

DOCTORAL (PHD) DISSERTATION

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Exploring the Interpretation of Performance Appraisal by the Key Stakeholders to Develop a Performance Appraisal Framework for Teacher Educators in Myanmar Universities of Education

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Abstract

Teacher educators play a central role in improving the quality of education. There has been relatively little research on Myanmar teacher educators, especially from the viewpoint of performance evaluation during one's career with special regard to the Universities of Education. Therefore, this study aims to develop a performance appraisal framework for teacher educators in Myanmar universities of education.

To successfully achieve this aim, an exploratory sequential mixed method design was applied. For the qualitative part, semi-structured interviews were conducted with 30 participants including experts, rectors, heads of department, and teacher educators while 244 participants took part in the quantitative part. To select participants, purposive random sampling method was used for semi-structured interview and convenience sampling method was used for web-based survey. In addition, a Hungarian example of performance appraisal (Eötvös Loránd University) has been included in this study.

The findings reveal that the aims of appraisal should be to improve personal development, develop organizational performance, increase staff accountability, improve the management of the institution, and recognize and reward good performance. Moreover, professional knowledge, professional skills and professional attitude can provide a useful starting point for describing a sensible and objective set of criteria for performance appraisal. This study has also shown that performance appraisal can be used as a quality enhancement tool to support teacher education sector reforms. Teaching skill, leadership and management competence and academic and research competence are the important competencies for teacher educators. Based on the interview results, major domains such as teaching activities, activities related to teaching profession, research and innovation activities and professional ethics should be used to evaluate the teacher educators' performance.

The findings of this study contribute an accurate composite picture of the current background for teacher educator appraisal in Myanmar universities of education. Moreover, the information received provides a good foundation for human resource management. It can be useful for self-imposed individual development. This research can be applicable to education practitioners, experts and policy makers in developing the national teacher educator competency standard framework.

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Abbreviations

Abbreviation	Definition
ASEAN	Association of Southeast Asian Nations
CESR	Comprehensive Education Sector Review
CPD	Continuous professional development
EC	Education College
HoD	Head of Department
MOE	Ministry of Education
NESP	National Education Strategic Plan
OECD	Organization for Economic Co-operation and Development
PA	Performance Appraisal
SPSS	Statistical Package for Social Studies
STEM	Strengthening Pre-Service Teacher Education in Myanmar
TCSF	Teacher Competency Standard Framework
TE	Teacher Educator
UNESCO	United Nations Educational, Scientific and Cultural Organization
UOE	University of Education

CHAPTER – 1 INTRODUCTION

Human resource management (HRM) play a key role in improving the performance of employees in their workplace. Similarly, educational institutions such as schools, colleges and universities use performance management techniques for a competitive performance culture (Soltani et al., 2005). Organizations measure and improve the quality and value of their workforce (Kaplan & Norton, 2001; Venkatraman & Ramanujam, 1986) through regular performance appraisals (PA) that involve ongoing performance reviews of individual employees or teams (Levy & Williams, 2004, cited in Camilleri, & Camilleri, 2018). Hence, performance appraisal (PA) is a vital element in managing performance and productivity. Therefore, regular performance feedback or appraisal systems remain crucial to the performance management cycle (CIPD, 2017, cited in Camilleri & Camilleri, 2018).

Teacher evaluation is an assessment scheme set within a country's education structure, aiming to evaluate individual teachers through gathering evidence that will support judgements related to their performance and competence and, in some cases, to provide feedback to support improvement and professional growth (OECD, 2013).

In high-performing education systems in every country, teachers have a central role in improving educational outcomes. Educational research shows that the way that teachers teach greatly affects student learning outcomes more than some other factor. Moreover, evaluation can help sustain teacher quality (Nye et al., 2004). Next, teacher evaluation and student outcomes are the best indicators for quality assurance within the existing education systems (European Commission, 2012). Therefore, performance appraisal standards and accountability in education need to be increased. In this regard, the Teacher Performance Appraisal Framework is becoming one of the essential tools for educational improvement.

1.1. Significance of the study

Education is crucial in developing a sustainable society, which is seen as a continuous process of learning involving various actors in formal, non-formal and informal learning. Enhancing the competencies of educators, leaders, and decision-makers at all levels of education is essential to ensure quality education. Staff management practices such as performance evaluation and constructive feedback are instrumental in developing educators' competencies.

Lay (2022) claimed that performance appraisal can help teachers identify areas of strength, assess their ability to nurture the students, track their students' results, review teaching competencies, develop personal development plans, and articulate innovations and other contributions to institution development. It cannot be denied that performance

appraisal is an effective tool that can help develop a teacher's professional growth and manage educational institutions (Lay, 2022).

There has been relatively little research on Myanmar teacher educators, especially from the viewpoint of performance evaluation during one's career with special regard to the universities of education (UOE) (Lay, 2022). Performance appraisal for teacher educators is called for to enhance the quality of teacher education. This research will develop teacher performance appraisal framework in the context of educational institutions with the hope of improving the quality of teacher education. This study will contribute to the wider professional discourse such as further developing policy recommendations on teacher educator performance evaluation.

1.2. Background and Context

Myanmar, officially the Republic of the Union of Myanmar, is one of the the largest countries in Southeast Asia. It is bordered by Bangladesh to the west, China to the northeast, India to the northwest, Laos to the east, Thailand to the southeast. The population is about 54 million according to the country's 2017 census. Myanmar is a kind of multi-ethnic country with 135 distinct ethnic groups. The population is 68% Bamar people and 32% other ethnic minorities including Kachin, Kayin, Rakhine, and Shan. In Myanmar, the Gross Domestic Product per capita was recorded at 1347.46 US dollars in 2023. Agriculture *plays a significant role in the Myanmar economy*, generating 43% of GDP and supporting the livelihoods of more than 70% of the population (World Bank, 2013).

In 1989, the nation's legitimate English name was transformed from the Union of Burma to the Union of Myanmar and in the Burmese language, the nation has been known as Myanmar- since the thirteenth century (MyintLay, 2021). From 1948 to 2006, the English name of the nation's capital, Rangoon, was dropped in 1989 for the basic Burmese name, Yangon. In 2005, the administration moved its focus, first to Pyinmana (200 miles [320 km] north of Yangon) and then to Naypyidaw, a recently built city close to Pyinmana. Naypyidaw was announced as Myanmar's capital in 2006 (Michael& Aung, Thwin, 2021, cited in MyintLay, 2021).

Myanmar is implementing a National Education Strategic Plan (NESP) 2016-2021 to ensure a quality national education system. The NESP is a comprehensive, widely owned, evidence-based roadmap to reform education (NESP, 2016).

1.2.1. Teacher Education and Training

In Myanmar, universities of education and Education Colleges are important teacher education institutions. I will present universities of education as my research context is universities of education.

In Upper Myanmar, one university of education called Sagaing University of Education is established and in lower Myanmar, Yangon University of Education (YUOE) exist. Yangon University of Education (YUOE) is an influential university in higher education intuitions. YUOE is primarily named Teacher Training College (TTC) established in 1931. Firstly, in 1964 TTC was started to name Yangon Institutes of Education and after that it was changed to University of Education in 2014. YUOE has over three thousand regular students, more than three thousand in-service teachers as part-time students, and about 7,000 high-school students in the laboratory schools of YUOE: 198 university teachers (61 PhD degree holders) and 199 administrative supporting personnel.

Education departments, academic departments, and administration departments are part of YUOE. Department of Educational Psychology, Department of Educational Theory and Management, Department of Educational Methodology and Curriculum, Department of School Health (Physical Education) are taking the initiative in YUOE to train prospective teachers. Moreover, academic departments such as Myanmar, English, Mathematics, Chemistry, Physics, Biology, History, Geography and Economics can be found in YUOE. and There are also administrative departments, including the Department of Correspondence, Department of Finance, Department of Academic Affairs and Department of International Relations which have responsibilities relating to student and teacher educator affairs.

The vision of YUOE is to train competent teachers, researchers, and educationists who can produce lifelong learners. Its mission is to bring up innovative academicians who can positively contribute to society with the utmost sincerity and loyalty. The motto is All for All.

YUOE offers bachelor programs, master programs and doctoral programs to produce qualified teachers. Moreover, it offers a post-graduate diploma in Multimedia Arts and a diploma in English Language Teaching Methodology under the Department of Human Resource Development.

Like Yangon University of Education, Sagaing University of Education (SUOE) has the same culture and training programs. There are 152 university teachers (43 PhD

degree holders) and 169 administrative staff at Sagaing University of Education. It offers Bachelor of Education, Master of Education, Doctor of Philosophy and Post Graduate Diploma in Multimedia Arts degree programs to the country's prospective secondary and tertiary school teachers. In addition, there are short-term courses for in-service teachers including pedagogies, educational management and administration courses.

1.2.2. The Role of Teacher Educators

Many scholars have different perspectives on broader definitions of teacher educators' role in higher education. Koster et al. (2002) define a teacher educator as someone who provides instruction or gives guidance and support to student teachers and thus support the development of students into competent teachers. Teacher educators can be defined as "all those who actively facilitate the (formal) learning of student teachers and teachers" (European Commission, 2013, p. 8). Across the literature, the two commonly described teacher education contexts include university education faculties and school-based contexts. Regarding school-based teacher educators, Livingston (2013) claims mentors are identified as teacher educators as they support adult learners in learning how to teach.

Regarding university-based teacher educators, the transition from school teacher to teacher educator is challenging (Dinkleman, 2011; Dinkleman et al., 2006). The shift is experienced at a both personal and professional level. Becoming a teacher educator is a shift from first-order to second-order teaching, which requires a reconceptualization of practice (i.e., what it entails, how it is conducted and why) (Murray and Male, 2005). Reconceptualizing teaching from first order to second order involves deeper thinking of teaching themselves. According to Korthagen (2016), being a teacher educator is rooted in the foundations of scholarship encapsulated by the ability to articulate and enact professional knowledge of practice i.e., a pedagogy of teacher education.

In 1986, Lanier and Little argued that "Teachers of teachers – what they are like, what they do, what they think – deliberately ignored in teacher education studies. A teacher educator must be able to teach about practice in ways that highlight the complex nature of teaching, not just delivering the declarative knowledge of teaching (Martinez, 2008).

To improve the quality of teaching, countries should define explicitly what competences are required by teacher educators. Those competences should include first-order competences (teaching competences) and second-order competences (teaching about teaching, research competences, pedagogy, and didactics) (European Commission, 2013). Teachers need to know not only the substance of the discipline—long recognized as vital

to teacher capacity—but also how to best represent the content to diverse learners. To do this well requires knowledge of curriculum materials, common pupil difficulties with the content, the context of learning, and the goals of the enterprise (Shulman, 1987). Teacher educators must have enough experiential knowledge and understand school teaching as a significant strength (Murray & Male, 2005). Understanding teaching and learning practices are saturated by personal values, beliefs and biographies. As second-order practitioners, teacher educators instruct their students on the practices and discourses of both school teaching and teacher education. Knowledge of the 'discipline' and the pedagogical knowledge of teaching that 'discipline' in HE are inseparable for teacher educators. Furthermore, teacher educators encountered professional and organizational demands, establishing scholarship and research as integral elements of their new professional identity. To conclude, teacher educators have a crucial role for the quality enhancement of the teaching workforce (European Commission, 2013).

1.2.3. Teacher Education Sector Challenges

The training needs of teacher educators are often neglected in Myanmar. The stimulus of further professional development and an environment that encourages reflective practice and research capacity through links with universities of education are rare. Most teacher educators had limited or no teaching experience in schools and needed more opportunities to develop their own core instructional and more broadly professional skills.

Therefore, there was a two-year initiative co-funded by the British Council and the UK's Department for International Development to develop the teacher training competence of Myanmar's teacher educators. In this regard, teacher educators across Myanmar made measurable and visible progress in their English proficiency, knowledge of teaching methodology, teaching skills and basic reflective competence (Borg, et al., 2018).

Improving the quality of teaching is fundamental to achieving national student learning standards. This demands an integrated approach to teacher education and management approach. The Law on National Education (2014) and its Amendment (2015) provide a clear legal framework for progressive, integrated and comprehensive teacher education and management reforms.

Currently, teacher deployment and promotion are not linked to performance but instead are based on years of experience. The promotional system is based on the schooling structure with the newly graduated teachers starting in primary schools and promoted to lower secondary school teaching positions. Likewise, lower secondary school teachers are

promoted to higher secondary school teacher positions. This drains quality primary school teachers who are most needed. Recently, recruited daily wage teachers (bachelor degree holders), who receive less formal training, are often sent to the most remote primary schools, meaning that these schools have the least experienced teachers. The KG+12 expansion of basic education will require more teachers to be placed using evidence-based teacher management and planning (NESP, 2016).

According to NESP (2016), the MoE has appointed approximately 72,000 new “daily wage” teachers to increase the number of teachers in every school as a shorter-term solution for some of the existing staffing gaps at schools. Daily wage teachers were introduced in 2014 to address the critical teacher deficit and meet the policy of having a minimum of five teachers in every primary school. These teachers lack teaching certificates, have different qualifications (ranging from master’s or bachelor’s degrees to high school certificates), receive about a month’s worth of training, and are employed at a lower salary scale without benefits. After a period of about one year of teaching, they are eligible to become permanent staff with the prospect that they will eventually undertake training to become fully qualified teachers (<https://www.stopfakes.gov/article?id=Burma-Education>).

1.3. Research Purpose

The aim of this study is to explore key stakeholders’ interpretation of performance appraisal in order to develop a performance appraisal framework for teacher educators in Myanmar universities of education.

Specific Objectives

- To identify the possible aims and objectives of a performance appraisal system for teacher educators in Myanmar universities of education
- To explore the perception of the interrelatedness of PA and the quality enhancement of teacher education
- To explore the knowledge and perception of teacher educators and the management team in universities of education on performance
- To identify the most important competencies for teacher educators in Myanmar
- To identify the major domains and performance indicators that should be used to evaluate the teacher educators’ performance in Myanmar universities of education

1.4. Research Questions

Key research questions were designed as follows.

1. What could be the aims and objectives of a performance appraisal (PA) system to be introduced for teacher educators in universities of education of Myanmar, with special regard to the quality of teacher education?
2. Do teacher educators and the management team perceive the interrelatedness of PA and the quality enhancement of teacher education?
3. How do teacher educators and the management team in universities of education understand and interpret “performance”?
4. What are the most important competencies for teacher educators according to teacher educators and management team? (Comparing the results with the Teacher Competency Standard Framework in Myanmar)
5. What can be the major domains and performance indicators that should be used to evaluate the teacher educators’ performance in Myanmar universities of education?

1.5. Definition of Key Terms

Appraisal is a formative assessment for improving the performance of teachers within their current position and for accountability. (Ingvarson & Chadbourne, 1994)

Teacher performance refers to how a teacher carries out his/her daily diverse tasks, (including teaching and nonteaching responsibilities), whether they are assigned or self-imposed, to do the job well. (McBride & Grant, 2006).

Teacher performance appraisal refers to the evaluation of individual teachers to make a judgement about their competencies and performance and/or to provide feedback to support the improvement of their practice (Nusche, 2013).

Teacher educator refers to a faculty member in higher education who has primary responsibility for the instruction of teacher candidates (Fisher, 2009). In this study, the researcher has limited the research to teacher educators working in higher education institutions not including school-based teacher educators.

1.6. Limitations

This research is limited by the available time frame. This study is designed to develop a performance appraisal framework for teacher educators with the following aspects only: aims and objectives, the major domains and indicators of the PA system. The study does not include the planning of the implementation of the designed PA system. The study of only two universities in one nation is not able to give comprehensive picture of performance appraisal framework for teacher educators due to the different levels of social and economic development of the nations.

CHAPTER 2 LITERATURE REVIEW

2.1. The Nature of Performance Appraisal

2.1.1. Meaning and concept of performance appraisal

Performance appraisal has been defined differently by many authors throughout the ages, but there is no standard definition of performance appraisal. However, it is defined as a systematic way of evaluating a worker's performance and his potential for development (Armstrong, 2000). Sulsky et al. (1998) also defined performance appraisal as a way of assessing the employee's work performance during the review period relative to specific indicators and overall rating through such rating categories as; highly successful, fully successful, making progress and unsatisfactory. Likewise, performance appraisal is considered as the process of evaluating how well employees are performing their tasks relative to the work performance standards and providing feedback to employees with the aim of eliminating performance deficiencies, motivating and developing employees (Jackson & Mathis, 1994; Mondy, et al., 1996; Dessler, 2000, cited in Khoury & Analoui, 2004).

Another approach of performance appraisal is that it is a set of evaluative activities used by an organization to enhance employee performance by clarifying expectations, setting improvement objectives, gathering data and providing feedback and support (Cardno & Piggot-Irvine, 1997, Perillo, 2006). Similarly, Taylor (2003) also argued that the performance appraisal process offers employees the opportunity to receive structured, constructively framed feedback about their work and growth potential. Bartlett (2000) shared that "during the appraisal process, data are gathered by systematic observations, not only to measure current performance but also to reinforce strengths, identify deficiencies, give feedback and the necessary information for changes in future performance" (p. 28). Apparently, performance appraisal is an evaluative activity that can enhance performance using planned goals and objectives and providing feedback.

On the other hand, Borman and Motowildo (1993) assert that accurate and reliable performance appraisal can help organizations to support and reward their most capable employees. According to Cole (2002), performance appraisal can offer the evidence not only to recognize and reward staffs' efforts and performance but also detect key barriers and identify professional development needs and opportunities (Namuddu, 2010). Accordingly, Decenzo (1998) noted that appraisal is the analysis of given tasks with a major aim of rewarding, appreciating or revising employee performance.

According to Armstrong (2006), performance appraisal is the formal assessment and rating of individuals by their manager at, usually, an annual review meeting. In other words, it helps harness the unique talents of individuals and coordinates their activities towards the achievement of the organization objectives by efficient and effective means (cited in Monyatsi, et al., 2006). It can also be thought that appraisal is a technique to influence and control employee behavior in order to increase productivity and effectiveness. Muchinsky (2012) concluded that performance appraisal is a process used to appraise worker progress, connect goals and outcomes, make hiring decisions, establish training needs, evaluate organizational processes. Obviously, performance appraisal involves various activities through which organizations seek to assess employees, develop their competence, improve performance, and establish reward procedures. Therefore, it can be noted that PA is the main pillar of HRM. However, performance appraisal should be tailored to suit the necessary employee aspirations and ensure that employees receive fair and accurate feedback.

2.1.2. The role of appraisal in personal and organizational performance

Many researchers and practitioners confirmed that PA has the greatest impact on overall organizational effectiveness (Robbins & Judge, 2009). It is said that it can also contribute to employee motivation, development, and confidence which lead him to be self-empowered. In addition, loyalty and commitment can be also preserved through performance appraisal and at the same time, corporate values are reinforced. Many studies have suggested that fair and clear performance appraisal systems help organizations satisfy their employees, which further leads to better job performance.

To create competitive advantages, performance appraisal is used for assisting personnel development which can support a better qualified and a highly motivated team in an organization. According to McGregor (1972), performance appraisal can be used as the basis for training, coaching, and counseling of the individual employee by the superior. Similarly, Teke (2002) points out that development activities (such as training) should be based on performance gap that are identified at performance appraisal result. Continuously, he states that relevant training and development intervention and regular performance feedback are important factors in skill retention. Moreover, Black and Lynch (1996) stressed that a good training should improve the quality and quantity of organization outputs that can contribute organizational success. In this regard, performance appraisal can develop the work performance of the employee in the organization (Delery & Doty, 1996).

There is sufficient evidence about the positive effects of performance appraisal on productivity and quality (Sidin, 2016). Through performance appraisal, employees can better assess their progress towards career goals and improve current performance as part of their continuing development (Kaye, 1984). In this respect, employees welcome and act upon improvement opportunities within the organization. In this way, their performance can really assist towards quality improvement and the success of the whole organization (Sidin, 2016). Simmons et al. (1995) implies that to align quality initiatives, a well-designed performance appraisal system should contain the following elements: (a) The quality of inputs and processes and not just outputs should be identified and recognized; (b) The personal improvement and not only the rating on performance relative to peers should be rewarded; and (c) Employees should be provided with qualitative feedback. In this regard, performance appraisal can assist quality enhancement of personal and organizational performance.

In 1990, Derven notes that there is a straight connection between the job of an individual and the strategic goals of the organization and this can directly increase the profitability of the company. He gives an example that advantage can be achieved when a company builds its appraisal systems on measuring customer satisfaction. Outcomes of performance appraisal can lead to improvements in work performance and therefore overall business performance via, for example, increased productivity or customer service. The importance of performance appraisal for quality improvement is also discussed by Mullins (1999). Performance appraisal can improve the employees' future performance by considering the past performance of the employees. It gives the staff the opportunity to improve the quality of their work based on a fair and analytical feedback on their performance.

According to Bowman (1994), performance appraisal helps to analyze processes for identifying barriers to quality, satisfy internal and external beneficiaries of the work performed, and finally to create an atmosphere where continuous improvement is encouraged. Hyde (1991) has similar views with Bowman that when there are more co-operations and less competition among employees, then quality can certainly be achieved.

For achieving high performance goals of organization, performance appraisal is very important component of HRM (Armstrong, 2000). It is argued that performance appraisal allows the manager or appraiser to make comments upon the employee's performance and progress. This is done under the headings such as quality of work produced, speed of work and the work performance, attitude to supervision, and so on

(Barber, 1973; Hackman & Oldham, 1980). In this regard, the employees are encouraged to improve their knowledge and skill to promote employee's growth and development based on information resulting from performance appraisal. It can finally lead to the quality of the services provided by the organization through the quality maintenance of the work of the employees (Sidin, 2016).

2.2 Performance Appraisal in Education

2.2.1. The Development of Teacher Evaluation

During the 1700s, education was not considered a professional discipline or field of study (Marzano, et al., 2011). A rising industrial base and the common schooling movement that extended through the 1800s spawned more complex school systems. In these larger schools and districts, a demand grew for teachers who hold expertise in specific disciplines and for administrators who could assume increasingly complex roles. By the mid-1800s, teaching was viewed as a complex endeavor requiring complex feedback if expertise was to be fostered. Blumberg (1985) notes that at that time supervision began to focus on improving instruction (Marzano, et al., 2011). Although there was little or no formal discussion about the specifics of pedagogic skills, the acknowledgement of their importance might be considered the first step in the journey of teacher evaluation.

The latter part of the 19th century and the early part of the 20th century were dominated by Frederick Taylor's scientific view of management (Marzano, et al., 2011). He argued that if there were 100 ways to perform a task, some methods would be more efficient than others. By studying the various ways, the *one best method* could be determined. Later, Taylor's principles also began to have an impact on K-12 education (Marzano, et al, 2011). Led by Edward Thorndike, educators began to view measurement as the ultimate tool for a more scientific approach to schooling (Marzano, et al., 2011). Then, the accumulated knowledge from these scientific management came to form the criteria used in many teacher evaluation systems today (Ellett & Teddlie, 2003).

Until the 1950s, teacher quality was judged from a moralistic and ethical perspective; with judgments based on the grounds of teachers' personal traits (Ellet & Teddlie, 2003). Danielson and McGreal (2000) stated that, in the 1940s and 1950s, educators and researchers emphasized the importance of traits that teachers naturally possessed in a good teacher (e.g. voice, appearance, emotional stability, warmth, trustworthiness, and enthusiasm, etc.). During this period, these traits became the focal point of local teacher evaluation criteria as it is believed that teachers who possessed these traits were more likely to perform effectively (Danielson & McGreal, 2000). Over time, the

measures of performance based on observable behaviors in the classroom (Ellett & Teddlie, 2003).

In 1969, clinical supervision was developed as a way to enhance instruction and observation instruments that can capture what occurred in the everyday classroom. This included a set of performance standards and categories that could be checked off on a checklist (Duke, 1995; Glickman, 2001). In the 1970s, Madeline Hunter established a theory-based approach to teaching that had its roots in a behaviorist view of basic learning theory that all behaviors can be learned, unlearned, and replaced by new behaviors. Hunter established a set of prescriptive teaching practices designed to enhance student learning and teacher decision-making. The Hunter model dominated views of teaching into the 1980s and began a trend towards instructionally focused staff development (Danielson & McGreal, 2000).

According to Evans and Tomlinson (1989), growing interest in teacher appraisal is linked to the school improvement movement in which schools developed their own appraisal approaches based on a professional concern for school improvement. These approaches facilitated the professional extension of teachers who become self-critical and self-developing for change. The reflection process as an embedded part of teacher evaluation can offer educators new perspectives from which to examine and reflect upon their teaching compared to the traditional evaluation process. Moreover, reflective approach offers highly effective teachers the opportunity to think more deeply about assumptions and beliefs related to their practice (Tripp et al., 2012).

In the 1980s, accountability in education, highly competent, professional teachers and a structured teacher evaluation procedure became a priority in the educational reform movement (Shinkfield & Stufflebeam, 1995). Brandt (1995) stated that “The most widely recognized immediate effect of the career ladder/incentive pay movement that marked the 1980s was an overhaul of traditional teacher evaluation practices” (p. 13). The lack of support from the education community caused the pay-for-performance plans dwindle away (Brandt, 1995). According to Shough (2010), standards-based performance indicators became popular with the purpose of improving the instructional process during the 1990s. Consistent with this movement, it started to use a comprehensive model or description of what teachers should know and be able to do. This was represented by explicit standards covering multiple domains and including multiple levels of performance defined by detailed behavioral rating scales (Moss, 2015).

Teacher evaluation has evolved throughout the years and research suggests that new teacher performance evaluation processes are shaped by certain conditions. These conditions, according to Danielson and McGreal (2000), may include the following, “reform and restructuring initiatives, increased understanding of how adults grow and learn, increased awareness of the importance and complexity of teaching, increased focus on the development of teacher expertise, new understanding about staff development, and the reappraisal of traditional supervision practices” (p. 15). (Ovando & Ramirez Jr., 2007).

2.2.2. Theories related to Teacher Performance Appraisal

With the purpose of having a valid theoretical background, I conducted a critical review of prevailing theories concerning teaching and performance which proved to be particularly influential in shaping teacher performance appraisal framework. As a result, this study will base on Cognitive theory, Andragogy, Social Development Theory, . I choose these theories not only having a significant contribution to teacher learning and performance appraisal but also having a theoretically sound, fair and relevant description relating to performance.

2.2.2.1. Cognitive theory

Cognitive theory focuses on how information is processed by the brain and how learning occurs through this process. It is based on the point that people mentally process the information they receive. Piaget believed that knowledge is constructed by learners based on their existing cognitive structures. Cognitive learning includes organizing, observing, categorizing, forming, perceiving, interpreting. The learning theory of cognitivism relates to information processing and knowledge development (Driscoll, 2000).

In the context of learning, this theory offers a useful perspective on the knowledge development of learners and helps to enhance learners’ self-control of information processing. It is beneficial to teachers in designing instruction that will facilitate the development of learners’ self-regulatory knowledge and skills.

Moreover, cognitive theory is one of the significant theories in the field of performance appraisal highlighting important theoretical assumptions. First, Lester (2010) suggests that knowledge and intellect are cognitive traits that may be included as criteria in the performance assessment instrument. “Another aspect of cognitivism is applied when models or constructs are used to structure a body of knowledge such as defining the categories of performance criteria that should be included in the assessment instrument” (Lester, 2010, p.26). Including assessment criteria that address sharing information among executive team members relates to the theory of shared cognition (Cannon-Bowers & Salas,

2001). According to Lester (2010), shared cognition can also be leveraged when the assessment instrument is co-developed and implemented by the rater, ratee, and other appropriate stakeholders so everyone has a common understanding of the performance criteria. It can be concluded that its important attributes are applicable in defining performance criteria.

2.2.2.2. Andragogy

Andragogy is an important disciplinary field that should be considered in designing teacher educator performance appraisal. Understanding how adults learn best can inform teaching strategies, course design, and instructional approaches, which in turn can impact student outcomes. Therefore, evaluating how well teacher educators apply principles of andragogy in their teaching could be one aspect of assessing their effectiveness as educators.

Malcolm Shepherd Knowles (1913-1997) was an American educator well known for the use of the term andragogy as synonymous to the adult education. According to Knowles, andragogy is the art and science of adult learning, thus andragogy refers to any form of adult learning (Kearsley, 2010). In 1980, Knowles made 4 assumptions about the characteristics of adult learners (andragogy) that are different from the assumptions about child learners (pedagogy). In 1984, Knowles added the 5th assumption.

1. Self-concept: As a person matures his/her self-concept moves from one of being a dependent personality toward one of being a self-directed human being.
2. Adult Learner Experience: As a person matures, he/she accumulates a growing reservoir of experience that becomes an increasing resource for learning.
3. Readiness to Learn: As a person matures his/her readiness to learn becomes oriented increasingly to the developmental tasks of his/her social roles.
4. Orientation to Learning: As a person matures his/her time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his/her orientation toward learning shifts from one of subject-centeredness to one of problem centeredness.
5. Motivation to Learn: As a person matures the motivation to learn is internal (Knowles, 1984).

The assumptions of andragogy should be used to understand the realities of adults, and to guide and foster a collaborative learning environment. On this basis, understanding the needs, backgrounds, characteristics, and expectations of adults, to be specific educators,

can be very beneficial in reassessing needs for continued learning and improving their performance.

2.2.2.3. Social Development Theory

It is reasonable to reflect Vygotsky's social development theory that focuses on how social interactions and cultural context influence cognitive development as this theory can help assess educators' effectiveness in facilitating social learning experiences. When evaluating educators, understanding this theory can highlight the significance of creating supportive, collaborative learning environments.

Vygotsky's theory explained that social interaction is in advance of development and both socialization and social behavior will lead to people's consciousness and cognition (Frank, 2013). Vygotsky focused on three main parts in the theoretical framework: Social Interaction, The More Knowledgeable Other, and The Zone of Proximal Development.

Social Interaction is an important foundation of cognitive development. As Vygotsky states, "every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people and then inside the child" (Guo-liang & Wu-Yuin, 2013). He believes that young children are more curious, involved in learning and discovery by themselves.

The More Knowledgeable Other (MKO) means that people have better understanding or higher level than others. The development of cognition is exceeded with others rather than alone, which means it will occur best when children stay with more knowledgeable people, such as teachers, parents, and coaches. For instance, when children begin to learn words, it is difficult for them to memorize all the words by themselves, but after their parents telling them the correct way to learn, the children can remember words much easier. This is an example of the MKO. Also, the MKO is related to the definition of intelligence that Vygotsky described. As Vygotsky defines, intelligence is "the capacity to learn from instruction". In his opinion, the knowledge that children learn from social community can influence their behavior and thinking.

The Zone of Proximal Development (ZPD) used to show the distance between children's abilities to do a task independently and their abilities to finish a task cooperatively. There are two levels of the ZPD: —the present level of development and the potential level of development. The present level of development shows what a child can do by himself/herself and the potential level of development describes what a child is able to do by working with or helping from other people (Vygotsky, 2013).

Vygotsky supports that language plays an important role in the development of cognition. He emphasizes the use of language and states that the internalization of language can cause cognitive development. Additionally, Vygotsky uses more emphasis on the influence of culture (Saul, 2014). Actually, it is very helpful and significant for students to use social development theory in learning. When children have some troubles in studying, they can work with other people and learn from each other actively.

Vygotsky's theory has embraced by many teachers has been applied to education. Here are some ways Vygotsky's theory can be incorporated in classroom.

1. Assess the child's ZPD
2. Use the child's ZPD in teaching
3. Use more skilled peers as teachers
4. Monitor and encourage use of private speech
5. Place instruction in a meaningful context. Transform the classroom with

Vygotsky's idea.

Vygotsky discussed the integration of behavior and consciousness or the unification of mind and social interaction as they are what constitutes human development (Shabani, 2016). The transformation of social behavior from the intermental to the intramental (i.e. the process of internalization) is a complicated and prolonged process that requires engagement of two or more people in a practical activity (Shabani, 2016). It was argued that higher thinking processes needed for optimal professional practices are inherently social and start at the intermental level between and among people. Interestingly, what Vygotsky claimed about child learning/development is applicable to the adults and teachers' professional training because, according to Eun (2008), the overall process inherent in learning and development is essentially the same for both adults and children. Hence, one advantage to this theory is that teachers should participate in social activities and groups for effective professional growth.

2.2.2.4. *Expectancy Theory*

Vroom (1964)'s expectancy theory of work and motivation involves an action–outcome linkage. He states that expectancies combine with total valence to yield a person's aroused motivation for a given course of action (Miner, 2005). To describe this combination, Vrooms offers the following proposition:

“The force on a person to exert a given amount of effort in performance of his job is a monotonically increasing function of the algebraic sum of the products of the

valences of different levels of performance and his expectancies that this amount of effort will be followed by their attainment”. (Vroom 1964, p. 284)

The key assumption of motivation according to Vroom is that “the choices made by a person among alternative courses of action are lawfully related to psychological events occurring contemporaneously with the behavior” (1964, p. 14).

In contrast to Vroom’s approach, Lawler (1981) sets forth the central motivational chain of expectancy theory. According to Lawler (2000), *effort-to-performance expectancy* infers to the expectation (assessed probability) that if effort is exerted, the result will be successful performance (though effective performance may fail to result because the job is too difficult, the evaluation process is deficient, or the individual lacks the needed skills). *Performance-to-outcome expectancy* refers to the expectation (assessed probability) that should effort be successfully exerted, something that is desired will result, such as a financial reward. Accordingly, the strength of a person’s motivation to perform effectively is influenced by:

- a) the person’s belief that effort can be converted into performance, and
 - b) the net attractiveness of the events that are perceived to stem from good performance.
- (Lawler 1981, p. 232)

According to Vroom (1964) and Porter & Lawler, (1968), the expectancy theory of motivation can be summarized as:

A person is motivated to perform only when all three of following conditions are met:

- The person believes that effort will lead to performance.
- The person believes that performance will lead to outcomes.
- The person believes that the outcomes will lead to satisfaction (Green, 1992).

Scholars point out that many specific assumptions regarding faculty performance that need to be considered when utilizing expectancy theory in academia (Estes & Polnick, 2012). Nadler and Lawler (1977) state that concepts of expectancy theory are as follows: “(a) behavior is determined by a combination of forces in the individual and forces in the environment,

(b) people make decisions about their own behavior in organizations, and

(c) different people have different types of needs, desires and goals which can influence performance” (Estes & Polnick, 2012, p. 4).

Overall, studies related to the motivation-productivity relationship supports the idea that individuals choose to alter inputs based on preferences among desired outcomes and

the probability of attaining those outcomes at a satisfactory level. A number of research have shown that each component of expectancy theory- expectancy, instrumentality, and valence- is an important factor in determining the extent to which an individual is motivated to increase or decrease productivity (Mitchell & Biglan, 1971; Nadler & Lawler, 1977; Porter & Lawler, 1968; Vroom, 1964). Ultimately, value perceptions are the strongest determinant of effort.

2.2.3. Use of Teacher Appraisal Results

Teacher appraisal is not an isolated system, as the conceptual framework developed in 2009 in *Teacher Evaluation: a conceptual framework and examples of country practices* best presents (Santiago & Benavides, 2009). This framework was further enhanced in OECD (2013)'s *Synergies for Better Learning* where it comprehensively presents the interlinks between four main areas, including: (1) governance, (2) procedures, (3) capacities and (4) use of appraisal results. There is evidence to support that teachers perform better when provided feedback to their performance. Schleicher (2011) notes that appraisals could be made more impactful in getting recognition for doing innovative work, receiving feedback and tailor-made professional development.

Performance appraisal as a tool for future practice improvement is critical to implement a sound education system providing continuing professional development opportunities. Goe et al., (2012) argue that the benefits of teacher appraisal are relatively limited with a clear link to professional growth opportunities. Consequently, it may lead to mistrust or apathy by the teachers being appraised (Danielson, 2001; Milanowski & Kimball, 2003; Margo et al., 2008). Hill and Herlihy (2011) claimed that teacher appraisal should allow teachers to receive tailored feedback. In turn, feedback should be followed with learning opportunities in identified areas through professional development, mentoring and other means. It is recognized that teachers' learning should be broader than participation in in-service training courses. Such professional learning cultures need to be supported and sustained by effective pedagogical leadership to build their professional capacity further. (Randi & Zeichner, 2004).

As another important way, appraisal results should be used to improve initial teacher education programmes with the focus of enhancing teacher learning in the long run. Ideally, teacher appraisal systems can provide very important information about the skills and needs of teachers, and it is important that such information be made easily accessible

to teacher education institutions (OECD, 2013). In this regard, electronic data management systems become important.

Moreover, teacher performance appraisal can also be used to determine career advancement, and its results inform promotion decisions. Teacher appraisal results are used for salary progression in some countries. Additionally, results might be used to award rewards to teachers, including the award of a one-off monetary prize (bonus pay), time allowances, sabbatical periods, opportunities for school-based research, public recognition or awards, changes in work responsibilities, support for post-graduate study or opportunities for in-service education. Some teacher appraisal systems include the possibility of sanctions for ineffective teachers beyond the standard consequences for career progression. Sanctions include the removal from teaching duties or simply the termination of the contract. Underperformance in registration processes may have an impact on contract, career advancement or salary levels. To conclude, using appraisal results can help to recognize and reward teaching competence and performance, essential to retaining effective teachers in schools and making teaching an attractive career choice (OECD, 2005).

2.2.4. Teacher Performance Appraisal and Quality

Teachers have a key role to improving educational outcomes. Similarly, raising the quality of schooling depends to a large extent on making sure that teachers are highly skilled, well resourced, and motivated to perform at their best (OECD, 2005). It is recognized that the quality of teaching workforce is a significant factor in keeping students in school and in improving student educational outcomes. In turn, the effective monitoring and appraisal of teaching is central to the continuous improvement of schooling (Santiago & Benavides, 2009). It is surely helpful to increase the focus on teaching quality and continuous professional learning for teachers as teaching performance can promote student learning outcomes. With this regard, performance appraisal become significant and important as quality improvement tools.

Greenwood and Gaunt (1994) described that in the increasingly competitive world of education, where students and their parents have the right of choice which school will be joined, the new *customer-led 'quality' paradigm*, which is based on a marketing strategy - i.e. schools marketing their services to survive – obviously become crucial. The point is that schools are required to exercise good management practice with the aim of a strong consumer satisfaction orientation. In many educational literatures, it is stated that teacher

performance appraisal must be a key factor not only leading to individual and institutional development but also affecting school quality and effectiveness.

According to Lustick and Sykes (2006), Hattie (2009) and Bailey (2010), teacher evaluation that provides feedback and opportunities for professional learning can have a sustainable impact on teacher quality as well as on teachers' job satisfaction and feelings of self-efficacy. Next to this, teacher evaluation, in combination with student outcomes, is the best indicator for quality assurance within the existing education systems (European Commission, 2012). Therefore, designing and implementing performance appraisal which can promote teacher learning and high-quality continuous professional development (CPD) to teachers during their career can be very fruitful. It is also vital that performance appraisal should be linked to quality assurance systems, salary ladders, and teacher development.

Through a longitudinal analysis involving a sample of mid-career math teacher in Cincinnati public schools, Taylor and Tyer (2012) proved that evaluation can improve teacher performance by improving teacher skills in ways that persist in the long run. All teachers of the sample were evaluated by a year-long classroom observation-based programme. The teachers have been more productive during the school year when they were evaluated and still more in the following years. The OECD's Teaching and Learning International Survey (TALIS) has found that teacher evaluation and feedback are one of the vital elements of high-performing schools and that well-designed evaluation system may support spreading of best practices. Eighty per cent of teachers responding to the OECD's 2013 Teaching and Learning International Survey (TALIS) reported that evaluation was helpful to improving their teaching (OECD, 2013).

2.2.5. Difference between standard and competence

The relation between teacher competencies and standards is crucial because it points to broader issues of teacher professionalism (Symeonidis, 2018). A standard usually refers to "what the profession expects (...) teachers to know and be able to do" (Ingvarson, 1998, p. 128). Teacher professional standards are linked to accountability and quality assurance mechanisms, focusing on "what teachers are expected to know and be able to do" (European Commission, 2013). The European Commission's report on "Supporting Teacher Competence Development for Better Learning Outcomes" mentioned a distinction between teacher competences and professional standards. Professional standard is connected to a "bureaucratic" or "technical" approach that emphasizes measuring, monitoring, comparing and regulating individual behaviour, and teacher competence is a "developmental"

approach with loose definitions of competences indicative of performance, focusing on principles and codes of practice (European Commission, 2013b, p. 16).

On the other hand, teacher competences form part of a broader education context. Competences represent a summary of an individual's key professional and personal skills/talents and behavioural patterns (Blašková, 2014). Poole, Nielsen, Horrigan, and Langan–Fox (1998) identified competence as a combination of knowledge, skills, attitudes, motivation and personal characteristics that allow an individual to act effectively in a particular situation. Similarly, Korthagen (2004) defined competence as possessing a complex combination of integrated skills, knowledge, attitudes and values displayed in the context of task performance. According to the Commission (2012), teacher competences "should be linked to culture and context, have sufficient details for their purpose, and employ concrete, clear, consistent and action-oriented language" (p. 28).

2.2.6. Competencies for School Teachers

The importance of competency that can guide a valid and meaningful performance appraisal cannot be forgotten. Generally, the term competency is used across organizations and typically refers to the behaviors that employees must possess, or attain, in order to achieve high levels of performance both personally and for the organization (Hart, Olsen, Fredrickson, & McGovern, 2006). According to Koster and Dengerink (2008), it can also be defined as the combination of knowledge, skills, attitudes, values and personal characteristics, empowering the teacher to act professionally and appropriately in a situation, deploying them in a coherent way (Caena, 2011). In the educational setting, identifying teachers' competencies as indicators of success are increasingly focused for improving educational performance, specifically for improving school, teaching practices. Identifying specific competencies as a teacher qualification requirement will improve both teacher effectiveness and organizational performance. (Mumtaz, Khan, Aslam, & Ahmad, 2012).

Basically, there are two kinds of competences, teaching competence and teacher competence, that often seem to overlap or interweave in the professional lives and experiences of teachers. Teaching competences can be described as focused on the role of the teacher in action in the classroom, therefore directly linked with the craft of teaching (pedagogical content knowledge) (Hagger & McIntyre, 2006). Teacher competence is the wider systemic view of teacher professionalism, involving the roles of the teacher on multiple levels – of the individual, of the school, of the local community, of professional networks (OECD TALIS, 2009). These fundamental dispositions are ultimately important

for teacher competences, as connected to the attitudes to constant professional development, innovation and collaboration (Caena, 2011).

Defining clear competencies for school teacher that is aligned to local context is vital to implement quality education and to ensure a good education system. In a number of different countries, teacher competency framework based on knowledge, skills, and attributes or values are developed for improving the quality of teacher work. Teacher competence frameworks include what teachers are expected to know and be able to do (pedagogical skills) to support and incentivize teacher quality. They are the basis for a shared conceptualization of teacher quality, for building teacher capacity and for evaluating teacher performance. They are used to improve the quality of professional work, to communicate the needs of society and clients to professionals, to orientate professional development and to support ethical professional behavior (Halász, 2019).

Competency framework in different countries have a wide variations in the ways in which standards are implemented and used, according to the contexts and the responsibilities for judgement (European Commission, 2013). Among different and useful competency frameworks that are shaped and developed – in a decisive way - by the needs, influences and constraints of multiple, embedded socio-cultural contexts, I will briefly present Myanmar Teacher Competency Standards Framework (TCSF) which is theoretically well-founded and reasonably practicable in order to provide a sound basis for a conceptual model for the current research. As a result of it, I can find guidance on the requirements which a valid and practicable teacher performance appraisal framework should comply with.

The most important goal of the Myanmar Teacher Competency Standards Framework (TCSF) is to guide the professional development of teachers, to increase their capacity to Know, Think, Feel and Act. The teacher competency standards refer to the expectations of teachers' knowledge, skills, attributes and required levels of performance at various stages of their teaching career and is organized in four *domains*: professional knowledge and understanding, professional skills and practices, professional values and dispositions, professional growth and development. Each domain refers to “a complex combination of knowledge, skills, understanding, values, attitudes and desire which lead to effective, embodied human action in the world, in a particular domain” (European Commission, 2013). Each domain is organized by *areas of competence* for which the *competency standard* is expressed as a concise statement with accompanying descriptors of the expected minimum requirements to be achieved by all teachers. Competency

standards are the expected professional abilities and skills a teacher should develop through their initial training and as they continue to grow and develop in their professional service and practice, such as participation in induction and on-going in-service education and training. There are competency standards and minimum requirements for teachers' professional development in each domain.

The areas of competence in the four domains are the following:

Domain A: Professional knowledge and understanding: This domain encompasses the knowledge required for teaching different stages and level- appropriate subject content competency. Under this domain, areas of competence are educational science, instructional technology, students, families, schools and community curriculum, and subject matter.

Domain B: Professional skills and practices: This domain deals with what teachers are able to do. Under this domain, areas of competence are pedagogy, assessment, classroom management and learner-centered values.

Domain C: Professional values and dispositions: This domain refers to the ideas, values, and beliefs that teachers hold about education, teaching and learning. The areas of competence specific to this domain are professional ethics, service to profession and community and community leadership.

Domain D: Professional growth and development: This domain incorporates teachers' habits, motivation, and actions related to their on-going learning and professional improvement. It highlights the need for research to support teachers' classroom performance and continuing professional development. The areas of competence specific to this domain relate to reflective practices, collaborative learning, and initiative for research culture.

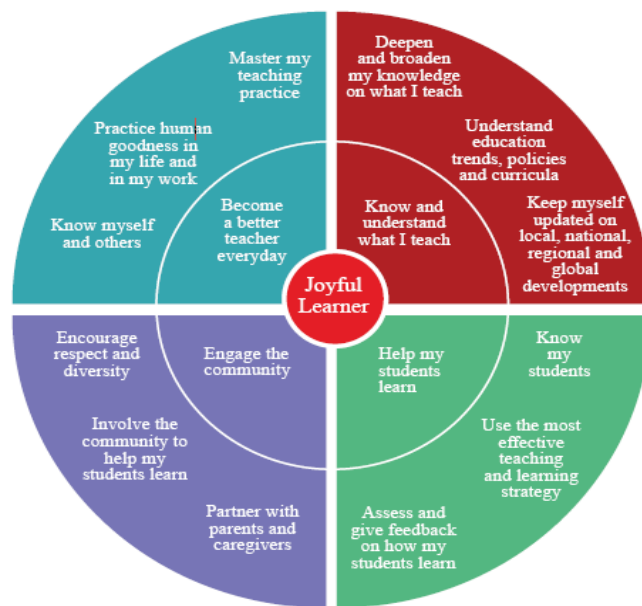
Although I have found several competence standard frameworks, most of which have provided useful information concerning the multifaceted nature of teaching, there are two especially valuable sources which form the backbone of this review because of their particular relevance and/or their comprehensiveness. These include the Southeast Asia Teachers Competency Framework and the Australian Professional Standards for Teachers. I chose to describe these frameworks, for the simple reason that these are theoretically well-founded, reasonably practicable, and in full compliance with the norms and the specific legal and moral requirements of Myanmar education system.

SEA-TCF was developed by the Teachers' Council of Thailand, in partnership with the Southeast Asia Ministers of Education Organization (SEAMEO) and the SEAMEO

Regional Center for Educational Innovation and Technology in February 2017. More than 40 teacher education experts from the eleven Ministries of Education in Southeast Asian Countries and experts from leading teacher education institutes and organizations such as Teachers College Columbia University, USA; and UNESCO developed it for improving teacher quality in the region. SEA-TCF is designed with the aim of providing as a guide for use in teacher professional development toward realizing 21st century skills and practices within a context that is regionally appropriate and in line with global best practices (SEA-TCF, 2018). Moreover, it can provide a solid foundation and guidelines for teacher exchange and teacher mobility within the Southeast Asia region. The Southeast Asia Teachers Competency Framework (SEA-TCF) is implemented in the following.

1. Knowing and understanding what to teach is the ability of teachers to deepen and broaden their knowledge on what to teach, understand education trends, policies, and curricula and be updated on local, national, regional, and global developments.
2. Helping students learn is the ability to know their students, use the most effective teaching and learning strategy and assess and give feedback on how students learn.
3. Engaging the community is the ability to partner with parents and caregivers, involve the community to help students learn, and encourage respect and diversity.
4. Becoming a better teacher every day is the ability to know oneself and others, practice human goodness and then master the teaching practice.

Figure 1 Southeast Asia Teacher Competency Framework



Source: Southeast Asia Teachers Competency Framework (SEA-TCF), 2018

The Australian Professional Standards for Teachers are a public statement of what constitutes teacher quality (Australian Institute for Teaching and School Leadership, AITSL, 2011). These standards present a clear language for discourse between teachers, teacher educators, teacher organizations, professional associations and the public.

The Australian Professional Standards for Teachers are organized into four career stages: Graduate, Proficient, Highly Accomplished and Lead. These standards provide a framework by which teachers can judge the success of their learning and assist self-reflection and self-assessment. They can contribute to the professionalization of teaching and raise the status of the profession (AITSL, 2011).

Table 1 Professional Standards for Teachers in Australia

	Domain of teaching	Standards
Domain 1	Professional Knowledge	1. Know students and how they learn
		2. Know the content and how to teach it
Domain 2	Professional Practice	3. Plan for and implement effective teaching and learning
		4. Create and maintain supportive and safe learning environments
		5. Assess, provide feedback and report on student learning
Domain 3	Professional Engagement	6. Engage in professional learning
		7. Engage professionally with colleagues, parents/careers and the community

Source: Professional Standards for Teachers in Australia (AITSL, 2011).

Comparing the 3 frameworks we may conclude that in the Myanmar teacher competency standard framework (TCSF), competency standards are organized in four professional domains such as knowing and understanding, skills and practices, values and dispositions, growth and development. Encouraging to interpret on it based on local context and specific needs, the Southeast Asia Teachers Competency Framework (SEA-TCF) include 4 essential competencies consisting of 12 general competencies that are ready comprehension and ease in application. The Australian Professional Standards for Teachers have three professional domains (Knowledge, Practice and Professional Engagement) having seven standards. Comparing to SEA-TCF and The Australian Professional Standards for Teachers, Myanmar TCSF has a specific domain as professional values and dispositions, despite having different usage of competence and similar areas of competence.

Since teacher competence frameworks are designed in ways consistent with their educational policies and used for evaluation purposes with measurable and observable performance indicators, this review can provide a strong foundation for developing a performance appraisal framework for teacher educators in Myanmar.

2.2.6. Competence Frameworks in Different Contexts

Teachers, university teachers and teacher educators have different roles. Teachers instruct students in several subject areas and assist students in developing personal skills but also in developing interpersonal skills. A university teacher is a postsecondary educator at the college or university level who teaches undergraduate and/or graduate students and provides the foundation for the students' future careers and lives as independent adults. The difference between teachers and professors connects to the work setting and student population. Teachers work with young children and teenagers, while professors work with adults in higher education contexts. There are distinct differences in the educational requirements for teachers and university teachers, specific job responsibilities, research expectations and average salaries. (Drexel University School of Education).

In the educational studies, the tasks of teacher educators are also compared to that of teachers (Smith, 2005). The most defining difference between teacher educators and teachers is the distinction between "first order teaching," which involves teaching students, and second order teaching" (Murray & Male, 2005). Teacher educators, second order teaching involves training and supervising (prospective) teachers who teach students. A teacher educator works for a different age group compared to teachers, and focus on "modeling" (Lunenberg, Korthagen & Swennen, 2007). Further difference is doing and supervising research (Murray, Swennen & Shagrir, 2009).

The competence frameworks for teachers, faculty members, and teacher educators share common elements but also have distinct aspects tailored to their specific roles and responsibilities. There are some consensus and differences between teacher competence framework and competence framework for university teachers. The commonalities between competence framework of teachers and that of university teachers include mother tongue literacy, continuous professional development and the integration of technology. While teachers focus more on direct classroom applications, university teachers on content expertise and research. The report of DeSeCo strategy paper (OECD, 2002) provides common competence areas in the different countries within the OECD project *Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo)* which

are Learning/Lifelong learning, Mother tongue literacy, Social competencies/ Cooperation/ Teamwork, Communication competencies, Information/Problem solving/ IT-media competencies, Numeracy/Mathematical literacy. Similarly, National University of Ireland Galway developed the Competency Framework for university teachers under six categories of competencies: Research Excellence, Teaching Excellence, Personal Effectiveness, Leading others, Strategy & Vision, Collegiate and Community Contribution. On the one hand, regarding teacher competences, the Commission proposed a reference framework with eight key competences for teachers, defined as “a combination of knowledge, skills and attitudes appropriate to the context”, including: (1) communication in the mother tongue; (2) communication in foreign languages; (3) mathematical competence and basic competences in science and technology; (4) digital competence; (5) learning to learn; (6) social and civic competences; (7) sense of initiative and entrepreneurship; and (8) cultural awareness and expression (European Parliament & Council of the European Union, 2006, p. 13) . The Turkish teacher competence framework was organized under three categories (a) professional knowledge (b) professional skills (c) attitudes and values (MoNE, 2017).

The key difference between competence framework of teachers and that of university teachers is research excellence that is connected with ability to transfer the science results to students for their future development. The analysis suggests that while teacher competence framework focus on pedagogical skills and student learning, that of university teachers focus on leadership competence (e.g. supervising student research, managing research team, etc) and knowledge dissemination contributing to academic discourse.

In contrast, the competence frameworks for teacher educators focus on the preparation and support of future teachers. To improve teacher educators’ essential abilities, it is vital to understand competencies and the process of acquiring them. According to Blašková et al. (2014), the competences of teacher educators are of exceptional importance because teachers can constitute and create new knowledge and new values beneficial to the university as well as to students. Celik (2011) claimed that a good teacher educator must have four qualities: being a good teacher, creating new practical and theoretical knowledge, supporting teachers in training and development, and developing oneself professionally. Koster et al. (2005) stated the competencies of teacher educator are content competency, communicative and reflective competencies, organizational competency, pedagogical competencies. The competence framework for teacher educators and university teachers share similarities but differs in some specific skills and attributes.

For example, teacher educators must acquire reflective competencies to model teaching for student teachers while reflective practice of university teachers focus on improving research and teaching effectiveness.

It is good for all the members of the profession to aware the continuous need to screen and update their professional competencies. The field of education and teacher training is rapidly evolving, with new research, technologies, and teaching methods constantly emerging. Therefore, it is essential for educators to stay updated and adapt their competencies to these changes to ensure they are providing the best possible education for their students (Koster & Dengerink, 2001).

2.3. Appraisal Practices in Higher Education

Performance appraisal is one of the performance management tools that is widely used to measure the productivity of academic employees in different contexts. In this section, appraisal practices in higher education will be presented and discussed with diverging views among academia and practitioners on the role of performance appraisal, the form it should take, and use of appraisal results. The above-mentioned topics are discussed by citing international literature mostly. Performance appraisal in education is a new paradigm in Myanmar, thus, related research is scarce and relevant national literature is scant.

2.3.1. Key Issues in Faculty Evaluation

Evaluation is regarded as an important component in increasing faculty motivation, satisfaction, and productivity. Kerr (1976) argued evaluation is the most important element in MBO (management by objectives) organizational planning and control systems. But, Highet (1950) believed that teaching is an art and far too complex for evaluation. As evaluating faculty is a sensitive issue, it is necessary to consider its validity, reliability, and sources of evidence.

Another key issue for faculty evaluation is mindset on professional growth. According to Hall (2013), observation, dialogue, feedback, and investment are the four key ingredients for a growth mindset. Dialogue among faculty members can provide insight into their own teaching in positive way. Muoio (2019) insist that supervisor's feedback can help gain valuable insight into their teaching practice.

Designing a fair performance appraisal system is a significant issue in faculty appraisal process. According to Ahmed (2016), the design and content of performance appraisal should be linked to career progression and development. Only if the faculty evaluation process was well-designed, performance outcomes of organizations can be

improved. Otherwise, the evaluation process can be ineffective and (b) cause frustration for appraisers and appraisees (Phan, 2014).

In evaluation process, the evaluator's role is important as he or she must maintain a professional environment, create equilibrium in the curriculum (Alfonso, Firth & Neville, 1981). The evaluator must be familiar with quantitative evaluation strategies, techniques, and constructs, and need clinical supervision skills (Panigrahi, 2013).

Another challenge to faculty evaluation is reliable and valid judgmental measures. DeNisi and Murphy (2017) claimed that the types of performance measures most widely used in performance appraisal and performance management (i.e., ratings of performance by supervisors, peers, or some other source) are weak indicators of individual job performance. In practice, subjective methods of evaluation offer the potential for games of political intrigue and skullduggery (Dilts, et al, 1994). Moreover, the reliability and validity of student questionnaires are questionable. Peer evaluation of instruction is also limited. Therefore, I think that it should not be missed the importance of observable performance indicators used in measuring effective teaching.

One controversial issue related to performance indicators is the number of publication . A lecture is far different from writing scientific journals, but if knowledge can be presented in both activities, then does it not necessarily follow that a single individual will always possess both talents? In practice, researchers with the ability of writing academic journal may be relatively rare. It is wise to develop research culture in developing countries with the aim of promoting knowledge creation and knowledge transmission.

There have been some controversies regarding identifying the work of the faculty and what is being assessed. According to Flaniken (2009), faculty are more willing to support the assessment of their research compared to the assessment of their teaching or service activities. Generally, the work of faculty includes three categories which are research, teaching, and service (Clement & Stevens, 1989; Dilts, Haber, & Bialik, 1994). Faculty work includes four main parts which are teaching, research and creative activity, practice and professional service, and citizenship (Braskamp & Ory,1994).

2.3.4. Appraisal techniques and methods

To determine the performance in higher education sector, diverse appraisal methods and their combinations are used to achieve the own goals of an academic unit. There are several areas of evaluation such as teaching, research, service and citizenship. Apparently, evidence concerning one specific area using different evaluation techniques should be gathered and analyzed. It is necessary to have a systematic scheme of varied component

portions in a total performance evaluation for establishing a proper performance evaluation system. First, many different appraisal methods used in measuring teaching area that are focused on teacher competency, teacher performance and teacher effectiveness are discussed.

Referring to the history of performance appraisal in higher education, Gustad (1967) identified 13 most frequently used methods in his study. They were

- (a) chairman evaluation,
- (b) dean evaluation,
- (c) colleagues' opinion,
- (d) scholarly research and publication,
- (e) informal student opinion,
- (f) grade distributions,
- (g) committee evaluations,
- (h) course syllabi and examinations,
- (i) student examination performance,
- (j) self-evaluation,
- (k) enrollment in elective courses,
- (l) systematic student rating, alumni opinions, classroom visits, and
- (m) long-term follow-up students" (p. 270). There is little evidence concerning what the most important methods are.

Currently, the most dominant approaches are being used as sources to collect information and feed into evaluation, including student feedback, administration evaluation, peer review (colleagues), self-evaluation and also teacher portfolio (Casey et al., 1997; Paulsen, 2002; Aslam, 2011; Dinh, 2013).

2.3.4.1. Student Feedback

Significantly, student feedbacks are valuable and potential source of faculty evaluation which is unavoidable and the most indicated way to get their view is through student's questionnaires that consist of questions about teacher performance (Aslam, 2011). In a very recent study undertaken by Benton and Cashin (2014), they claimed that *"no source of information is more reliable than student ratings, because they are based on multiple students who observe instruction on multiple occasions"* (p.281). But, to stress the importance of student's feedback, it is vital to consider an important extract by Seldin

(1975) that is “*the opinions of those who eat the dinner should be considered, if we want to know how it tastes*”.

Although many scholars reported student feedback as a valuable tool to assess teacher effectiveness, Feldman (1996; 2007) pointed out that the most critical one to student feedback, lack of student’s awareness and experience, capriciousness and their irresponsibility are the weak points to be considered. To add more validity, reliability and credibility of students’ ratings, it is commonly recommended to incorporate other sources, such as peer review, teacher portfolio (Casey et al., 1997; Emery et al., 2003; Benton & Cashin, 2014).

2.3.4.2. Peer evaluation

The process of peer evaluation can be very effective in that the evaluator and the one to be evaluated can predetermine exactly what is going to be assessed. Knowing that the process is merely for the purpose of identifying and strengthening specific weaknesses is reassuring to the individual who is being evaluated. An additional strength of peer evaluation is that the faculty member doing the evaluation is familiar with institutional goals, priorities, and values (Arreola, 1995). Moreover, Peterson et al. (2002) indicate that peer evaluation can include assistance in data gathering, reviewing materials, teacher collaboration, mentoring, school improvement planning, and leadership.

Peer reviews are expected to provide information from three broad important aspects; classroom reflection of the teacher, accuracy and quality of course materials, and appraisal of the faculty instructional development activities (Casey *et al.*, 1997). However, prejudice, inaccuracy and bias are some major problems addressed in many studies. According to Arreola (1995), peer evaluations should rarely be used for the purpose of personnel decisions unless the one doing the evaluation is part of a team designed for that purpose and uses a standardized rating instrument.

2.3.4.3. Self-evaluation

It is rarely used as basis for personnel decisions. Because there is a lack of objectivity inherent in such a process. Dilts, et al (1994) claimed that self-evaluation can be a useful technique when used in conjunction with administrator/colleague observations or student surveys to determine if the perceptions of the evaluate on his or her classroom performance are consistent with those of other potentially more objective observers (p. 53). Sometimes, it can identify weaknesses and strengths in teaching that may lead to instructional effectiveness.

2.3.4.4. Teacher portfolio

One additional method of performance appraisal to be discussed is teacher portfolios. Assessment portfolios are increasing in popularity as an assessment tool, and results indicate that administrators feel that portfolios are more accurate and comprehensive than the occasional classroom visit (Attinello, 2006). According to Tucker, Stronge, & Gareis (2002), portfolio assessment can address both formative and summative evaluation. Teacher portfolio are preparing for two aims; to provide a source for use in personnel decision and to improve teaching performance (Seldin *et al.*, 2010). When using portfolios, instructors tend to feel as though they have a part in the performance appraisal process; through compiling a portfolio, an instructor can show mastery of the various areas of teaching (Donnelly, 2005).

Generally, teacher portfolio consists of materials and documents that contain the scope and quality of faculty teaching performance and including their teaching strengths and accomplishments (Seldin *et al.*, 2010). Dinh (2013) explained that teacher portfolio has many benefits such as providing different sources of evidence of teaching performance in line with student evaluations, reducing the gap between institutions and individual by challenging institutions to develop evaluation processes. Casey *et al.* (1997) suggested that when the result of appraisal is used for promotion or tenure based on teaching contributions, it is better for the institution to rely on also teaching portfolios which incorporate soundly based appraisals of teaching. However, Dinh (2013) believed that although teacher portfolio is an effective way for experienced lecturers to evaluate, it may not be useful for young lecturers.

2.3.4.5. 360-degree Appraisal

It is a popular performance appraisal technique that includes evaluation inputs from a number of basic enumerators (Superior/Management, Peers, Students and Self). 360 Degree appraisal provides people with information about the influence of their action on others. It is said that it is not only precise and dependable system but also legally more justifiable (Shaout & Yousif, 2014). Buller (2012) insists that there are several important principles to remember in 360-degree appraisal and that observers should be qualified to evaluate. For example, when assessing a faculty member, students are well positioned to comment about the degree to which the professor addressed multiple learning styles and the professor's effectiveness in communication. Students are not in a proper position to evaluate whether the professor's grading scale was too hard or too easy or the degree to which the professor was a professional and collegial member of the department. In this

regard, administrators are in a proper position to evaluate faculty member's progress toward tenure, adherence to institutional policies, or effectiveness in service to the discipline or university. In this sense, carefully designed and targeted questions for each constituency in a 360-degree evaluation will produce more meaningful results for the institution and the faculty members.

. In sum, self-evaluation, 360-type feedback evaluation, peer evaluation, supervisor evaluation, and the behaviorally anchored rating scales are common techniques in this area. It is worth mentioning that effective and proper evaluation techniques play a vital role in providing reliable feedback on faculty's performance.

2.3.3. Use of Appraisal Results

Fletcher (1993: 5) typically states that "assessment done for its own sake is of little value", therefore the results of the appraisal should be useful to both appraiser and appraisee. Performance appraisal provides important information helpful for several organizational and individual goals.

Use of appraisal results is twofold -- formative and summative. As formative use of results, it is useful for identifying areas for professional development leading to the preparation of individual improvement plans. Specifically, it involves identification of the faculty member's achievements and areas where improvement has occurred, and progress is still necessary, and guidance about how the person could improve (Buller, 2012). In this respect, Dienemann and Shaffer (1992) also contended that performance appraisals can provide useful information concerning quality of current performance, and career development planning for developmental use. Based on formative results, areas of weakness should be focused, and specific advice and suggestions should be offered for future growth. This is critical to the pursuit of institutional excellence, so formative evaluation should be a major concern of unit faculty and heads. There is also a need to link appraisal results to professional development for future improvement. For example, in Korea, education authorities provide excellent faculty members with a "study and research year" based on the appraisal results; it should provide a way of granting opportunities for faculty members to further build their professional capacity. Moreover, underperforming teachers are obliged to undertake short-to long-term training programmes depending on their appraisal results (OECD, 2013).

Formative use of appraisal results can improve teacher effectiveness by providing specific, constructive suggestions for improvement. Buller (2012) discovered that offering recognition and praise in a meaningful manner is the critical part of performance

evaluation. As a result, evaluation offers a powerful motivation for faculty members to do their very best for the program and institution. In general, effective evaluation will make slight and incidental, if any, use of inter-individual comparisons; rather it will compare the record of the given individual at successive time intervals and always in the light of his own unique needs and purposes. (Greene, 1956, p. 34). Therefore, careful consideration should be given to individual needs and interests for improvement of academic staffs' performance.

On the other side, summative use of appraisal results come at the conclusion of an activity (e.g. a faculty member's evaluation year) intended to produce judgments on the adequacy or effectiveness of the activity. Summative evaluations thus lend themselves to providing a basis for personnel decisions such as merit salary raises, promotion and tenure (Kansas State University, 2012). Obviously, these are helpful for administrative uses and specifically, human resource planning. In consequence, the personnel decisions can be reasonable and defensible.

According to Williams (1994), Fletcher (1993), Swan and Margulies (1991), appraisal results can be used for pay increase, identifying people with potential for promotion, identifying employees needs for training and development, for discovering problems faster. In addition, performance feedback and motivation, career counselling, research purposes and a reference base for other human resource management decisions are significant advantages of using appraisal results.

As argued earlier, the appraisal will be meaningful and helpful in higher education institutions only if the outcomes of the appraisal process are used effectively. It is necessary to feed information on performance back to those who deliver education services, notably faculty members; design professional-development activities to improve teaching practices; establish rewards, support systems and consequences that flow from appraisal results; and develop the channels through which the information gathered during performance appraisals is used to develop education policy (OECD, 2013). A study done by Turk (2008) showed that the performance appraisal and compensation system (pay-for-performance system) has guaranteed a highly motivated core of staff. According to Turk (2008) a good and well-functioning performance appraisal system would help the educators to make their mark in the organizational setting of their faculty.

Both are vitally important, but formative and summative evaluations should be distinctly separated. Sometimes confusion arises concerning the data useful for summative and formative evaluation. Some kinds of data serve one purpose better than the other. Thus,

observation of teaching is better for formative evaluation, while student ratings are better for summative purposes. However, some kinds of data (e.g., publications, student ratings, assessment of tests, and evaluation of syllabi) can very effectively serve both purposes (Kansas State University, 2012).

International studies have shown that constructive and quality feedback is perceived to be critical to an effective PA (Rindler, 1994; Danielson, 1996; Marshall, 2005; Feeney, 2007). Ovando (2005) contended, “Feedback refers to relevant information provided to those engaged in the teaching-learning process regarding their performance so that they may introduce modifications, correct errors or engage in professional development that will lead to enhanced teaching and learning” (p.173). Likewise, Stiggins and Duke (1988) asserted that “A continuous cycle of feedback . . . is needed to promote teacher development” (p.22). It is noteworthy that constructive feedback can enhance educator satisfaction and commitment, improving their performance and help them grow professionally (Marzano et al., 2001; Marshall, 2005; Ovando, 2005; Feeney, 2007).

It is impossible to create a fair and ethical performance appraisal system without identifying how the measured performance will be translated into rewards and punishments (Dilts, et al., 1994). Researchers have found that the failure to adequately link performance appraisal with compensation has several negative implications. Consequently, a lack of predictability of rewards serves to mitigate commitment and increase employee dissatisfaction. If the appraisal system fails in either predictability or in the requisite link between performance and rewards, it has the potential for providing disincentives to quality performance (Dilts, et al., 1994).

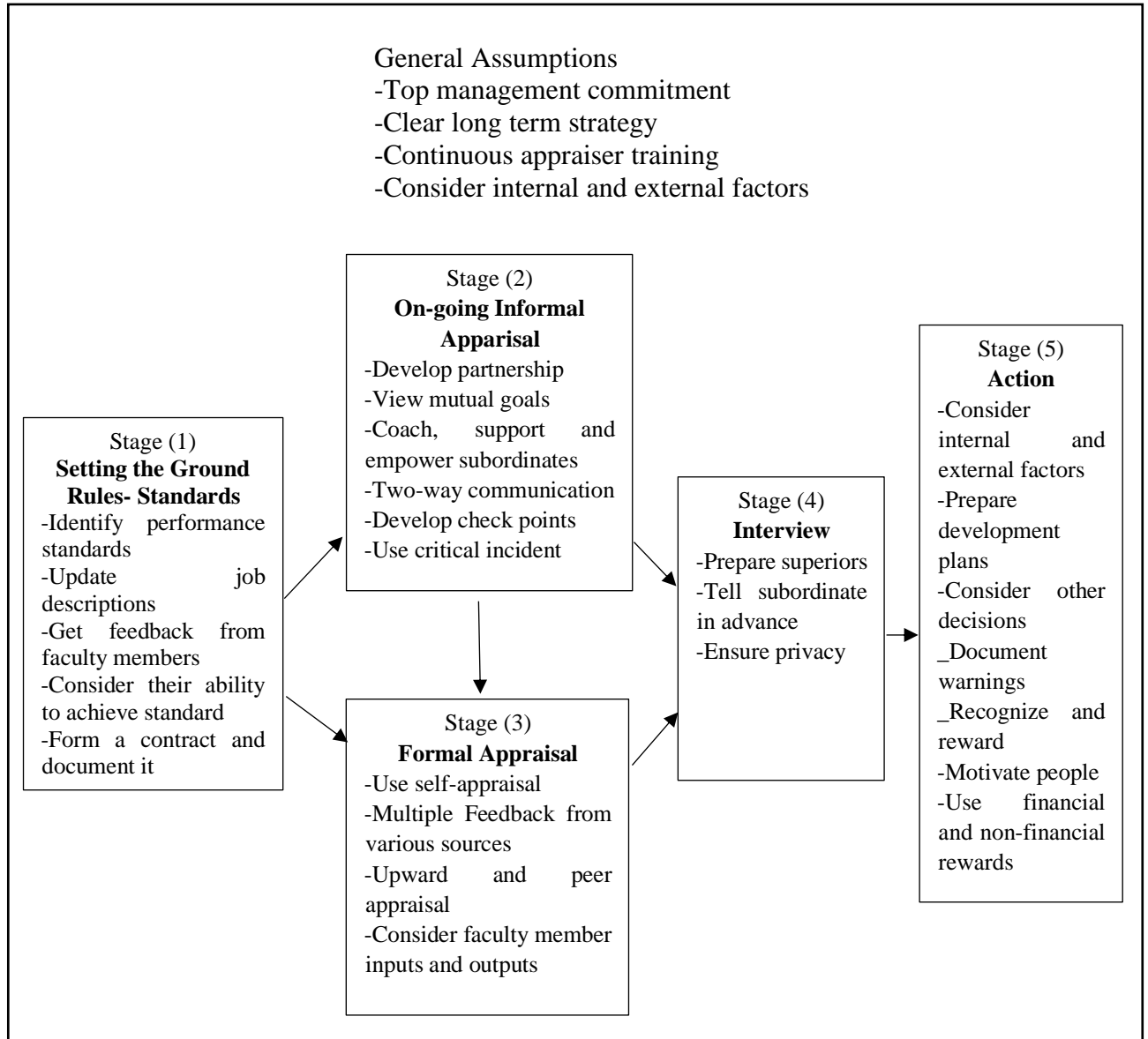
2.4 Frameworks for establishing a teacher educator evaluation system

2.4.1. Integrated performance appraisal management model

Khoury and Analoui (2004) proposed a model (see Figure) in which they have employed some major stages. **The first stage** is basic rules and standards that are important to identify performance standards, updating job descriptions, getting feedback from academics and considering their ability to achieve standards. **The second stage** is a continuous informal appraisal that includes developing partnership, viewing mutual objectives, coach, supporting and empowering subordinates, and two-way communication. A formal appraisal is a **third stage** which covers upward and peer appraisals, self-appraisal, various feedbacks from different sources, and considering academics’ contributions. **The fourth stage** is an interview to prepare managers, tell employees in advance and assure privacy. The last stage is taking internal and external factors, use financial and non-

financial rewards, prepare development plans, document warnings and motivate people (cited in Ahmed, 2016).

Figure 2 Integrated performance appraisal management model



Source: Khoury, G. & Analoui, F. (2004). Innovative management model for performance appraisal: the case of the Palestinian public universities. Management Research News. P.63.

2.4.2. Standards for Teacher Educators

Many kinds of literature show that developing standards for teacher educators contribute towards the formulation of the qualifications of teacher educators (Koster & Dengerink (2001). Standards can provide a guide and a reference point for personal and professional development planning (Ingvarson, 1998). A teacher educator standard is

crucial for performance appraisal because it sets clear expectations and benchmarks for teacher educators to meet. By aligning performance appraisal with these standards, institutions can assess educators fairly and consistently, fostering continuous improvement in teacher education programs.

These standards can strengthen the collective capacity and professional accountability of teachers. Moreover, they can help to know the strengths of teachers and those aspects of their practice which could be further developed. From this perspective, teacher standard for teacher educators is a vital step in the drive to improve the effectiveness of teaching and learning and raise educational standards.

The Australian Institute for Teaching and School Leadership (AITSL) sets forth the Australian National Professional Standards for Teachers as endorsed by the Ministerial Council for Education, Early Childhood Development and Youth Affairs. The National Professional Standards outline seven key elements for effective teacher educators (identified as “lead teachers”), which are summarized below:

Standard 1- Know the students and how they learn. Lead teachers are expected to select, develop, evaluate and revise teaching strategies “to improve student learning using knowledge of the physical, social and intellectual development and characteristics of students” in order to meet the needs of students from diverse cultural and economic backgrounds.

Standard 2 – Know the content and how to teach it. Lead teachers must be able to “lead initiatives [...] to evaluate and improve knowledge of content and teaching strategies,” as well as to “monitor and evaluate the implementation of teaching strategies to expand learning opportunities and content knowledge for all students”.

Standard 3 – Plan for and implement effective teaching and learning. Qualified lead teachers should “demonstrate exemplary practice and high expectations [...] and lead colleagues to plan, implement and review the effectiveness of their learning and teaching programs”.

Standard 4 – Create and maintain supportive and safe learning environments. Lead teachers are expected to be active in “the development of productive and inclusive learning environments,” as well as to “lead and implement behavior management initiatives” in order to ensure students’ well-being.

Standard 5 – Assess, provide feedback and report on student learning. Lead teachers are required to “evaluate school assessment policies and strategies” to diagnose learning needs

and to “co-ordinate student performance and program evaluation using internal and external student assessment data to improve teaching practice.

Standard 6 – Engage in professional learning. Lead teachers should “initiate collaborative relationships to expand professional learning opportunities, engage in research, and provide quality opportunities and placements for pre-service teachers”.

Standard 7 – Engage professionally with colleagues, parents/carers and the community. Lead teachers are expected to “model exemplary ethical behavior and exercise informed judgments in all professional dealings with students, colleagues and the community,” as well as taking a “leadership role in professional and community networks and support[ing] the involvement of colleagues in external learning opportunities” (AITSL, 2011).

2.4.3. Teacher Educator Competencies

Teacher educator competencies are crucial for designing performance appraisals because integrating them can foster a culture of continuous improvement. Moreover, evaluating their competency helps maintain high teaching standards, directly impacting student learning outcomes and overall educational excellence.

Koster et al. (2005) defined competency as “a combination of knowledge, skills, attitudes, motivation and personal characteristics” allowing teacher educators to effectively work educators at universities. Understanding competencies and the process of acquiring them contributes to improving teacher educators’ essential abilities. According to Blašková et al. (2014), the competences of teacher educators are of exceptional importance because teachers constitute the basis for the creation of new knowledge and new values beneficial to the university as well as to students.

In the Slovak Republic, Blašková et al. (2014) developed a competence model for university teachers (professors). The model includes seven competences: professional, educational, motivational, communication, personal, scientific and research, and publishing competencies. Celik (2011) claimed that a good teacher educator must have four qualities: being a good teacher, creating new practical and theoretical knowledge, supporting teachers in training and development, and developing oneself professionally.

Koster et al. (2005) stated the competencies of teacher educator are as follows:

1. Content Competency
 - a. Being able to discuss one’s professional field with others
 - b. Being perfectly at home with the content of one’s field
 - c. Having a vision with regard to the pedagogical side of one’s field
 - d. Being knowledgeable about the current situation in the field of education

- e. Being able to anticipate new developments
- 2. Communicative and reflective competencies
 - a. Being able to evaluate one's own teaching and make changes accordingly
 - b. Being able to reflect on the ways one operates and to develop alternatives
 - c. Being able to communicate with students from different backgrounds
 - d. Being able to give a good example in one's interaction with students
 - e. Having excellent communication skills
 - f. Able to manage group processes
 - g. Being able to clearly articulate one's own opinion
 - h. Having an-inquiry-oriented attitude
- 3. Organizational competency
 - a. Being able to work in a team
 - b. Being able to interact with school supervisors
 - c. Being able to strike a balance between work and leisure
 - d. Being able to further develop a joint vision and implementing it
 - e. Being able to establish contacts outside the institute
 - f. Being able to deal efficiently with administration and record-keeping
- 4. Pedagogical competencies
 - a. Being able to plan and organize one's own teaching activities starting from the existing competencies students possess and working towards students should possess in the future
 - b. Being able to help students in working on their own learning needs
 - c. Being able to make one's own pedagogical approaches accessible to student teachers
 - d. Being able to adjust course components to the rest of the curriculum
 - e. Being able to work from the students' experiences
 - f. Being able to give students concrete pointers for their teaching practice
 - g. Being able to be a model with regard to pedagogical and communicative competencies
 - h. Being able to develop and use evaluation and (self) evaluation systems for professional competencies
 - i. Being able to use ICT in one's own teaching
 - j. Being able to stimulate learning among teachers in the field

2.4.4. Example of Faculty Performance Appraisal from Hungary (ELTE Faculty of Education and Psychology)

A study of ELTE Faculty of Education and Psychology as a case study helps to frame a model for teacher educator appraisal to be implemented in Myanmar universities of education.

Eötvös Loránd University (ELTE) is located in the city of Budapest in Hungary. It is not only the oldest and largest university but also the leading research university in Hungary. Regarding faculty appraisal, it has developed its online student evaluation of teaching. I chose *Eötvös Loránd University* as a unique case to study as it can be a good example of how to implement a performance assessment system in the university. The interview with the vice dean at faculty of Education and Psychology was carried out to gather the necessary data.

1. Objectives of Performance Appraisal

The purpose of the Activity Register of Academics for lecturers and researchers of the Faculty of Education and Psychology is to identify their different activities. Another primary purpose is to make the workload of each faculty member visible and measurable and to evaluate the scientific output according to a common set of criteria. This application was introduced in 2021 to register and manage academic activities.

There are three different categories for lecturers and researchers.

- **Educational activities** are measured by the number of hours. The actual contact hours, fieldwork, preparation time, data about tasks related to/time spent on exams, evaluation, supervising students, talent support, and education development are taken into consideration.
- **Scientific activities** are measured by points. In this category, the standard is the number and quality of publications. Conferences, editorial, or proofreading activities. applications (supported or submitted) and international networking are also included in this category.
- **Public activities** are measured by the number of hours. We evaluate the membership of committees, titles, and positions, the leadership of research groups, responsibilities of programmes and specializations, and other activities that support the public life of the university.

In the case of educational and public activities, evaluation is based on the number of hours. In the case of scientific activities, the efficiency of the output is

measured, not the working hours. The aim of performance appraisal system is to create their own personal development plans for the upcoming period based on their registered result and cooperating with their direct supervisor.

2. Procedure of Appraisal

The Activity register gathers information on the faculty member's scientific and educational work and his participation in public life from the Faculty's own or University-owned and public scientific databases. These data can be completed or in certain circumstances even altered by the colleague himself. This dataset is overlooked by the colleague and his direct supervisor (Head of Department or Director of Institute) together with a verbal appraisal, then after an administrative examination the dean decides whether to affirm the dataset.

The evaluation is done by the direct supervisor, who is the Head of Department if there is a department, and if not, it is directly done by the Director of Institute. The Dean's Office summarises the results of the faculty and creates statistics using them.

The ELTE Strategic Database and the Hungarian Scientific Bibliography Database are used for monitoring faculty member's performance. After accepting, the faculty member can add additional missing data on all three sheets and fill his activity register. Upon filling, he can add notes to the items if he has a comment for his superior/head of department that can affect the number of hours or points. After finalizing, the activity register is sent for Dean's correction and approval.

Then the Dean's Office makes diverse statistics, summaries and rankings using the sent data and submits its proposals concerning the creation and the financial acknowledgement of the motivational system to the Faculty Council. Data regarding the previous year are registered during May and June. This reason behind this is that the achievements and information become available in scientific databases during May and June.

3. Criteria of Appraisal

The indicators are part of a criteria consisting of three pillars: educational activities, scientific activities and public activities. When examining the colleague's educational activities, it is not only the actual contact hours and fieldwork that we take into account, but also the preparation time, the time spent on tasks related to exams, evaluation, supervising students, talent support and education development. When measuring scientific activities, the main focus is on the quality and quantity of publications, however we

consider working at conferences, and editing or proofreading activities. This pillar also contains the activities regarding applications (supported or submitted) and international networking. The third pillar is about evaluating public activities which means we inspect the membership of committees, titles, and positions, the leadership of research groups, responsibilities of programmes and specializations, and other activities that support public life. All pillars have their individual value and score measured in points which is multiplied by a certain assigned number.

4. Performance Appraisal Scheme

The Faculty of Education and Psychology has developed a complex system to evaluate the performance of lecturers and researchers. The Dean set up an ad hoc team to create a register monitoring of the lecturers and researchers with the aim of achieving development, which is able to measure the quality and quantity of work. The indicators established by this team were tested with the help of 22 lecturers and later the conclusions of the registration and the impressions of the mentioned lecturers were used to optimize the indicators. Afterwards the Scientific Committee, the Quality Management Committee and Institute Councils gave their opinion on the indicators of the register.

The impressions of the panels were incorporated into the indicators and in 2017 the personal registers on 2015 and 2016 were applied by the colleagues giving lectures and doing research while giving them the opportunity to express their individual opinion and remarks. These propositions were also discussed by the team working on creating the register and therefore the indicators became more sophisticated.

In conclusion, the indicators are part of the register, and the importance of certain indicators compared to others is known by and available to the colleagues hence the Faculty's expectations on each pillar are clear. The establishment of the compensation system and capacity planning based on the register' data is in process, we are examining the correlation between the minimal criteria and exceptional performance concerning the 3 main pillars (educational, scientific and public activities). The register will serve as a ground for decisions made about the Faculty's tenders for exceptional performance and will provide a convenient evaluation on the level of different departments and research teams as well. The system is adopted by the whole Faculty so there is only one united method of practice.

The Faculty Council made every decision regarding the described system, and every decision with a detailed explanation was shared with the given colleagues. It is important

to emphasise that the system is still under construction, and only the pillar of the scientific activity operates.

5. Use of results

The data stored in the register are not open for the public. The information is only accessible to the person exercising the Employer's rights (the direct supervisor), the head of the institute and of the Faculty, and the person who is given permission by the Faculty's head based on the person's job description.

The register serves as basis to motivate the activities of lecturers and researchers. The register measures the quality and quantity of the performance based on the precisely detailed indicators mentioned above and presents guidance on the actual performance. The additional compensation system is under development, but it is certain that colleagues achieving exceptional performance in one of the pillars will be granted salary bonuses according to their results.

The exact expectations on the minimal criteria will be a crucial motivational factor for colleagues lagging behind in certain indicators as well. The effectiveness of the motivational system will be examined by the Dean's Office by analysing and interpreting the data from the annual evaluations. Furthermore, there will probably be a need for a periodical revision of the register and if necessary, a correction of it by the team.

According to the plans, if the system marks a lower performance of a colleague, the head of department or the director of the institution discuss the reasons and the possible solutions, which can be reconsideration of the requirements or tasks or tasks other direct interventions.

2.5 Domains of Faculty Performance Appraisal Systems

Karimi, Navehebrahim, Hassanpour & Mosapour (2020) designed a Model of Performance Appraisal for Faculty Members in Farhangian University which comprising four main dimensions namely Professional knowledge, Professional skills, Professional ethics and personality traits. content knowledge, pedagogical knowledge, professional-content knowledge and general knowledge in professional knowledge, under professional skill, leadership skills, Management skills and research and technology, professional ethics, altruism, goodwill, social ethics, conscientiousness of work conscience and initiative and lastly, in personality traits dimation, sociable, compatibility, openness and patience are sub-criteria for evaluating the faculty members.

In 2010, Ghosh, Gutterji and Ghosh designed a performance appraisal system for faculty members and showed how crisp scores multiplied by fuzzy criteria weights that can effectively generate performance score in faculty performance evaluation. It includes three major criteria (teaching, research and development, service). Under teaching area, Lecture plan and follow up, Class test per semester, Use of Advance teaching methods, Class discipline, Result of Students, Use of Advance teaching Tools. Under the area of research and development, Publication, Seminar presentation, Conducted Workshop, Attended Workshop, Project guidance, Sponsored programme, Research guidance and under the topic Service/ behavior, Attendance, Punctuality, Involvement in extra and co curricular activity, Obeying administration.

Tunca, Şahin, Oğuz and Güner (2015) explored the qualities of ideal teacher educators and as a result, they identified five main themes including ‘professional roles and responsibilities, professional values, personal characteristics, professional ethic principles and social responsibilities’. Besides, Turtorean (2013) identified the competency areas that teacher educators should have as ‘world knowledge, scientific competence (field expert), technical competency (using information technologies to facilitate learning’, moral competency (being a role model by reflecting ethic values to the classroom), affective competency (motivating students to learn), artistic competency (attracting the students' attention using body language), intercultural competency (being able to communicate with students from different religious, language and cultural backgrounds), pedagogical competency (using the methods and techniques that would facilitate students' learning), and psycho-communicative competency (guiding students to perform a task)’.

In national literature, Aung Lin (2013) studied “Developing Teachers’ Performance Appraisal System,” using qualitative and quantitative research methods. He developed performance appraisal system for Basic Education Sector in Myanmar. There were five major domains for teachers’ performance evaluation. They are lesson preparation, learning environment, delivery of instruction, evaluation and professional practices and responsibility.

According to Dissertation by San San Hla (2008), in her doctoral dissertation “Development of Competency Model for Professional Development of Upper Primary Teachers in Yangon”, the components of teacher competency are

1. Having subject matter knowledge
2. Identifying individual differences
3. Creating student learning environment

4. Using instructional strategies
5. Using information and communication technology
6. Using assessment strategies
7. Demonstrating professional responsibility
8. Having reflective practice

Keczer (2008) studied several methods applied in higher education institutions and pointed out that it is important to assess personal and organizational performance. Hard methods such as grading scale, work norm, and soft methods such as essay, critical incident method, grading scale based on behavior forms, behavior monitoring scales, objective-oriented management, self-evaluation, evaluation discussion are frequently used for assessing individual performance. On the other hand, ranking and forced division are techniques used to assess several persons at a time. She also listed performance factors that are crucial in assessing university instructors as follows:

Instruction-related activity:

- due delivery of classes;
- preparation for classes;
- integration of recent scientific results in the learning material;
- pedagogical methods applied;
- methodology applied;
- provision of auxiliary materials;
- readiness to assist students;
- fair checking of acquired knowledge.

Scientific activity:

- scientific progress;
- publication activity;
- results attained in research;
- results attained in submitting proposals.

Miscellaneous:

- preparation of students, thematic guidance;
- preparation of textbooks and other learning aids;
- participation in department activities;
- development of individual skills (language learning, computer literacy);
- establishing and maintaining educational and scientific relations;
- acquisition of resources;

- other performance factors not specific to higher education such as job experience,
- presence,
- punctuality,
- reliability,
- initiatives,
- inclination to cooperate or provide assistance,
- assumption of responsibility,
- loyalty,
- inclination to self-training,
- flexibility,
- assiduity,
- working capacity, etc.

Evaluating the teaching performances of teacher educators, Tonbul (2008) found that the most important criteria indicated by the teacher educators and students were 'having effective communication skills, following the developments in the field, and updating knowledge'. Although related research exists on performance appraisal in an international context, there is a theory-practice gap on appraisal in Myanmar.

Summary

In this chapter, the nature of performance appraisal including the meaning and concept of performance appraisal, the role of appraisal in human resource management, the significance of PA in personal and organizational performance, and performance appraisal in education have been discussed. In addition, related theories of performance appraisal are described in detail. It also provides a brief overview of appraisal practices and performance appraisal models of faculty members. This review of literature revealed an existing gap on performance appraisal that needs to be explored, specifically in Myanmar context.

CHAPTER 3 METHODOLOGY

This chapter describes the methods and procedures in detail that the researcher followed to conduct the study. A description of the research paradigm, research design, the population and sample, the instrument used to collect the required data, the reliability and validity of the instrument, the data collection procedures and the data analysis are presented. Both quantitative and qualitative research methods were employed in this study.

3.1 Research Aims

The aim of this study is to develop a PA framework for teacher educators at UOEs in Myanmar.

Specific Objectives

- To identify the possible aims and objectives of a performance appraisal system for teacher educators at UOEs in Myanmar
 - To explore the knowledge and perception of teacher educators and the management team at UOEs on performance
 - To explore the perception of the interrelatedness of performance appraisal and quality enhancement of teacher education
 - To identify the most important competencies for teacher educators in Myanmar
- To identify the major domains and performance indicators that should be used to evaluate the teacher educators' performance at UOEs in Myanmar

3.2 Research Questions

1. What could be the aims and objectives of a performance appraisal system to be introduced for teacher educators at UOEs in Myanmar, with special regard to the quality of teacher education?
2. Do teacher educators and the management team perceive the interrelatedness of performance appraisal and the quality enhancement of teacher education?
3. How do teacher educators and the management team at UOEs understand and interpret "performance"?
4. What are the most important competencies for teacher educators according to teacher educators and management team? (Comparing the results with the TCSF in Myanmar)
5. What can be the major domains and performance indicators that should be used to evaluate the teacher educators' performance at UOEs in Myanmar?

3.3 Research Paradigm

Introduced by Thomas Kuhn (1970), the term paradigm was used to discuss the shared generalizations, beliefs, and values of a community of specialists regarding the

nature of reality and knowledge. Paradigms are “conceptual and practical “tools” that are used to solve specific research problems; in other words, paradigms function as heuristics in social research” (Abbott, 2004, p. 42). Among the several paradigms that structure modern social research (e.g., post-positivism, constructivism, participatory, or pragmatism), this doctoral research is related to pragmatism and interpretivism.

The pragmatic paradigm holds “a worldview that focuses on the outcomes of research that includes the actions, situations and consequences of inquiry” (Creswell, 2012, p. 22). Pragmatist scholars believe that there is an objective reality that exists apart from human experience. However, this reality is grounded in the environment and can only be encountered through human experience (Goles & Hirschheim, 2000; Morgan, 2014; Tashakkori & Teddlie, 2008). To answer the research questions, the researcher holds a pragmatic view, especially for the quantitative part of the study.

It is theoretically understood that the interpretive paradigm allows researchers to view the world through the perceptions and experiences of the participants. According to Willis (2007), interpretivists “believe an understanding of the context in which any form of research is conducted is critical to the interpretation of data gathered” (p. 4). Interpretivism includes “accepting and seeking multiple perspectives, being open to change, practising iterative and emergent data collection techniques, promoting participatory and holistic research, and going beyond the inductive and deductive approach” (Willis, 2007, p. 583). The researcher follows the interpretive paradigm for the qualitative part as the first part of this study is aimed to explore the perspectives of participants on performance appraisal.

The acceptance of multiple perspectives in interpretivism often leads to a more comprehensive understanding of the situation (Klen & Meyers, 1998; Morehouse, 2011). That significantly facilitates this research as the researcher needs to capture ‘in-depth’ and ‘insight’ information from the population. Therefore, the researcher’s consideration of the research paradigm is between pragmatism and interpretivism.

3.4. Research Design

3.4.1. Method

In this study, a mixed-methods research approach was used. Mixed-methods research design is “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p. 4). There are good reasons identified by scholars for choosing mixed methods research

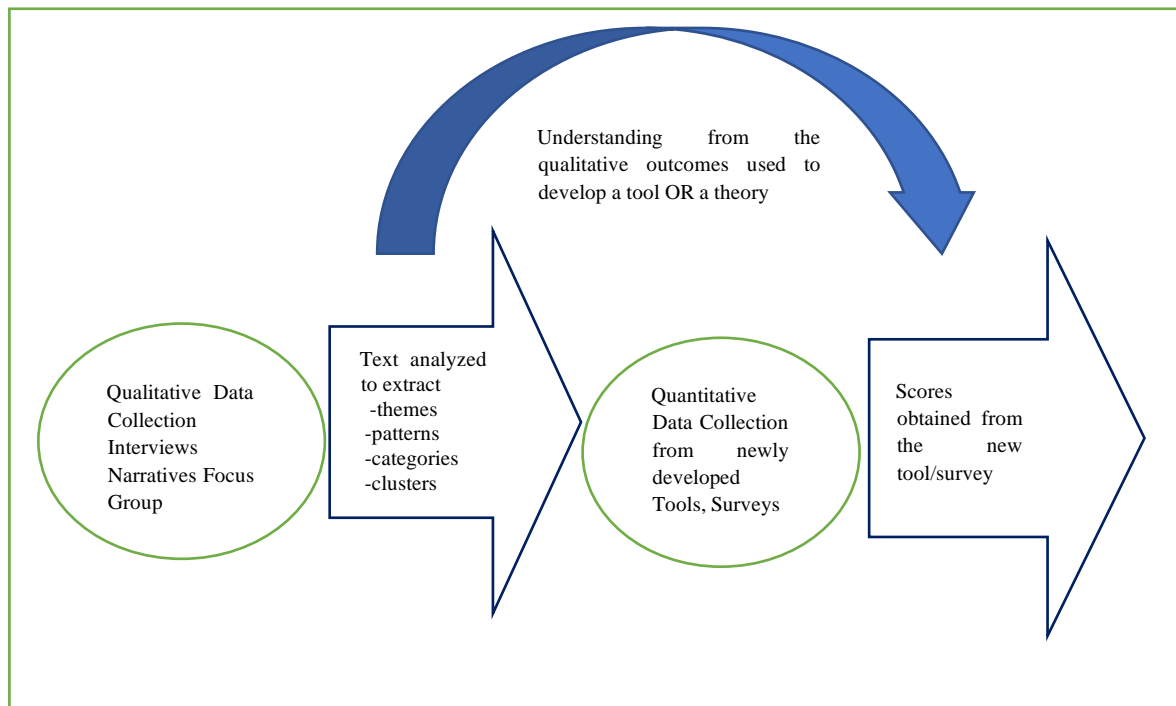
(Bryman, 2006; Greene, 2007). One prominent argument for combining different methods is referred to as “offsetting strengths and weakness” (Clark & Ivankova, 2016, p. 84). For example, the researcher might argue that he/she needs to use a quantitative method with a large sample size (strength). However, generalizing the results of the large representative sample may lack details about the particular contexts (weakness). In the qualitative method, a small and purposeful sample may give a rich description of a particular setting (strength). In contrast, those descriptive findings might be limited within a few cases (weakness). If the researcher wisely combine the two methods, he/she might obtain results that compensate for the weaknesses of both methods and take advantage of their strengths.

Complementary is another justification for why researchers use mixed-method research. According to Greene (2007), the research might reveal complementary results about different facts of a phenomenon by using qualitative and quantitative methods. In general, complementary is an argument of using both qualitative and quantitative methods to achieve meaningful outcomes of the study. Moreover, this research design helps the researcher bring different perspectives to bear in the inquiry and supports triangulation of the findings. Ideally, triangulation refers to the combinations and comparisons of multiple data sources, research methods, data collection and analysis procedures, investigators, and inferences that occur at the end of a study. Methodological triangulation refers to “the use of multiple methods to study a single problem” (Patton, 2002, p. 247). The researcher applied a methodological triangulation approach in this project in order to maximize the validity of field efforts.

Among the various types of mixed-method designs, the researcher used exploratory sequential mixed-methods design. A sequential qualitative-quantitative design was used to develop theoretical concepts or measurement instruments in a qualitative study, which were further elaborated and tested in a quantitative study (Kelle, Kühberger & Bernhard, 2019). In this two-phase project, the researcher collects the qualitative data first. This was followed by quantitative data analysis. One advantage of this approach is that it allows the researcher to identify concepts actually grounded in the data obtained from study participants. The rationale for using exploratory sequential mixed methods design is grounded in the fact that the researcher can initially explore views by listening to participants rather than approaching a topic with a predetermined set of variables to gain a better understanding of the research problem. This can help the researcher understand underlying hidden processes, by providing detailed information about the setting or context.

In the exploratory sequential mixed design, the researcher starts with an investigation into what is known about a construct or a variable. Generally, this research design helps when investigating variables where not much is known or where there is no universal agreement (Mihas, 2019). The procedure involves first gathering the qualitative data and the outcomes are used to direct the quantitative phase (Creswell & Clark, 2007).

Figure 3 The flow of Sequential Exploratory Design



Note. The design starts with qualitative data analysis followed by quantitative data analysis. Source: Sabharwal, Goh & Thirumaran (2021)

3.4.2. Analytical framework

This study was framed under interpretivism and pragmatism, and an exploratory sequential mixed-method was used. Semi-structured interviews and survey are used to collect the required data. Thematic analysis was conducted on interview data and SPSS software was used for descriptive statistics. The interview questions were developed based on research questions and a thorough literature review. After generating initial codes, searching for themes and reviewing themes, four themes finally emerged: (i) the aims and objectives of PA, (ii) the concept of “performance”, (iii) views of performance appraisal in teacher education institutions, and (iv) core competencies of teacher educators.

For developing the items related to major domains and performance indicators of teacher educators, a review of related literature, an analysis and a comparison of the competence frameworks of teacher educators were conducted to understand and develop major domains and performance indicators of teacher educators’ PA. Because of different contexts and situations, performance indicators cannot be adopted in Myanmar universities of education. For this reason,

the researcher conducted the current research in order to develop the major areas and performance indicators for teacher educators. Based on the analysis of the literature and the interview data results, a survey instrument for performance domains and indicators was developed.

3.4.3 Early Attempt for the Research Design

The initial design of the study was also exploratory sequential mixed methods design that include the collection and analysis of both quantitative and qualitative data. For the first phase of data collection, it was planned to use a purposive sampling method and for the second phase, the entire population of teacher educators from two universities of education that operates under MOE in Myanmar (350 teacher educators) would have been involved to carry out a survey of teacher educators to identify their perspectives on major indicators of performance appraisal. But the universities which have been intended as a scope for this research were closed both offline and online during the COVID-19 pandemic. Due to the political situations in the country, the unstable internet connection, insufficient digital literacy and, the researcher had difficulties to reach the participants. Random sampling was used for the quantitative part of the study. This methodology was designed to identify the major domains and performance indicators that could be used to evaluate the teacher educators' performance at UOEs in Myanmar.

3.4.4. Primary and Secondary Data Sources (Data Collection Tools)

The researcher used the following primary and secondary data sources:

1) Primary data sources:

- data collected from the semi-structured interviews of experts, rectors, heads of department and teacher educators
- data collected from the teacher educators' survey

2) Secondary data sources – scientific articles, monographs, books, official documents and existing research dedicated to performance appraisal of teacher educators

3.5 Phase I. Qualitative Study

In this study, semi-structured interviews was conducted to explore teacher educators' ideas on performance appraisal. In a semi-structured interview, the interviewer “has the freedom to probe the interviewee to elaborate on an original response or to follow a line of inquiry introduced by the interviewee” (Hancock, Ockleford & Windridge, 2009, p.16). The researcher selected semi-structured interview because it is guided by a flexible

interview protocol and asking more possible questions if needed, gets deeper perceptions to be determined.

3.5.1 Sample

Participants in this study were education experts, rectors, heads of department and teacher educators at UOEs in Myanmar. From the three UOEs in Myanmar, YUOE and SUOE were selected in this study. The third university of education, the University of the Development of the National Races of the Union operates under the Ministry of Border Affairs and it has a different administrative style and nature. Therefore, it was excluded from this study.

Purposive sampling was used to identify the participants for this qualitative study. Purposive sampling represents a group of different non-probability sampling techniques. This type of sample based on decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research (Oliver, 2015). Purposive sampling was used to ensure that all participants can share their knowledge and experiences on developing a performance appraisal framework for teacher educators. The researcher purposefully selected informants who had the best answers to the research questions and who are information-rich persons (Patton, 1990).

When using a semi-structured interview approach, researchers should propose 30 as an approximate or working number of interviews at which one could expect to be reaching theoretical saturation (Morse, 2000 cited in Vasileiou, et al., 2018).

In this study, education experts were necessary to gather a set of information that could help alongside the literature on performance appraisal systems in higher education. The ideal criteria for the selection of the education experts included the following: (a) a person who has held a manager position in a university of education in the past three years, and (b) a person who has participated in the Technical Working Group, established by the MOE, to develop a National Continuous professional Development Framework for Management Staff and Teacher Educators. Only three education experts met these criteria and so they were selected in this project to explore their ideas and experiences for developing a performance appraisal framework for teacher educators. Two of the experts were members of the Myanmar Teacher Task Force (TTF) for teacher and teacher education policy formulation. They are not only education experts but also representatives from universities of education in TTF. They were involved in the development of the key

criteria for the promotion policy. One was a representative from the MOE who was involved in the process of developing and validating the Teacher Competency Standard Framework. He was also involved in developing the draft national CPD Framework for ECs. They had significant experience in professional exchanges, overseas visits and international meetings for the Department of Higher Education.

Furthermore, rectors, heads of department and teacher educators at UOEs in Myanmar were included in this study. In the overall picture, the number of individuals participating in the project included altogether 30 professionals. Table 2 presents the number of participants.

Table 2 Overview of research participants

Participant type	Number of interviews (participants)
Educational experts	3
Rectors	2
Heads of department	4
Teacher educators (from educational departments and academic departments)	21
Total	30

Source: author

3.5.2 Instrument

First, the researcher reviewed the related literature on performance appraisal and several secondary data sources (periodicals, articles, books, and research dedicated to the performance appraisal of teacher educators). After reviewing the concepts related to developing performance appraisal of faculty members thoroughly, an interview guide was developed to collect the required data. The first section of the research instrument included questions related to biographical information. The second section included questions related to the understanding of performance appraisal and important features in developing performance appraisal, whereas the questions in the last section were aimed to explore interviewees' views on possible performance indicators in a performance appraisal system. The interview guide included 22 items (See Appendix 3).

3.5.3 Procedure

The instrument for the qualitative study was simultaneously reviewed by five expert educators including four retired teacher educators from the Department of Educational Theory. After expert validation, the wording and some ambiguous questions were modified.

The interviews with the 30 participants were conducted in November 2021. Before conducting the interview, the interviewees were contacted via e-mail to provide information on the purpose of the study, scope, the researcher's background and ethical information concerning anonymity and confidentiality. Subsequently, online interviews were conducted. The interviews lasted approximately 30 to 60 minutes. The interviewees provided their consent for the interviews to be audio-recorded. Data was transcribed within a maximum of three weeks after the interviews took place. The researcher conducted all the interviews in Myanmar as Myanmar is the native language of the participants. The researcher realized that it would be challenging for some participants to answer questions in English. Therefore, I used Myanmar in the interviews to reduce any anxiety of the participants and to avoid possible language-related problems (Spradley, 1979).

3.5.4 Data Analysis

Regarding data analysis, thematic analysis was used as it is an appropriate and powerful method to use when seeking to understand a set of experiences, thoughts, or behaviors across a data set (Braun & Clarke, 2012). Thematic analysis involves the search for and identification of common threads that extend across an entire interview or set of interviews (DeSantis & Noel Ugarriza, 2000). Firstly, the researcher read the participants' answers several times to attain a high level of familiarity with the raw data. Then, each segment of data that was relevant to or captured something interesting about the research question was coded and the codes were organized into themes. Themes were reviewed to be coherent and at the final phase of defining themes, the following four themes emerged: (i) aims and objectives of PA (ii) the concept of "performance" (iii) views of performance appraisal in teacher education institutions (iv) core competencies of teacher educators.

3.6 Phase II: Quantitative Study

In this study, a questionnaire survey was carried out to identify the major domains and performance indicators that should be used to evaluate the teacher educators' performance in Myanmar universities of education.

3.6.1 Population and Sample

Participants in this study were teacher educators working at UOEs. There are three UOEs in Myanmar, YUOE, SUOE, UDNR. Although these three UOEs in Myanmar, UDNR is under the Ministry of Border Affairs and it has different administrative style and nature. Therefore, the researcher selected two UOEs under MOE. There are 350 teacher educators working at two UOEs. The target population were 350 teacher educators for this

study. A valid response rate was 244 (70%). The number of participants and their demographic information was presented in Table 3.

When conducting a mixed methods study, sampling (i.e., selecting participants) is a particularly important consideration because sampling for each phase of the study (qualitative and quantitative) must be compatible with the assumptions belonging to that part of the design (Mills & Gay, 2016). The researcher used random sampling technique for the quantitative part of the study. Random sampling is the sampling technique in which each sample has an equal probability of being chosen and is meant to be an unbiased representation of the total population

Table 3 Demographic Data of Target Population

No.	Variable	Group	No. of Respondents	Total
1.	Gender	Male	39	350
		Female	311	
2.	Service (years)	0-4 years	54	350
		5-12 years	130	
		13-20 years	96	
		21-27years	34	
		Above 27 years	36	
3.	Qualification	M.A/M.Sc/M.Res	172	350
		M.Ed	84	
		Ph.D	94	
4.	Department	Education subjects	113	350
		Academic subjects	233	
		Co-curriculum subjects	4	

Source: author

3.6.2 Instrument

The instrument includes 53 items with 5 items for demographic data and 48 items for identifying the possible major domains and indicators for teacher educators' performance appraisal framework with five-point Likert-type items (1=Not at all important, 2=Slightly important, 3=Moderately important, 4=Very important, 5=Extremely important) was developed. (See Appendix B)

3.6.3. Procedure

The questionnaire was developed after reviewing related literature and other PA systems and analyzing the interviews' results thoroughly. To ascertain the clarity and

simplicity of the survey instruments, advice and guidance were taken from five expert educators who have special knowledge and experience in the field of this study. Among them, three were experienced teachers from the Department of Educational Theory and Management., and two were retired teachers from the Department of Educational Theory and Management. For item clarity, the wording and content of items were revised following the result of the expert review.

After expert validation, the questionnaire for a pilot study was created in an online survey software program (Qualtrics) and sent to the participants via email and messenger on 1st January 2023. The participants had two weeks to complete the questionnaire. The collected data of this study were systematically analyzed using the Statistical Package for the Social Sciences (SPSS) software version 28. Forty teacher educators from Sagaing University of Education were included in the pilot study. According to the result of the pilot study, the questionnaire was reviewed and modified.

To assess the reliability of the instrument, all variables from the pilot study were judged with Cronbach's alpha coefficients. It was found that the reliability coefficient (Cronbach α) was 0.708 for the questionnaire for performance indicators of teacher educators. All the measures are above the accepted reliability values ranging from 0.614 to 0.745. According to Sekaran & Bougie (2011), a Cronbach's alpha coefficient of 0.60 is deemed average reliability, while a coefficient of 0.70 or higher signifies that the instrument has a high-reliability standard. Table 4 demonstrates the summary of the reliability results. The results of the pilot test indicate that the Cronbach's alpha values for the respective constructs under examination are all above 0.60. Therefore, the conclusion can be drawn that all the constructs are reliable, consequently, no need to remove any item.

Table 4 Reliability of Constructs (n=40)

Latent Variable	No. of indicator	Cronbach's alpha
Teaching Activities	16	0.614
Activities related to Teaching Profession	11	0.653
Research and Innovation Activities	8	0.745
Ethics	13	0.729

Source: author

The questionnaire for the main study was also created in an online survey software program (Qualtrics) and sent to the participants via email and messenger on 1st February 2022. The researcher returned the questionnaire two weeks later.

3.6.4 Analysis of Data

The collected data of this study were systematically analyzed by using the SPSS software version 28 as it is widely used in quantitative research. To explain the main components of the performance appraisal framework for teacher educators, the importance level for each item included in the questionnaire perceived by various educators was analyzed by using descriptive statistics.

In scoring the responses to the items relating to the importance level of performance indicator, the frequency of practice was assigned by 1.00-1.49= Not at all important, 1.50-2.49 = Slightly important, 2.50-3.49 = Moderately important, 3.50-4.49= Very important, 4.50-5.00 = Extremely important.

To identify the components that should be included in the proposed Performance Appraisal Framework for Teacher Educators at UOEs in Myanmar, the importance level that perceived by all participants was determined as the percent, the mean values, and standard deviations of the total responses for items included in the questionnaire. Moreover, exploratory factor analysis and confirmatory factor analyses were used to identify and validate the major domains and teacher performance indicators that should be used to evaluate the teacher educator's performance.

In this study, the Normed Fit Index, Non-Normed Fit Index (also known as Tucker-Lewis Index,), Incremental Fit Index, the Comparative Fit Index and the index of Root Mean Square Error of Approximation were examined.

3.7 Ethical considerations

The researcher reflected on potential ethical problems and the methodological design was set in a way to maximize the protection of the respondents without endangering the validity and reliability of the study. Firstly, the researcher submitted the research permission form to the Ethical Committee of Eotvos Lorand University and the ethical approval was obtained with licensed number 2020/383-2. Prior to the interview, each participant was informed about the research project, the research purpose, the data collection and analysis procedure, as well as about how personal data will be protected. This information was shared with the participants in written form (in e-mail). Each participant was explicitly asked if they understood it and gave consent to participate in the research. Care was also taken to inform participants that they can withdraw from the study if they wish so.

The researcher emphasized anonymization throughout the project and the data was stored in a digital form in a secured system (the personal laptop of the researcher) in form

of textual documents. Voice recordings were deleted after being transcribed. At the stage of providing quotes and descriptions, all participants were numbered. Using pseudonyms or assigning numbers to respondents is common in research, and the researcher used the latter. In addition, interviewees were informed that although the findings may be published, no names or coding numbers would be used. These measures gave faculty members more comfort to participate in the study.

In the case of the online survey, the researcher protected the participants' IP address by deleting the response form right after downloading it in Excel form from the Qualtrics software. The researcher maintained a high level of integrity, making sure to always protect the privacy of the participants.

3.8 Limitations

This study has some limitations although the careful preparation and the precautions taken. The primary limitation was the time restriction regarding the PhD study in Hungary, the conduction of the empirical research delayed by COVID restrictions and the military coup and its consequences in Myanmar.

The other limitation is that the objective of this study was to develop a performance appraisal framework for teacher educators with the following aspect only: the aims and objectives, the meaning, the perceptions, major domains, and teacher performance indicators in Myanmar.

Thirdly, this study is purposefully limited to the two UOEs under MOE: YUOE and SUOE and so the generalization of the findings should be limited to this category of universities.

Next, the qualitative study applied phone interviews via messenger with the purposively selected experts, rectors, heads of department and teacher educators about their views on performance appraisal. It could be better to have data obtained from a face-to-face interview, but it was unfeasible due to the different locations of the researcher and the interviewees.

Table 5 Summary of research questions, methods and data sources

Research question	Data collection method	Data source
Q1. What are the possible aims and objectives of a performance appraisal system to be introduced for teacher educators at UOEs in Myanmar, with special regard to the quality of teacher education?	Literature review	Secondary data sources – relevant literature
	Interview	Primary data sources – Interviews with 3 Experts, 2 rectors, 4 heads of department, 21 teacher educators
Q2. How do teacher educators and the management team at UOEs understand and interpret “performance”?	Literature review	Secondary data sources – relevant literature
	Interview	Primary data sources – Interviews with 3 Experts, 2 rectors, 4 heads of department, 21 teacher educators
Q3. Do teacher educators and the management team perceive the interrelatedness of performance appraisal and quality enhancement of teacher education?	Literature review	Secondary data sources – relevant literature
	Interview	Primary data sources – Interviews with 3 Experts, 2 rectors, 4 heads of department, 21 teacher educators
Q4. What are the most important competencies for teachers? (Comparing the results with the TCSF in Myanmar)	Literature review	Secondary data sources – relevant literature
	Interview	Primary data sources – Interviews with 3 Experts, 2 rectors, 4 heads of department, 21 teacher educators
Q5. What can be the major domains and performance indicators that should be used to evaluate the teacher educators’ performance at UOEs in Myanmar?	Literature review	Secondary data sources – relevant literature
	Interview	Primary data sources – Interviews with 3 Experts, 2 rectors, 4 heads of department, 21 teacher educators
	Survey	Primary data sources – Survey of 244 teacher educators

Summary

This chapter provided information on the research procedure including research design, research techniques and the justification of the study. This study employed exploratory sequential mixed methods design to collect and analyze its datasets. This approach was judged to be the best suited to the research context and research questions set. The study applied a hybrid data collection strategy. Having adopted the methods and methodologies outlined in this chapter, a formal analysis of data derived from the interview of participants and the survey is presented in the following two chapters.

CHAPTER 4 RESULTS OF THE STUDY

In this chapter, the researcher presents the results of the study including 1) the aims and objectives of a performance appraisal system to be introduced for teacher educators in universities of education of Myanmar 2) the perception of teacher educators and the management team on the interrelatedness of PA and the quality enhancement of teacher education 3) teacher educators' and the management team's understanding on "performance" 4) the most important competencies for teacher educators 5) the major domains and performance indicators that should be used to evaluate the teacher educators' performance in Myanmar Universities of Education.

In this chapter, the qualitative phase findings were first described, followed by those of the quantitative phase.

4.1 Qualitative Results

To have a thorough understanding on the nature and best practices of teacher educators' competence and a deeper analysis and comparison of the competence frameworks of teacher educators was conducted.

4.1.1. Professional competence of teacher educators: An analytical perspective

The quality of teacher educators has an effect on the learning of (student) teachers and thus their work and competence are extremely important (Snoek et al. 2011). Raising teacher educators' quality and formal qualification requirements can lead to wider improvements in education (European Commission, 2012b). Quality frameworks for teacher educators cannot be developed without having a clear definition of the teacher educators' competences. (European Commission, 2013). Therefore, it is important to conceptualize the meaning of competence of teacher educators.

First and foremost, it is essential to understand the difference between competence and standard. According to Symeonidis (2018), the relation between teacher competences and teacher standards is crucial, as it points to wider issues of teacher professionalism. A standard usually refers to "what the profession expects (...) teachers to know and be able to do" (Ingvarson, 1998, p. 128). Teacher professional standards are linked to accountability and quality assurance mechanisms, focusing on "what teachers are expected to know and be able to do" (European Commission, 2013). In the European Commission's report on "Supporting Teacher Competence Development for Better Learning Outcomes", a distinction between definitions of teacher competences and professional standards was mentioned. Professional standard is connected to a "bureaucratic" or "technical" approach that emphasizes measuring, monitoring, comparing and regulating individual behavior. To

the contrary, teacher competence is a “developmental” approach with loose definitions of competences indicative of performance, focusing on principles and codes of practice (European Commission, 2013b, p. 16).

On the other hand, teacher competences form part of a broader education context. Competences refer to a collection of key professional and personal skills/talents and behavioral patterns of an individual (Blašková, 2014). Poole, Nielsen, Horrigan, and Langan–Fox (1998) identified competence as a combination of knowledge, skills, attitudes, motivation and personal characteristics of an individual to act effectively in a given situation. Similarly, Korthagen, (2004) defined competence as the possession of a complex combination of integrated skills, knowledge, attitudes and values displayed in the task performance.

Smith (2005) highlights that competence framework of teacher educators providing a general overview of professional qualities might vary, according to their roles and the contexts. In recent years, national frameworks defining the competencies of teacher educators have been designed by national associations of teacher educators (ATE, 2008; VELON, 2012; VELOV, 2012). Although the generic competencies may depend on the factors (the prevailing vision on teacher education, and the specific role the teacher educator plays within it), I will try to analyze teacher educators’ competencies. To gain a clear understanding on the content of the competencies of teacher educators, an analysis was conducted with three frames of reference: the American Standards for Teacher Educators (ATE, 2008), the Dutch standard for teacher educators (VELON, 2012) and the Flemish/Belgian Developmental profile of teacher educators (VELOV, 2012).

Figure 4: Comparison of Teacher Educator Standard

Country	The Netherlands	US	Belgium
Organization	the Dutch Association of teacher educators VELON	the Association of Teacher Educators (ATE)	the Flemish association of teacher educators VELOV
Purpose/ Function	Reference framework Professional development tool	Reference framework Professional development tool	Reference framework Professional development tool

<p>Areas</p>	<p>1) Pedagogy of teacher education: structuring learning processes of (prospective) teachers; educating and training by modelling; promoting the exchange between theory and practice; monitoring the development of (prospective) teachers;</p> <p>2) Supervising professional learning: interpersonal interaction; dealing with diversity; supervising the development of a professional identity;</p> <p>3) Organization and management: structuring shared education; working in a multi-disciplinary team; contributing to the organization of teacher education; contributing to teacher education management</p> <p>4) Developmentally competent: reflection; analytical performance; maintaining one's expertise</p>	<p>1) Teaching</p> <p>2) Cultural Competence</p> <p>3) Scholarship</p> <p>4) Professional Development</p> <p>5) Program Development</p> <p>6) Collaboration</p> <p>7) Public Advocacy</p> <p>8) Teacher Education Profession</p> <p>9) Vision</p>	<p>1) a supervisor of learning and development processes</p> <p>2) a facilitator of personal, social and interactive processes</p> <p>3) an educational didactic specialist</p> <p>4) a content expert</p> <p>5) an organizer</p> <p>6) an innovator and researcher</p> <p>7) a member of an education team</p> <p>8) a partner of externals and member of the educational community</p> <p>9) an engaged and critical, social participant</p>
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Regarding their *purpose and function*, they all are intended as a reference for self-evaluation, feedback by peers for teacher educators' professional development. Regarding the *content or area*, the American standard involve nine elements describing the competencies of the teacher educator (model teaching, applying cultural competence, engaging in inquiry and contributing to scholarship, etc). The Dutch standard includes structuring learning processes of (prospective) teachers; educating and training by modelling; promoting the exchange between theory and practice, reflection. On the one hand, the Flemish Developmental Profile involves nine generic teacher educator roles (the teacher educator as a supervisor of learning and developmental processes; as innovator and researcher; as an involved and critical social participant), attaching a short description of each role.

Overviewing the *contents* of the three frames of reference, knowledge and understanding, attitude and behaviour. With regard to the contents or structure, all three frames of reference deal with teaching, interpersonal relations, coaching and organization. In the Dutch standard, research competence is not focused compared to other two standards. the American standard highlight “engage in action research” in scholarship domain. Similarly, “able to carry out research” is involved Flemish/Belgian Developmental profile (VELOV).

4.1.2. Interview Responses

Semi-structured interviews were conducted with the purpose of exploring the views of teacher educators and management team on the aims and objectives of performance appraisal system, their perceptions on performance appraisal, their understanding on performance and the most important competencies for teacher educators. In order to gather qualitative data, interview guide having eighteen questions were used.

4.1.2.1. The possible aims and objectives of a performance appraisal system to be introduced for teacher educators in universities of education of Myanmar

The interview question asked the participants to describe the possible aims and objectives of performance appraisal system for teacher educators in universities of education in Myanmar. Among 30 participants, 30 participants (100%) responded to this question. Based on the frequency of the answers, interview responses were categorized and ranked into the following themes:

1. Personal development
2. Organizational development
3. Accountability

4. Disciplinary action
5. Recognizing and rewarding good performance

Theme 1. Personal Development

Concerning the possible aims of performance appraisal, all the interviewees (n=30) mentioned personal development in the first place as PA can help enhance teacher quality by regular monitoring teacher's work and providing constructive feedback on areas for improvement. Furthermore, they said that performance appraisal can be a key lever for personal and career development. One education expert believed that:

The aim of PA should be to enhance teacher practice at improving student outcomes indirectly. PA should focus on improving teacher quality because only improving teacher quality can foster student outcomes. Moreover, training and development needs for teacher educators were included in PA to ensure quality education. (Expert 2)

Similarly, one of the rectors expressed that PA of teacher educators should aim to identify areas for improvement so that they can become more effective. The interview answer was as follows:

In order to improve teaching and learning, and raise education outcome, developing PA is an important element. PA is essential to know the strengths and weaknesses of teacher educators and help modify teachers' instructional behaviors. PA should aim to develop performance by providing feedback for their teaching practice. (Rector 1)

In one of the heads of department's view, the aim of PA should be self-development and consequently, the organization would accomplish its expected goals. Her statements were as follows:

PA can help promote teacher quality and teacher effectiveness and then can increase student learning and achievement. PA should be developed for providing a way for employees' growth and development. As an end, it can help achieve organizational objectives in the future. (HoD 4)

Apart from the heads of department, one teacher educator in an academic department believes that PA should aim for staff development, in particular they would use

their existing potentiality fully with the help of PA. It can be seen in the participants' interview answers below:

The purpose of PA should be to develop professional practice and PA can help teacher educators in their career progression and self-improvement. In other words, the main focus of PA should be to develop staff performance as it allows review of the individual progress of the staffs. (TE Academic 5)

Moreover, one of the teacher educators in an education department mentioned that:

PA should aim to develop individual faculty member teaching performance. Assessment of teaching can lead to quality teaching, it can make teachers to know their professional progress. (TE Education 9)

To sum up, all the participants responded that PA should aim for self-development. But some teacher educators in an academic department said that they did not have enough confidence to identify the aims of PA as they had a little knowledge on it. Nevertheless, they have awareness on the possible aims of PA because they could mention that PA is essential for staff development. All the participants have a common opinion in that the aims of PA should be personal development and quality improvement in order to reach their best performance.

Theme 2. Organizational Development

According to the result of the interviews on the aim of PA, almost all of the interviewees (n=27) recognized that the aim of PA is to evaluate organizational goal attainment by identifying faculty performance which contributes to those goals. However, their individual answers varied in their wording in some extent. Among them, one the education experts answered:

Because of higher education's competitiveness, it is necessary to introduce changes and improvements. Here PA would allow comparisons and improvement. The purpose of PA should be institutional development based on self-development. (Expert 1)

Likewise, one of the rectors answered, based on his knowledge and experiences in human resource management, that the PA should focus on organizational development. The evidence can be seen in the interview answers, such as the one below:

The aim of PA should be organizational growth. If we establish an example of good practice of PA for the whole teacher education institution, it will indirectly benefit to the society. Moreover, the results of performance evaluation can be utilized for future organizational planning and research. (Rector 2)

Apart from rectors, one of the heads of department responded:

PA should be aimed to improve work performance and consequently, the organization would accomplish its expected goals. (HoD 1)

This view shows that PA is vital for accomplishing organizational goals.

Furthermore, one of the teacher educators replied:

PA of teacher educators should focus on achieving organizational goals that need to be a priority in educational organizations. (TE Academic 4)

Similarly, one of the teacher educators in an education department expressed that:

According to my knowledge, PA should be intended for organizational development by improving university teaching effectiveness. (TE Education 11)

The above statements are about the main aims of PA, especially highlighting organizational development. Almost all the participants pointed out that PA should be aimed at organizational development in the long run. They explained their standpoints based on their knowledge rather than their practical experience, as the concept of PA is new to them. Some participants continued with saying how important PA was for effective utilization of the human talent. according to their expressions and wordings, the researcher could feel their readiness and welcome attitude to PA.

Theme 3. Accountability

Some of the participants (n=18) believed that the purpose of PA is to achieve staff accountability with the main focus on achieving the organization's objectives by efficient and effective means. It means that PA can provide evidence for disciplinary procedures. Concerning that, one of the education experts in this study expressed that:

PA should be used as a means of achieving accountability. By pinpointing strong points and shortcomings of personnel, we can control quality assurance. (Expert 3)

This view shows that PA can be used as an accountability aspect, one of the most valuable assets in quality assurance. Apart from experts, rector 2 had the same opinion:

The aim of PA should be accountability purpose. Nowadays, university accountability towards the state and all stakeholders plays a vital role. PA results will be helpful for a suitable and reliable management system. (Rector 2)

Similarly, one of the heads of department mentioned that PA should aim to reach increased accountability. The statements of this participant were as follows:

PA should focus on accountability function and careful analysis of human resources affecting educational outcomes. PA should be used for decision-making and administrative purposes. (HoD 4)

In one teacher educator's view working at an academic department, PA should be implemented to measure accountability. Thus, she noted that:

In a global, knowledge-based market, the aim of PA should be quality assurance, and accountability can be measured by it. It can show evidence for future improvement. (TE Academic 1)

One teacher educator in an education department commented about the importance of accountability as follows:

PA should assist in holding employees accountable, addressing underperformance, and enhancing performance and practice. PA results can be helpful for administrative tasks (e.g., promotion, demotion, transfer, etc.). (TE Education 7)

To sum up, it was found that some participants responded that PA should have accountability purposes to increase efficiency, productivity and morale of teacher educators. The interviewees explained their standpoint with logical reasoning as they revealed their answers using logical consequences. Therefore, they seemed well aware of this aim of PA.

Theme 4. Administrative Purpose

Some interviewees (n=12) contended that PA should have administrative purposes for human resource development. It is essential for systematic administration. Through PA, teacher educators can improve knowledge and skills as it has the judgement nature against the standards. One of the education experts noted that:

PA is the most important administrative instrument. PA results may be helpful for informal oral correction and formal written performance improvement plan. (Expert 1)

Likewise, rector 2 mentioned that:

PA should be used to provide evidence for disciplinary procedures for personnel development. It can assist in providing professional development, in-service training which aims at developing the teacher's knowledge, skills and confidence. (Rector 2)

This statement is more confirmable with the response of other participants of this study. The other two interviewees noted that,

The aim of PA should be controlling teacher educators but not to oppress and suppress them. PA should act as a continuous support and staff development process. (HoD 3)

PA can be used for disciplinary purposes in order to develop future work, performance goals and expectations. (TE Education 2)

To sum up, it was found that some experts, rectors and HoDs had a desire to use PA for an administrative purpose. But a few teacher educators can give the response on disciplinary action of PA. Therefore, only some of the participants seemed well aware of administrative purpose of PA.

Theme 5. Recognizing and rewarding good performance

Some interviewees (n=10) claimed that PA should act as a motivating factor in working conditions. One of the education experts argued this as below:

PA is a positive stimulating force of work practice. The purpose of PA should be recognition and appreciation for work. (Expert 1)

This statement was identical with the views of rector 2. He mentioned that:

One of the purposes of teacher performance appraisal is to recognize and reward outstanding teachers. (Rector 2)

Moreover, the head of department 4 had the same opinion as expert 1 and rector 2. The evidence can be seen in the interview answer below:

PA can provide a reliable reward system that can lead to improve the quality of work life. (HoD 4)

Correspondingly, other two teacher educators expressed that PA should have motivational purposes for teacher educators to use the best of their abilities. The interview answers were as follows:

PA should be aimed at motivating teacher educators towards better performance in the future. PA have a great impact on teachers' level of motivation. (TE Academic 4)

The purpose of PA should be motivating teachers towards improved performance and in other words, to have a good reward system (TE Education 1)

Some participants agree on the recognition and reward purposes of PA. Their expression showed eagerness on reward purpose. Therefore, some participants seemed well aware of the reward purpose of PA.

According to the answers of the interviewees, the major purpose of PA was personal development. But the majority of the interviewees also mentioned organizational development, so we should not neglect it as an objective of the PA system to be introduced. Accountability was mentioned by 18 of the interviewees, thus, it seems of only third importance. On the other hand, 12 interviewees mentioned administrative purpose as the aim of PA. Some interviewees (n=10) responded that recognizing and rewarding good performance should be the purpose of PA.

4.1.2.2. Views of performance appraisal in teacher education institutions

Besides investigating the knowledge and understanding of teacher educators and the management team on “performance”, it is important to take a closer look at their opinions on performance appraisal. Therefore, participants were asked about their opinions about specific aspects of performance appraisal.

The interview question asked participants to describe how you think about teacher performance appraisal as a teacher educator. According to interview responses, three themes appeared as follows:

- (a) PA as a tool for quality enhancement
- (b) PA as a human resource management tool
- (c) PA as a tool for professional development.

Theme 1: PA as a Tool for Quality Enhancement

According to the result of the interviews, all of the interviewees (n=30) recognized that PA can help to enhance teacher educators' quality, capabilities and skills. But their wording and expressions were different in some extent. One of the education experts expressed the view that

Quality of higher education in universities cannot be achieved without continuous assessment of teacher educators. If we can use PA results, we can improve the quality of teacher educators. (Expert 1)

Similarly, one of the rectors noted that

PA focuses on the individual educator's own performance for improvement as well as potentials for developing new skills. According to my experience, accurate feedback can lead to performance and quality improvement. (Rector 2)

Apart from rectors, one of the heads of department also commented in this way:

The educational transformation efforts can be useless when there is no appraisal. Because only qualified teachers can provide the proper guidance of students learning. Moreover, PA can be used as a quality enhancement tool for faculty members. (HoD 4)

Furthermore, one teacher educator noted that PA is related to quality improvement. The views of this participant are that:

In the rapidly changing society, performance appraisal is vital for the teaching and learning process because the appraised and compensated teacher educators can produce good results. In this way, the quality of teacher education can be enhanced. (TE Academic 2)

Likewise, another teacher educator working in the education department commented that,

In teacher education institutions, we need PA as a crucial function of internal quality assurance systems. in order to improve teaching and learning, research. (TE Education 6)

To sum up, it was found that all participants responded that PA could help improve the quality of teacher educators. They showed their confidence regarding the interrelatedness of PA and quality enhancement of teacher education institutions.

Theme 2: PA as a Human Resource Management Tool

Most of the interviewees said explicitly that PA is a major function of HR

management. PA outcomes will result in the enhancement of employees' ability, increase their motivation and job satisfaction.

There was a number of participants who mentioned human resource management, as for example these two claims point out:

PA is essential in every organization as PA has the combination of administrative and development purposes. With the perspective of human resource management, PA can guide and support teacher educators' career goals. It is therefore, necessary to have a formal appraisal programme with clearly stated objectives. (Expert 3)

The appraisal process is needed in managing human resource, especially personnel, to fulfill and grasp accountability for improved teaching and learning in schools and educational institutions, one of the goals of National Education Strategic Plan (NESP). (HoD1)

This idea, PA as a HR management aspect, was present in almost all interviews.

One of the teacher educators expressed it in this way:

PA can be used as a controlling instrument in the current HR management. In my opinion, promotion and transferring should be based on PA outcomes. PA can help appoint the right person in the right position. Fair promotion will lead to high performance motivation. (TE Academic 3)

This view shows that information obtained through PA may help management to make promotion decisions.

Moreover, another teacher educator pointed out that:

Performance appraisal provides a basis for recognizing and evaluating the present and potential capabilities of employees. Performance appraisal should be a continuous function. Employees should be appraised at least once a year with the purpose of increasing employee efficiency, productivity and morale. (TE Education 5)

To sum up, almost all the participants (n=28) recognize that PA is one of the important activities of human resource management. The interviewees explained their views with a high level of enthusiasm and confidence. Therefore, it can be concluded that they understand the nature of PA very well.

Theme 3: PA as a Tool for Professional Development

In this study, many participants (n=22) said that PA can be used as a professional development tool in teacher education institutions. Participants view that PA can offer a valuable opportunity to focus on work activities and goals as well as identify and correct

existing problems, and to encourage better future performance. This is a considerable fact that PA should have multiple measures to improve the capacity of teacher educators.

One of the education experts answered as follows:

It is obvious that self-appraisal can improve teacher educators' knowledge, skills and teaching practices because it has the reflective nature. It also serves as a guide for formulating a suitable training program to upgrade the competences of the employees. That's why we should use PA as a professional development tool. (Expert 1)

Similarly, one of the rectors answered that PA for teacher educators is essential for improving knowledge, skills for instruction. The evidence can be seen in interview answers:

In teacher education institutions, the use of PA can reinforce continuous professional development and improve educators' instructional quality. Performance feedback is the most valuable part for every teacher educator in the appraisal process. (Rector 2)

Likewise, one of the heads of department expressed his opinion as follows:

PA leads to teacher educators' learning. Actually, performance appraisal procedures encourage improvement with respect to the activity being evaluated. Consequently, PA can provide an in-service training program that can bring about professional development. (HoD 4)

Furthermore, one teacher educator in academic department viewed that

"PA is an activity that measures teacher educators' accomplishments and deficiencies in order to develop their potential. It can also help achieve professional development objectives." (TE Academic 8)

Next to this, one of the teacher participants in this study expressed that,

"PA is a method to ensure the constant professional development of teacher educators in institutions of higher education. If it is used effectively, it can improve teaching quality." (TE Education 2)

To sum up, it was found that many participants indicated that PA can be utilized to help teacher educators; take part in building and developing their professional development. They showed a high level of enthusiasm to utilize PA in the future as a professional development tool. Therefore, the majority of the participants seemed to recognize the importance and nature of PA.

Regarding the opinions of interviewees on performance appraisal, all the participants noticed the quality enhancement aspect of PA. Moreover, the majority of the

interviewees also mentioned the human resource management aspect of PA. The professional development nature of PA was mentioned by 22 of the interviewees, thus, participants did not miss this important aspect of PA.

4.1.2.3. Concept of performance

In order to design a performance appraisal framework for teacher educators that could be applied in Myanmar Universities of Education, it is essential to explore the knowledge and understanding of teacher educators and the management team on “performance”. Therefore, interview questions have been developed to find out how the participants understand “performance”. Qualitative interview reported three major attributes involving in their understanding of “performance”:

- (a) Effective teaching
- (b) Teaching skill and continuous professional development
- (c) Professional attitudes and values

(a) Effective teaching

Regarding the concept of performance – how (good) performance can be interpreted, many participants (n=18) said that good performance means effective teaching, that involves having content and pedagogical knowledge, teaching and management skills.

One participant commented that

If a teacher educator has a sound content and pedagogical knowledge, understands educational psychology, can link theory to practice, we can call him a good teacher educator and a good performer. (Expert 1)

Likewise, one of the heads of department in an education department expressed that:

Good teaching could be constructed on strong professional knowledge which is important in the professional service and practice of teacher educators. (HoD 4)

In one teacher educator’s opinion, good performance implies a repertoire of professional knowledge. Her statements were as follows:

Professional content knowledge is the most important factor in teaching career. Individuals with a sound content knowledge and knowledge of instructional strategies are perceived as good performers in the educational context.

(b) Teaching skill and continuous professional development

Besides professional knowledge, some participants (n=11) mentioned that good performance of a teacher educator involves teaching skills and continuous professional development. The statements of this idea are as follows:

We can measure performance of a teacher educator using specific performance indicators such as participation in professional activities, conducting educational research, seeking updated information for the subject being taught, teaching skills, etc. (HoD 4)

Similarly, one of the education experts focused this as below:

It is difficult to define what constitutes good teaching, but a good teacher need to have professional skill (such as classroom management, communication, assessment, etc.) in order to teach effectively and successfully. (Expert 2)

(c) Professional attitudes and values

Next to this, ten participants expressed their view that good performance means having a professional attitude, understanding students' needs and how to motivate them, having management and communication skills. The interview answers were as follows:

A good teacher educator should adhere to a code of ethics when interacting with students, colleges, and the community. For example, they must demonstrate integrity, respect and fairness in every action. Honesty is the most essential attribute for teacher educators. (Expert 2)

Based on my experience, teacher educators should have professional ethics in every matter, especially decision-making, and maintain confidentiality in educational practice because it can affect positive or negative in the educational community. (HoD 1)

If a teacher educator has an educational philosophy, commitment on teaching profession, has knowledge on child psychology, he is called a good performer. (TE Academic 8)

Good performance of teacher educators means having many skills, for example instructional skill, management skill, communication skill, setting a good example for students by demonstrating good citizenship and good self-control. (TE Education 2)

To sum up, many participants responded that good performance of a teacher educator involved effective teaching that can improve students' learning outcomes. But some teacher educators in academic department said that they did not have enough confidence to explain the concept of performance as they had a little knowledge on it. Furthermore, some participants have awareness on good performance in different ways

because they mentioned that good performance of a teacher educator involves teaching skills and professional growth. Some of the participants noted that good performance of teacher educators includes professional attitude and skills. It is found that the participants had a slightly different opinion of good performance. It can be concluded that they expressed good performance in various perspectives, but all of them are valid interpretations.

4.1.2.4. Core Competencies of teacher educators

To obtain a detailed information on the most important competencies perceived by interviewers (experts, heads of department, teacher educators), the first interview question asked interviewees to describe the most important competencies for teacher educators. I asked them to describe their opinions on the important competencies openly. The responses were grouped into three categories based on the frequency.

The interview analysis shows that a good teacher educator should have the following competencies:

- (a) Teaching skill
- (b) Leadership and management skills
- (c) Academic and research competency

(a) Teaching skill

Out of 30 participants, 21 participants answered that teaching skill is the most frequent competency. According to the heads of department, teaching skill is the most observable competency to improve student learning outcomes. One of the heads of department mentioned this as follows:

Excellent teaching is the most important factor in imparting learning. Teaching skills can increase the capability of students in their own learning process. As a teacher educator, he or she must possess effective teaching skills in order to be a role model for their students.

Similar to this head of department, one teacher educator reported that:

Today students need to acquire new knowledge and skills to face the challenges of the 21st century and thus, it also needs teacher educator with good teaching skill to support their learning. Teacher educators must understand different teaching strategies and use information and communication Technology (ICT) appropriately in teaching learning situations.

(b) Leadership and management skills

16 participants expressed that leadership and management is also important competency in improving educational outcomes. Concerning this competency, one expert answered:

To implement quality education, teacher educators should possess effective management skills which can help in creating a conducive learning environment. Furthermore, they should be knowledgeable about leadership strategies and apply them appropriately in teaching practices.

Additionally, one teacher educator stated:

Teacher educators should use resources (teaching aids, instructional media, etc.) effectively in ensuring student engagement in all learning activities. To improve educational outcomes, they should know basic management theories (e.g., classroom management, community leadership, etc.) and apply them effectively with proper problem-solving techniques.

(c) Academic and research competency

Besides leadership and management, some participants (n=12) stated that academic and research competency is the most important competency for teacher educators. The example answers of the participants were:

Creation and dissemination of knowledge is the essential aspect for every profession and teaching professional is the same. But research culture is rare in Myanmar higher education institutions. Teacher educators should have initiative for researching culture. Conducting research and applying empirical information to practice plays a key role in upgrading the teacher education system. (Expert 3)

Research competency is vital for all teacher educators for educational improvement. In this regard, university autonomy is a key element for pursuing research excellence. Although there are some barriers to research, teacher educators should seek information on current trends to improve teaching practices. (HoD 1)

Developing research capabilities is vital for educational practitioners. Cooperation in research work is needed to provide evidence-based practices for educators. Teacher educator who are expected to exemplify practicality and innovation must develop and enhance research capabilities. (TE 6)

Teacher educators should conduct action and classroom research to transform educational practice. Moreover, applying the required knowledge and skills and producing research output and innovation that a teacher educator should not miss. (TE 11)

Based on these opinions, generally provided by the respondents, the researcher concluded that teacher educators should possess important competencies such as teaching skills, leadership and management, academic and research competency, although there are some other important competencies (personality competence, motivation competence, communication competence).

4.2 Quantitative Results

4.2.1. The major domains and performance indicators

Survey instrument was designed based on a comprehensive literature review and interview results.

According to the analysis of interview results, the major domains that should be used to evaluate teacher educators' performance (in the performance appraisal framework to be developed for teacher educators) in Myanmar universities of education are teaching activities, activities related to teaching profession, research and innovation activities and professional ethics. Table 6 shows the mean values showing importance level on each domain of performance appraisal.

Table 6 Mean values showing importance level on domain 1 (Teaching Activities), Domain 2 (Activities related to Teaching Profession), Domain 3 (Research and Innovative Activities) and Domain 4 (Professional Ethics)

(N= 244)

Variables	Mean (SD)	Importance Level
Domain 1 (Teaching Activities)	4.51 (.370)	Extremely important
Domain 2 (Activities related to Teaching Profession)	4.48 (.408)	Very important
Domain 3 (Research and Innovation Activities)	4.47 (.419)	Very important
Domain 4 (Professional Ethic)	4.51 (.390)	Extremely important

Scoring direction - 1.00-1.49=Not at all important,

1.50-2.49=Slightly important,

2.50-3.49= Moderately important,

3.50-4.49 =Very important,

4.50-5.00 =Extremely important

Table 7 showing the number and percentage of importance level perceived by teacher educators on each indicator under Domain 1 can be seen in Appendix. It can be regarded that, in the category of identifying Domain 1 (Teaching Activities), 0.03% of

teacher educators indicate not at all important, 0.13% slightly important, 1.88% important, 44.93% very important and 53.02% extremely important on each item.

Table 8 Mean values showing importance level on each indicator under Domain 1(Teaching Activities)

(N= 244)

Variable	Mean	Standard Deviation	Remark
Preparing lesson plan according to institutional curriculum guidelines	4.68	.466	Extremely Important
Preparing lesson plan and teaching aids according to student teachers' developmental stage	4.60	.507	Extremely Important
Preparing teaching-learning strategies for student active engagement	4.59	.501	Extremely Important
Improving teacher educators' capacity by applying their own life experiences of teaching and learning	4.51	.533	Extremely Important
Preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences	4.53	.508	Extremely Important
Linking key concepts, principles, and educational theories to real-life applications	4.50	.525	Extremely Important
Demonstrating a variety of teaching-learning materials including appropriate ICTs to support teaching-learning activities	4.44	.545	Very Important
Model teaching by using assessment tools to evaluate the learning process and outcomes	4.45	.604	Very Important
Facilitating student teachers' potential development	4.50	.541	Extremely Important
Designing learning experiences that ensure student- teacher collaboration, inquiry, problem-solving and creativity	4.47	.547	Very Important
Creating conducive learning environments that help students with differing backgrounds and abilities, including special learning needs	4.45	.582	Very Important
Designing and selecting formative and summative assessment strategies aligned with curriculum requirements	4.56	.529	Extremely Important
Demonstrating and encouraging student teachers' understanding of different cultures and global citizenship	4.44	.552	Very Important
Conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.)	4.48	.577	Very Important
Encouraging, motivating and observing student teachers to obey the school discipline	4.46	.576	Very Important

Designing lessons including district examples and illustrations	4.46	.583	Very Important
Overall	4.51	.370	Extremely Important

Scoring direction - 1.00-1.49=Not at all important,

1.50-2.49=Slightly important,

2.50-3.49= Moderately important,

3.50-4.49 =Very important,

4.50-5.00 =Extremely important

As indicated in table 8, the mean values of the importance level perceived by teacher educators on items: 1) *Preparing lesson plan according to institutional curriculum guidelines*, 2) *Preparing lesson plan and teaching aids according to student teachers' developmental stage*, 3) *Preparing teaching learning strategies for student active engagement*, 4) *Improving teacher educators' capacity by applying their own life experiences of teaching and learning*, 5) *Preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences*, 6) *Linking key concepts, principles, and educational theories to real-life applications*, 7) *Facilitating student teachers' potential development*, 8) *Designing and selecting formative and summative assessment strategies aligned with curriculum requirements* were between 4.50-5.00, therefore, they perceived that these 8 items are extremely important in teacher educators' performance appraisal to be developed in Myanmar universities of education. Additionally, they answered that 1) *Demonstrating a variety of teaching learning materials including appropriate ICTs to support teaching learning activities*, 2) *Model teaching by using assessment tools to evaluate learning process and outcomes*, 3) *Designing learning experiences that ensure student teachers collaboration, inquiry, problem-solving and creativity*, 4) *Creating conducive learning environments that help students with differing backgrounds and abilities, including special learning needs*, 5) *Demonstrating and encouraging student teachers' understanding of different cultures and global citizenship*, 6) *Conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.)*, 7) *Encouraging, motivating and observing student teachers to obey the school discipline*, 8) *Designing lessons including district examples and illustrations* were very important in teacher educators' performance appraisal as the mean values of these items were between 3.50-4.49.

Table 9 indicating the number and percentage of importance levels perceived by teacher educators on each indicator under Domain 2 can be seen in Appendix. It can be regarded that, in the category of identifying Domain 2 (Activities related to Teaching Profession), none of the teacher educators indicates not at all important, 0.2% slightly important, 2.2 % important, 47.3% very important and 50.2% extremely important on each item.

Table 10 Mean values showing importance level on each indicator under Domain 2 (Activities Supporting Teaching Profession)

(N= 244)

Variable	Mean	Standard Deviation	Remark
Updating Course materials for use in teacher education	4.50	.533	Extremely important
Collaborate and network with others, including peers, head teachers; professional groups; parents	4.49	.570	Very important
Continuously upgrade their own knowledge and skills	4.51	.548	Extremely important
Adhere to the rules and regulations of the profession and Institution	4.49	.548	Very important
Participating in teacher education programs at the local, state, national, or international level	4.47	.555	Very important
Providing counselling, by introducing teaching methods and programs to schools for staff development	4.44	.574	Very important
Establish goals for own professional development as a teacher educator	4.44	.567	Very important
Engaging in the new education curricular reform as a teacher educator	4.48	.555	Very important
Mentoring colleagues for professional growth	4.45	.561	Very important
Leading and managing professional groups	4.44	.560	Very important
Attending workshops, seminars, symposia and conferences, etc.	4.50	.533	Extremely important
Overall	4.48	.408	Very important

Scoring direction - 1.00-1.49=Not at all important,

1.50-2.49=Slightly important,

2.50-3.49= Moderately important,

3.50-4.49 =Very important,

4.50-5.00 =Extremely important

According to table 10, teacher educators perceived that 1) *Updating Course materials for use in teacher education*, 2) *Continuously upgrading their own knowledge and skills*, 3) *Attending workshops, seminars, symposia and conferences* were extremely important in teacher educator s’ performance appraisal because their mean values were between 4.50-5.00. The mean value of the other eight items such as 1) *Collaborating and networking with others, including peers, head teachers; professional groups; parents*, 2) *Adhere to the rules and regulations of the profession and institution*, 3) *Participating in teacher education programs at the local, state, national, or international level*, 4) *Providing counselling, by introducing teaching methods and programs to schools for staff development*, 5) *Establishing goals for own professional development as a teacher educator*, 6) *Engaging in the new education curricular reform as a teacher educator*, 7) *Mentoring colleagues for professional growth*, 8) *Leading and managing professional groups* were between 3.50-4.49, so, teacher educators believed that these items were very important in teacher educator s’ performance appraisal.

Table 11 showing the number and percentage of importance levels perceived by teacher educators on each domain under Domain 3 can be seen in Appendix. It can be regarded that, in the category of identifying Domain 3 (Research and Innovation Activities), none of the teacher educators indicates not at all important, 0.05% slightly important, 2.9 % important, 47.1% very important and 49.95% extremely important on each item.

Table 12 Mean values showing importance level on each indicator under Domain 3 (Research and Innovation Activities)

(N= 244)

Variable	Mean	Standard Deviation	Remark
Writing scientific articles, monographs, and chapters in books	4.50	.548	Extremely important
Conducting joint research with colleagues or students	4.53	.524	Extremely important
Supervising master and doctoral students’ dissertations	4.41	.578	Very important
Reviewing and editing others’ manuscripts	4.39	.581	Very important
Giving academic and research advice to colleagues	4.47	.547	Very important

Applying innovations to the teaching and learning process	4.47	.569	Very important
Participate in basic educational research	4.48	.548	Very important
Initiating inquiry and research-based learning to improve teaching practice	4.50	.548	Extremely important
Overall	4.47	.419	Very important

Scoring direction - 1.00-1.49=Not at all important,

1.50-2.49=Slightly important,

2.50-3.49= Moderately important,

3.50-4.49 =Very important,

4.50-5.00 =Extremely important

As indicated in table 12, the mean values of the importance level perceived by teacher educators on items: 1) *Writing scientific articles, monographs, chapters in books*, 2) *Conducting joint research with colleagues or students*, 3) *Initiating inquiry and research-based learning to improve teaching practice* were between 4.50-5.00, therefore, they perceived that these 3 items are extremely important in teacher educators' performance appraisal. Furthermore, they responded that 1) *Supervising master and doctoral students' dissertations*, 2) *Reviewing and editing others' manuscripts*, 3) *Giving academic and research advice to colleagues*, 4) *Applying innovations to the teaching and learning process*, 5) *Participating in basic educational research* were very important in teacher educators' performance appraisal as the mean values of these items were between 3.50-4.49.

The number and percentage of importance levels perceived by teacher educators on each indicator under Domain 4 can be seen in Table 13 in the Appendix. It can be regarded that, in the category of identifying Domain 4 (Professional Ethic), none of the teacher educators indicates not at all important, 0.06% slightly important, 1.55 % important, 45.84% very important and 52.55% extremely important on each item.

Table 14 Mean values showing the importance level on each indicator under Domain 4 (Professional Ethics)

(N= 244)

Variable	Mean	Standard Deviation	Remark
Having patience in the face of problems	4.52	.548	Extremely important
Being cheerful and humble	4.51	.533	Extremely important

Having intimate and warm interaction with students	4.52	.525	Extremely important
Being honest in action and speech	4.50	.541	Extremely important
Establishing trust with parents and community as a professional (e.g., participating in the events of the community, being available for parents and community)	4.49	.525	Very important
Practice reflective thinking to improve the quality of teaching	4.49	.533	Very important
Accepting students' opinions and suggestions to gain innovative experiences	4.50	.533	Extremely important
Helping colleagues to solve problems and tasks	4.51	.533	Extremely important
Maintain equity and fairness among learners	4.55	.531	Extremely important
Being aware of existing laws and regulations that apply to the profession	4.52	.548	Extremely important
Having a commitment to the profession (e.g. devoting himself /herself to education and society)	4.47	.524	Very important
Respect diversity in working with students, colleagues, families, community members and other stakeholders	4.55	.515	Extremely important
Building unity among colleagues	4.52	.548	Extremely important
Overall	4.51	.390	Extremely important

Scoring direction - 1.00-1.49=Not at all important,

1.50-2.49=Slightly important,

2.50-3.49= Moderately important,

3.50-4.49 =Very important,

4.50-5.00 =Extremely important

According to table 14, teacher educators perceived that 1) *Having patience in the face of problems*, 2) *Being cheerful and humble*, 3) *Having intimate and warm interaction with students*, 4) *Being honest in action and speech*, 5) *Accepting students' opinions and suggestions to gain innovative experiences*, 6) *Helping colleagues to solve problems and tasks*, 7) *Maintain equity and fairness among learners*, 8) *Being aware of existing laws and regulations that apply to the profession*, 9) *Respect diversity in working with students, colleagues, families, community members and other stakeholders*, 10) *Building unity among colleagues* were extremely important in teacher educator s' performance appraisal because their mean values were between 4.50-5.00. The mean value of the other three items as 1) *Establishing trust with parents and community as a professional (e.g., participating*

in the events of the community, being available for parents and community), 2) *Practising reflective thinking to improve the quality of teaching* 3) *Having a commitment to the profession (e.g. devoting himself /herself for education and society)* were between 3.50-4.49 and therefore, teacher educators believed that these items were very important in teacher educator s’ performance appraisal.

4.2.2. Result of Exploratory Factor Analysis

Exploratory factor analysis was used to analyze the factor structure and correlation between items included in the questionnaire. The results of the rotated factor matrix were provided in the following table. Initially, the researcher did not get the desired results as some of the items are loading on other factors. In the results of the rotated component matrix, some of the items are loading on other components. These items (T1, T2, T11, T12, P3, R1, R2) were dropped from subsequent analyses as they loaded highly on more than one factor and get the following final result (see Table 15).

Table 15 Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.922
Bartlett’s Test of Sphericity	Approx. Chi-Square	7015.428
	df	820
	Sig.	.000

Note: Significant at 0.001 level

Before component analysis, the two important issues that need to be considered for the suitability of data are the number of samples (sample size tested through Kaiser-Meyer-Olkin) and the relationship between variables (multivariate normality of set of distribution measured by Bartlett Test of Sphericity) (Pallant, 2013). The Kaiser Meyer-Olkin value was 0.922 (see Table 15), exceeding the minimum value of 0.5 (Kaiser, 1974) and also 0.6 (Pallant, 2013). Bartlett test of sphericity was significant ($p < .001$), supporting the correlation matrix’s factorability. Therefore, in this case, both tests indicated the suitability of the data. Afterwards, it is important to choose a retention method because different methods are more or less likely to overestimate or underestimate the number of factors or components (Dinno, 2009). Therefore, the researcher could apply Varimax Rotation with the use of principal component analysis (PCA).

Eigenvalues were used to assist the number of factors. The solution is the factors having eigenvalue greater than 1 and they were presented in Table 16.

Table 16 Rotation Sums of Squared Loadings

Factors	Eigenvalues	% of Variance
Factor (1)	16.55	40.37
Factor (2)	2.76	6.74
Factor (3)	2.07	5.04
Factor (4)	1.73	4.23

Extraction Method: Principal Component Analysis

In this four-factor solution, only the factors having a factor score greater than 0.30 in Extraction were considered significant, which is a strong criterion for a factor to be useful.

Table 17 displays the factor loadings for the rotated factors and communalities based on the principal component analysis with Varimax rotation for teacher educators' performance indicators (See Appendix).

The results of the revised exploratory factor analysis showed that the solution is based on 4 factors as expected. Tabachnick and Fidell (2007, p. 649) suggest that "...loadings in excess of .71 are considered excellent, .63 very good, .55 good, .45 fair, and .32 poor...". According to the results of factor loadings (See Appendix), there is no item whose loadings is lower than 0.4. The four-factor solution was explaining 40.37 % of the variance of the total variance. The results of the exploratory factor analysis show that the factors have a good level of validity.

According to the data presented in Table 16, factor 1 contained 13 items: *being honest in action and speech, having intimate and warm interaction with students, establishing trust with parents and community, as a professional (e.g., participating in the events of the community, being available for parents and community), being aware of existing laws and regulations that apply to the profession, maintaining equity and fairness among learners, practising reflective thinking to improve the quality of teaching, accepting students' opinions and suggestions to gain innovative experiences, building unity among colleagues, being cheerful and humble, helping colleagues to solve problems and tasks, respecting diversity in working with students, colleagues, families, community members and other stakeholders, having a commitment to the profession (e.g. devoting himself /herself for education and society), having patience in the face of problems.* It mainly concerns **professional ethics**.

Factor 2 consisted of 14 items: *encouraging, motivating and observing student teachers to obey the school discipline, designing lessons including district examples and illustrations, leading and managing professional groups, establishing goals for own professional development as a teacher educator, updating course materials for use in teacher education, engaging in the new education curricular reform as a teacher educator, providing counseling, by introducing teaching methods and programs to schools for staff development, conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.), attending workshops, seminars, symposia and conferences, etc. participating in teacher education programs at the local, state, national, or international level, collaborating and networking with others, including peers, head teachers; professional groups; parents, mentoring colleagues for professional growth, demonstrating and encouraging student teachers' understanding of different cultures and global citizenship, adhering to the rules and regulations of the profession and institution.* It was associated with **activities supporting teaching profession.**

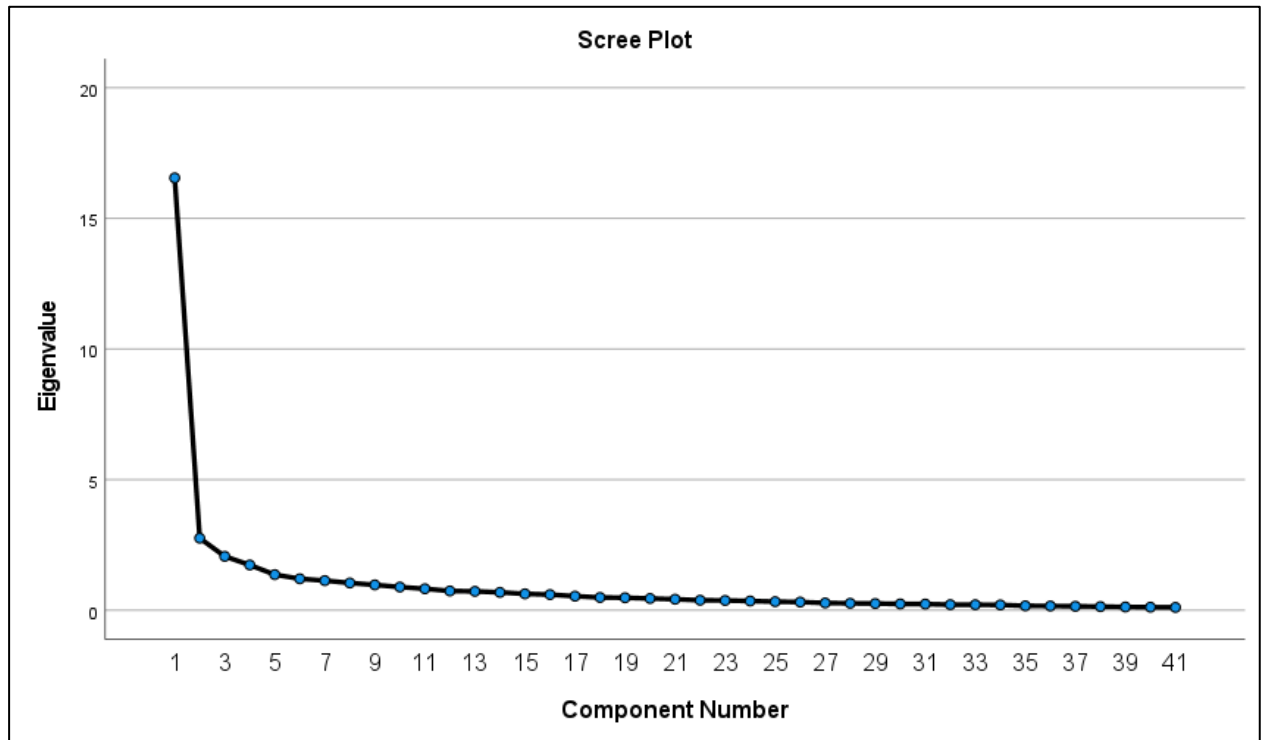
Factor 3 was a set of 8 items: *linking key concepts, principles, and educational theories to real-life applications, demonstrating a variety of teaching-learning materials including appropriate ICTs to support teaching-learning activities, model teaching by using assessment tools to evaluate learning process and outcomes, preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences, facilitating student teachers' potential development, improving teacher educators' capacity by applying their own life experiences of teaching and learning, designing learning experiences that ensure student teachers collaboration, inquiry, problem-solving and creativity, preparing teaching learning strategies for student active engagement.* It was named as **teaching activities.**

Factor 4 was also made up of 6 items: *giving academic and research advice to colleagues, reviewing and editing others' manuscripts, participating in basic educational research, applying innovations to the teaching and learning process, initiating inquiry and research-based learning to improve teaching practice, supervising master and doctoral students' dissertations.* It was identified with **research and innovation activities.**

The principal component matrix analysis revealed the presence of four factors with eigenvalues exceeding 1, explaining 40.37%, 6.74%, 5.04% and 4.23% of the variance respectively (See Table 16). Additionally, the factors were further supported by an

inspection of the Scree Plot revealing a clear break after the fourth component (See Figure 5).

Figure 5 Scree Plot showing teacher educators’ performance indicators



4.4 Result of the confirmatory factor analysis

CFA was used to test the structure of the scores for the 4-factor, 41-item of Teacher Educators’ Performance Indicators. Table 18 depicts the CFA result of performance indicators.

Table 18 Result of the confirmatory factor analysis

Model	CMIN	df	CMIN/df	NFI	RFI	TLI	CFI	RMSEA	PCFI
Criteria			≤ 3	≥ 0.5	0 to 1	≥ 0.9	≥ 0.9	≤ 0.08	≥ 0.5
Fit Model	1820.91	757	2.41	0.76	0.74	0.83	0.84	0.07	0.78

Note: CMIN = chi-square statistics;

df = degree of freedom;

NFI= Normed Fit Index;

TLI = Tucker–Lewis index;

CFI = comparative fit index;

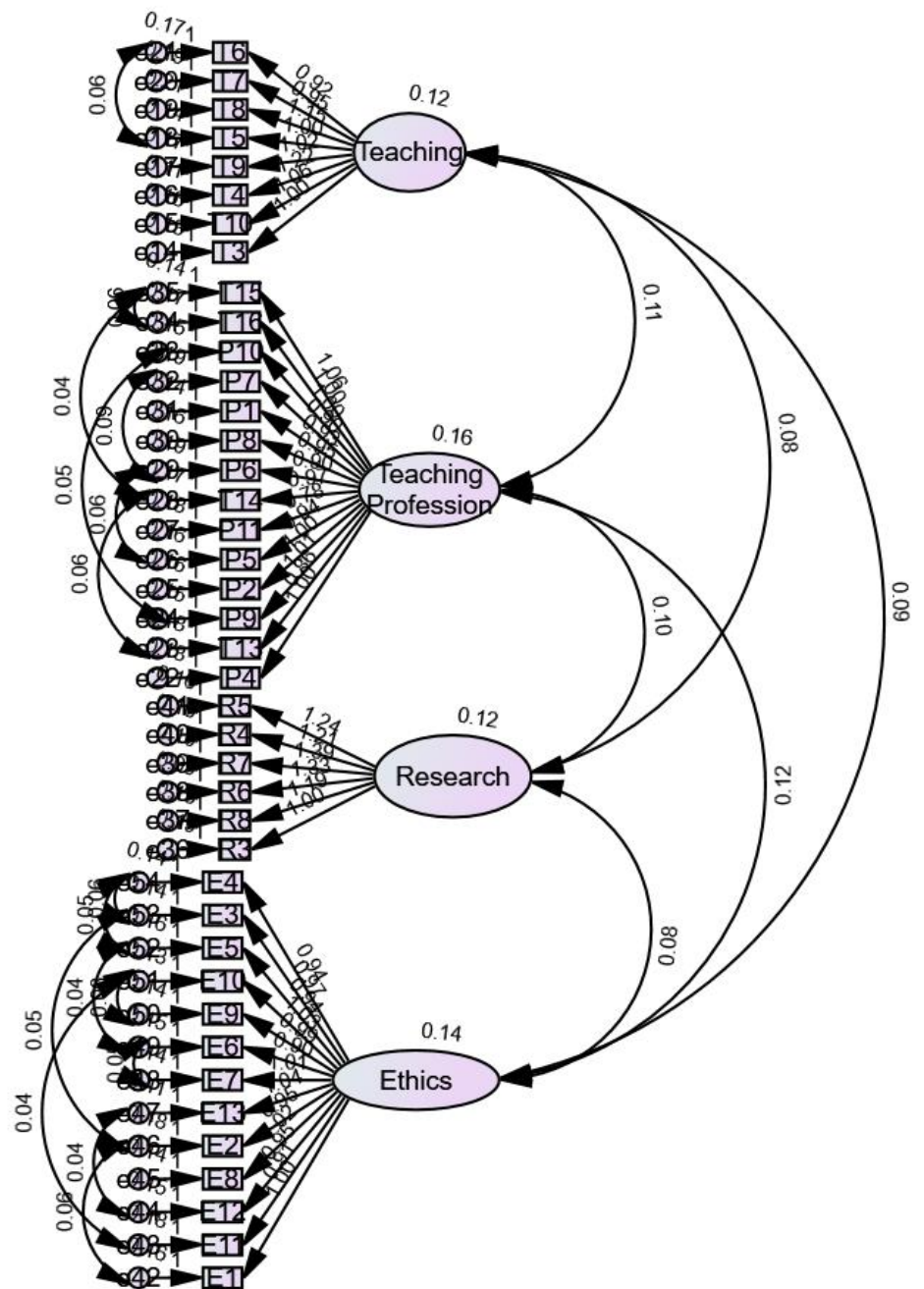
RMSEA = root mean square error of approximation;

PCFI = Parsimony Comparative Fit Index

As shown in Table 25, Comparative Fit Index (CFI) was 0.84 in this study. A value of $CFI \geq 0.9$ indicates a good fit (Hu and Bentler, 1999). It was shown that the hypothesized model was close to fit. The fit indices (chi-square value =2.41; Normed Fit Index=0.76, root mean square error of approximation=0.07; Parsimony Comparative Fit Index=0.78) suggested that the hypothesized model fits well.

According to the result of *confirmatory factor analysis*, the major domains and teacher educators' performance indicators were identified successfully as shown in figure 6. According to the results, it is suggested that teaching activities, activities supporting the teaching profession, research and innovation activities, and professional ethics should be major domains, and there should be 41 performance indicators in the appraisal framework. (See Appendix).

Figure 6 Confirmatory Factor Analysis for Performance Appraisal Framework

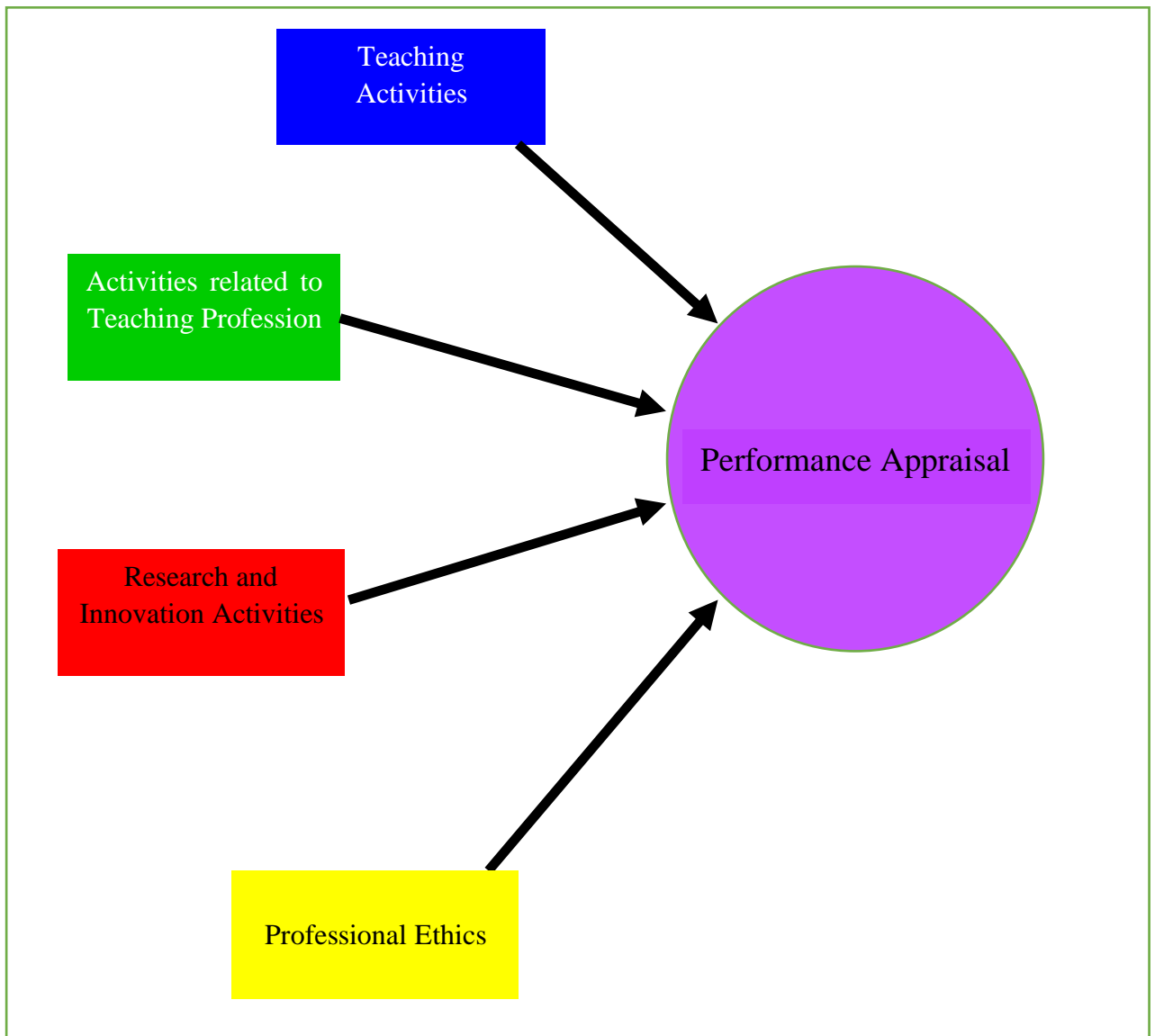


4.2.3. Performance Appraisal Framework for Teacher Educators

With the aim of developing performance appraisal framework for teacher educators, exploratory sequential mixed method was used. In the first phase of the study, semi-

structured interviews were conducted to explore ideas from practitioners (experts, rectors, HoDs, teacher educators) about performance appraisal. Based on interview results, a survey questionnaire was developed to identify the major possible domains and indicators for performance appraisal for teacher educators. According to the findings of factor analysis, performance appraisal framework for teacher educators was developed. The proposed performance appraisal framework for teacher educators is shown in figure 7. In this framework, there are four major domains: teaching activities, activities related to teaching profession, research and innovation and professional ethics. The thickness of the arrow refers to the mean values of importance level of teacher educators on major domains and indicators of performance appraisal.

Figure 7 Proposed performance appraisal framework for teacher educators



Chapter 5 Discussions and Conclusion

This chapter aims to discuss research findings on developing a performance appraisal framework for teacher educators in Myanmar universities of education. Firstly, the possible aims and objectives of a performance appraisal system for teacher educators at UOEs in Myanmar will be discussed according to interview results. Secondly, the researcher will discuss the perception of teacher educators and the management team in universities of education on performance, their perception of the interrelatedness of performance appraisal and the quality enhancement of teacher education, and the most important competencies for teacher educators. Thirdly, the major domains and performance indicators that should be used to evaluate the teacher educators' performance at UOEs will be discussed in this chapter. Finally, the implications and suggestions for future research will be presented in this chapter.

5.1 Discussion of Qualitative Phase

The main aim of this study was to develop a performance appraisal framework for teacher educators in Myanmar universities of education. The researcher chose the exploratory sequential mixed method to explore the major domains and performance indicators that should be used to evaluate the teacher educators' performance at UOEs in Myanmar. In this study, the qualitative phase (semi-structured interview) was conducted in November 2021, followed by a web-based survey for the quantitative phase, and quantitative data collection was completed in 15th February 2022.

Interview questions for the qualitative study were reviewed by five expert educators, including four retired teacher educators from the Department of Educational Theory and Management for expert validation. Based on their advice, the wordings and some ambiguous questions were modified. Then, three education experts, two rectors, four HoDs and twenty-one teacher educators were interviewed to explore their knowledge and perception of developing performance appraisal.

5.1.1 Discussion on Research Question 1

What could be the aims and objectives of a performance appraisal (PA) system to be introduced for teacher educators in universities of education of Myanmar, with special regard to the quality of teacher education?

Regarding the possible aims and objectives of a performance appraisal (PA) system to be introduced for teacher educators in universities of education in Myanmar, the participants responded that the aims of PA should be personal development, organizational

development, accountability, disciplinary action, recognizing and rewarding good performance.

Firstly, all the interviewees responded that personal development should be one of the aims of PA. Delery and Doty (1996) described that PA may serve developmental and administrative purposes. Moreover, Ying (2012) claimed that managing performance helps employees to think about what kind of work they did good, then they could recognize how and in what ways they can use for developing, finally leads to personnel development. Thus, the present study's result was consistent with the findings of Delery and Doty (1996) and Ying (2012).

Secondly, the interviewees reported that another main aim of PA should be organizational development. This is in line with Kim (2014), who claimed that PA should be used more for administrative decisions that may heavily affect employee career advancement and their well-being in general. Furthermore, PA can contribute to improving organizational performance. This idea was further supported by Bowman (1994), who argues that PA helps to analyze processes for identifying barriers to quality, satisfy internal and external beneficiaries of the work performed, and finally to create an atmosphere where continuous improvement is encouraged.

Thirdly, the interviewees answered that PA should have accountability purposes to increase efficiency, productivity and morale of teacher educators. PA should focus on accountability function and careful analysis of human resources affecting educational outcomes. Bland et al. (2002) also highlighted the notion that PA had two purposes: to enhance motivation and performance, and to increase the accountability of our faculty toward departmental goals. An important reason for performance appraisal is the faculty's principle of accountability. Responsibility and accountability must be aligned at every level of the organization, and performance appraisal encourages this behavior. This finding is echoed by OECD review (2013) on international perspectives on evaluation and assessment in education; the balance between developmental and accountability functions of the appraisal process is crucial for the overall design (cited in Lay, 2022).

Fourthly, the participants reported that PA should aim for disciplinary action. One teacher educator answered that PA can be used for disciplinary purposes to develop future work, performance goals and expectations. It has been highlighted in the work of Joseph (1983) that the appraisal should fulfil a management function and its major purposes should be focused on the training, deployment, and dismissal of teachers. The study of Lay (2022) noted that performance appraisal has a controlling function in giving feedback and

identifying future areas for growth and development. PA can be used to control employee behaviors (rewarding desirable behaviors and punishing undesirable behaviors). Kiraly (2005) highlighted that the aim of appraisal was related to disciplinary actions. On the other hand, the result of the present study is contradicted by the Advisory, Conciliation and Arbitration Service (ACAS) report (1986), claiming that disciplinary procedures should remain quite separate from appraisal.

Finally, interviewees responded that one of the purposes of PA should be recognizing and rewarding good performance. This reflects Conger, & Riggio, (2012) who argue that performance appraisal provides a good method of documenting performance-related information and can help facilitate future career development needs and rewards. PA has become a general heading for a variety of activities through which organizations seek to assess employees and develop their competence, enhance performance and distribute rewards (Fletcher, 2001).

To sum up, this finding is generally congruent with the work of First (1996) that the purposes of teacher appraisal can be categorized under three headings: development, improved communication and quality control and assurance. According to the current research findings, the purposes of appraisal should be to improve skills and performance, develop organizational performance, increase the faculty's accountability, improve the institution's management, support career development and recognize achievement.

5.1.2. Discussion on Research Question 2

Do teacher educators and the management team perceive the interrelatedness of PA and the quality enhancement of teacher education?

When exploring the views on performance appraisal in teacher education institutions, three themes were found in the analysis of data. Firstly, the interviewees described PA as a tool for quality enhancement, showing their confidence in the interrelatedness of PA and quality of teacher education. This research confirms the findings of Taylor and Tyer's (2012) longitudinal analysis that evaluation can improve teacher performance by improving teacher skills in ways that persist in the long run. Lustick and Sykes (2006), Hattie (2009), and Bailey (2010) assert that teacher evaluation that provides feedback and opportunities for professional learning can have a sustainable impact on teacher quality.

The second theme of the interviewees' responses is that PA is one of the important activities of human resource management. Pegulescu (2018) claimed that performance

appraisal has many important functions, such as assessing and giving award for performance, analyzing training and development needs, identifying potential for career development, gathering information to assert HR planning, and selecting candidates for promotion. The present study's result is consistent with the findings of Robbins and Judge (2009) that PA has the greatest impact on overall organizational effectiveness, including employee motivation, development, confidence, loyalty, and commitment.

Thirdly, the participants reported that PA can be used as a professional development tool in teacher education institutions. The finding suggests that PA can help achieve professional development objectives by measuring teacher educators' accomplishments and deficiencies. Cohen & Brawer (1994) assert that performance evaluation is helpful in defining good teaching with specific regard to the faculty and their respective courses and providing for the improvement of instruction and curriculum to achieve good teaching. Dilts et al. (1994) have claimed that in performance appraisal process, supervisors evaluate the faculty member's performance, analyze strengths and weaknesses against set criteria, and plan for professional development. Thus, the present study's result is consistent with the findings of Dilts et al. (1994).

To sum up, all the interviewees noticed the quality enhancement aspect of PA. On the other hand, most respondents expressed their views on PA as a human resource management aspect concerning motivation and job satisfaction. Moreover, they showed a high level of enthusiasm to utilize PA in the future as a professional development tool.

5.1.3. Discussion on Research Question 3

How do teacher educators and the management team in universities of education understand and interpret “performance”?

In order to design a performance appraisal framework for teacher educators that could be applied in Myanmar universities of education, it is essential to explore the knowledge and understanding of teacher educators and the management team on “performance”. In the interview participants were asked how (good) performance can be interpreted. Firstly, education experts, heads of department, and teacher educators said that good performance means effective teaching, which involves having content-related and pedagogical knowledge, teaching and management skills. This study confirms that an important characteristic of the teaching profession is the availability of a body of knowledge (Eraut, 1994; Hoyle & John, 1995; Jansma & Wubbels, 1992; McGaghie, 1991). Celik (2011) argues that competency standards are the main criteria by which performance and professional development of teacher educators can be assessed.

According to Koster and Dengerink (2008), competency is the combination of knowledge, skills, attitudes, values and personal characteristics, empowering the teacher to act professionally and appropriately in a situation, deploying them in a coherent way. In Myanmar, *Teacher Competency Standards Framework (TCSF)* for career-starter teachers is being developed to outline nationally accepted profiles of what teachers are expected to know and be able to do at different stages of their careers.

Moreover, the interviewed experts described that a good teacher needs teaching skills and continuous professional development in order to teach effectively and successfully. This is congruence with Gay (2018) claiming that teachers need teaching skills to help diverse students. This is also consistent with the research findings by Koster and Dengerink (2001), who found that teachers should have pedagogical competence to link teaching situations with appropriate pedagogical insights for their students.

According to the interviewees, it was also found that good performance of a teacher means having professional attitudes and values, understanding students' needs and how to motivate them. This finding was similar to the findings of the study of Koster et al. (2005) claiming that quality teacher educators should possess important and tangible attitudes (an inquiry-oriented attitude, taking part in guidance, support, and tutoring).

To conclude, this study aligns with the study of Falus (1997) for ensuring a teacher's high performance; professional skills (assessment skills, pedagogical skills, classroom management skills) are essential ingredients for success in the teaching profession. It can be concluded that effective teaching, teaching skills and continuous development, and professional attitudes and values can provide a useful starting point for describing a sensible and objective set of criteria for performance appraisal.

5.1.4. Discussion on Research Question 4

What are the most important competencies for teacher educators according to teacher educators and management team? (Comparing the results with the Teacher Competency Standard Framework in Myanmar)

In response to the questions relating to the most important competencies of teacher educators perceived by interviewees (experts, HoDs, teacher educators), most respondents expressed their views that teaching skill is the most important competency to improve student learning outcomes. In the 21st century, students in teacher education need to acquire new knowledge and skills and hence, teacher educators need a high level of teaching competence to support their learning. Different teaching strategies and using information and communication technology (ICT) appropriately in teaching-learning situations are

important for teacher educators. Compared to TCSF in Myanmar, it was mentioned that teachers must possess professional skills and practices -- a repertoire of teaching strategies for different educational contexts to meet the needs of individual students. Thus, this study confirms that teaching or professional skill is the most important competency.¹

Next, the respondents reported that teacher educators should possess leadership and management competence. This is in line with Myanmar TCSF where professional skills and practices such as classroom management is required for effective teaching of students at the different grade levels. Moreover, this study aligns with the results of Koster et al. (2005) claiming that being able to manage group processes is considered a necessary competency for teacher educators. The study of Koster and Dengerink (2010) showed that teacher educators must also be model in the following five competency areas:

- content competencies
- pedagogical competencies
- organizational competencies
- group dynamic and communicative competencies
- developmental and personal growth competencies.

The qualitative study also revealed that academic and research competency is also considered important for teacher educators. In the interviews, one expert mentioned that teacher educators should have initiative for research as research culture is rare in Myanmar higher education institutions. He also highlighted that conducting research and applying empirical information to practice plays a key role in upgrading the teacher education system. The study by Global Development Network (2020) showed that there are a number of challenges in Myanmar, from lengthy authorization processes to the lack of familiarity of the research concepts such as research policy, research council, ethics review processes and mentoring. It was recommended to establish a national research body that will oversee, facilitate, coordinate, support and document research activities conducted in Myanmar,

¹ In Myanmar, a further three levels of proficiency related to teacher competency standard framework – experienced, expert, and leader teachers are being developed. Therefore, a ‘Teacher Educator Competency Standards Framework’ (TECSF) should also be developed and informed by the TCSF in order to provide an immediate benchmark and assessment tool for TE quality and upskilling (UNESCO, 2016).

increase research budget and improve flexibility, strengthen international funding support to boost quality, ethics and equity in the research system.

5.2 Discussion of Quantitative Phase

5.2.1. Discussion on Research Question 5

What can be the major domains and performance indicators that should be used to evaluate the teacher educators' performance in Myanmar universities of education?

With the aim of identifying the major domains and performance indicators that should be used to evaluate the teacher educators' performance at UOEs in Myanmar, the researcher chose the exploratory sequential mixed method to explore the knowledge and perception of education experts, the management team and teacher educators of developing performance appraisal. Semi-structured interviews were conducted regarding the possible performance indicators of teacher educators. After the analysis of first qualitative phase-semi-structured interviews, a questionnaire was developed based on literature review, the study of other PA systems, and the interviews' results in order to collect the required data in this study. The questionnaire was structured with two main parts. The first one includes items for demographic data such as gender, current position, time of service in teacher education department. The second one is made up to explore the possible domains and indicators of PA.

The researcher's attempt made the instruments valid and reliable to develop a performance appraisal framework for teacher educators. As has been mentioned in Chapter 3, face validity from five experts was taken, and the pilot data was checked for reliability; Cronbach's alpha was at the required range from 0.614 to 0.745. The respondents who participated in this study were teacher educators (n=244) working at universities of education.

Descriptive statistics showed means and standard deviations of performance domains. Among the four domains, teaching activities and professional ethics had the highest mean scores, while research and innovation activities had the lowest mean score. It can be concluded that teacher educators perceived that teaching activities and professional ethics are extremely important, while research and innovation activities are very important. Some teacher educators thought that performance appraisal should not rely on research activities so much. According to interview results, aged teacher educators do not agree that having a number of scientific articles should be one of the performance indicators.

The results of factor analysis showed that four main domains: professional ethics, activities supporting teaching profession, teaching activities, and research and innovation activities should be included in teacher educators' performance appraisal framework.

Under the factor of professional ethics, professional responsibilities of code of ethics of teacher educators are include. Teacher educators need the characteristics of being honest in action and speech, having intimate and warm interaction with students, establishing trust with parents and community as a professional. Moreover, teacher educator exhibit qualities such as caring attitude, respect, and integrity. Teacher educators reflect their practice to improve the quality of teaching and identify things that are working well, areas that need to be improved. Teacher educators aware existing laws and regulations related to teaching profession for professional engagement.

The domain of activities supporting teaching profession consisted of fourteen specific indicators. Teacher educator. Teacher educator collaborate and network with others with the purpose of learning their ideas, experiences, and feedback. Teacher educator engage in the new education curricular reform for improving the quality of teacher education. Teacher educator conducting ESD (Education for Sustainable development) that is relevant for the communities and the wider society that these institutions serve. Teacher educators share a responsibility as members of local, state, and national professional organizations for active participation.

The domain of teaching activities was composed of a set of 8 activities. Effective modeling of teaching practices is at the heart of successful teacher education program. Teacher educators model teaching by using assessment tools to evaluate learning process and outcomes. Teacher educators demonstrate a variety of teaching-learning materials including appropriate ICTs to support teaching-learning activities for the *improvement in the teaching and learning experience* Teacher educator design learning experiences that ensure student teachers collaboration, inquiry, problem-solving and creativity.

Teacher educator conduct basic educational research to improve educational practice. Teacher educator apply innovations to the teaching and learning process with the aspect of increasing the confidence and skills to continue to adapt. Teacher educators supervise master and doctoral students' dissertations one of the way of assimilation of knowledge. Teacher educator give research advice to colleges across disciplines and contexts.

5.3 Practical Implications

Nowadays, universities and higher education institutions play an important role in the education of an efficient human force who also play crucial roles in the economic, social, cultural and political development of a country. Surely, performance appraisal plays an important role in the quality of education and if no effort is made in the respect of improving the educational performance of teacher educators, the quality of teaching/learning would considerably decrease and lead to the dissatisfaction of teacher educators and students. In this case, the outcome of education won't be desirable and the social, economic, political and cultural development of the society would be at risk. Thus, conducting research in the field of the evaluation of the faculty members seems essential.

With the aim of identifying major domains and performance indicators that are relevant in the current Myanmar context -- in addition to providing a review of the relevant literature, reporting different models of appraisal and presenting example of appraisal in a Hungarian university -- it provides an overall picture of the current background for teacher appraisal in Myanmar universities of education. Moreover, the information received provides a good foundation for human resource management. It can be useful for self-imposed individual improvement. This research can be applicable to education practitioners, experts and policy makers in developing the national teacher educator competency framework.

Based on the research findings, there is growing numbers of teacher educators, managers awaring an increasing need for performance appraisal. Moreover, experts, managers teacher educators have an understanding of the nature, concept, aims of performance appraisal and their attitudes and opinions tend to undergo a profound change and many interviewees support the idea of introducing appraisal. It would be suggested that there are certain vital conditions which must be satisfied so that appraisal will be used as an effective tool in quality management in Myanmar. It is essential that practitioners should be properly informed about the aims and processes of appraisal: policy makers at Myanmar Ministry of Education should pay more attention to appraisal-related training and publicity issues. Furthermore, education authorities need to determine if performance domains and indicators are in harmony with the goals of the institution.

Teacher educator performance appraisal framework is helpful in the broader educational discourse at the micro, meso, and macro levels, each of which pertains to different layers of the educational system. At the micro level, PA provides direct feedback to individual teacher educators, helping them to reflect on their teaching practices and

professional development. This assessment enables educators to identify strengths and areas for improvement. Moreover, it promotes self-assessment and peer assessment, enhancing teaching quality. Research by Darling-Hammond (2006) points out that effective teacher education is linked to ongoing professional development, and PA plays a critical role in facilitating this process.

At the meso level, which concerns educational institutions (such as universities or teacher training colleges), PA for teacher educators offers insights into the overall effectiveness of teacher education institutions. Institutions can use aggregated assessment data to evaluate and improve their curricula, instructional methods, and support systems. By identifying trends and common challenges teacher educators face, institutions can create a supportive environment by establishing mentorship programs and offering opportunities for collaboration, both within and between institutions. The study of Cochran-Smith & Zeichner (2005) highlighted that institutional practices are very important in shaping the quality of teacher preparation.

At the macro level, PA for teacher educators contributes to the discourse on national and international education policies. PA results can inform policy-makers about the current state of teacher education and highlight areas that need attention. Furthermore, the findings from PA can be used to advocate for policy changes that support professional development, allocate resources. This broader application is supported by the work of Fullan (2007), discussing how systemic educational change requires evidence-based policy-making, often driven by data from tools like PA. Again, Darling-Hammond (2000) advocate that supportive PA should be integrated into broader educational policies in order to create a coherent system that promotes overall teacher quality. By contributing to these different layers, TEPA fosters environments conducive to learning, collaboration, and long-term societal development.

A summary of the implications for practice is listed below:

1. To promote the quality of teacher educators, it is essential to understand “What is performance appraisal?”
2. Institutions that do not have an objective assessment system of staff performance should devote the necessary resources to develop and implement such a system.
3. Institutions should use their appraisal systems for both administrative and developmental purposes.
4. Teacher educators need to be involved in designing and testing performance indicators for the performance appraisal system.

5. It is necessarily important to identify appraisal methods in appraising teacher educators' performance.
6. Mutual understanding and trust need to occur among teacher educators and evaluators.
7. It is necessary to establish a systematic reward system for proficient teacher educators.
8. Institutions should use performance appraisal to identify their staff's training and development needs.
9. The impact of potential biases in the appraisal process should be taken into account, and regular and thorough training for the evaluators is needed.
10. Finally, "A Handbook of performance appraisal system for teacher educators in Myanmar" should be developed.

5.4 Recommendations for Future Research

This section presents recommendations for further research. This study investigated developing a performance appraisal framework for teacher educators in Myanmar universities of education. I hoped that the performance appraisal framework serves as guidance and a useful starting point for further discussions. The recommendations for conducting further studies are as follows.

1. Firstly, the researcher cannot conduct longitudinal studies due to the limitation of time and resources although a longitudinal research design is more desirable. Therefore, longitudinal studies could help to develop performance appraisal framework for teacher educators.
2. Secondly, only 244 primary teacher educators conveniently participated in this study. This sampling procedure have not resulted in a representative sample of Myanmar teacher educators. Hence, further research can be conducted with larger sample size in Myanmar.
3. Thirdly, the qualitative study used semi-structured interviews with the purposively selected participants to explore their views on performance appraisal. The triangulation or circulation methods for qualitative data could be employed with the help of data obtained from documentation, observation, group discussion, and a face-to-face interview.
4. Fourthly, further research should be conducted on developing the Appraisal Handbook for teacher educators in Myanmar.

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Appendix 1 Structure of the research

Time	Steps	Brief Explanations
September 2021-June 2022	Step 1	<p>Preparing Interview Guide:</p> <ol style="list-style-type: none"> 1. How would you describe a good performance in your job? (To teacher educators) 2. How could good performance be evaluated/measured/monitored in the case of teacher educators? 3. As a teacher educator, how do you think about teacher performance appraisal? 4. How teacher performance is monitored and assessed at the moment in your institution? 5. If it is monitored and assessed, are you contented with the way of assessment? 6. Why do you think it is good? OR Why do you think it is not good? 7. If it is monitored and assessed, what is the aim/objective of the assessment? Summative or formative? How are the results used? 8. Do you think that there should be a formal, standardized performance appraisal system for teacher educators in Myanmar? Why? 9. What could be the aims/objectives of such a PA system? For what and how could the results be used? 10. If you were a manager, what would you do with the results? What could be the consequences of good and bad performance?
	Step 2	All participants were sent the informed consent forms via email. The form included the explanation about ethical information concerning anonymity and confidentiality and consent for audio-recording. Then online interviews were arranged and conducted.
	Step 3	Semi-structured interviews were held with the participants and voice were recorded. (N=30)
	Step 4	Data was transcribed and the researcher read the participants' answers several times to attain a high level of familiarity with the raw data.
	Step 5	<p>The content of the data was analyzed and then four themes were emerged from the interviews:</p> <ol style="list-style-type: none"> (i) aims and objectives of PA (ii) the concept of "performance" (iii) views of performance appraisal in teacher education institutions

		(iv) core competencies of teacher educators.
August 2022-December 2022	Step 6	The researcher developed the questionnaire based on the emerging findings (qualitative findings).
	Step 7	Piloting Testing After expert validation from five education experts, the questionnaire for a pilot study was created in an online survey software program (Qualtrics) and sent to the participants (N=40) via email and messenger.
	Step 8	Modifying and finalizing the questionnaire.
January 2023-June 2023	Step 9	Quantitative data collection The researcher created the questionnaire for the main study and sent to the participants working at the universities of education via email and messenger. (N=244, response rate 70%)
	Step 10	Analyzing the survey data. (descriptive statistics, factor analysis)
	Step 11	Interpretation and Discussion

Teaching activities

T6= Linking key concepts, principles, and educational theories to real life applications

T7= Demonstrating a variety of teaching-learning materials including appropriate ICTs to support teaching-learning activities
T8= Model teaching by using assessment tools to evaluate the learning process and outcomes

T8= Model teaching by using assessment tools to evaluate the learning process and outcomes

T5= Preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences

T9= Facilitating student teachers' potential development

T4 =Improving teacher educators' capacity by applying their own life experiences of teaching and learning

T10= Designing learning experiences that ensure student-teacher collaboration, inquiry, problem-solving and creativity

T13= Preparing teaching learning strategies for student active engagement

Activities related to teaching profession

T15= Encouraging, motivating and observing student teachers to obey the school discipline

T16= Designing lessons including district examples and illustrations

P10= Leading and managing professional groups

P7= Establish goals for own professional development as a teacher educator

P1= Updating Course materials for use in teacher education

P8= Engaging in the new education curricular reform as a teacher educator

P6= Providing counselling, by introducing teaching methods and programs to schools for staff development

P14= Conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.)

P11= Attending workshops, seminars, symposia and conferences, etc.

P5= Participating in teacher education programs at the local, state, national, or international level

P2= Collaborate and network with others, including peers, head teachers; professional groups; parents

P9= Mentoring colleagues for professional growth

P13= Demonstrating and encouraging student teachers' understanding of different cultures and global citizenship

P4= Adhere to the rules and regulations of the profession and Institution

Research and innovation activities

R5= Giving academic and research advice to colleagues

R4= Reviewing and editing others' manuscripts

R7= Participate in basic educational research

R6= Applying innovations to the teaching and learning process

R8= Initiating inquiry and research-based learning to improve teaching practice

R3= Supervising master and doctoral students' dissertations

Professional ethics

E4= Being honest in action and speech

E3= Having intimate and warm interaction with students

E5= Establishing trust with parents and community as a professional (e.g., participating in the events of the community, being available for parents and community)

E10= Being aware of existing laws and regulations that apply to the profession

E9= Maintaining equity and fairness among learners

E6= Practicing reflective thinking to improve the quality of teaching

E7= Accepting students' opinions and suggestions to gain innovative experiences

E13= Building unity among colleagues

E2= Being cheerful and humble

E8= Helping colleagues to solve problems and tasks

E12= Respect diversity in working with students, colleagues, families, community members and other stakeholders

E11= Having a commitment to the profession (e.g. devoting himself /herself to education and society)

E1= Having patience in the face of problems

Informed Consent and Description of Research (online study)

Title: Developing a Teacher Performance Appraisal Framework for Teacher Educators in Myanmar Universities of Education

DESCRIPTION: You are invited to participate in a research study of developing a teacher performance appraisal framework in Myanmar Universities of Education. The aim of this study is to develop a teacher performance appraisal framework in Myanmar Universities of Education. The purpose of study is to identify the major domains and performance indicators that should be used to evaluate the teacher educators' performance in Myanmar Universities of Education. Your expertise and experience will help to develop a teacher performance appraisal framework for teacher educators.

The interview will be conducted as follows:

In online semi-structured interview, interviewees will be engaged in a 40-minutes conversation. The interview will have 18 questions related to the research purpose. With the interviewee's permission, the interview will be audio recorded for research purpose. Interviewees' personal information will be identified only in pseudonym form in all phases of the study, in all field notes, computer files and all project texts including the final thesis.

The survey will be conducted as follows:

Participants will be taken approximately 20 minutes to complete the survey questionnaire. Participants will be asked about the importance of the performance indicators that should be used to evaluate the teacher educators' performance in Myanmar Universities of Education. There are 60 items in the survey questionnaire. Participants should select the answer which shows their opinion in the questionnaire. Their participation is voluntary, and their responses will be confidential. All the participants will remain anonymous. Their responses will be systematically analyzed by using the Statistical Package for the Social Sciences Software version 28. To explain the main components of teacher performance appraisal, the agreement level of each item included in the questionnaire by various educators will be analyzed by the descriptive statistics. Exploratory factor analysis of survey data will lead to identify and validate the major areas and teacher performance indicators.

All possible identifiers in the presentation of data will be removed in all project writing stages, including the thesis, in order to conceal participants' identity. All the documents with their information will be kept in a separate, secure location: a locked desk drawer. All collected or produced research documents in hard-copy form, and field notes, when not with the researcher, will be kept in a separate, secure location: a locked desk drawer. All computer documents related to the project will be kept in a secure password-protected computer. All audio recordings will be destroyed after 5 years upon the completion of research.

TIME INVOLVEMENT: Your participation will take approximately 40 minutes for interview and 20 mins for the survey study.

RISKS AND BENEFITS: The risks associated with this study are minimal. Your personal data and interview will be strongly secured and kept safe. Your identity and any revealed information via interview will not be shared with your employer(s) to avoid conflict. Your decision whether or not to participate in this study will not affect your employment.

PARTICIPANT’S RIGHTS: If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate. You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

No medical or laboratory report will be prepared about the results of the study. Verbal account can be provided about the findings upon request.

I (undersigned) declare that I was given thorough information regarding the circumstances of my participation in the present research. I agree with the conditions and to participate in the study. I also give my consent to use the anonymized data collected during this process so that these may be accessible to other researchers. I reserve the right to terminate my participation at any time in which case the data belonging to my person should be erased.

ELTE FEP Dr.Keczner Gabriella and Aye Aye Myint Lay as data processors handle my above personal data confidentially and do not allow access to these for other data processing or data analyzing organizations of any kind. Details of this statement are found in the “Information of Processing of Data (GDPR) “which I agree with as proven by my signature.

The Permission to data processing can be found here:
<https://drive.google.com/file/d/12C3DGPGMH4xGEEJFbc-2WrnxXnsqhWbo/view?usp=sharing>

Regulations pertaining to Data Processing can be found in detail at:
https://ppk.elte.hu/file/Permission_to_data_processing_appendix_2018.pdf

I read the “Agreement to Data Processing” document.

I agree and accept I do not agree, do not accept

I declare that I am over 18 years of age. I have received full detailed information concerning the conditions of my participation of the study. I agree with these conditions, and I am willing to participate.

Yes No

CONTACT INFORMATION:

Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Research Supervisor, Dr. Keczer Gabriella, e-mail: kecz@jgyk.szte.hu.

Please sign this consent form if you agree to participate in this study.

- I have carefully read the information provided;
- I have been given full information regarding the purpose and procedures of the study;
- I understand how the data collected will be used, and that any confidential information will be seen only by the researchers and will not be revealed to anyone else;
- I understand that I am free to withdraw from the study at any time without giving a reason;
- With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Signature: _____

Date:

The extra copy of this signed and dated consent form is for you to keep.

Thank you for taking the time to read this interview protocol and I hope that you will accept our invitation to be involved.

Interview Guide

1. When did you start working in your organization?
2. Which year did you start working in your position?
3. How would you describe a good performance in your job? (To teacher educators)
4. How could good performance be evaluated/measured/monitored in the case of teacher educators?
5. As a teacher educator, how do you think about teacher performance appraisal?
6. How teacher performance is monitored and assessed at the moment in your institution?
7. If it is monitored and assessed, are you contented with the way of assessment? Why do you think it is good? OR Why do you think it is not good?
8. If it is monitored and assessed, what is the aim/objective of the assessment? Summative or formative? How are the results used?
9. Do you think that there should be a formal, standardized performance appraisal system for teacher educators in Myanmar? Why?
10. What could be the aims/objectives of such a PA system? For what and how could the results be used?
11. If you were a manager, what would you do with the results? What could be the consequences of good and bad performance?
12. In what way does academic staff involvement in developing teacher educators' performance appraisal affect the appraisal design?
13. To what extent and what way do performance appraisal (PA) interrelate to the quality and enhancement of teacher education?
14. What are the major domains that should be used to evaluate the teacher educators' performance in Myanmar Universities of Education?
15. What are the important performance indicators that should be used to evaluate the teacher educators' performance in Myanmar Universities of Education?
16. What are the most important competencies for teachers?
17. What knowledge, skills and attitude do you need to be a good teacher educator?
18. To what degree is TPA necessary to be in line with teacher competency standards?
19. Should the PA system measure the competencies that are included in the teacher competency framework? Why?
20. What teacher educator standards are needed to be included in the TPA?
21. Do you agree research output (the number of publications) is a good indicator when appraising teacher educator's performance? How can you assess the quality of the journal?
22. Do you have any further thoughts and suggestions to include in the teacher performance appraisal in Myanmar?

Appendix 4 Survey Questionnaire

Title: Developing a Teacher Performance Appraisal Framework for Teacher Educators in Myanmar Universities of Education

My name is Aye Aye Myint Lay. I am a doctoral candidate in Teacher Education and Higher Education Studies (EDiTE Programme) of Eötvös Loránd University, Budapest, Hungary.

I am asking you to help me with the survey study in research. Please answer the following questions related to developing a teacher performance appraisal framework for teacher educators in Myanmar Universities of Education. Read the following items carefully and please SELECT your answer which shows your opinion in the questionnaire below. Please give your opinions and responses frankly and honestly because your honesty is very important for me to be successful in my research. The information you provide will be treated with confidentiality and all the participants will be remain anonymous.

The result of this confidential survey will form important indicators of performance appraisal framework for teacher educators in Myanmar Universities of Education.

If you have any question, please feel free to contact me via my email ayemyintlay@student.elte.hu, or my supervisor, Dr. Keczer Gabriella, e-mail: keczergabriella@jgypk.szte.hu.

Your participation is highly appreciated!

Please answer the questions below:

Gender: Male Female

Job Title: _____

Years of experience in present job: _____

You are kindly requested to choose the answer that best describes your opinion.

1=Not at all important

2=Slightly important

3=Moderately important

4= Very important

5=Extremely important

How do you personally evaluate the importance of the following variables to be included in a performance appraisal for teacher educators?

No	Variable	Not at all important	Slightly important	Moderately important	Very important	Extremely important
		1	2	3	4	5
1	Preparing lesson plan according to institutional curriculum guidelines					
2	Preparing lesson plan and teaching aids according to student teachers' developmental stage					
3	Preparing teaching-learning strategies for student active engagement					
4	Improving teacher educators' capacity by applying their own life experiences of teaching and learning					
5	Preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences					
6	Linking key concepts, principles, and educational theories to real-life applications					
7	Demonstrating a variety of teaching-learning materials including appropriate ICTs to support teaching-learning activities					
8	Model teaching by using assessment tools to evaluate the learning process and outcomes					
9	Facilitating student teachers' potential development					
10	Designing learning experiences that ensure student- teacher collaboration, inquiry, problem-solving and creativity					
11	Creating conducive learning environments that help students with differing backgrounds and abilities, including special learning needs					

12	Designing and selecting formative and summative assessment strategies aligned with curriculum requirements					
13	Demonstrating and encouraging student teachers' understanding of different cultures and global citizenship					
14	Conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.)					
15	Encouraging, motivating and observing student teachers to obey the school discipline					
16	Designing lessons including district examples and illustrations					
17	Updating Course materials for use in teacher education					
18	Collaborate and network with others, including peers, head teachers; professional groups; parents					
19	Continuously upgrade their own knowledge and skills					
20	Adhere to the rules and regulations of the profession and Institution					
21	Participating in teacher education programs at the local, state, national, or international level					
22	Providing counselling, by introducing teaching methods and programs to schools for staff development					
23	Establish goals for own professional development as a teacher educator					
24	Engaging in the new education curricular reform as a teacher educator					
25	Mentoring colleagues for professional growth					
26	Leading and managing professional groups					
27	Attending workshops, seminars, symposia and conferences, etc.					
28	Writing scientific articles, monographs, and chapters in books					
29	Conducting joint research with colleagues or students					
30	Supervising master and doctoral students' dissertations					
31	Reviewing and editing others' manuscripts					
32	Giving academic and research advice to colleagues					
33	Applying innovations to the teaching and learning process					

34	Participate in basic educational research					
35	Initiating inquiry and research-based learning to improve teaching practice					
36	Having patience in the face of problems					
37	Being cheerful and humble					
38	Having intimate and warm interaction with students					
39	Being honest in action and speech					
40	Establishing trust with parents and community as a professional (e.g., participating in the events of the community, being available for parents and community)					
41	Practice reflective thinking to improve the quality of teaching					
42	Accepting students' opinions and suggestions to gain innovative experiences					
43	Helping colleagues to solve problems and tasks					
44	Maintain equity and fairness among learners					
45	Being aware of existing laws and regulations that apply to the profession					
46	Having a commitment to the profession (e.g. devoting himself /herself to education and society)					
47	Respect diversity in working with students, colleagues, families, community members and other stakeholders					
48	Building unity among colleagues					

Appendix 5 Selected examples from Quantitative data analysis

Table 7 Number of perceived levels of importance on each indicator under Domain 1 (Teaching Activities)

Variable	Number and percentage of teacher educators on importance level					Total
	Not at all Important	Slightly important	Moderately important	Very important	Extremely important	
Preparing lesson plan according to institutional curriculum guidelines	0 (0%)	0 (0%)	0 (0%)	77 (31.6%)	167 (68.4%)	244 (100%)
Preparing lesson plan and teaching aids according to student teachers' developmental stage	0 (0%)	0 (0%)	2 (0.8%)	93 (38.1%)	149 (61.1%)	244 (100%)
Preparing teaching learning strategies for student active engagement	0 (0%)	0 (0%)	1 (0.4%)	98 (40.2%)	145 (59.4%)	244 (100%)
Improving teacher educators' capacity by applying their own life experiences of teaching and learning	0 (0%)	1 (0.4%)	1 (0.4%)	114 (46.7%)	128 (52.5%)	244 (100%)
Preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences	0 (0%)	0 (0%)	1 (0.4%)	113 (46.3%)	130 (53.3%)	244 (100%)
Linking key concepts, principles, and educational theories to real life applications	0 (0%)	0 (0%)	3 (1.2%)	116 (47.5%)	125 (51.2%)	244 (100%)
Demonstrating a variety of teaching learning materials including appropriate ICTs to support teaching learning activities	0 (0%)	1 (0.4%)	3 (1.2%)	128 (52.5%)	112 (45.9%)	244 (100%)
Model teaching by using assessment tools to evaluate the learning process and outcomes	1 (0.4%)	1 (0.4%)	5 (2.0%)	116 (47.5%)	121 (49.6%)	244 (100%)

Facilitating student teachers' potential development	0 (0%)	0 (0%)	5 (2.0%)	113 (46.3%)	126 (51.6%)	244 (100%)
Designing learning experiences that ensure student-teacher collaboration, inquiry, problem-solving and creativity	0 (0%)	0 (0%)	6 (2.5%)	118 (48.4%)	120 (49.2%)	244 (100%)
Creating conducive learning environments that help students with differing backgrounds and abilities, including special learning needs	0 (0%)	0 (0%)	11(4.5 %)	112 (45.9%)	121 (49.6%)	244 (100%)
Designing and selecting formative and summative assessment strategies aligned with curriculum requirements	0 (0%)	0 (0%)	4 (1.6%)	99 (40.6%)	141 (57.8%)	244 (100%)
Demonstrating and encouraging student teachers' understanding of different cultures and global citizenship	0 (0%)	0 (0%)	7 (2.9%)	123 (50.4%)	114 (46.7%)	244 (100%)
Conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.)	0 (0%)	0 (0%)	10 (4.1%)	107 (43.9%)	127 (52%)	244 (100%)
Encouraging, motivating and observing student teachers to obey the school discipline	0 (0%)	0 (0%)	10 (4.1%)	111 (45.5%)	123 (50.4%)	244 (100%)
Designing lessons including district examples and illustrations	0 (0%)	2 (0.8%)	5 (2%)	116 (47.5%)	121 (49.6%)	244 (100%)
Overall	0.03%	0.13%	1.88 %	44.93%	53.02%	100%

Table 9 Number of perceived levels of importance on each indicator under Domain 2
(Activities Supporting Teaching Profession)

Variable	Number and percentage of teacher educators on Importance Level					Total
	Not at all important	Slightly important	Moderately important	Very important	Extremely important	
Updating Course materials for use in teacher education	0 (0%)	1 (0.4%)	1 (0.4%)	116 (47.5%)	126 (51.6%)	244 (100%)
Collaborate and network with others, including peers, head teachers; professional groups; parents	0 (0%)	0 (0%)	9 (3.7%)	107 (43.9%)	128 (52.5%)	244 (100%)
Continuously upgrade their own knowledge and skills	0 (0%)	0 (0%)	6 (2.5%)	107 (43.9)	131 (53.7%)	244 (100%)
Adhere to the rules and regulations of the profession and Institution	0 (0%)	0 (0%)	6 (2.5%)	112 (45.9%)	126 (51.6%)	244 (100%)
Participating in teacher education programs at the local, state, national, or international level	0 (0%)	0 (0%)	7 (2.9%)	115 (47.1%)	122 (50.0%)	244 (100%)
Providing counseling, by introducing teaching methods and programs to schools for staff development	0 (0%)	1 (0.4%)	7 (2.9%)	120 (49.2%)	116 (47.5%)	244 (100%)
Establish goals for own professional development as a teacher educator	0 (0%)	1 (0.4%)	6 (2.5%)	121 (49.6%)	116 (47.5%)	244 (100%)
Engaging in the new education curricular reform as a teacher educator	0 (0%)	1 (0.4%)	4 (1.6%)	115 (47.1%)	124 (50.8%)	244 (100%)
Mentoring colleagues for professional growth	0 (0%)	1 (0.4%)	5 (2.0%)	120 (49.2%)	118 (48.4%)	244 (100%)
Leading and managing professional groups	0 (0%)	1 (0.4%)	5 (2.0%)	123 (50.4%)	115 (47.1%)	244 (100%)
Attending workshops, seminars, symposia, and conferences, etc.	0 (0%)	0 (0%)	4 (1.6%)	113 (46.3)	127 (52.0%)	244 (100%)
Overall	0%	0.2%	2.2%	47.3%	50.2%	(100%)

Table 11 Number of perceived levels of importance on each indicator under Domain 3
(Research and Innovation Activities)

Variable	Number and percentage of teacher educators on Importance Level					Total
	Not at all important	Slightly important	Moderately important	Very important	Extremely important	
Writing scientific articles, monographs, chapters in books	0 (0%)	0 (0%)	6 (2.5%)	109 (44.7%)	129 (52.9%)	244 (100%)
Conducting joint research with colleagues or students	0 (0%)	0 (0%)	3 (1.2%)	108 (44.3%)	133 (54.5%)	244 (100%)
Supervising master and doctoral students' dissertations	0 (0%)	0 (0%)	7 (2.7%)	110 (45.1%)	127 (52.0%)	244 (100%)
Reviewing and editing others' manuscripts	0 (0%)	0 (0%)	11 (4.5%)	121 (49.6%)	112 (45.9%)	244 (100%)
Giving academic and research advice to colleagues	0 (0%)	0 (0%)	12 (4.9%)	125 (51.2%)	107 (43.9%)	244 (100%)
Applying innovations to the teaching and learning process	0 (0%)	0 (0%)	6 (2.5%)	118 (48.4%)	120 (49.2%)	244 (100%)
Participate in basic educational research	0 (0%)	0 (0%)	9 (3.7%)	111 (45.5%)	124 (50.8%)	244 (100%)
Initiating inquiry and research-based learning to improve teaching practice	0 (0%)	1 (0.4%)	3 (1.2%)	117 (48.0%)	123 (50.4%)	244 (100%)
Overall	0%	0.05%	2.9%	47.1%	49.95%	100%

Table 13 Number of perceived levels of importance on each indicator under the Domain 4 (Professional Ethics)

Variable	Number and percentage of teacher educators on Importance Level					Total
	Not at all important	Slightly important	Moderately important	Very important	Extremely important	
Having patience in the face of problems	0 (0%)	1 (0.4%)	3 (1.2%)	109 (44.7%)	131 (53.7%)	244 (100%)
Being cheerful and humble	0 (0%)	1 (0.4%)	5 (2.0%)	111 (45.5%)	127 (52.0%)	244 (100%)
Having intimate and warm interaction with students	0 (0%)	0 (0%)	4 (1.6%)	112 (45.9%)	128 (52.5%)	244 (100%)
Being honest in action and speech	0 (0%)	0 (0%)	3 (1.2%)	110 (45.1%)	131 (53.7%)	244 (100%)
Establishing trust with parents and community as a professional (e.g., participating in the events of the community, being available for parents and community)	0 (0%)	0 (0%)	5 (2.0%)	112 (45.9%)	127 (52.0%)	244 (100%)
Practice reflective thinking to improve the quality of teaching	0 (0%)	0 (0%)	3 (1.2%)	118 (48.4%)	123 (50.4%)	244 (100%)
Accepting students' opinions and suggestions to gain innovative experiences	0 (0%)	0 (0%)	4 (1.6%)	117 (48.0%)	123 (50.4%)	244 (100%)
helping colleagues to solve problems and tasks	0 (0%)	0 (0%)	4 (1.6%)	115 (47.1%)	125 (51.2%)	244 (100%)

Maintain equity and fairness among learners	0 (0%)	0 (0%)	4 (1.6%)	112 (45.9%)	128 (52.5%)	244 (100%)
Being aware of existing laws and regulations that apply to the profession	0 (0%)	0 (0%)	4 (1.6%)	103 (42.2%)	137 (56.1%)	
Having a commitment to the profession (e.g. devoting himself /herself to education and society)	0 (0%)	0 (0%)	6 (2.5%)	105 (43.0%)	133 (54.5%)	244 (100%)
Respect diversity in working with students, colleagues, families, community members and other stakeholders	0 (0%)	0 (0%)	3 (1.2%)	123 (50.4%)	118 (48.4%)	244 (100%)
Building unity among colleagues	0 (0%)	0 (0%)	2 (0.8%)	106 (43.4%)	136 (55.7%)	244 (100%)
Overall	0%	0.06%	1.55%	45.84%	52.55%	100%

Table 17 Factor loadings and communalities based on principal component analysis with Varimax rotation for teacher educators' performance indicators

(N = 244)

Items	Component				Commonalities
	1	2	3	4	
Being honest in action and speech	.713				.597
Having intimate and warm interaction with students	.709				.598
Establishing trust with parents and community as a professional (e.g., participating in the events of the community, being available for parents and community)	.701				.559
Being aware of existing laws and regulations that apply to the profession	.695				.610
Maintaining equity and fairness among learners	.688				.565
Practising reflective thinking to improve the quality of teaching	.663				.516
Accepting students' opinions and suggestions to gain innovative experiences	.657				.546
Building unity among colleagues	.656				.608
Being cheerful and humble	.635				.503
Helping colleagues to solve problems and tasks	.625				.533
Respect diversity in working with students, colleagues, families, community members and other stakeholders	.602				.536
Having a commitment to the profession (e.g. devoting himself /herself to education and society)	.591				.523
Having patience in the face of problems	.564				.537

Encouraging, motivating and observing student teachers to obey the school discipline	.686			.656
Designing lessons including district examples and illustrations	.662			.614
Leading and managing professional groups	.656			.576
Establish goals for own professional development as a teacher educator	.650			.554
Updating Course materials for use in teacher education	.647			.594
Engaging in the new education curricular reform as a teacher educator	.645			.574
Providing counseling, by introducing teaching methods and programs to schools for staff development	.639			.559
Conducting ESD (Education for Sustainable development) co-curricular or extra-curricular activities (e.g., the use of student clubs, associations, etc.)	.605			.542
Attending workshops, seminars, symposia and conferences, etc.	.597			.455
Participating in teacher education programs at the local, state, national, or international level	.590			.545
Collaborate and network with others, including peers, head teachers; professional groups; parents	.578			.519
Mentoring colleagues for professional growth	.565			.556
Demonstrating and encouraging student teachers' understanding of different cultures and global citizenship	.531			.464

Adhere to the rules and regulations of the profession and Institution		.512			.519
Linking key concepts, principles, and educational theories to real-life applications			.742		.621
Demonstrating a variety of teaching-learning materials including appropriate ICTs to support teaching-learning activities			.700		.548
Model teaching by using assessment tools to evaluate the learning process and outcomes			.691		.691
Preparing learning activities to assist student teachers to link new concepts with their prior knowledge and experiences			.672		.572
Facilitating student teachers' potential development			.632		.509
Improving teacher educators' capacity by applying their own life experiences of teaching and learning			.597		.591
Designing learning experiences that ensure student-teacher collaboration, inquiry, problem-solving and creativity			.468		.458
Preparing teaching-learning strategies for student active engagement			.459		.468
Giving academic and research advice to colleagues				.778	.673
Reviewing and editing others' manuscripts				.730	.653
Participate in basic educational research				.723	.657
Applying innovations to the teaching and learning process				.723	.692

Initiating inquiry and research-based learning to improve teaching practice				.551	.586
Supervising master and doctoral students' dissertations				.505	.480
Eigenvalues	16.55	2.76	2.07	1.73	
% of variance	40.37	6.74	5.04	4.23	

Note: Loading <.3 are suppressed Extraction method: Principal Component Analysis

Rotation Method: Varimax with Kaiser

Normalization