency of participation in professional development activities among these respondents. These results demonstrated that some respondents had frequently participated in professional development activities while others rarely attended such activities, indicating a gap in the knowledge and skills acquired by them. Such variation in the frequency of professional development participation was due to the donor-driven and ad hoc nature of the professional development programs offered. These results also indicated that professional development was associated with one-off workshops. These findings were consistent with the previous studies (i.e., Ros & Oleksiyenko, 2017) that found that this type of professional

development did not provide academic staff with meaningful professional learning.

Overall, the academic staff demonstrated that their professional development participation had a moderate impact on their profession. They highlighted that the types of professional development activities that they had engaged the most frequently (i.e., knowledge and understanding of their subject fields and pedagogical competences in teaching their subject fields) had the largest positive impact on their instruction. In contrast, they reported that the types of professional development activities that they had rarely participated in (i.e., student career guidance and counseling and teaching students with special needs) had the smallest positive impact on their teaching. These results indicated that there was a positive relationship between the frequency of respondents engaging in professional development activities and the impact on their instruction. Such findings supported previous research (i.e., Johnson & Fargo, 2014) that found that frequent/sustained professional development had a greater impact on academic staff's learning as it provided them with opportunities to learn, practice, implement and reflect upon new teaching methods/strategies in their own classes.

In relation to the respondents' current needs for professional development, it was found that their needs for professional development activities were slightly above moderate level. The professional development programs that respondents reported needing were knowledge and understanding of their subject fields, research skills, approaches to individualized learning, pedagogical competences in teaching their subject fields, teaching cross-curricular skills, student evaluation and assessment practices, knowledge of the curriculum, student career guidance and counseling, information and communication technological skills for teaching, teaching students with special needs, and student behavior and classroom management. These results showed that these respondents would fully participate in the above professional development programs due to the relevance of these activities to their individual needs. These findings indicated that the academic staff valued professional development, as they perceived that it played a vital role in ensuring that they were well-equipped with up-to-date knowledge and skills to support student learning in their classes (Steward, 2009; Zepeda, 2012).

In relation to the barriers for their participation in professional development programs, academic staff indicated there were a number of obstacles. These were a lack of incentives, lack of support/encouragement,

irrelevant professional development programs, a lack of practicality, unaffordable fees, a lack of autonomy, and conflicts with teaching schedules. Such findings supported the recent study undertaken by Badri et al. (2016). The senior administrators also identified that further barriers included the university's lack of a professional development policy, the lack of a specific budget being allocated for professional development activities and the donor-driven nature of professional development. These obstacles were likely to prevent academic staff from participating in the professional development programs offered. These findings were aligned with Ros and Oleksiyenko's (2017) study. The authors found that a lack of professional development policies and budget hindered the implementation of professional development programs and activities in one public university in Cambodia.

In relation to the preferred professional development format, the study found that the format the academic staff preferred the most was courses/workshops dealing with their subject matter/methods and/or education-related topics, followed by observational visits to other universities, education conferences or seminars where lecturers and/or researchers presented their research results and discussed educational issues, qualification/degree programs, problem-based projects, mentoring/coaching, and small study groups. These results demonstrate that the respondents tended to favor professional development courses/workshops over mentoring/coaching and small group study methods. This may be due to their less frequent participation in such professional development format of methods. These findings differed from the study undertaken by Roth et al. (2011). The authors found that professional developments that provided coaching and expert support could provide academic staff with opportunities to share their expertise about content and evidence-based practice and emphasized individual needs.

It was also found that the respondents preferred their professional development programs to be scheduled during their university vacations on either weekdays or weekends for a duration of three hours per week. They favored their professional development programs to be located either at their university campus or another suitable location. They preferred their professional development programs to be conducted by either foreign or local experts. They also needed the financial support from their university to enable them to participate in the professional development programs offered. These results show that these respondents wanted to fully participate in the professional development programs and did not want to

have conflicts between the times the professional development programs were offered and their teaching schedules. They seemed not to be mind about the profile of the professional development trainers or the location of the professional development programs. They did, however, tend to have financial constraints in relation to paying for professional development fees.

Conclusion and Recommendations

The findings emerging from the current study reveal that academic staff strongly appreciated the professional development programs that they had taken part in in the three years prior to this study. They highlighted the connection between the frequency of professional development programs offered and the positive impact on their instruction. Unfortunately, they also reported that they did not have access to regular professional development programs. Moreover, the degree of involvement in professional development varied, with some staff reporting having participated in many professional development activities while others reported rarely attending professional development programs. A number of obstacles have been identified that hindered them from fully participating in the professional development programs offered. The findings of the current study have various implications for policy and implementation and practice with respect to the optimal mechanisms for the professional development of academic staff.

In relation to policy, the top administrators should carry out a needs assessment to identify the urgent and most pressing needs and desires of academic staff in relation to their professional learning. Such needs assessments data can ensure that the academic staff's professional learning is well connected to their classroom practices by means of providing them with necessary and relevant knowledge and skills. The top administrators should also adopt the features of effective academic staff's needs assessments to design the professional learning that is right for their academic teaching staff. Furthermore, the top administrators should take into consideration the use of time, the integration of peer teaching/observation, mentoring and coaching, collaborative lesson planning and teaching schedules to ensure academic staff have ample opportunities for learning and collaboration. Such planning will enable academic staff to fully participate in the professional learning community. The top administrators should also set up a concrete platform for developing expert academic staff as mentors and coaches to support other

teaching staff's professional learning in their relevant areas of expertise. Moreover, the top administrators should consider linking in-service staff training to incentives within the overall structure of an academic staff career pathway in order to monitor the professional growth and continued career progression of teaching staff. The top administrators should consider creating teaching and research awards to reward and recognize innovative and excellent teaching and research in order to raise the status of the academic staff and also provide incentives for staff. In addition to this, funding should be provided to establish a Teaching and Learning Unit (TLU) within the university in order to provide all academic staff with continuous in-service learning opportunities including workshops, seminars, mentoring, coaching and peer observation. The establishment of the TLU can provide an institutionalized structure for the professional development of all academic staff, resulting in institutionalizing a system of university-based in-service teaching staff training.

In relation to professional development implementation and practices, it is crucially important to ensure the effective implementation of professional development programs. It is recommended that professional development training be provided to all academic staff within the university vacation for a duration of between 30 to 60 hours per academic year in order to provide them with opportunities to update their knowledge and skills for effective and efficient delivery of their instruction. It is also vital to include the use of reflective practices in this professional development training as such self-reflection can greatly improve academic staff's instruction by systematically reflecting on their prior classroom teaching. This reflection practice can help academic staff to find solutions for addressing teaching problems associated with teaching methods/techniques, outcomes-based assessments, classroom management and student learning, resulting in improving instructional skills and practices. Furthermore, it is essential to encourage academic staff to undertake action research to explore their classroom issues and student learning by providing funding for undertaking such research activities. When planning professional development programs, there is a need to anticipate the main barriers for its implementation as well as to identify the specific methods for evaluating the professional development program's implementation. It is also necessary to ensure that the professional development programs are responsive to the academic staff's specific needs, particularly in relation to their teaching and learning contexts. It is also recommended that there should be a teaching and research awards day held at the end of each academic year within the

university to reward high-performing teaching and research staff as well as to provide a platform for sharing the most innovative pedagogy, innovative assessment methods, and best research findings that contribute to the higher education development in Cambodia.

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Brief biographies

Nary Tao received a PhD in Educational Assessment from Victoria University (Australia). She lectures in classroom-based assessment, critical pedagogy and training and professional development as part of the master's degree program at RUPP. Her primary teaching and research interests are classroom-based assessment literacy, large-scaled learning assessment, the impact of testing on learning and instruction, quality assurance, program evaluation, teacher professional development, academic misconduct by students including cheating and plagiarism, and gender-related issues.

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