# CONTINUOUS PROFESSIONAL DEVELOPMENT FRAMEWORK FOR TEACHER EDUCATORS IN SINDH: POLICY FOR IMPROVING THE QUALITY OF TEACHER EDUCATION

## USAID TEACHER EDUCATION PROJECT

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## RESEARCH STUDY REPORT

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# EXECUTIVE SUMMARY

The USAID Teacher Education Project was a five- year, nation-wide program tasked with institutionalizing selected reforms in teacher education, including the introduction of a four-year degree program for pre-service teacher preparation. To support the introduction of the degree program, the project worked with provincial teacher education apex institutions to offer professional development for teacher educators in elementary colleges and universities.

This study was initiated to find out how continuing professional development (CPD) with teacher educators might be sustained in a province once the project ended. Building on the observations of successful approaches to teacher educator CPD in other countries, the following research questions were put forward to guide this study:

1. What are the opportunities for intensive CPD for teacher educators in Sindh, as well as for collaborating and sharing knowledge and ideas?
2. What types of CPD do teacher educators benefit most from at various stages of their professional careers?
3. What are the experiences of teacher educators as they first transition to a college or university from teaching in school, then became more established as a faculty member, and then may eventually return to school?
4. What elements are required in an effective and sustainable teacher educator CPD framework and for its implementation?

The key objective of this study is to propose a framework for CPD that would provide continual and ongoing opportunities for the current and future teacher educators in Sindh to build their knowledge and skills.

The study was conducted in the province of Sindh, where the provincial government has been reforming the management of teacher education and leading the introduction of the Associate Degree in Education (ADE) and the Bachelor of Education (B.Ed.) Elementary degree in its teacher education institutions (TTIs).

## FINDINGS

Both senior and junior faculty members said that a lack of pedagogical skills was the major challenge when they started teaching. Additionally, many noted that they were assigned to teach unfamiliar content, and they had to manage classes of a larger size than they were used to or comfortable with. Pedagogy and classroom management were not among the subjects they learned during their professional preparation, and the vast majority of

respondents said that they struggled, especially during their first few years as teacher educators.

With recruitment now taking place through the Sindh Public Service Commission all applicants for a teacher education position go through a rigorous content area exam, and the large majority of teacher educators hold master's degrees. Traditionally, teacher educators have been appointed from the pool of secondary school teachers in the province - thus ensuring some experience of teaching - but with the shift towards hiring teacher educators from a wider pool of candidates through the public service commission, CPD concerned with how to teach may be increasingly important.

Many teacher educators noted that research skills were desirable and would contribute to the advancement of the profession; while conducting original research is not mandated by TTIs, doing so would improve one's practice and contribute to the sense of professionalism among teacher educators.

Finally, respondents said that the professional development opportunities provided through various sources were very helpful, although the opportunities offered did not always fit their specific needs.

Survey results indicate that CPD is an area of immense interest to teacher educators. Several teacher educators saw organized CPD activities as the best way to stay current and grow professionally in an ever-changing climate. CPD was also seen as the best way to stay up to date with new methodologies, pedagogies, and other important topics. Also clear in the responses was the sense of professionalism that participation in CPD offers teacher educators.

Survey participants were very receptive to various modes of delivery of CPD, including self-study, online delivery, or blended approach. Particularly important from the perspective of sustainability, three-quarters of respondents indicated their willingness to pay full or partial costs of their CPD and use personal time to participate. As the vast majority of respondents indicated both computer availability and technical proficiency, an electronic mode of CPD delivery seems like a viable option.

Interviews with education officials in Sindh revealed the generally shared opinion that currently there is no coherent system for the CPD of teacher educators, and there is a clear need for such a system. Current PD opportunities were reported to be sporadic and to typically occur in response to a specific event, such as a new curriculum or as part of a donor initiative. Officials from both the Sindh's Bureau of Curriculum (BoC) and Provincial Institute of Teacher Education (PITE) said that they thought teacher educators needed training on pedagogy, English language skills, IT skills, and research skills, as well as "refresher training" to update their subject knowledge of their content area. As the teacher educators also noted in their interviews, officials pointed out the need for PD follow-up activities.

While officials agreed that the cost of face-to-face trainings in remote locations was a serious obstacle to providing systematic PCD to teacher educators, most were skeptical that other methods would work. These findings are in sharp contrast to the findings from the teacher educator survey.

No officials proposed introducing monetary or promotional incentives to motivate teacher educators to participate in CPD. However, they noted that linking CPD with performance monitoring could have a motivational effect on teacher educators. More importantly, though, they noted that the nomination process must be linked to a transparently conducted needs assessment.

## RECOMMENDATIONS

Based on the data collected, and with input from STEDA, the PITE, and BoC, the study is recommending three key principles for a CPD framework in Sindh:

- The CPD framework is based on supported self-learning.
- Participation in CPD activities is voluntary and elective.
- Participation in CPD activities is unpaid and is not associated with any promotions or increase in pay for participants.

The study recommends a process that begins with self-learning using materials identified and provided to teacher educators by a central body ("CPD Central"). The teacher educator would then practice applying the new knowledge with help from a coach. The selection and provision of appropriate materials and the role of the coach are central to the process proposed – as is motivation to participate in CPD among teacher educators.

In line with findings from the survey and focus group discussions, five topics or areas of focus are proposed for a CPD system in Sindh:

- Teaching methods, including assessment methods and materials development
- Computer/IT skills, including effective use of instructional ICT
- Research skills and methods, including data analysis, and publication
- English language skills
- Communication and leadership skills

Based on the results of the study, the research team put forward the following recommendations for advancement of CPD for teacher educators in Sindh:

1. Appointment by STEDA of formal leadership for the development of a system CPD for teacher educators in Sindh.

2. Appointment, by STEDA, of a small expert group to develop a detailed proposal for a CPD system for teacher educators in Sindh, based on the principals, elements and process proposed in this study.
3. Develop the proposal and budget to include a short (six-12 month) pilot phase to test the principals, elements and process proposed in the study with a group of teacher educators/institutions or by focusing on a particular topic.
4. Implement and document the pilot phase and use the results to refine the plan for a province-wide system of CPD for teacher educators in Sindh.

The research team conducted a series of focus groups in a sample of TTIs to validate the research findings and proposed framework for CPD that emerged from the first stage of data collection. The research team encountered an overwhelmingly positive response to the proposed framework for CPD. With the introduction of B.Ed. (Hons) Elementary/ADE, there is a heightened sense of professionalism among many teacher educators across the province. Teacher educators are eager for professional support, and the proposed CPD model and recommendations for implementation provide a way forward to capitalize on their interest.

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# ACKNOWLEDGMENTS

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# INTRODUCTION

Decades of education research and practice demonstrate that improvement in student outcomes requires a sustained effort to change teaching and learning practices in classrooms, and this requires focused and persistent effort by all sectors of the education system and its partners (Levin & Fullan, 2008). Studies of pre-service teacher training have been largely centered on the experiences of teacher trainees and the associated process of preparation, induction, and assimilation into the teaching profession. The experiences of teacher educators have been little studied[1] and are not well-understood by researchers or policymakers. However, as Gherardi (2000) aptly noted, teaching practice is the "product of specific historical conditions resulting from previous practice and transformed into present practice" and as such requires constant modifications to reflect advances in both practical knowledge and theoretical understanding of foundational concepts.

While continuous professional development (CPD) of in-service teachers has received much attention in recent years as one of the major vehicles for improving the quality of education, it is no less important to understand the role that teacher educators play in the process. Teacher educators can serve as powerful agents for change—but they can also continue to reproduce obsolete practices and disseminate false information among prospective teachers. Their role is central to improving the quality of education, since they shape the next generation of teachers.

Change, however, does not come easily to professionals who see themselves as graduates of teaching (even though they may never have been teachers) and whose professional identity has been shaped around the notion of "sharing knowledge" with the next generation of practitioners. Efforts at professional development (PD) may appear threatening to teacher educators' professional identity, as such efforts may seem to challenge the validity of their knowledge. So how can one develop a framework for teacher educator PD that would reconcile two seemingly contradictory propositions: one in which teacher educators' professional identity is based on their role as expert teachers whose mission is to pass knowledge to the next generation of teachers, and one that asserts that in order to prepare good teachers, teacher educators must themselves regularly participate in high-quality PD?

Education Development Center, Inc. (EDC), in partnership with the Sukkur Institute of Business Administration (IBA), and in consultation with the Sindh Teacher Education

[1] With the recent exception of a volume on the professional development of teacher educators published by Rutgers (*Professional Development in Education,* 36[1–2], March–June 2010), the topic has received only peripheral notice by major publishers and journals in education research.

Development Authority (STEDA), the Provincial Institute of Teacher Education (PITE), and the Reform Support Unit (RSU), has undertaken an exploratory research study to provide policymakers in the province of Sindh with information from faculty in colleges and universities in Sindh about the PD needs of teacher educators and the normatively acceptable ways of ensuring their continual professional growth.

The study findings are intended to help establish a framework for teacher educator PD that is sensitive to such contextual factors as traditional values and mores, perceived roles of stakeholders in the teaching and learning process, and exogenous factors that impact this process. The study also identifies the key areas for teacher educator CPD and what approaches seem to work best, based on the experience of Pakistani teacher educators.

The study was conducted in the province of Sindh, where the provincial government has been reforming the management of teacher education and leading the introduction of the Associate Degree in Education (ADE) and the Bachelor of Education (B.Ed.) Elementary degree in its teacher education institutions (TTIs). The provincial government has recognized the importance of PD for faculty by notifying a team of master trainers from the Sindh Bureau of Curriculum (BoC), PITE, and colleges to introduce the ADE/B.Ed. (Hons) Elementary degree in institutions across the province.

This paper presents the overall findings of the research study. The first section provides an overview of the experiences of difference countries, institutions, and groups of professionals with the systems of PD for faculty at the tertiary level, and more specifically for teacher educators, where such systems are in existence. This section relied on secondary data and provides the conceptual foundation for the present study. The second section describes the methodology of the primary data collection undertaken by EDC for this study. The third section describes the findings of the primary data collected, and the fourth section introduces a CPD framework for teacher educators based on the study findings.

# LITERATURE REVIEW

## NATIONAL CPD MODELS

The EDC research team conducted a literature review to map out models of CPD for teacher educators used in different countries around the world. Both academic publications and policy documents from European countries, New Zealand, Australia, the United States, and Israel were reviewed. The literature review found a few different patterns of CPD in the profession of teacher education. The complete review of CPD models is included in Appendix 1; below is an overview that frames the present study in Pakistan.

In most European countries, there are no national policies or systematic formal support for teacher educators' PD. The latter is the responsibility of institutions where teacher educators are employed. In some countries, including Belgium, Hungary, and the Netherlands, teacher educators' professional associations take responsibility for PD initiatives, networking, and cooperation. PD activities may include courses, professional platforms, conferences, meetings, research coordination, and journal publications (Caena, 2011).

In **England and Wales**, there are no centralized arrangements for teacher educators' PD, and there are no national standards for teacher educators' professional knowledge. However, recent and relevant experience of teaching in schools is expected. While actual teacher educator responsibilities vary from institution to institution, teaching, mentoring, and conducting research are mandatory functions. Existing PD opportunities are institution-based and tend to focus on professional interaction, research, and subject-specific training.

In **Scotland**, the General Teaching Council for Scotland is the entity that spearheads the advancement of PD for teacher educators. In 2011, the Government of Scotland accepted recommendations to introduce a new system of re-accreditation that would ensure that teacher educators regularly update their skills. In addition to university-based research, the new system is promoting a professional dialogue among teacher educators that would also involve stakeholders and partners. The implementation of the new system is left to individual institutions.

The teacher education profession in **the Netherlands** has undergone substantial changes in recent years. Teacher educator professional standards have been developed, and a professional register was established to strengthen the professional identity of teacher educators. The process of developing a knowledge base was finalized in 2011, through a joint effort of the Dutch Association for Teacher Educators (VELON) and the Free

University. The process sets out the key elements of being a teacher educator, with background knowledge provided by experts, examples of good practice, and suggestions for discussion and further reading.

The existence of the professional association VELON is decisive for strengthening self-awareness, professional identity, and PD tools for Dutch teacher educators. VELON is a recognized stakeholder within the debates on teacher education; it receives financial support for relevant projects and oversees the process of developing and revising professional standards. Teacher education employers (heads of faculties and schools) promote and may financially support VELON membership among their staff.

The system of teacher education in **New Zealand** is often hailed as among the most advanced in the world. New Zealand operates a nationwide research and development initiative about the learning and practice of in-service teacher educators (ISTEs). INSTEP (Inservice Teacher Education Practice), a project of the Ministry of Education to New Zealand, involves approximately 400 ISTEs and researchers. In its initial phases, the INSTEP project examined professional learning of teacher educators through a reflective practice of self-inquiry and action research. The project then developed an understanding that effective professional learning has the following characteristics: resolves practitioners' questions and dilemmas about their own practice; involves evidence-based self-inquiries linked to learner outcomes; is based on collaborative and collegial relationships; is responsive to localized contexts and cultures; and is supported by active and conscious leadership and mentoring (Ministry of Education, cited in Davey & Ham, 2010). The INSTEP website provides free materials for teacher educators' PD, including case studies and theoretical materials on improvement of ISTEs, learning, and professional learning communities; conducting inquiry; communication; and relationships.

By contrast, teacher educators in **Australia** have been subject of public ridicule in the conservative press; they were called "little more than quasi-sociology departments" (Briant & Doherty, 2012), with low entry standards and low rigor. Teacher educators have been criticized on the grounds of lacking classroom teaching experience (Briant & Doherty, 2012), and their expertise has been often devalued (Cochran-Smith & Demers, 2009). PD is under the purview of the Australian Teacher Education Association, which is the major professional association for teacher educators in Australia.

In **the United States**, the Association of Teacher Educators, the National Council for Accreditation of Teacher Education, and the Teacher Education Accreditation Council have established requirements for qualifications of teacher education faculty. However, there is no coherent system or approach to the PD of teacher educators; it is left to be determined by teacher training institutions (TTIs).

In **Israel**, the MOFET Institute, a nonprofit government-funded agency, is responsible for both preparation and CPD of teacher educators. The MOFET Institute provides a national forum for exchanging ideas, information, and research on teacher education. It offers courses to novice teacher educators, opportunities to learn and work together with colleagues, and opportunities to undertake research and publish. Thousands of teacher educators who teach at 26 academic colleges of education or in non-academic educational institutions visit the MOFET Institute. The institute's staff are recruited from the colleges and universities. MOFET has also been engaged in developing effective modes of assessment for student teachers' learning (MOFET, 2012; MOFET JTEC, 2012; Murray, Swennen, & Shagrir, 2008; Swennen & Bates, 2010). The institute's mission is to serve as a professional meeting place for teacher educators and to facilitate an educational dialogue among colleagues both in the teacher education system and in other settings in the education system. Although there are no national standards for teacher educators in Israel, MOFET has introduced the United States' Association of Teacher Education Standards for the PD of teacher educators in Israel.

## INSTITUTION-LEVEL CPD MODELS

In most countries, the issue of PD for teacher educators is left to the institutions where they work. The literature suggests that the following could be used to support effective PD for teacher educators:

- Area networks of teacher educators from schools and universities under the coordination of teacher education institutions
- Professional learning communities
- Research and educational development projects
- Networks and partnerships
- Seminars on education and didactics, as well as mobility periods in schools and abroad, for university teacher educators
- Master's programs for school mentors
- Sabbaticals for school teacher educators, with opportunities for study visits, CPD courses, and research projects linked with teacher education institutions

TTIs around the world practice a range of approaches to support the CPD of their staff. The most popular are professional learning communities/communities of practice, collaborative cross-institutional networks, online communities, international collaboration, and induction programs. Each approach is described in more detail below.

### COMMUNITIES OF PRACTICE

In the last two decades or so, PD opportunities moved from being individual-level to community-level (Hadar & Brody, 2010; Little, 2002). Professional learning communities, or "communities of practice," focus on active teaching, assessment, observation, and interpersonal relations to improve practice, and they sometimes bring about organizational improvement (Darling-Hammond & McLaughlin, 1995; McLaughlin & Talbert, 2001; Stevens, Kahne, & Cooper, 2006). Professional learning communities promote the sharing of new ideas and practices across classrooms (McLaughlin & Talbert, 2001).

The main characteristic of professional learning communities that facilitates PD is social interaction. Researchers claim that having teachers question routines, examine new paradigms, find ways to respond to conflicts, and engage in professional growth improves their teaching and learning (Achinstein, 2002; Grossman, Wineburg, & Woolworth, 2001; Little, 1999; Witziers, Sleegers, & Imants, 1999). The traditional understanding of teaching as an isolated, restrictive, and protective occupation (Snow-Gerono, 2005) was established to negatively affect the quality of teaching quite some time ago (McLaughlin, 1992). Isolation is stronger at Higher Education Institutions (HEIs) than at schools since HEIs are organized by departments, which discourages interdisciplinary collaboration.

## CROSS-INSTITUTIONAL NETWORKS

Jones, Stanley, McNamara, and Murray (2011) conducted empirical research on the Teacher Education Research Network (TERN) initiative. TERN piloted a research capacity-building initiative at seven regional HEIs in the North West of England who provide pre-service teacher training. TERN aimed to provide PD opportunities to early and mid-career researchers. Participant teacher educators formed research groups on potential research topics and worked with a senior researcher (mentor) from one of seven participating universities on developing a research bid. Besides the mentoring support, the initiative included five face-to-face one-day workshops, two colloquia, and Virtual Research Environments, which encouraged further communication among teacher educators and provided storage facilities and access to resources. TERN contributed to the academic learning and PD of the involved teacher educators, as it created a professional learning environment and developed a more comprehensive knowledge base (Jones et al., 2011).

## ONLINE COMMUNITIES

Ramirez, Allison-Roan, Peterson, and Elliott-Johns (2012) describe the case of novice teacher educators from North America (the United States and Canada) who created an online community to offer professional support to one another. They used online journaling and dialoguing as well as feedback from their students to study the experiences of beginner teacher educators. They then focused on modeling critical reflection and enacting democratic practices. The online community was perceived as a safe space where

the teacher educators could examine, enhance, question, and develop their practices, and receive support and critical feedback. The study shows that the online community proved to be a viable and useful venue for self-study. While the participants expected that different contexts would influence their development as teacher educators, their collaborative study mainly focused on the common experiences they had as beginner academics.

## INTERNATIONAL COLLABORATION

The collaborative project between the Faculty of Education and Social Work at the University of Sydney, Australia, and the School of Education at Can Tho University, Vietnam, represents a good example of international collaboration among HEIs. Sixteen participants were involved in the project (2 from the University of Sydney and 14 from Can Tho University), with 10 staff members of the University of Sydney contributing from time to time. Besides the development and redesign of teacher education programs, the project facilitated teacher educators' PD. The project lasted from May 2007 to November 2008 and included face-to-face meetings of the two universities' staff, workshops, and e-mail communication. The project was based on the concepts of collaborative, collegial relationships, active learning and trust, respect, and reciprocity (Laws, Harbon, Nguyen, & Trinh, 2009).

## INDUCTION PROGRAMS

Research shows that there are serious concerns regarding the quality of induction programs for teacher educators (Swennen & Bates, 2010). Members of the Association of Teacher Educators in Europe conducted a study of teacher educators' induction experiences in six countries: Flanders, Israel, the Netherlands, Serbia, the United States, and the United Kingdom. They discovered that teachers in none of these countries, with the exception of Israel, had satisfactory induction experiences (Van Velzen, Van der Klink, Swennen, & Yaffe, 2010).

Israel seems to be the only country that offers professional support to beginner teacher educators at the national level. This support is offered through the MOFET Institute, which implements year-long induction programs for novice teacher educators (Ben-Peretz, Kleeman, Reichenberg, & Shimoni, 2010). The program is based on the idea of learning with colleagues under the guidance of expert teacher educators. It is offered to teacher educators in their first or second year in different institutions across Israel. Meetings consist of a theoretical lecture and a tutorial/workshop at which participants can connect theory with practice, discuss issues, raise questions, and seek advice. They also have opportunities to present cases from their work. The program evaluation showed that participants found the induction program useful in terms of building a professional

identity, learning the language of the profession, being a member of a community of professionals, and enhancing professional skills (Shagrir, 2010).

### THE ECHANGE PROJECT

The eChange project, a teacher educator PD project to support the use of information and communication technology (ICT) in teaching, is based in the Faculty of Education at the University of Technology, Sydney, Australia. Before introducing this project, some teacher educators incorporated technology into their teaching but often got frustrated with problems they encountered in ICT use. Others did not know how to use ICT in their teaching and lacked confidence in exploring opportunities related to ICT use in classroom. The eChange project assisted those faculty members who were using ICT to solve the problems they encountered by establishing a forum that allowed them to reflect on beneficial ways of using technologies and to provide direct assistance with any challenges. The project also supported the use of ICT by teacher educators who had not been using it before (Sandra, 2002).

The faculty dean decided that the best way for teacher educators to learn to use ICT was to have two of them coordinate the eChange Project. The two coordinators chosen were teacher educators (not technical experts) from the faculty who were exploring new technologies in their work. The fact that the coordinators were academics rather than technical experts was the main reason for the project's successful implementation, as this helped the other teacher educators feel more comfortable about their own technological ignorance (Sandra, 2002).

A committee of early adopters comprised those academics who were engaged in innovative ideas for using ICT in teaching, the faculty technical support person, and a member of the faculty management committee. The latter two were especially useful as they could advise on technical issues and relay suggestions to the management committee. The discussions were focused first on pedagogy and then on using ICT to implement relevant pedagogical strategies more effectively (Sandra, 2002).

## SUMMARY OF LITERATURE REVIEW

Some clear themes emerge from the review of the existing research on PD for teacher educators. First, most countries where PD for teacher educators was institutionalized had a well-articulated leadership to pursue the establishment of standards and provide supports for achieving them. While in some countries this leadership role was allotted to a professional association, without external funding and a mandate, the association was rarely able to achieve significant changes. In those countries where PD for teacher

educators was taken up by regulatory bodies, such as the Ministry of Education, the advancements in PD were faster and more far-reaching. For example, in New Zealand, Israel, and Scotland, the national government provides financial and regulatory support for continual development of the teacher education profession, with positive results. Systems of standards and clear pathways to accreditation help TTIs ensure that their staff have necessary skills.

TTIs around the world have developed a range of successful strategies that enable the CPD of their staff. The most successful examples discussed in the review were communities of practice, collaborative cross-institutional networks, online communities, international collaboration, and dedicated PD projects. These strategies emphasize peer-to-peer learning, well-defined safe forums for exchanging ideas, and clear leadership.

Lessons from other countries are undoubtedly valuable when one considers a new system of PD for teacher educators in a Pakistani province. Despite vastly different conditions, the principles and values of the profession of teacher education universally emphasize learning and leadership. Improvements in knowledge in chosen content areas and related pedagogy, and skills in mentoring, ICT, and professional communication form the foundation of many reviewed approaches to the CPD of teacher educators.

# STUDY METHODOLOGY

## RESEARCH QUESTIONS

Building on the observations of successful approaches to teacher educator PD in other countries, the following research questions were put forward to guide this study:

5. What are the opportunities for intensive PD for teacher educators in Sindh, as well as for collaborating and sharing knowledge and ideas?
6. What types of CPD do teacher educators benefit most from at various stages of their professional careers?
7. What are the experiences of teacher educators as they first transition to a college or university from teaching in school, then became more established as a faculty member, and then may eventually return to school?
8. What elements are required in an effective and sustainable teacher educator CPD framework and for its implementation?

The key objective of this study is to propose a framework for PD that would provide continual and ongoing opportunities for the current and future teacher educators in Sindh to build their knowledge and skills.

## DATA COLLECTION METHODS

Primary data were collected in two stages. The first stage was designed to better understand the experiences of teacher educators in Sindh. To accomplish this, the research team conducted the following primary data collection activities between December 2012 and February 2013:

- In-depth interviews or focus groups with 50 teacher educators from 23 TTIs in Sindh
- A survey of a sample of 85 teacher educators at various stages of their professional careers in colleges and universities.
- Key informant interviews with nine education officials from provincial teacher education apex bodies (i.e., the PITE, BoC, and STEDA) in Sindh

All data collection was conducted by two- to three-member teams of designated staff from EDC and the Sukkur IBA. Interviews with officials were conducted by phone. All interviews and focus groups with teacher educators were conducted face to face. Interview and survey protocols were developed by the EDC research team in consultation with Sukkur IBA

research staff; they were piloted during the first week of data collection and then modified based on the results of the pilot.[2]

Upon completion of the first stage of data collection, all data were analyzed, and a workshop to interpret the findings was held in Karachi in February 2013. Research team members presented the findings to representatives of Sindh government bodies, including STEDA, PITE, and RSU. In a collaborative process during the workshop and based on the data, the research team members and Sindh policymakers articulated the central elements of the CPD framework. Testing these elements became the task of the second stage of data collection, which occurred in March 2013.

During the second stage, the data collection teams conducted focus groups in eight TTIs in Sindh, including two universities. During these focus groups, teacher educators were presented with the elements of the framework and asked to comment.[3] More than 50 teacher educators contributed their feedback on the proposed elements of the CPD framework.

All quantitative and qualitative data analyses were completed by the members of the research team, and the findings are presented in this report.

## SAMPLING

To ensure the generalizability of the findings, the study sample was carefully constructed to ensure that various types of institutions were represented. Thus, the selection of TTIs was purposeful (non-random). Additional considerations, such as the security risks involved in traveling to particular locations, were also factors in the decision-making process.

Recognizing that the faculty structure in TTIs is highly hierarchical, the sample selection within institutions was stratified by faculty longevity: Separate focus groups were held with experienced teacher educators and with new faculty members. All participants signed a consent form indicating their understanding of the purposes of the study and their agreement to participate.

## DATA ANALYSES

[2] The data collection protocols can be found in the Appendices.
[3] The focus group protocol can be found in the Appendices.

Survey data were analyzed using standard statistical procedures, including frequency distributions and central tendency analysis. Since the sample was not selected randomly and cannot be considered representative, no inferences to the entire population of teacher educators in Sindh were made.

Data from in-depth interviews and focus groups were analyzed using principles of content analysis[4] and grounded theory.[5] During the first stage of data analysis, all data were coded according to pre-determined questions. The analysis began with some initial codes (based on the well-tested semi-structured protocol employed for the study), which were revised throughout the analysis, and each transcription was marked with the appropriate codes. However, whenever relevant information was found that was not congruent with any of the existing codes, a new code was added. The central higher-order codes remained the same throughout the analysis process, and only lower-order codes went through fine-tuning. For example, "role of teacher educators" was used as a higher-order code in the initial template and then was further extended to embrace different types of roles (e.g., a facilitator, a learner, a catalyst of change in society), which were identified in the interview transcripts.

All qualitative data analyses were done using the qualitative analysis software Atlas.ti. Quantitative analyses were done using Statistical Package for Social Sciences software.

## LIMITATIONS

The major limitation of the exploratory and qualitative study is the necessary amount of subjectivity in the data analysis, which is inherent in this type of research. Personal biases of the lead researchers undoubtedly constitute the major threat to the validity of the findings. Similarly, the reliability of the data is affected by the non-random sampling of institutions.

To counter these threats to validity and reliability, the research team adhered to strict protocols for the data collection and analysis, and used well-established methods of qualitative data analysis that minimize the influence of subjective biases.

[4] A content analysis approach assumes a coding frame based on a set of predefined categories for which evidence is sought in the data.

[5] A grounded theory approach assumes that the explanatory framework is developed through the process of analysis rather than based on a predetermined set of categories.

# FINDINGS

## FINDINGS FROM INTERVIEWS AND FOCUS GROUPS WITH TEACHER EDUCATORS

The key objective of the qualitative data collection was to gain a better understanding of teacher educators' backgrounds and experiences, and the PD needs that they themselves are aware of. In-depth interviews were conducted with experienced teacher educators (those who were in their position for more than three years), and focus groups were conducted with new teacher educators (those who started in the past two years). Two-thirds of participants were experienced educators.

All participants reported having master's degrees in various specialized disciplines (e.g., English, chemistry, physics, botany, computer science, mathematics, Urdu, Sindhi), and most had a master's degree in education as well. Similarly, almost 90 percent of the interview and focus group participants had more than one year of teaching experience at the school or college level. A third of the respondents were women.

The following key themes were used to organize information from interviews and focus groups:

- Perceived role of teacher educators
- Pathways to the profession
- Challenges experienced by teacher educators
- Supporting factors
- Strengths and weaknesses of newly appointed teacher educators

Fifty transcripts of recorded interviews and focus groups were analyzed. The summary of findings for each key theme notes the relative frequency of opinions and uses direct quotes from interviews and focus groups.

### PERCEIVED ROLE OF TEACHER EDUCATORS

The analysis of interviews and focus groups showed that teacher educators hold a clear distinction between a teacher and a teacher educator. According to about half the study

participants (*n* = 26),[6] a teacher is the one who emphasizes *what* is taught (i.e., content), while a teacher educator is the one who emphasizes *how* to teach (methodology).

> "I make this comparison [between teacher educator and general teacher] on the basis of teaching. I found that what a teacher does is to walk and talk. They don't really integrate with the knowledge of the students. They only go by a lecture method, which doesn't improve their knowledge." *[Male, newly appointed teacher educator]*

Many respondents emphasized that content knowledge focused instruction remains dominant in most teacher education institutions, whereas they believed that the emphasis should be on pedagogy instead. Since teacher trainees are already supposed to have good expertise in the content of their subjects, they maintain that good teacher educators should place less emphasis on the content and more on the pedagogy.

Asked to explain what the main role of a teacher educator was, respondents' answers fell into four categories:

- Educator of educators
- Catalyst of change in society
- Learner
- Facilitator

A good number (*n* = 18) of study participants highlighted the role of teacher educator as an **educator of educators**. They believed that their job as a teacher educator is of great importance, as they are teaching teachers who will later on teach children. Therefore, their role is more important than that of a teacher who only teaches students.

> "My role as a teacher educator is of high value. I am the one who prepare teachers who teach at HST and JST level at schools. If I am competent to transfer the required skills in my students, it will have multiplying effect on the society as a whole. So, I see my role very important in preparing the future." *[Male, experienced teacher educator]*

Some participants (*n* = 15) highlighted the role of teacher educator as a **catalyst of change in society** because they believe that teachers in general, and teacher educators in particular, are the backbone of any society. As one experienced participant noted, only teacher educators can "build or ruin" the future of society through the quality of their teaching.

> "If not directly then indirectly the teacher educator brings a change in society. If only few of his students learn honest skills and learn to have moral and ethical behavior,

[6] The variable *n* shows the relative frequency of this theme in the transcripts of 50 interviews.

> they will have multiplying effect on the society. In this way or the other, the teacher educator has a responsibility towards the whole society. The whole society is of course not approachable by him, but he can teach good values to his circle of influence." *[Male, experienced teacher educator]*

Another role expressed by some respondents (*n* = 14) is that of **learner**. Respondents argued that teacher educators have more chances of learning and growing because they are supposed to teach teacher trainees who are specialized in various disciplines; thus, there are always ample opportunities for learning new subject content and new teaching strategies, methods, and techniques.

Teacher educators are also **facilitators** (*n* = 13) who disseminate knowledge to the teacher trainees. In the past, the role of a teacher educator was limited to delivering knowledge to teacher trainees only through lectures; however, today's teacher educators have to be facilitators who help their teacher trainees engage in healthy discussions and learn from each other. The role of facilitator emphasizes guiding teacher trainees to learn on their own rather than treating them as passive recipients of information.

Some teacher educators noted that empowering teacher trainees to be agents of their own learning is a hallmark of the new approach to teacher education. As one experienced teacher educator noted:

> "Lecture-based method is also good, where a teacher talks and students listen. But I have observed [that] students learn more when they are engaged in discussions. Thus, the role of the teacher educator has been shifted from a preacher to a facilitator."

## PATHWAYS TO THE PROFESSION

Four motivating factors for becoming a teacher educator were identified during the analysis: teaching as a family occupation, opportunities for PD, teacher as a nation builder, and no alternative job opportunity.

Some respondents (*n* = 11) said the main reason they became a teacher educator was that teaching is a **family occupation**—their family members (e.g., father, mother, brother, or sister) were also teachers or teacher educators, and these respondents see the teaching profession as their family vocation. One newly appointed teacher educator commented that she was greatly influenced by her family background:

> "Many of my family members were in education. My grandfather was E.D.O. My mother and my brother are in teaching. Few of my uncles and aunts are in the field of education."

An equally compelling reason to join the teacher educator profession was better **opportunities for professional growth**. Some respondents (*n* = 11) noted that in comparison with a general teacher, teacher educators have more opportunities for PD, both in Pakistan and overseas, which helps them build their careers.

> "I always had an idea of professional development. I wanted to develop myself. In [the] teacher education institute you have lot of chances of research, conferences, or development, training etc. but in the school you don't have these chances. You only have to teach things and no professional development. *[Male, experienced teacher educator]*

Some respondents (*n* = 9) said that it was their teacher who inspired them and helped them see the teaching profession as the one that promotes **nation building**, and that is why they decided to be a teacher educator.

> "My first inspiration was one of my teachers in BS (CS). She used to give us examples that were related to the concepts we were taught in school that made me realize what an important role teachers who teach at school play. They have heavy responsibility. They can build or ruin the future of nation. Thus, I started feeling that I should contribute in preparing effective teachers." *[Female, experienced teacher educator]*

Finally, the analysis of the interview data also showed negative socio-contextual factors for drawing teacher educators into the profession, such as **no alternative job opportunity**. One in 10 study participants (*n* = 5) said that they did not want to be teacher educators but as they could not find a job in the profession of their choice, they took a teacher educator position. For example, an experienced teacher educator recounted how after graduation, with a degree in physics, he could not find any job other than as a teacher educator. Another interviewee described how she took the job because her father died and she had to support her family, and this one was the only job available to her.

## CHALLENGES FACED BY TEACHER EDUCATORS

Our analysis identified many problems faced by teacher educators, both in their initial stage of employment and currently. Reported issues fall into five main categories:

- Lack of pedagogical skills
- Lack of ICT skills and resources
- Teaching unfamiliar courses
- Teaching large classes
- Frequent electricity outages

Not all teacher educators experienced the same problems. A substantial generational divide was found in relation to ICT skills. New faculty members who were hired recently did not

report experiencing difficulties with technology; their issues largely had to do with a lack of pedagogical skills and the need to teach outside their subject area expertise. Challenges with ICT were reported mostly by experienced faculty members who had been employed as teacher educators for a dozen or more years.

One of the most commonly reported early challenges faced by teacher educators was a lack of knowledge of **teaching pedagogy**. The vast majority of respondents reported that the lecture method was the only teaching method they were familiar with when hired. In fact, many respondents (*n* = 29) noted that when they became teacher educators, they had no knowledge or idea of teaching pedagogy at all. Some respondents had no teaching experience when they first joined the faculty; they did not know how to develop a course outline, a lesson plan, or class activities, and said that learning and adopting new methods of teaching, such as collaborative learning, was difficult for them. One respondent reflected on the early days of his career as a teacher educator:

> "In the beginning, of course, I was feeling difficulties because here methodology is activity based. Here, in Mathematics (my area of specialization), we present to our students a physical shape or a manipulative, but in my previous department, teaching at school, we just delivered the lecture without any sort of methodology." *[Male, experienced teacher educator]*

Another big problem faced by many teacher educators (*n* = 23), particularly those who joined a TTI during the 1990s and early 2000s, was a **lack of ICT skills**. They did not know how to use a computer or a multi-media projector for teaching purposes. In addition, some interviewees reported a complete lack of any ICT in their institutions, while others they said that the ICT they have is non-functional (either broken or unavailable when needed).

> "Till the year 2000, we were not taking advantage of technology. Though, there were few computers available in the Elementary College but Principal didn't allow anyone to experiment with them. Computers were considered as expensive resources, and we were not allowed to work on them, because in that case we could cause some harm to those computers." *[Male, experienced teacher educator]*

For the newly appointed teacher educators, the use of ICT was not a big challenge. Many junior faculty members said that they were comfortable with ICT and used it extensively.

Another challenge reported by the teacher educators was **having to teach courses that were not related to their area of specialization**. A good number of respondents (*n* = 22) said that they were assigned to teach courses for which they had no prior knowledge or experience. Interviewees pointed out that these assignments frequently happened at the last minute, leaving them to scramble to prepare. One experienced teacher educator from a university said that this was a usual practice in his institution: "I am a science teacher, but I

have taught psychology for many years [here]." Another respondent reported being "confused" as to why he was asked teach English, which was not his area of specialization.

One reason that courses are assigned to faculty with a different area of specialization is the shortage of faculty members with the necessary expertise. For example, one study participant recalled that when she joined her institution, there were already faculty members with a science background but no one with an Urdu background—so the administration was obliged to assign a science teacher to teach Urdu.

As respondents reported, newly appointed teacher educators are still facing this problem even though there is a perception that there isn't much of a shortage of teacher educators. One possible explanation may be that many teacher educators have master's degrees in a subject that is not being taught in the teacher education institution. For example, only one course related to science (i.e., general science) is offered by the teacher education institution, but four teacher educators with different science specializations (i.e., chemistry, physics, botany, and zoology) are working there. Since only one teacher can teach the general science course, the remaining three will be assigned to teach other courses, unrelated to science.

**Teaching a large class** was identified as a substantial challenge by some respondents. Most of the teachers had taught at the school or college level, where class size was 20–25 children. However, when they were appointed as teacher educators, they faced the challenge of classes of 50–80+ adult students. One respondent reported teaching as many as 150 students in a class, which he found very difficult. Female teacher educators, in particular, found it very demanding to teach a large class of mostly male adult students[7].

This challenge is further exacerbated by the fact that some of the junior faculty are young, with very limited teaching experience, and some of their students are older and have served as either heads of schools or school principals.

**Frequent electricity outages** and shutdowns also affect teacher educators' performance. For example, teacher educators find themselves unable to make photocopies before class or access needed sites on the Internet. Some study participants shared that they were trying to track outage patterns so they could schedule classes that needed to use IT equipment during the time of day when outages are least likely.

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[7] Cohort enrolment in colleges in the study in 2013 when data was collected ranged from 18 to 60. Colleges with 60 students in one cohort had two sections. In universities, cohort enrolment ranged from 11-47 and, again, the larger cohorts are split into two sections. Thus, it is likely that respondents were referring to experiences several years ago when enrolment in PTC, CT and one year B.Ed. courses may have been much higher than it is now in ADE/B.Ed (Hons) programs.

## STRENGTHS AND WEAKNESSES OF NEWLY APPOINTED TEACHER EDUCATORS

To better understand the state of the profession, one task of the study was to map out existing human capacity at the TTIs. In particular, we were interested to learn more about the perceived strengths and weaknesses of newly appointed teacher educators, as they represent the new generation and the future of the profession. Both senior faculty members and the new faculty themselves were asked to share their thoughts. The data analysis found that strong content area knowledge and strong IT skills were the characteristics most frequently associated with the newly appointed faculty, and a lack of pedagogical skills was highlighted as their main weakness.

The new teacher educators were selected by the Public Service Commission of Pakistan through a rigorous process in which they were thoroughly tested in content knowledge of their specialized subjects. It is therefore no surprise that the new faculty have an **excellent mastery of the content**.

Particularly when compared with those who joined more than a decade ago, the newly appointed teacher educators have **strong ICT skills**. These new teacher educators are used to using modern ICT tools for effective teaching.

One explanation for the major weakness found among the new teacher educators—a **lack of pedagogical knowledge and skills**—was that they had not received any training on teaching methods prior to becoming a teacher educator. While they had master's degrees in various subjects, they were never exposed to learning about pedagogy during those courses, and thus were in particular need of professional development.

## SUPPORTING FACTORS

Where do novice teacher educators turn for help when faced with the problems described above? Many respondents mentioned that they did a lot of self-study when they first joined the faculty. Some teacher educators ($n$ = 11), especially those who had good ICT skills, reporting using the Internet to find solutions. As one respondent noted, "When [we] need [information] we surf the net. Whole material can be found there."

At their workplaces, the study participants mentioned the following sources of support:

- Supervisor and senior colleagues
- System-level support

Almost all respondents ($n$ = 47) stated that at the initial stage of their career as a teacher educator, their supervisors and senior colleagues helped them a lot in coping with early challenges they faced. This support took a number of forms: For example, some senior colleagues sat in on classes taught by junior colleagues, observed and commented on their

teaching methodology, and suggested ways to improve their teaching skills. Some participants said that they found co-teaching and mentoring very helpful. With regard to co-teaching, most respondents understood it as "shared" teaching, when two faculty members are assigned to teach the same class and take turns teaching it. The concept of "mentoring" seemed to describe particular relationships formed between junior and senior faculty members, where the senior person helps the new faculty member navigate the institution and advises the new member on teaching and research.

Many respondents (*n* = 41) explicitly mentioned that they got ample support from their institution, particularly in the form of workshops and conferences (both in Pakistan and abroad). The study participants mentioned several training opportunities that were offered during the last couple of years[8] which helped them get familiarized with new student-centered teaching methods and broadened their teaching knowledge spectrum.

> "The university provided several professional development opportunities, workshops, trainings, which I received in my first and second year. Many opportunities were from the university, from the Higher Education Commission. The trainings, learning and education division has professor development trainings on pedagogy skills, microteaching." *[Male, experienced teacher educator]*

It is worth mentioning here that though the participants acknowledged the ample training opportunities, they also highlighted three issues that undermined the effectiveness of these opportunities:

- Absence of post-training monitoring and evaluation
- Lack of transparency in the nomination process
- Training that is not linked to teacher educators' needs

A good number of respondents (*n* = 31) in various ways expressed a concern with the absence of post-training monitoring and evaluation, claiming that there is no formal procedure to ensure that after PD, the teacher educator will implement any of the new skills and/or communicate the knowledge to his or her colleagues. They believe that without consistent, structured follow-up, the objectives of the PD will not be achieved. These respondents would like to see a systematic approach to monitoring how training recipients put their new skills into practice and to evaluating the results of the training in terms of improved student outcomes.

[8] Most of the training opportunities the respondents mentioned were delivered through the USAID Teacher Education Project.

Some respondents (*n* = 17) said that a limitation to existing PD opportunities is that the principal or dean nominates the faculty members to take part. Thus, the nomination process does not seem to be based on merit or need, but rather is seen as a manifestation of personal relationships between the principal or dean and his or her subordinates. As one interviewee put it:

> "All we are concerned with is the pleasure of our immediate boss (principal). He handles you promotions, career growth opportunities, etc., so you have to be pleasing him only." *[Male, experienced teacher educator]*

Finally, some respondents (*n* = 16) mentioned that the PD could have been much more useful for their career if it had been preceded by a needs analysis. Different faculty members struggle with different issues, and the principal is not always aware of their real needs or which staff members would benefit most from what kinds of PD. Specifically, teacher educators highlighted the following key areas in which they would like to have more PD:

- Using ICT in teaching
- Conducting research
- Improving English language and communication skills

Almost all participants considered the use of ICT to be an important component of effective teaching, and many stated that their institutions provide them with ICT equipment. However, the use of ICT is still limited because of lack of knowledge and expertise. Many respondents (*n* = 34), most of whom are experienced faculty, expressed an interest in more training and professional courses on using the latest ICT tools in teaching.

Another area of high need was found to be research methods. Nearly half the study participants (*n* = 20) acknowledged their limited or nonexistent knowledge of how to conduct research. One respondent from a university mentioned how this lack of knowledge impairs his teaching:

> ". . . when I give some research-based assignment to my students, they are unable to complete the task. I feel this deficiency is on my side. I don't have the required research skills to give them proper guidance."

Other respondents (particularly those from universities) noted that teacher educators need to learn about research and get trained in the use of the latest research tools—not only to be a good teacher educator but also to advance in their own educational careers. Thus, more training on research methods and tools would have many benefits for teacher educators.

The third area in which some participants ($n$ = 14) would like more training is English language and communication skills. It has been noted that teacher educators may have very good content knowledge of their subjects (e.g., Islamic culture, Pakistan study, geography), but as they learned those subjects in Urdu, they have difficulty teaching the content in English.

## SUMMARY OF FINDINGS FROM INTERVIEWS AND FOCUS GROUPS WITH TEACHER EDUCATORS

The data analysis found that teacher educators' perceptions of their own profession were predominantly characterized by their position of authority in relation to teacher trainees. Three of the four dominant themes ("educator of educators," "catalyst of change in society," and "facilitator") describe teacher education as a profession of active involvement in shaping the future of the field of education and of the nation itself. These perceptions characterize an understanding of the profession as a calling, not as a craft. The fourth dominant theme, "learner," indicates that teacher educators are seen as a source of new knowledge and experiences.

Interviews and focus groups with teacher educators revealed that the majority of respondents who selected the profession did so for one of three reasons. A large group of respondents were following a family tradition; another group was attracted to the profession because it offered opportunities for professional growth; and about one in five were inspired by the charismatic teachers they encountered. However, a substantial proportion explained that they "fell" into the profession because it was the only job they could get.

Both senior and junior faculty members said that a lack of pedagogical skills was the major challenge when they started teaching. Additionally, many noted that they were assigned to teach unfamiliar content, and they had to manage classes of a larger size than they were used to or comfortable with. Pedagogy and classroom management were not among the subjects they learned during their professional preparation, and the vast majority of respondents said that they struggled, especially during their first few years as teacher educators.

Many noted that research skills were desirable and would contribute to the advancement of the profession; while conducting original research is not mandated by TTIs, doing so would improve one's practice and contribute to the sense of professionalism among teacher educators. Most teacher educators sought help from senior faculty members or from the Internet and books.

Finally, respondents said that the PD opportunities provided through various sources were very helpful, although the PD offered did not always fit their specific needs.

# TEACHER EDUCATOR PROFESSIONAL DEVELOPMENT INTEREST SURVEY FINDINGS

The Professional Development Interest Survey was conducted with teacher educators in the province of Sindh at the same time that the interviews and focus groups took place. The survey had two key goals: to obtain quantitative data relating to the respondents' interest in PD in terms of content, mode of delivery, and willingness to attend; and to collect data on teacher educators' technology proficiency and their access to a working, Internet-capable computer. The findings are presented below.

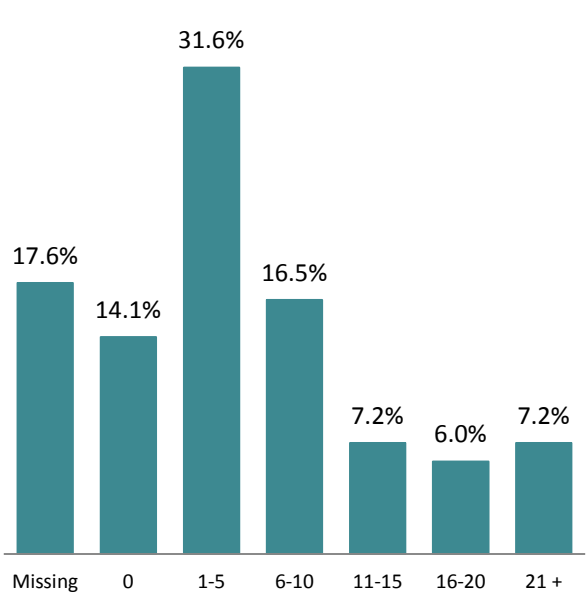
## RESPONDENT DEMOGRAPHICS

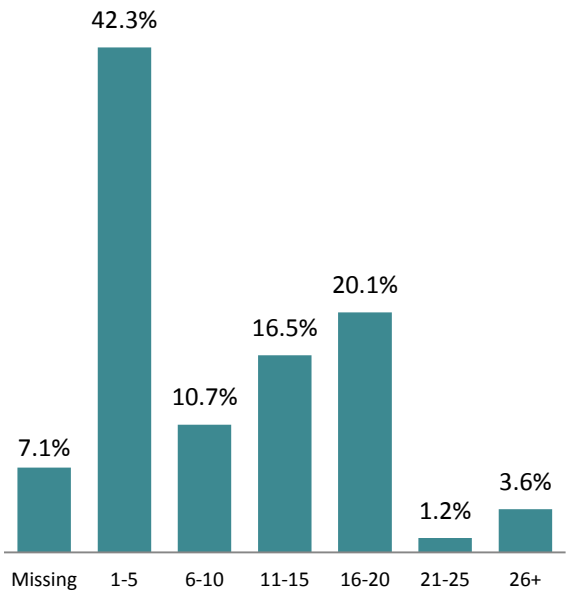
A total of 85 teacher educators participated in the survey. The majority of respondents (72.9 percent) were male; fewer than a quarter (23.5 percent) were female. A few respondents (3.6 percent) did not identify their gender.

As the figures below illustrate, just over a third (36.9 percent) of respondents have worked as an elementary or secondary school teacher for more than six years. A substantial proportion of respondents either haven't worked at schools at all or have worked for less than five years. Nearly a fifth of the sample did not answer the question. Approximately half (53 percent) the respondents have worked as a teacher educator for less than 10 years, with 42.3 percent working less than 5 years. Nearly 25 percent have worked as a teacher educator for more than 16 years.

FIGURE 1. NUMBER OF YEARS WORKED IN AN ELEMENTARY/SECONDARY SCHOOL

FIGURE 2. NUMBER OF YEARS WORKED AS A TEACHER EDUCATOR



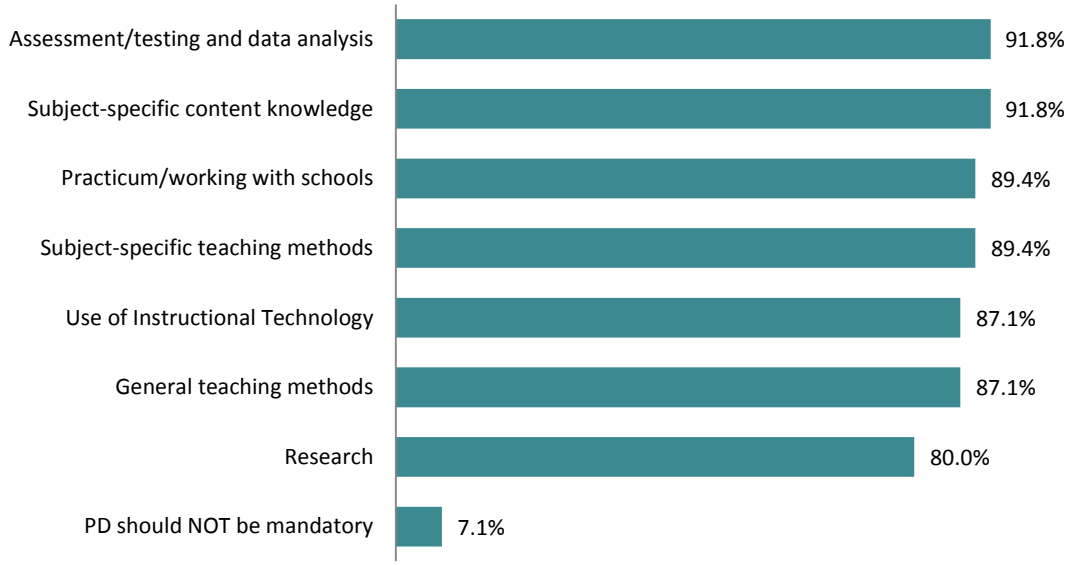

## TOPICS, MOTIVATION, AND INTEREST

One task of the survey was to learn what teacher educators thought about the content of the PD and what they perceive as motivational factors. The survey also asked whether PD should be mandatory for all teacher educators.

A strong majority (89.4 percent) of respondents believed that teacher educators should be able to choose the topics for which they receive PD. Only 4.7 percent thought that the content should be determined by others, and the remaining respondents were undecided.

Few respondents (7.1 percent) thought that PD should not be mandatory for all teacher educators. Among the strong majority who believed that PD should be mandatory, each potential PD topic received a large favorable response. These data present an interesting contradiction to the participants' responses to the question above, regarding choice of PD topics. While nearly 9 in 10 participants felt strongly that no one should tell them what sort of PD to receive, nearly the reverse was true regarding the question of whether PD should be mandatory in the first place, which the vast majority thought it should be. Figure 3 lists the PD topics that respondents believed should be mandatory for all teacher educators.

FIGURE 3. PD TOPICS THAT SHOULD BE MANDATORY




Respondents were offered five potential sources of motivation for participating in PD. Each source received a majority of positive responses (see Figure 4), with professional interest receiving the highest amount (85.9 percent) of interest.

FIGURE 4. SOURCES OF MOTIVATION TO PARTICIPATE IN PD


Survey respondents expressed interest in each PD topic listed. Subject-specific teaching methods, assessment/testing and data analysis, and research methods received the highest percentage of strong interest. Table 1 illustrates respondents' level of interest by PD topic.

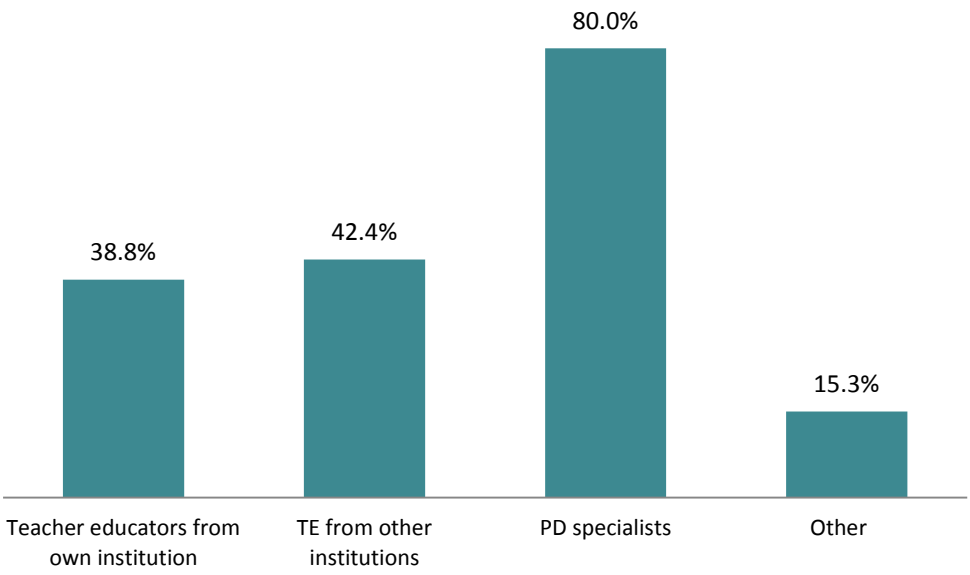
TABLE 1. LEVEL OF INTEREST, BY TOPIC OF PD

| | Strong | Moderate | A Little | No Interest | Did Not Answer |
|---|---|---|---|---|---|
| Subject-specific content knowledge | 57.6% | 29.4% | 5.9% | 1.2% | 5.9% |
| Subject-specific teaching methods | 67.1% | 29.4% | 3.5% | 0.0% | 0.0% |
| General teaching methods | 41.2% | 45.9% | 9.4% | 1.2% | 2.4% |
| Assessment/testing and data analysis | 67.1% | 25.9% | 3.5% | 0.0% | 3.5% |
| Practicum/working with schools | 54.1% | 31.8% | 8.2% | 1.2% | 4.7% |
| Use of instructional technology | 58.8% | 32.9% | 8.2% | 0.0% | 0.0% |
| Research methods | 64.7% | 21.2% | 8.2% | 0.0% | 5.9% |

## PD DELIVERY

Respondents did not have strong opinions regarding who should provide the PD; 80 percent thought that PD specialists should provide the PD, and slightly more (81.2 percent) thought that it should be provided by fellow teacher educators (see Figure 5). However, respondents were divided as to whether the teacher educator providing PD should be from their own institution (38.8 percent) or another institution (42.4 percent).

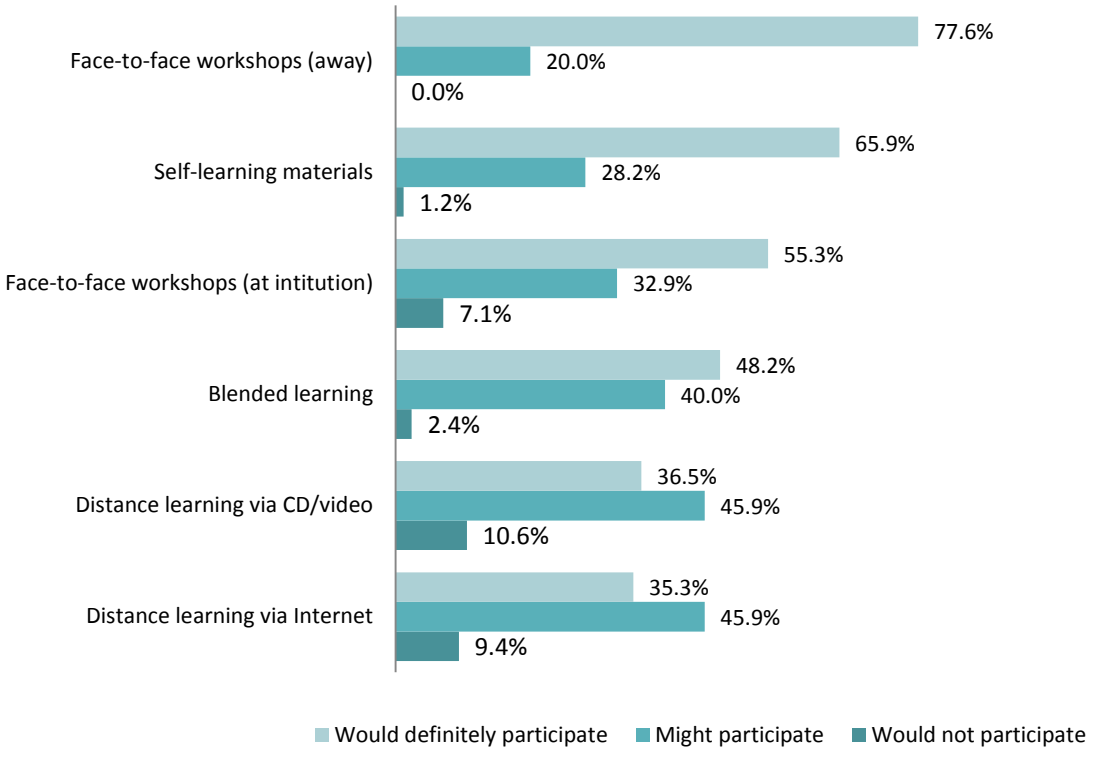
FIGURE 5. WHO SHOULD PROVIDE PD TO TEACHER EDUCATORS




Respondents were receptive to all modes of PD delivery, saying that they "might" or "definitely would" attend each type (see Figure 6). They were most interested in face-to-face workshops held away from their home institutions. This high percentage may be due to the fact that this is the dominant form of PD delivery and, since participation is typically associated with "everything covered" travel and meaningful per diems, it is seen as a reward or bonus.

The delivery modes that the largest numbers of respondents said they would definitely attend were self-learning materials (65.9 percent) and face-to-face workshops at the home institution (55.3 percent). Teacher educators were more likely to say that they "might" rather than "definitely would" attend distance-learning workshops, whether through the Internet or on a CD or video. Only a small percentage of respondents had no interest in distance learning, whether via CD or video (10.6 percent) or the Internet (9.4 percent). Nearly half the respondents (48.2 percent) said that they would definitely participate in blended learning, although the extent of their familiarity with this mode of learning is unclear. Overall, these data show that teacher educators are open to new ways of receiving PD.

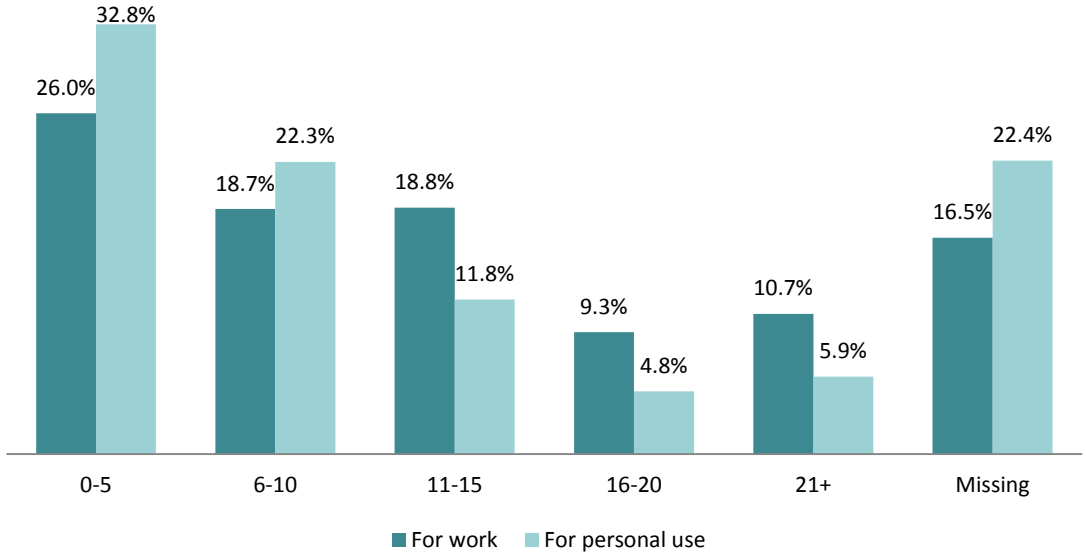
FIGURE 6. LEVEL OF INTEREST IN PARTICIPATION, BY MODE OF DELIVERY




## COMPUTER/INTERNET USAGE AND PROFICIENCY

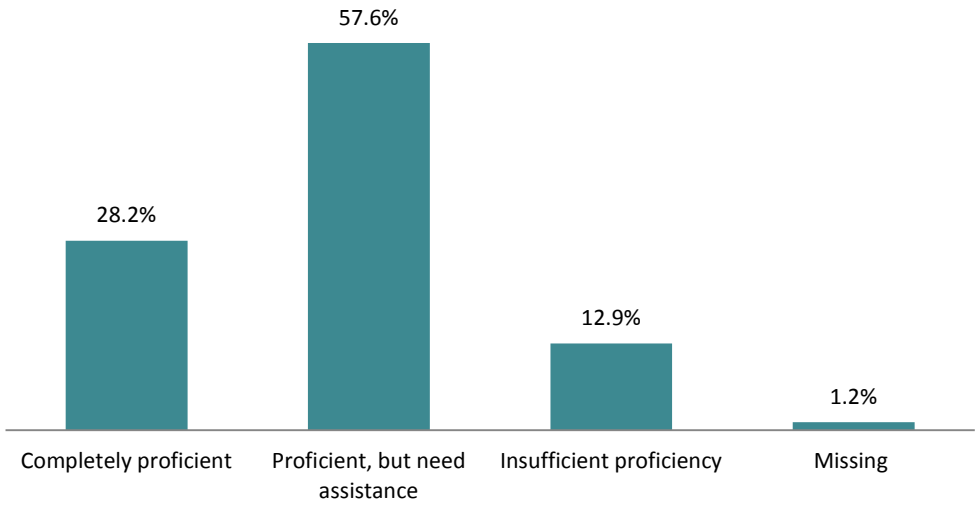
To explore the potential for delivering PD more cost-effectively, respondents were asked about their computer proficiency and the availability of Internet access at their homes and workplaces. Most respondents said that they used a computer less than 15 hours a week for work purposes (63.7 percent) and less than 15 hours a week for personal use (67.1 percent). Respondents tended to spend more hours per week on a computer for work purposes. Figure 7 illustrates these data.

FIGURE 7. HOURS A WEEK USING COMPUTER




The majority of participants (85.5 percent) reported that they were either somewhat or completely proficient in using a computer to participate in distance learning via the Internet or a CD. Slightly more than half the respondents (57.6 percent) indicated that assistance would be needed to participate.

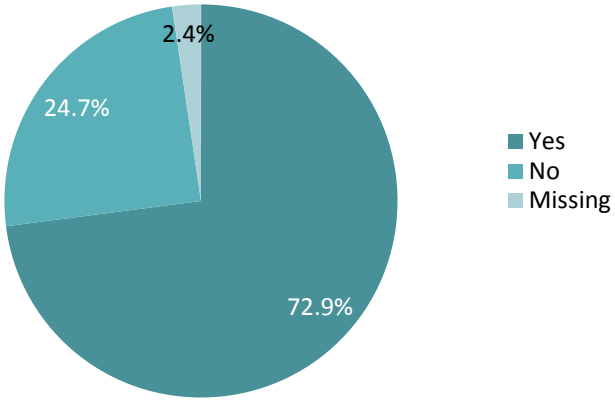
FIGURE 8. LEVEL OF PROFICIENCY IN USING A COMPUTER TO PARTICIPATE IN DISTANCE LEARNING VIA THE INTERNET OR A CD



## INTEREST IN PD OUTSIDE WORK HOURS

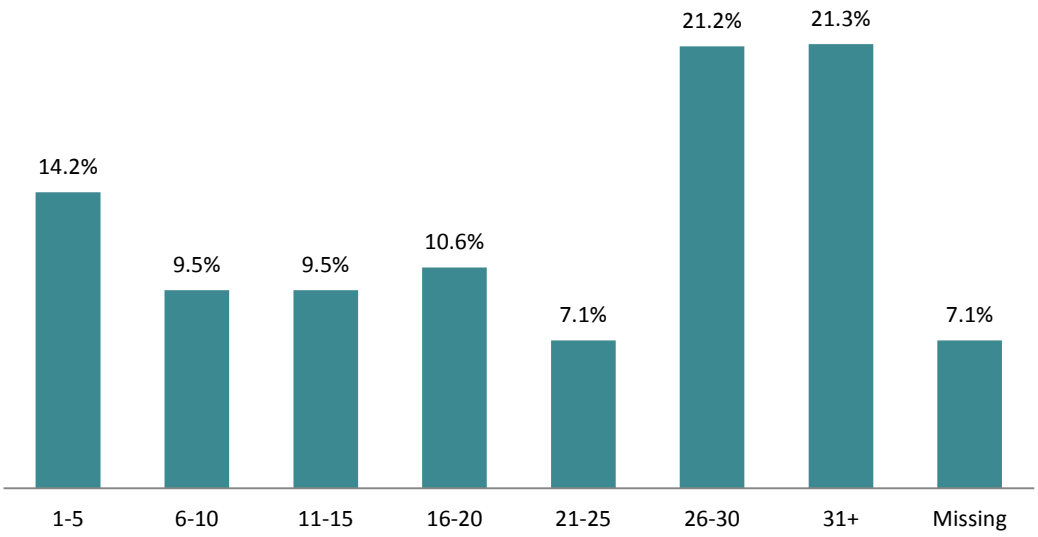
The survey aimed to explore to what extent teacher educators are motivated to improve their qualifications by participating in PD outside of work hours. The vast majority (72.9 percent) of respondents indicated that they were willing to participate in PD on their own time.

FIGURE 9. WILLINGNESS TO PARTICIPATE IN PD ON OWN TIME



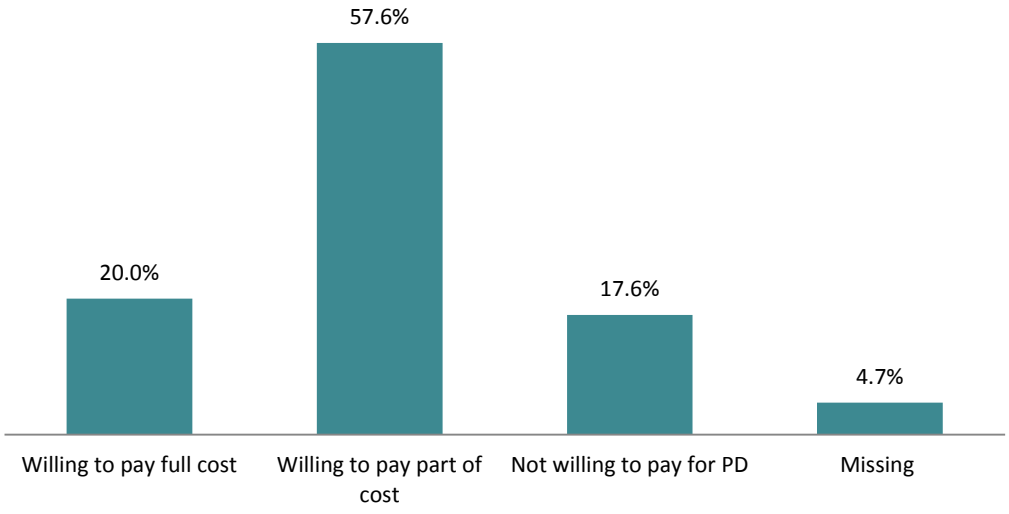

The hours a month that respondents were willing to dedicate to PD on their own time varied considerably (see Figure 10). Nearly half the respondents (49.6 percent) were willing to dedicate more than 20 hours of their personal time to PD, with about one in five (21.3 percent) willing to dedicate more than 30 hours a month.

FIGURE 10. HOURS WILLING TO DEDICATE TO PD ON OWN TIME, PER MONTH




Respondents were asked if they would be willing to help offset the costs of the PD they would receive. Most respondents were willing to pay some portion or all of the costs for PD. Fewer than one in five respondents (17.6 percent) were not willing to pay for their PD. More respondents (57.6 percent) were willing to contribute part of the cost than to pay the full cost (20 percent), as shown in Figure 11.

FIGURE 11. WILLINGNESS TO PAY FOR PD



Survey participants were asked to share any thoughts they had on the topic of PD for teacher educators. Several themes emerged in the analysis of these open-ended responses:

- **Opportunities should be based on merit or need.** Many respondents noted that access to PD opportunities should be equitable. Several cited their concerns that currently the same faculty members are given PD over and over; selection is not based on merit or need.
- **PD should be regular and should include follow-up.** One-time training workshops were not considered as useful as regular PD that included follow-up components.
- **Resources should be made available.** Teacher educators expressed a need for content resources (e.g., on pedagogy) as well the means to access them (via the Internet in particular).

### SUMMARY OF PROFESSIONAL DEVELOPMENT INTEREST SURVEY FINDINGS

Survey results indicate that PD opportunities are an area of immense interest to teacher educators. Several teacher educators saw organized PD activities as the best way to stay current and grow professionally in an ever-changing climate. PD was also seen as the best way to stay up to date with new methodologies, pedagogies, and other important topics. Also clear in the responses was the sense of professionalism that participation in PD offers teacher educators.

Survey participants were very receptive to various PD opportunities, even if they involved using personal time or incurring out-of-pocket costs. Particularly important from the perspective of sustainability, three-quarters of respondents indicated their willingness to pay full or partial costs of their PD. As the vast majority of respondents indicated both computer availability and technical proficiency, an electronic mode of PD delivery seems like a viable option.

## FINDINGS FROM INTERVIEWS WITH SINDH EDUCATION OFFICIALS

Semi-structured interviews with seven sampled senior officials from PITE and from the Sindh BoC were conducted in early 2013 by the EDC research team. Interview questions focused on the existing system of CPD for teacher educators and on the role of various

agencies within this system. Respondents were also asked about the current needs of teacher educators and about how they monitor performance.

An analysis of transcripts of seven interviews revealed the generally shared opinion that currently there is no coherent system for the CPD of teacher educators in Sindh, and there is a clear need for such a system. Officials from both the BoC and PITE said that they thought teacher educators needed training on pedagogy, English language skills, IT skills, and research skills, as well as "refresher training" to update their knowledge of their content area. The current PD opportunities were reported to be sporadic and to typically occur in response to a specific event, such as a new curriculum or as part of a donor initiative.

STEDA, the new regulatory authority, was formed in part to respond to this need. STEDA's responsibilities include devising a framework for regular PD to ensure that the skills of new and existing teacher educators are continually updated. PITE and the BoC retain their implementing functions, with PITE focusing chiefly on teacher education and the BoC focusing on quality control of the education process and materials development. Nomination for participation in PD is done by the principals of colleges. The nomination is supposed to be need-based, although in reality it is difficult to assess to what extent it is indeed need-based and to what extent it reflects personal relationships between the principal and the nominees. In fact, one interviewee noted that based on his observations, many principals "do not have adequate knowledge of the needs of their faculty members." While PITE officials conduct sporadic observations of teacher educators, there is no evidence that the results are used in the nomination process.

The research team attempted to de-code the term "PD" during the interviews. Nearly all respondents understood PD as face-to-face training activities, typically conducted away from the TTI. Additionally, some respondents mentioned mentoring by more experienced colleagues as an effective PD method. Since off-site face-to-face workshops can be relatively expensive, other methods of PD were proposed to interviewees, such as online courses, self-study courses, and face-to-face workshops at teacher educators' home institutions. While respondents agreed that the cost of face-to-face trainings in remote locations was a serious obstacle to providing systematic PD to teacher educators, most were skeptical that other methods would work. In their opinion, the existing "culture" and "tradition" dictate that PD be delivered as a face-to-face training in a remote location. However, without clear evidence to the contrary, the conviction behind these assertions could be attributed to mere habit; indeed, these findings are in sharp contrast to the findings from the teacher educator survey, presented in the previous section.

## PROFESSIONAL DEVELOPMENT NEEDS OF TEACHER EDUCATORS

Nearly all interviewed officials agreed that all teacher educators must have access to PD on pedagogy. **Pedagogy**, or teaching methodology, was highlighted as a critical skill that most of the cadre of 500 Sindh teacher educators are lacking. As pedagogy is not taught in the content area master's programs, teacher educators are obliged to master pedagogical skills on the job, and most of them replicate methods that they themselves experienced at school, college, and university.

The research team did not expect to find the need for CPD for teacher educators in the **content areas of their subjects** to be highlighted as strongly as it was by the interviewed officials. After all, recruitment now takes place through the Sindh Public Service Commission; all applicants for a teacher education position go through a rigorous content area exam, and the large majority of teacher educators hold master's degrees. But as one interviewee noted:

> "There had been so much advancement in every field since teacher educators started working, it is essential for them to stay up to date with latest trends in pedagogy and the advancement in the content area of their subject of expertise."

Nearly every interviewed official pointed out that all faculty members should be fully proficient in the **English language**, yet currently not all of them are. Said one interviewee, "It is important not only because it is an international language, but it is the language of knowledge and information as well." Another noted, "Most up-to-date materials are available in English, therefore it is an important vehicle for learning." Making English language proficiency a selection requirement for all newly appointed teacher educators would help address this issue in the future.

**IT skills** were emphasized by the interviewees as necessary for keeping up with advancements in the field (through Internet resources), as well as for incorporating technology into one's teaching to increase effectiveness. Some officials believed that faculty members already possess those skills. One senior official emphasized:

> "I think it is very basic for everyone to know about working with computers; otherwise, they cannot get ahead—and if they had not known English, I wonder how had they come this far. . . . I believe all young teacher educators are well-versed both in English language skills and in computer technology."

Other officials disagreed and shared their own observations of poor English and IT proficiency among faculty members.

Finally, some officials noted that **research skills** remain low among most faculty members, junior and senior alike. To enable teacher educators to develop bodies of their own

research work, thereby advancing the state of the profession, PD in the area of research is needed.

As the teacher educators also noted in their interviews, officials pointed out the need for PD follow-up activities. If teacher educators are to put their new knowledge into practice, they need be encouraged and supported. As one official said, “No matter how good the quality of training is and no matter how hopeful we feel about the outcomes of each of these trainings, the best results can only be achieved if we strengthen the follow-up system.” Information on the identified needs, trainings attended, and results of trainings could also be included in the Annual Confidential Report to make performance monitoring easier.

Currently, there is no system of incentives associated with participation in PD, except for per diem and travel allowances. No officials proposed introducing monetary or promotional incentives to motivate teacher educators to participate in PD, possibly because the demand currently far outstrips supply. However, linking PD with performance monitoring that is reflected in the Annual Confidential Report could have a motivational effect on teacher educators. More importantly, though, it was noted that the nomination process must be linked to a transparently conducted needs assessment.

# RESEARCH-BASED CPD FRAMEWORK

Upon completion of the first stage of data collection in February 2013, the EDC/Sukkur IBA research team met with representatives from STEDA, PITE, and BoC to discuss the findings and identify elements of the CPD framework that emerged from the data. The resulting elements were offered for feedback and reflection to a random sample of experienced and junior teacher educators in Sindh.

## ELEMENTS OF THE FRAMEWORK

The findings from the qualitative and quantitative data collected over six months of research by the EDC/Sukkur IBA research team show that the overwhelming majority of teacher educators feel a need for CPD and are willing to participate in PD activities without any financial or promotional incentives if the content of the CPD seems relevant to them.

### PRINCIPLES OF A CPD FRAMEWORK

Based on the data collected, and with input from STEDA, PITE, and BoC, the research team put forward three key principles for a CPD framework in Sindh:

- **Principle 1. The CPD framework is based on supported self-learning.** The central PD coordinating body ("CPD Central") will provide learning materials to interested teacher educators on topics from a pre-determined menu of options, and also various kinds of support that may include coaching, linkages to other teacher educators taking the same PD module, and occasional events such as conferences and seminars.
- **Principle 2. Participation in CPD activities is voluntary and elective.** Any faculty member in Sindh may choose to participate. Group participation is encouraged to promote collaborative learning.
- **Principle 3. Participation in CPD activities is unpaid and is not associated with any promotions or increase in pay for participants**. Some CPD activities might have an associated cost for participants. CPD participants may be invited to participate in provincial teacher education conferences and seminars to share their experiences and promote learning.

### KEY ELEMENTS OF THE CPD FRAMEWORK

The key elements of the CPD framework are summarized in Figure 12.

FIGURE 12. KEY ELEMENTS OF THE CPD FRAMEWORK


## THE CPD PROCESS

The CPD process (illustrated in Figure 13) starts with self-learning, using CPD materials provided by CPD Central, and then applying the knowledge with support from an assigned coach.

FIGURE 13. THE CPD PROCESS


## CPD TOPICS

The research identified five main areas of interest among teacher educators with regard to PD, which are outlined in Table 2.

TABLE 2. CPD TOPICS

| | |
|---|---|
| **Topic 1** | Subject/course teaching methods, including assessment methods and materials development |
| **Topic 2** | Computer/IT skills, including effective use of instructional ICT |
| **Topic 3** | Research skills and methods, including methodology, data analysis, and publication |
| **Topic 4** | English language skills |
| **Topic 5**[9] | Communication and leadership skills |

[9] The fifth topic was not clearly articulated by respondents during the first stage of data collection but instead emerged during the second stage when the elements of the CPD framework were tested with the Sindh teacher educators.

Each topics has levels. Levels would begin with the Level 1 corresponding to basic skills, and progress to level 2 (Intermediate), and Level 3 (Advanced). During the CPD material development it may be determined that some topics should have more than three levels.

Nearly all research study participants expressed "strong interest" in participating in PD activities on these topics, even if the PD is entirely unpaid and not linked to future pay raises or promotions. The two main motivating factors for participation were the desire to "stay up to date with new ideas and methods in teaching and learning" and "professional satisfaction."

### CPD MATERIALS

The cost of developing and updating materials presents a major expense for those offering CPD. Study participants suggested that institutions such as the Aga Khan University Institute for Educational Development and international experts might help with materials development. Further research is needed to establish the potential cost of developing and updating a multi-level set of CPD materials.

### CPD CENTRAL

Given its mandate, STEDA is the organization to lead and oversee the implementation of CPD for teacher educators in the province. STEDA would need to develop a process for selecting CPD materials designers and CPD providers (including the coaches and the organization[s] that trains the coaches), and would need to establish quality control mechanisms to ensure the quality of CPD materials and providers. STEDA might also develop a system of CPD provider accreditation (as has been proposed and to some extent practiced for CPD providers working with school teachers).

## CPD FRAMEWORK VALIDATION FINDINGS

During the second stage of primary data collection, the EDC/Sukkur IBA research team visited seven TTIs and conducted focus groups with 54 teacher educators. The TTIs were purposefully selected to represent the diversity of geographic locations as well as different types of institutions, including male and female colleges and universities. Participants in focus groups were selected randomly from the faculty of visited institutions. The following institutions were included in the sample:

1. GECE Federal B Area

2. GECE Lyari and Qasimabad
3. GECE Hyderabad (Female)
4. IBA Sukkur University
5. GECE Kandhkot (Male)
6. GECE Mithi
7. University of Sindh

During the focus groups, the research team presented elements of the CPD framework to focus group participants and requested their specific feedback. Participants were also asked to complete a survey relating to the CPD framework elements.

The vast majority of focus group participants reacted positively to the proposed framework, and many offered valuable suggestions for its improvement. This section presents findings from those focus groups.

Some notes on the data:

- When experienced and junior faculty members had significantly different opinions, these data were disaggregated by experience.
- Since not all respondents answered all questions, in some charts the totals do not add up to 100 percent.
- A number of questions allowed for a selection of multiple answer options, and in these cases the total may exceed 100 percent.

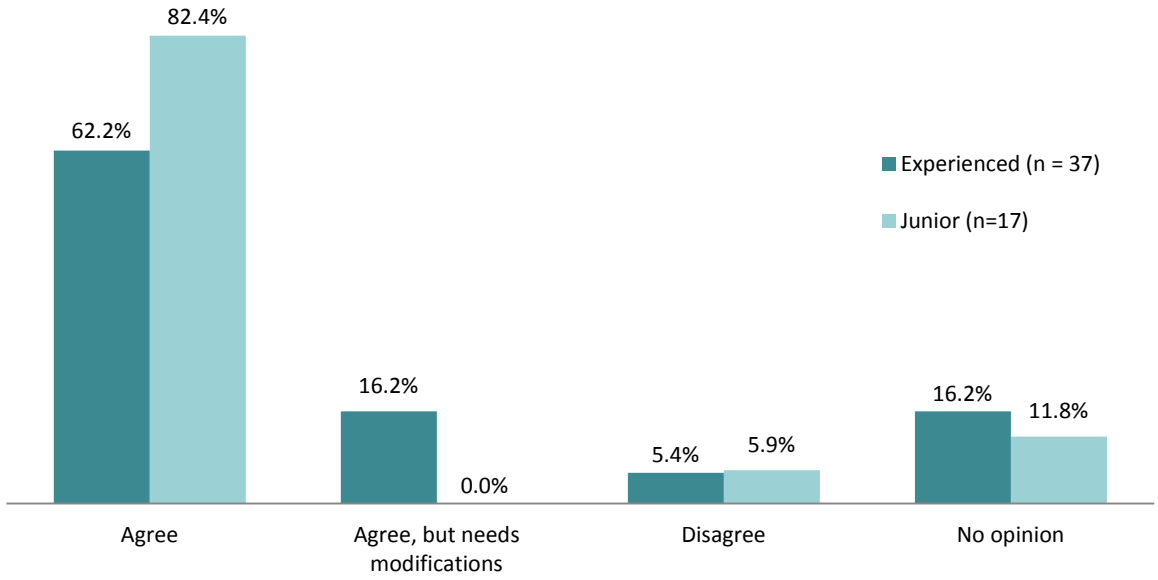
## CPD PROCESS

The majority of respondents responded positively to the CPD process depicted in Figure 13. the CPD Process, though several faculty members suggested improvements. Most suggestions involved the inclusion of feedback, evaluation, and publications of one's original work. The topic of publishing in particular generated a lot of discussion among focus group participants. Not having had much support with publishing in academic journals in the past, teacher educators (particularly those from universities) are clamoring for opportunities to conduct original research and to publish.

Evaluation of one's performance was another hotly debated subject. While in principle most teacher educators agree that their performance should be regularly evaluated, in practice there is no consensus on the process of evaluation and the criteria that must be used. Student evaluations are not seen as particularly valuable, since students rarely have a point of reference outside the classroom and thus cannot be objective in their assessment of a professor's performance.

These suggestions have been incorporated into the final CPD framework.

FIGURE 14. AGREEMENT WITH PROPOSED CPD PROCESS, BY EXPERIENCE




When asked which parts of the CPD process were of particular relevance or importance, experienced teacher educators strongly agreed that the third and fourth steps, "develop new skills through collaboration with others through the CPD network" and "share new skills and ideas through research, publishing, and knowledge-sharing events," were most important. Junior teacher educators' responses were evenly distributed across all components of the process.

The issue of new knowledge application in the classroom was raised by many as a crucial one. One participant said, "I think that application is most important. We have many good systems, but there is no implementation of those."

Many respondents supported a cyclical CPD process, with feedback and evaluation present throughout the cycle. Several experienced teacher educators suggested feedback by coaches. Junior teacher educators stressed the inclusion of evaluation and opportunities for self-reflection.

## KEY ELEMENT 1: CPD TOPICS AND LEARNING MATERIALS

Of the four key elements of the proposed CPD framework (Materials, Support, Collaboration, and New Ideas—see Figure 12. Key Elements of the CPD Framework), the first key element is the provision of topic-specific CPD materials, differentiated by level. Respondents were asked to rank their level of interest across four topic areas: subject area

content and teaching methods, computer skills, English language skills, and research skills. All four attracted a lot of interest, but research skills were deemed the most important, with 90 percent indicating that they were "very" interested. All junior teacher educators were "very" interested in subject area content and teaching methods and research skills. Experienced teacher educators were less likely to be "very" interested in the topics than junior teacher educators. Only a few teacher educators expressed no interest.

TABLE 3. LEVEL OF INTEREST OF TEACHER EDUCATORS IN CPD TOPICS

| | | Level of Interest | | | |
|---|---|---|---|---|---|
| | | **Missing** | **None** | **A Little** | **Very** |
| **Subject area content and teaching methods** | *Experienced (*n = *37)* | 16.2% | 5.4% | 16.2% | 62.2% |
| | *Junior (*n = *17)* | 0.0% | 0.0% | 0.0% | 100.0% |
| | ***Total (*n = *54)*** | **11.1%** | **3.7%** | **11.1%** | **74.1%** |
| **Computer skills** | *Experienced (*n = *37)* | 10.8% | 0.0% | 13.5% | 75.7% |
| | *Junior (*n = *17)* | 5.9% | 0.0% | 23.5% | 70.6% |
| | ***Total (*n = *54)*** | **9.3%** | **0.0%** | **16.7%** | **74.1%** |
| **English language skills** | *Experienced (*n = *37)* | 10.8% | 5.4% | 18.9% | 64.9% |
| | *Junior (*n = *17)* | 0.0% | 0.0% | 11.8% | 88.2% |
| | ***Total (*n = *54)*** | **7.4%** | **3.7%** | **16.7%** | **72.2%** |
| **Research skills** | *Experienced (*n = *37)* | 10.8% | 0.0% | 2.7% | 86.5% |
| | *Junior (*n = *17)* | 0.0% | 0.0% | 0.0% | 100.0% |
| | ***Total (*n = *54)*** | **7.4%** | **0.0%** | **1.9%** | **90.7%** |

Respondents were asked to comment on the listed PD topics and to suggest further areas for CPD. Fourteen respondents, mostly experienced teacher educators, suggested topics[10] that generally fall under "communication and leadership skills," which was added as the fifth topical area for CPD. A few respondents also would like to see assessments included; this can be achieved by including assessments under content area teaching methods.

Some teacher educators voiced their satisfaction that the content and pedagogy PD are bundled together for each subject that was included. In their view, one cannot teach pedagogy that is divorced from a specific subject, since the pedagogy of teaching science will be inherently different from the pedagogy of teaching child development. Others

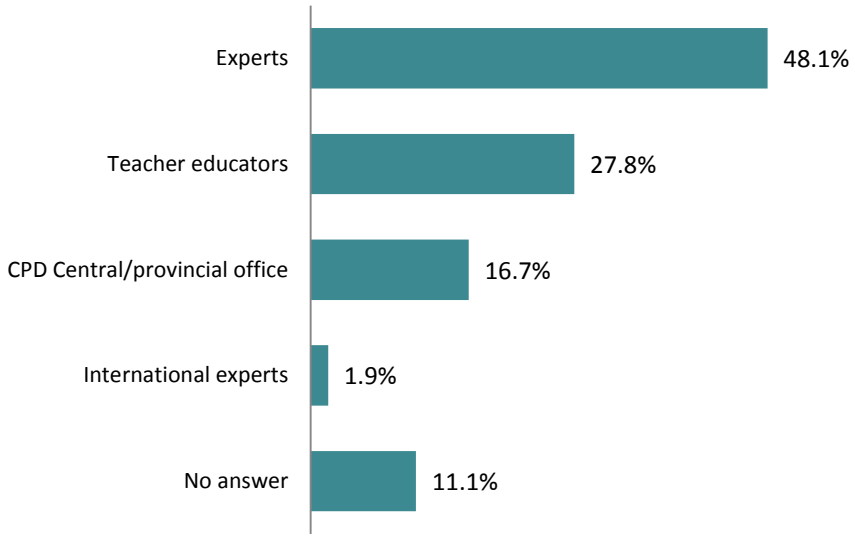
[10] Specific suggestions included "communication," "presentation skills," "leadership," "professional ethics, especially with regard to research and publications," "personality development," "classroom management," "peer management," and "time management." These concepts were considered to correspond most closely to the content under the new topic of "communication and leadership skills."

commented that a teacher educator may have full mastery of the content but still need support to use appropriate methods of teaching this content. There was a general consensus among participants that specific pedagogical techniques should be presented alongside the content for which they are deemed appropriate.

The issue of inherent differences between teacher educators in universities and those in colleges came up in focus group discussions. One participant emphasized that research skills are particularly needed by those in the universities, while English and ICT skills are needed by college-based teacher educators.

Focus group respondents were asked their opinion regarding who should develop learning materials for PD (see Figure 15). Respondents were most likely to favor an expert or subject specialist as the developer of CPD materials, though other teacher educators and faculty members were also suggested. Several respondents suggested a combination of experts and teacher educators. Many voiced an opinion that no matter who develops the materials, the quality and content must adhere to international standards.

FIGURE 15. WHO SHOULD DEVELOP MATERIALS (N=54)




Respondents were asked to suggest formats for self-study. Close to half (48.1 percent) suggested that printed materials be provided, while a similar number (46.3 percent) suggested access to materials online. A smaller group (31.5 percent) suggested that materials be provided on DVDs or CDs. Many respondents said they would like a combination of formats. Several noted that it depended on the focus of the self-study material.

FIGURE 16. FORMAT MOST COMFORTABLE WITH FOR SELF-STUDY (N=54)

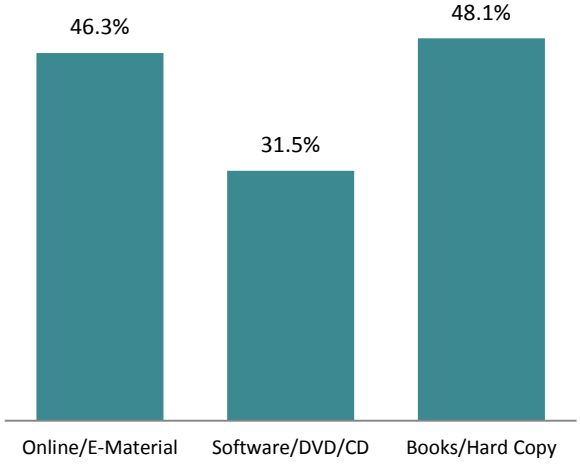
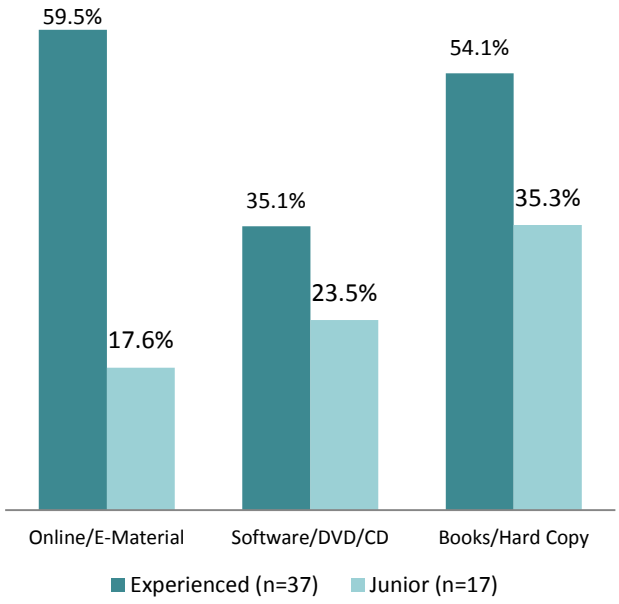



FIGURE 17. FORMAT MOST COMFORTABLE WITH FOR SELF-STUDY, BY EXPERIENCE



## KEY ELEMENT 2: CPD SUPPORT

The second key element of the proposed model (see Figure 12. Key Elements of the CPD) is the mechanism of support for teacher educators undertaking PD: a coach assigned by CPD Central. The role of the coach is not supervisory; rather, the coach aims to be a professional friend who provides guidance and assistance with the specific CPD module selected by the teacher educator. The amount of interaction between the teacher educator and his or her coach could vary; the mode of interaction can range from regular face-to-face meetings to periodic e-mails and phone calls, and the intensity of the professional relationship is established by the coach and mentee themselves. The idea of a coach appeared to be very appealing to focus group participants; they emphasized that the coach would be a source of motivation and would help to ensure that the teacher educator is on track with the self-study.

Most teacher educators would prefer a coach from an institution other than their own. This is understandable, since faculty members usually know each other well and already have access to those people who can help their professional growth. Having a coach from outside one's own institution would be helpful for building professional networks. Focus group participants were generally very receptive to the idea of a remotely located coach. They did not think that distance would be an obstacle, and they discussed multiple ways that an off-site coach could work effectively with a teacher educator, including phone calls and Internet-enabled communication. In fact, several participants voiced support for coaches outside their institutional network, either local or provincial leaders or international coaches.

The type of coach preferred varied by experience level. More than half the junior teacher educators preferred a coach from another institution rather than their own.

The main concern expressed by teacher educators was the level of expertise possessed by the coach. If the coach is not knowledgeable or experienced enough to command the respect of his or her advisees, the coach will not be able to provide an adequate level of support. Thus, focus group participants recommended being very careful with the selection of coaches.

FIGURE 18. PREFERENCE OF COACH'S AFFILIATION (N=54)

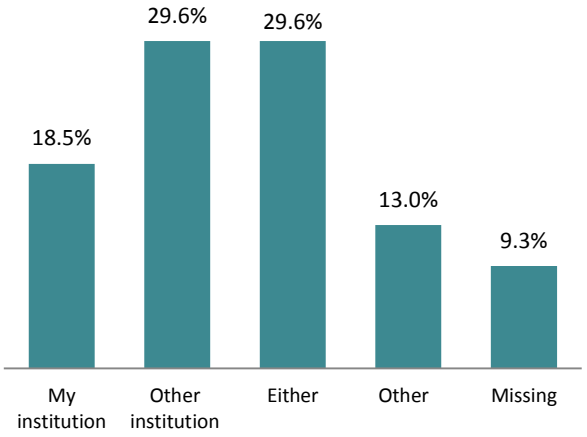
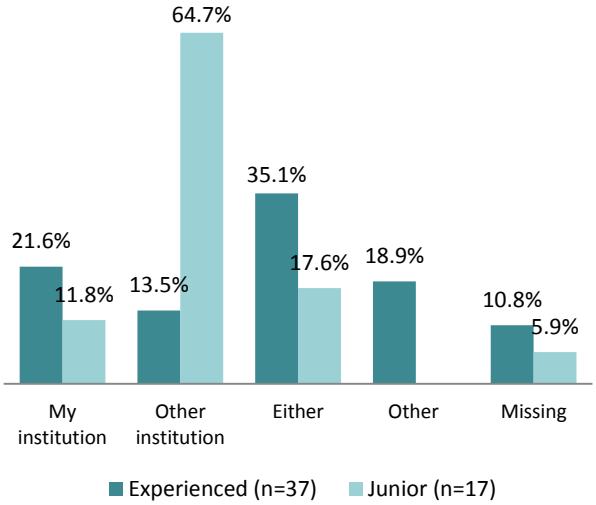



FIGURE 19. PREFERENCE OF COACH'S AFFILIATION, BY EXPERIENCE




Overall, responses were fairly split between participation on one's own and participation with a colleague from the same institution, though more than 10 percent were comfortable with either. Nearly 20 percent of experienced teacher educators indicated that they were equally comfortable with both options. While junior teacher educators were most likely to prefer to participate on their own, experienced educators were more likely to prefer participation with a colleague.

FIGURE 20. PREFERENCE FOR PARTICIPATION (N=54)

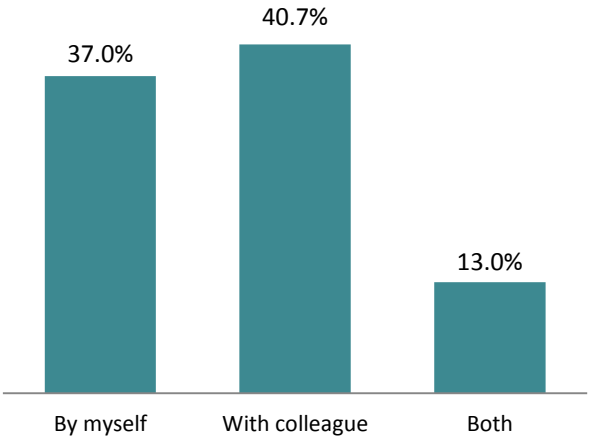
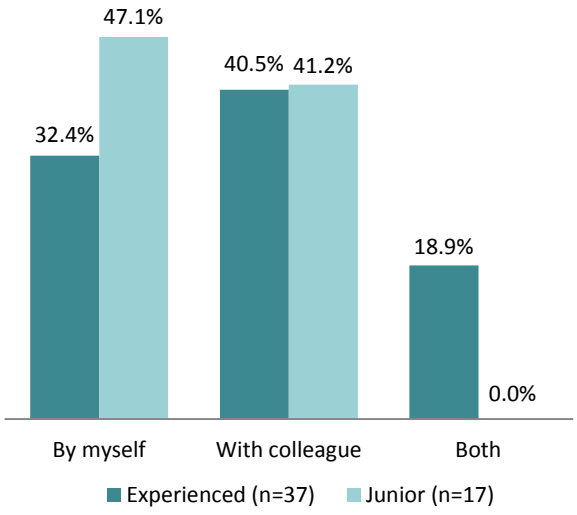



FIGURE 21. PREFERENCE FOR PARTICIPATION, BY EXPERIENCE



## KEY ELEMENT 3: COLLABORATION

The third key element of the proposed CPD framework is promoting collaboration among teacher educators (see Figure 12. Key Elements of the CPD Framework). Respondents, particularly the junior teacher educators, overwhelmingly favored sharing their learning and experiences with other teacher educators who are taking the same CPD track at the same time. Similarly, all junior teacher educators and more than 80 percent of experienced teacher educators were interested in collaborating with other teacher educators who were experts in the same content area.

FIGURE 22. INTEREST IN SHARING WITH TE TAKING SAME CPD TRACK CONCURRENTLY, BY EXPERIENCE

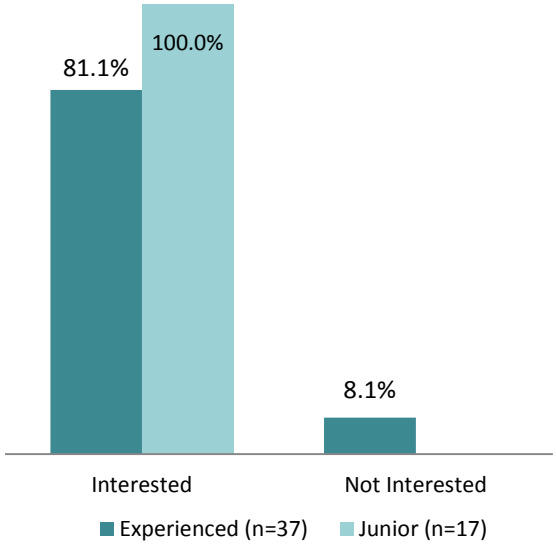
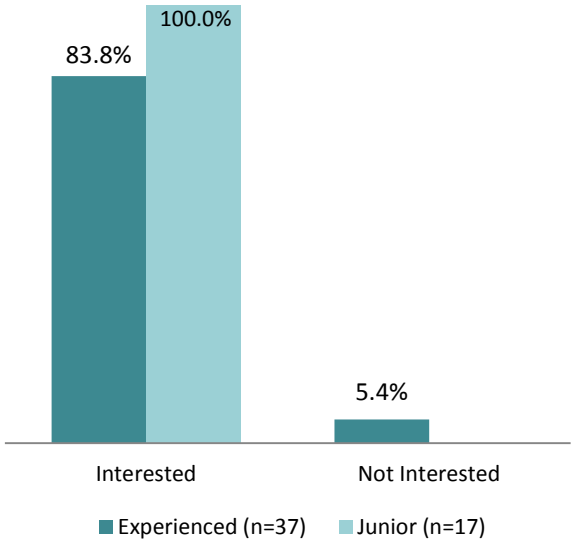



FIGURE 23. INTEREST IN COLLABORATION WITH OTHER TE WHO ARE EXPERTS IN SAME AREA, BY EXPERIENCE




## KEY ELEMENT 4: NEW IDEAS

The fourth element of the proposed CPD framework refers to strategies deployed by CPD Central to promote new ideas among the cadre of teacher educators in Sindh as well as sustain interest to CPD among teacher educators (see Figure 12. Key Elements of the CPD Framework).

During the second stage of data collection, the question of attending provincial-level conferences and various seminars at one's own expense was explored. Half the respondents were interested in attending such knowledge-sharing events and many were willing to cover their own expenses. Several respondents noted that compensation should be provided, but indicated that they would still go even if it was at their own expense.

Junior teacher educators were more likely to express willingness to participate at their own expense than were experienced teacher educators. Approximately 40 percent of experienced teachers were not interested in attending such events at their own expense.

The majority of respondents, both experienced and junior, expressed an interest in joining a professional association for teacher educators.

FIGURE 24. INTEREST IN PARTICIPATING IN PROVINCIAL LEVEL CONFERECERES AND SEMINARS (AT OWN EXPENSE), BY EXPERIENCE

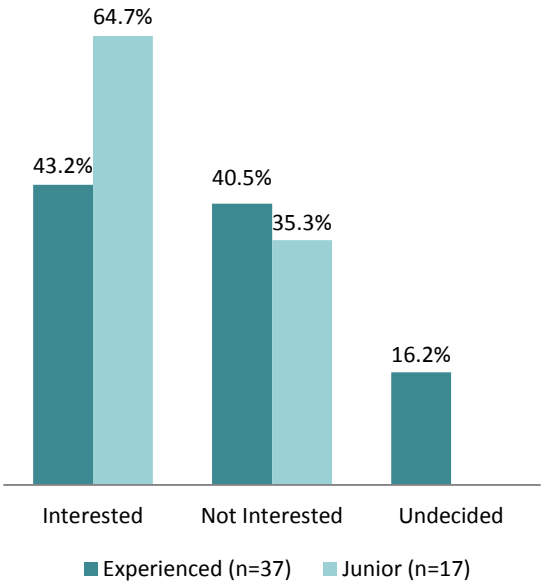
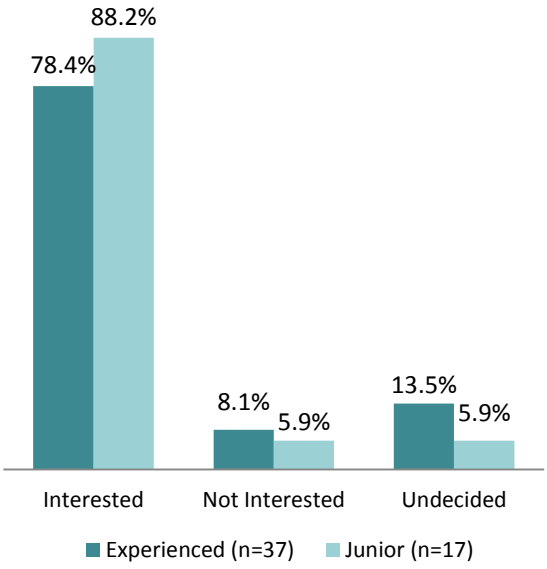



FIGURE 25. INTEREST IN JOINING A PROFESSIONAL ASSOCIATION FOR TEACHER EDUCATORS, BY EXPERIENCE




## TEACHER EDUCATOR QUALITIES AND PD MOTIVATING FACTORS

What are some shared ideas about the profession of teacher education among faculty members of teacher education institutions, and how can CPD Central tap into the intrinsic motivations of each member of the profession? The EDC/Sukkur IBA research team endeavored to explore how respondents see the profession and themselves within it.

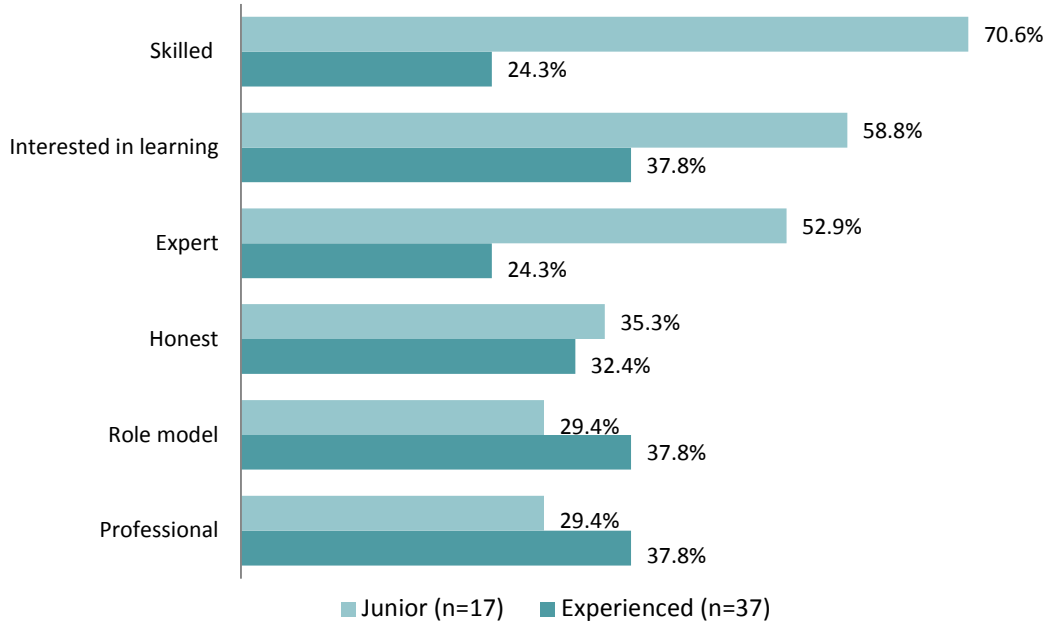
First, respondents were provided with a list of 18 qualities that could be applied to teacher educators, and then asked to circle those they thought were most important:

| | | |
|---|---|---|
| Professional | Fair | Experienced |
| Interested in learning | Role model | Subject specialist |
| | Values diversity | Respected |

| | | |
|---|---|---|
| Former school teacher | Collaborative | Skilled |
| Open to new ideas | Mentor | Expert |
| Has high expectations from all students | Coach | Other (specify) |
| Honest | Teacher | |

Six of the 18 qualities listed stood out as particularly important to teacher educators. However, there were some differences in the opinions of experienced and junior teacher educators. Being skilled and an expert were much more highly valued by junior teacher educators, while being professional and a role model were qualities prized by their experienced colleagues. Both junior and senior faculty members thought that interest in learning was an indispensable quality of a teacher educator.[11]

FIGURE 26. MOST IMPORTANT TEACHER EDUCATOR QUALITIES, BY EXPERIENCE



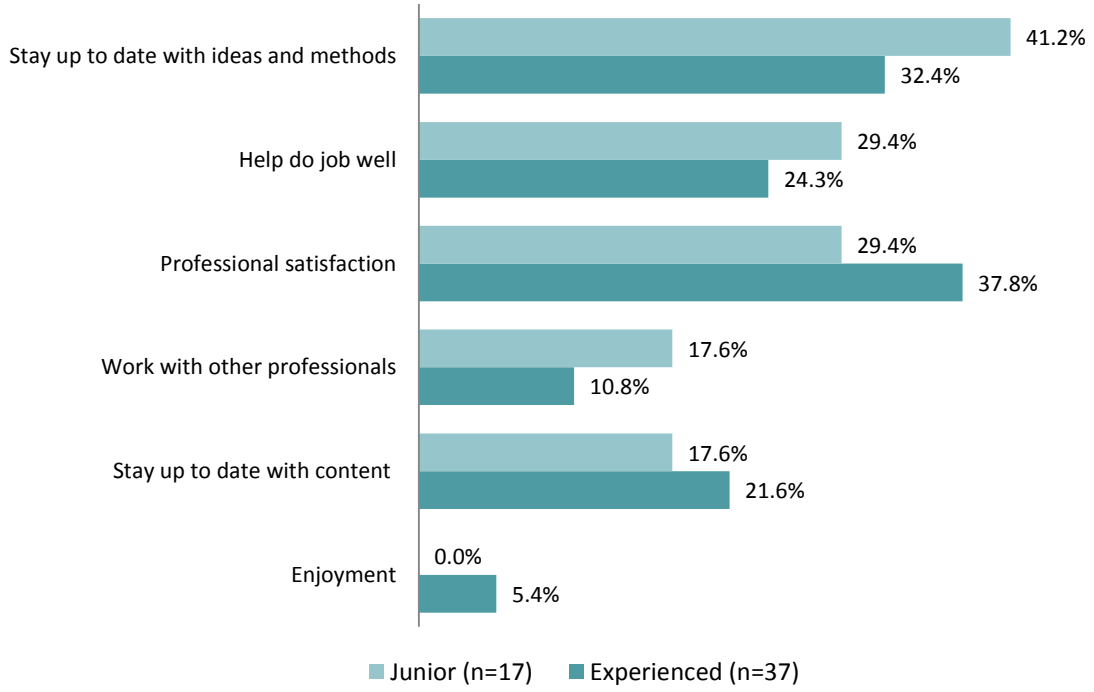

Respondents were also given a list of six motivating factors for participation in CPD, not linked to promotion or pay increase, and asked to select the factors that were important to them:

[11] Some respondents chose the "Other" category; the qualities they added to the list included "leader," "approachable," "responsible," and "friendly."

Professional satisfaction
Enjoyment
Staying up to date with new ideas and methods in teaching and learning
Staying up to date with my subject
Working with other professionals
Helping me do my job well

"Professional satisfaction" and "Staying up to date with ideas and methods in teaching and learning" were most likely to provide motivation for teacher educators. Though the prompt excluded financial benefits for participation, some junior teacher educators wrote in responses that emphasized the importance of financial supports to allow for participation in CPD.

FIGURE 27. REASONS FOR PARTICIPATION IN CPD, BY EXPERIENCE




Although not explicitly written in during this section, focus group participants highlighted their interest in gaining certificates or other forms of appreciation for participation in CPD, and this would likely be another motivating factor for teacher educators' participation.

# RECOMMENDATIONS

Based on the results of the study, the research team put forward the following recommendations for advancement of CPD for teacher educators in Sindh:

1. Appointment by STEDA of formal leadership for the development of a system CPD for teacher educators in Sindh.
2. Appointment, by STEDA, of a small expert group to develop a detailed proposal for a CPD system for teacher educators in Sindh, based on the principals, elements and process proposed in this study.

   Key questions for the group to consider will include:
   - What materials exist already that could be used for CPD with teacher educators in Sindh? Internet access permitting, educators around the world now have access to high quality professional development materials online? What resources or courses might be re-purposed for CPD with teacher educators in Sindh? Who will select materials and/or design new materials?
   - There is already a culture of collaboration among teacher educators for professional development. How can this culture be promoted? What role exists for technology to promote collaborative professional development among teacher educators?
   - How will CPD materials/courses be made available to teacher educators?
   - How will coaches be selected and trained? Who will guide and supervise their work?
   - What mechanisms need to be in place to assure the quality of CPD materials/courses for teacher educators and to assure high quality coaches?
   - Would all teacher educators be eligible at any time to take part in CPD and request a coach? Or would participation be targeted? Planning for a system of CPD for teacher educators will inevitably raise questions about the selection of teacher educators. CPD with teacher educators is unlikely to be a cost effective investment if participants are fundamentally unsuited to the task of teacher education. Thus, it is also recommended that the purpose of the CPD system be clearly focused on *enhancing* teacher educator's existing knowledge and skills: no amount of CPD can make up for poor subject knowledge, a lack of appropriate teaching experience and fundamental skills such as basic English and IT skills.
   - What would be the cost of a CPD system for teacher educators in Sindh? How would it be funded?

3. Develop the proposal and budget to include a short (six-12 month) pilot phase to test the principals, elements and process proposed in the study with a group of teacher educators/institutions or by focusing on a particular topic.
4. Seek approval and funding to implement the pilot phase. Document the outcomes of the pilot and use the results to refine the plan for a province-wide system of CPD for teacher educators in Sindh.

The research team encountered an overwhelmingly positive response to the proposed framework for CPD. With the introduction of B.Ed. (Hons) Elementary and the ADE, there is a heightened sense of professionalism among many teacher educators across the province. As this study has shown, teacher educators are eager for professional support, and the proposed CPD model and recommendations for implementation provide a way forward to capitalize on their interest.

# APPENDIX 1. TERTIARY CPD MODELS IN DIFFERENT COUNTRIES AND INSTITUTIONS

Prepared by Dr. Maia Chankseliani

In most European countries, there are no national policies or systematic formal support for teacher educators' PD. The latter is the responsibility of institutions where teacher educators are employed. In some countries, like Belgium, Hungary and the Netherlands, teacher educators' professional associations take forward PD initiatives, networking and cooperation. Their activities may include courses, professional platforms, conferences, meetings, research coordination, journal publications (Caena, 2011). Based on scarce literature on CPD models for teacher educators, below country cases of the UK, New Zealand, Australia, the USA and the Netherlands are presented.

## UNITED KINGDOM

Literature establishes several key reasons for undertaking comparative analysis of Pakistani and UK education systems. First, the present education system of Pakistan is considered to be a legacy of the British colonial times. Teacher education system, levels of education assessment / examinations, degree titles, medium of instruction at higher levels remain the same as they have been in pre-independence period. Second, Pakistan, like the UK, represents a union of four territories with considerable provincial autonomy: Khyber Pakhtoonkhwa, Punjab, Sindh and Balochistan. The four countries in the UK have their own parliaments, own laws and education systems. In terms of teacher training, curriculum, assessment and qualifications differ in these four countries. Similar to the UK, teacher education is regulated at the provincial and not national level. Third, the UK has been considered a role model with high literacy, standards, and education participation rates (Iqbal, 2011; MacBeath, 2012).

### ENGLAND

Pre-service teacher training in England is considered to be "demanding, relevant, and practical" (Furlong, Barton, Miles, Whiting, & Whitty, 2000, p. 144). Teacher education used to be financed and monitored by a quango Training and Development Agency for Schools (TDA) and pre-service courses are inspected by a government-funded body Ofsted (Murray, Swennen, & Shagrir, 2008). TDA's successor agency is Teaching Agency.

There are hundreds of initial teacher training (ITT) courses offered in the UK:

- School-based training schemes, such as school-centred initial teacher training (SCITT) or the Graduate Teacher Programme (GTP). These courses are taught on the job with the support of experienced teachers. Lectures or discussions that cover the same material as college-based or university courses may make up part of these programs.

- Undergraduate and postgraduate courses, offered by universities and colleges, which include at least 18 weeks spent teaching in schools.
- Online ITT courses. The Open University and Hibernia College UK, for example, offer such courses, which are suitable for individuals who have employment and/or family commitments (Department of Education, 2012).

Teacher educators in England are usually performing the following duties: teaching student teachers in a HEI; supervising students on school placements; undertaking research; engaging in service to the school sector and service to the HEI (academic administration). Responsibilities vary by institutions and, as research on teacher educators for the Knowledge and Identity in Teacher Education (KITE) project shows that heterogeneity of this professional group has been increasing (Murray, Davison, & John, 2006).

There are no centralized arrangements for teacher educators' PD in the UK or any constituent countries. As explained in Teaching Agency Representative (2012), the universities that offer teacher training courses have their own arrangements for PD of teacher trainers.

In England, there are no national standards for teacher educators' professional knowledge. It is, however, assumed that most teacher educators bring a few years of school teaching experience and that this experience will help them facilitate learning of student teachers (Murray, Swennen, & Shagrir, 2008). In England and Wales, this recent and relevant experience of teaching is decisive when selecting new teacher educators (Harrison & McKeon, 2008; Murray, Swennen, & Shagrir, 2008). In the last two decades or so, HEIs have been trying to fill teacher educator positions with practicing teachers rather than lecturers.

As pre-service teacher education is provided at HEIs, teacher education departments and teacher educators need to engage in research (Murray, Swennen, & Shagrir, 2008). Few teacher educators hold doctoral degrees at the times of entering teacher educator profession (Murray, 2010). It is not surprising, therefore, that novice teacher educators find research responsibilities one of the most challenging from the new duties that they acquire at HEIs (Harrison & McKeon, 2008; Murray, 2010; Sinkinson, 1997).

Westrup (2009) conducted an empirical study which identified that following ideas for teacher educators' continued PD in English settings:

- "Greater communication and clear definitions of roles for those working as teacher educators;
- To be kept up to date with what schools are doing;
- The opportunity to share 'good practice' between universities and schools;
- Greater understanding and awareness of other agencies and the possibility of working together to 'develop appropriated teacher education';
- Subject-specific training and time to allow for training;
- Senior Management supporting/encouraging attendance of available training courses;

- Subject-specific training and raising awareness of new, developing and expanding initiatives (especially with introduction of Masters in Teaching and Learning)" (Westrup, 2009, p. 10).

## SCOTLAND

A comprehensive review of teacher education in Scotland was completed in 2010, and the report Teaching Scotland's Future was published in 2011. This report (Donaldson, 2010) considers all aspects of teacher education from entry to an initial teacher education course to the CPD of experienced teachers and head teachers and makes 50 recommendations for further improving teacher education in Scotland.

The report argues that in order to have high quality teacher education, PD of all staff involved needs to be seriously considered. The survey undertaken for the purposes of this report shows that staff profile in universities, their knowledge and skills, reflects evolving needs and missions (Donaldson, 2010).

In Scotland, those involved in initial teacher education and who assess the professional components of the ITE program are normally required to be registered with the General Teaching Council for Scotland (GTCS). The report argues that this will form a key mechanism in the future for ensuring that all those involved in teacher education have appropriate access to, and benefit from, PD opportunities (Donaldson, 2010).

The report (Donaldson, 2010) maintains that through re-accreditation arrangements, the GTCS should ensure that teacher educators at HEIs and schools are fully ready for their tasks. University-based teacher educators should have a responsibility to complete an agreed programme of continuing PD (CPD) each year. The Scottish Government published its response *Continuing to Build Excellence in Teaching* in 2011. In this response, Scottish Government (2011) accepts this recommendation. The Government invites GTCS to specifically consider how arrangements for professional update (as they currently term reaccreditation) will work for university-based teacher educators. The GTCS is currently working towards the phased introduction of professional update no later than 2014 (Scottish Government, 2011).

According to Donaldson (2010), PD of teacher educators at HEIs is not only about connectedness to the work of schools. They should also be part of an actively inquiring teacher education community through maintaining research-informed teaching in pre- and in-service courses for teachers, and contributing to the building of capacity in the broad field of education research (Donaldson, 2010). The report reads:

> If we are to learn from some high-performing systems around the world and foster a research-informed profession, more has to be done to facilitate knowledge exchange between schools and universities. There is significant potential for greater collaboration in supporting inquiry-based improvement and a more fluid exchange of learning between the sectors. University-based teacher educators need to have the skills, experience and quality of research which supports and challenges schools, and is seen as relevant and purposeful for improving practice. (Donaldson, 2010, p. 75)

Moreover, the report argues that all teachers need to be seen as teacher educators, whether or not a teacher has responsibility for mentoring of student teachers and probationers at any time. Donaldson (2010) maintains that teachers need to see themselves as teacher educators because they need to be continuously engaged in professional dialogue with peers. Skills of mentoring and coaching help effective dialogue and learning to take place in groups of teachers as well as with stakeholders and partners. Therefore, according to Donaldson (2010), the skill set of mentoring and coaching needs to be developed through initial teacher education, induction and CPD.

The Scottish Government (2011) accepted this recommendation. Recognizing that there will be limitations in providing necessary resources for mentoring training for all teachers the Scottish Government seeks to look for local authorities and schools to provide opportunities for teachers to develop their skills and experience supporting their colleagues learning needs over time (Scottish Government, 2011).

## NEW ZEALAND

New Zealand operates a nationwide research and development initiative about the learning and practice of in-service teacher educators (ISTE). INSTEP is In-service Teacher Education Practice project of the Ministry of Education to New Zealand. INSTEP involved approximately 400 ISTEs and researchers from 2005–2008 and had three key objectives:

- to explore and develop effective approaches for the professional learning of in-service teacher educators
- to strengthen and promote evidence-based in-service teacher education practice
- to support professional leadership and ongoing improvement within the in-service teacher education sector (INSTEP, 2012).

In its initial phases, the INSTEP project examined professional learning of teacher educators through reflective practice of self-inquiry and action research. INSTEP project developed an understanding that effective professional learning has the following characteristics: resolves practitioners' own questions and dilemmas about their own practice; involves evidence-based self-inquiries linked to learner outcomes; is based on collaborative and collegial relationships; is responsive to localized contexts and cultures; and is supported by active and conscious leadership and mentoring" (Ministry of Education cited in Davey & Ham, 2010).

The web-site of INSTEP project (INSTEP, 2012) provides free materials for in-service teacher educators' PD. These include theoretical materials on improvement of ISTEs, learning and professional learning communities; case studies; literature on conducting inquiry; material on communication and relationships. One can also find literature on theories of change - how to manage change and, specifically, how to maintain improvements achieved as a result of change.

The Teacher Professional Learning and Development: Best Evidence Synthesis Iteration (Timperley, Wilson, Barrar, & Fung, 2007) identified that ISTEs play the key role in assisting teachers to improve outcomes for students. The synthesis indicated that the most effective PD for

teachers usually involves them in an inquiry and knowledge-building that starts with establishing students' needs, passes on to developing the skills and knowledge teachers require to meet those needs, and then assesses if changes in teaching practice have achieved the desired outcomes. The learning materials provided by (INSTEP, 2012) on their web-site are designed to support teacher educators' PD and show the key role of ISTEs and their learning in improving outcomes for students.

## AUSTRALIA

Pre-service teacher educators in Australia are sometimes referred to as lead teachers (AITSL, 2011; Celik, 2011). There are two pathways into teacher educators' profession. One leads from successful classroom teaching experience and another from postgraduate research (Berry, 2007). Generally, it is experienced school teachers who become teacher educators and at the same time start pursuing doctorates. Lately, however, having a doctorate is becoming decisive for tenure-track appointments. This means that a number of very successful school teachers may be reluctant to dramatically change their income and professional status by moving from the top tiers of one profession to the starting level of another (Hamilton, Loughran, & Marcondes, 2008). After obtaining academic position, lecturers can be promoted to senior lecturers, associate professors, and finally - full professorships. Promotion is based on performance in three areas of academic work – research, teaching and service. There is greater opportunity for academics to be promoted based on either research or teaching accomplishments (Mayer, Mitchell, Santoro, & White, 2011).

The Australian Teacher Education Association (ATEA) is the major professional association for teacher educators in Australia. The mission of the Australian Teacher Education Association is to promote:

- The pre-service and continuing education of teachers in all forms and contexts;
- Teacher education as central in the educational enterprise of the nation;
- Research on teacher education as a core endeavor.

The Association enacts this mission through several key strategies, among which is improving the nature, quality and availability of PD for teachers educators (ATEA, 2012).

Teacher educators and education departments where they worked have been subject of public ridicule in the conservative press; they were called "little more than quasi-sociology departments", with low entry standards and low rigor. Teacher educators have been criticized on the grounds of lacking classroom teaching experiences (Briant & Doherty, 2012). Experience and expertise of teacher educators has been often devalued (Cochran-Smith & Demers, 2009).

## USA

In the United States, the Association of Teacher Educators (ATE), the National Council for Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council

(TEAC) establish requirements for teacher education faculty. These requirements are shown the table below.

TABLE 4. REQUIREMENTS FOR TEACHER EDUCATORS IN THE UNITED STATES

| ATE | NCATE | TEAC |
|---|---|---|
| Model the knowledge, skills, and attitudes reflecting the best available practices in teacher education. | Qualified faculty with earned doctorates or exceptional expertise; contemporary professional experiences in school settings at the levels they supervise. | Faculty accept the Inquiry Brief and that the preparation of competent, caring and qualified educators is their own goal for the program. |
| Research and contribute to one or more areas of scholarly activity that are related to teaching, learning, and/or teacher education. | Model best professional practices in teaching: Reflective or conceptual framework, incorporate appropriate performance assessments. | Faculty accept the Inquiry brief as demonstration of accurate and balanced understanding of the disciplines that are connected to the program. |
| Inquire systematically into, and reflect on, their own practice and demonstrate commitment to lifelong PD. | Model best professional practices in scholarship. | Faculty are qualified to teach the courses in the program to which they are assigned. |
| Provide leadership in developing, implementing, and evaluating programs for educating teachers that embrace diversity, and are rigorous, relevant, and grounded in accepted theory, research, and best practice. | Model best professional practices in service. | Faculty qualifications are equal to or better than the statistics for the institution as a whole with regard to the attributes of the members of the faculty. |
| Collaborate regularly and in significant ways with representatives of schools, universities, state education agencies, professional associations and communities to improve teaching, learning and teacher education. | Collaborate in community of learners. | |
| Serve as informed, constructively critical advocates for high-quality education, public understanding of educational issues, and excellence and diversity in teaching and teacher education. | Unit evaluates professional education faculty performance. | |
| Contribute to improving teacher education. | Unit facilitates PD, mentoring new faculty, supports scholarly work. | |

Source: Celik (2011, pp. 76–77)

## THE NETHERLANDS

In the Netherlands, higher education is divided into universities and institutes for higher education. These institutions for higher education are usually referred to as professional universities. There are three types of teacher education institutions in the Netherlands: teacher education institutes for primary teaching are part of the professional universities; teacher education institutes for lower secondary education are also part of the professional universities; teacher education institutes for upper secondary education are part of the traditional universities (Murray, Swennen, & Shagrir, 2009).

There are teacher educators who used to be experienced teachers in primary and secondary schools. Before moving to HEIs, these teachers had formed links with teacher education institutes by serving as mentors in partnership schools. There is also another type of teacher educators who have studied at traditional universities and have graduate degrees in a specialization subject or education studies. These go from the graduate program directly to being a teacher educator (Murray et al., 2009).

The profession of a teacher educator is perceived as a complex task that involves a wide array of pedagogical knowledge and skills. Besides teaching their subject and subject pedagogy, teacher educators are often involved in research and reflective enquiries (Murray et al., 2009).

In terms of teacher educators' PD, there have been the following nation-wide changes taking place in the Netherlands in recent years:

- Teacher educator professional standards have been developed and a professional register was established to strengthen the identity of Teacher Educators as professionals recognized by the ministry. The original standards were developed in 1999 and revised and extended afterwards to include school-based teacher educators, and are currently under further revision, to include different competence levels.
- The process of developing a knowledge base was finalized in 2011, through a joint effort of the Dutch Association for Teacher Educators (VELON) and the Free University. It sets out the key elements of being a Teacher Educator, with background knowledge provided by experts, examples of good practice, suggestions for discussion and further reading.
- The existence of the professional association VELON is decisive for strengthening self-awareness, professional identity and tools for PD of teacher educators. It is a recognized stakeholder within the debates on teacher education, receives financial support for relevant projects, and is in charge of the process of development and revision of professional standards. Teacher education employers (heads of faculties and schools) promote and may financially support the VELON membership of their staff.
- There are attempts to improve structural framework for partnership between the three main stakeholders (the ministry, VELON and heads of departments), for example, the possibility of trilateral agreements with explicit outcomes are discussed. Additional issues

concern the engagement of school leaders as employers of school-based teacher educators and the connections between (re)registration and existing programmes to strengthen the teaching quality of university staff, for the synergy of different policies and processes (Caena, 2011).

## ISRAEL

In Israel, there is an institute entirely devoted to preparation and CPD of teacher educators. MOFET institute is a non-profit foundation funded by the Ministry of Education provides a national forum for exchanging ideas, information, research on teacher education. It offers courses to novice teacher educators, opportunities to learn and work together with colleagues and opportunities to undertake research and publish. Thousands of teacher educators who teach at 26 academic colleges of education or in non-academic educational institutions visit the MOFET Institute. The Institute's staff are recruited from the colleges and universities. MOFET has also been engaged in developing effective modes of assessment for student teachers learning (MOFET, 2012; MOFET JTEC, 2012; Murray, Swennen, & Shagrir, 2008; Swennen & Bates, 2010). The institute's mission is to serve as a professional meeting-place for teacher educators and to facilitate an educational dialog among colleagues both in the teacher education system and in other settings in the education system. The professional encounters afford exchanges of opinions, broadening of knowledge, and collaborative studies; teacher educators' professional, personal and group development; creation and dissemination of professional knowledge regarding the significance of teacher education, its patterns of action and its meanings; the initiation and development of system-wide directions and projects in teacher education and in fields of research and educational enterprise (MOFET, 2012).

Although there are no national standards for teacher educators in Israel, MOFET has introduced initiatives of applying the Association of Teacher Education (ATE) Standards from the USA for PD of teacher educators in Israel (Murray, Swennen, & Shagrir, 2008).

The MOFET Institute has different modes of operation. It is a school for PD, produces writing/research in teacher education, facilitates integration of technology into education and teaching, houses Information and Communications Centers, hosts intercollegiate encounters and operates international channel. Below a brief description of each of these functions, as reported on their web-site (MOFET JTEC, 2012) is provided:

| Function | Description |
|---|---|
| A school for PD. | The aim of the studies in the school's specialization tracks is to develop teachers' professional perception and equip them with essential tools for their work in the teaching education colleges. There are regular tracks as well as tailored programs which are developed to meet emerging needs in teacher education and the education system in general. |
| Writing in teacher education. | The MOFET Institute aims to support teacher educators in transforming their personal theoretical and practical knowledge into public knowledge that is available to the community of educators in the colleges and in the field of education. Moreover, the |

| | |
|---|---|
| Research in teacher education. | Institute publishes a peer-reviewed academic journal Dapim which specializes in theory, research and practice of teacher education as well as on its development.<br>The Research Authority, the Intercollegiate Research Committee and the Interest Group for Qualitative Research aim at promoting research conducted by the teaching staff in the colleges and at The MOFET Institute. This is done to develop teacher education and improve the status and image of colleges, teacher educators, and teachers. |
| The integration of technology into education and teaching. | The MOFET Institute promotes the integration of advanced technologies into teaching and learning, teaching curriculum and tools for improving teaching. |
| The Information and Communications Centers. | The Information Center houses databases and documents that may be relevant for teacher educators. The center runs three academic portals: an academic content portal, a portal for Jewish education and MASA – a Hebrew-language portal. The Communications Center is focused on the provision of communication services and develops state-of-the-art teaching technologies for individual professionals as well as academic institutions. |
| Intercollegiate encounters. | The MOFET Institute hosts intercollegiate encounters for teacher educators' PD in a range of fields. These encounters allow colleagues to clarify shared topics, discuss various research studies, and formulate standpoints in the field of teacher education. |
| MOFET International | Considering the growing international interest in the unique model of the MOFET Institute, it has started operating an International Channel which is in contact with institutions in different countries as well as with the Jewish diasporas. The aim is to make the knowledge that has accumulated at the MOFET Institute in the field of teacher education available for the PD of teacher educators internationally. Knowledge-sharing takes place during face-to-face meetings in Israel as well as in online settings (MOFET JTEC, 2012). |

## INDIVIDUAL/GROUP-LEVEL MODELS

Literature recognizes the following actions that could be used in supporting effective PD of teacher educators:

- Area networks of teacher educators from schools and universities under the coordination of teacher education institutions;
- Professional learning communities;
- Research and educational development projects;
- Networks and partnerships;
- Seminars on education and didactics, as well as mobility periods in schools and abroad, for university teacher educators;
- Masters programs for school mentors;

- Sabbaticals for school teacher educators, with opportunities for study visits, CPD courses and research projects linked with teacher education institutions;
- Doctoral programs in subject didactics for university teacher educators, although their uncertain status in academia can represent an issue (Caena, 2011).

Below we focus on professional learning communities/communities of practice; collaborative, cross-institutional networks; online communities; international collaboration; induction programs; and the eChange project.

## COMMUNITIES OF PRACTICE

In the last two decades or so, PD opportunities moved from being individual-level to community-level (Hadar & Brody, 2010; Little, 2002). Professional learning communities, or "communities of practice" focus on active teaching, assessment, observation, interpersonal relations to improve practice and sometimes bring about organizational improvement (Darling-Hammond & McLaughlin, 1995; McLaughlin & Talbert, 2001; Stevens, Kahne, & Cooper, 2006). It is through professional learning communities that sharing new ideas and practices across classrooms is promoted (McLaughlin & Talbert, 2001).

The term "community of practice" was introduced by Lave & Wenger (1991) to describe any group of professionals who share common interest in a particular topic and work together towards a common goal. Later, Wenger, McDermott, & Snyder (2002) expanded the definition by adding the notion of sharing of a common set of challenges, or passion about a topic, and the deepening of knowledge / expertise by continuous interaction (Hadar & Brody, 2010).

As argued by Lave (1991), McLaughlin & Talbert (2001), the main characteristic of professional learning communities that facilitates PD is social interaction. Thinking and memory develop socially as people share information and approaches (Perkins, 1995). The process of teachers' questioning routine, examining new paradigms, finding ways of responding to conflicts and engaging in professional growth is argued to improve teaching and learning (Achinstein, 2002; Grossman, Wineburg, & Woolworth, 2001; Little, 1999; Witziers, Sleegers, & Imants, 1999).

Communities of practice do not get established randomly; they require well-organized leadership and systematic, deliberate efforts (Hadar & Brody, 2010). Generally, communities of practice are established on the basis of existing social networks in organizations and require some leadership to flourish. Wenger, McDermott, and Snyder (2002) describe a four-stage process of developing such community. The first stage is "potential" when professionals realize that they have common needs and identify a leader. The second stage is "coalescing" when the community is launched, new members join the community. The third stage is "maturity" when the community establishes learning agenda and community's roles in the organization. It is at the fourth stage, which is called "stewardship", that the momentum is maintained, leadership is developed and new members mentored.

Traditional understanding of teaching as of an isolated occupation which is restrictive and protective (Snow-Gerono, 2005) has been established to negatively affect the quality of teaching quite some time ago(McLaughlin, 1992). Isolation is stronger at HEIs than at schools since HEIs are organized by departments, which discourages interdisciplinary collaboration.

## COLLABORATIVE, CROSS-INSTITUTIONAL NETWORKS

Jones, Stanley, McNamara, & Murray (2011) conducted empirical research on the Teacher Education Research Network (TERN) initiative. TERN piloted research capacity building initiative at seven regional HEIs in the North West of England. These HEIs provide pre-service teacher training. TERN aimed at providing PD opportunities to early and mid-career researchers. Participant teacher educators formed research groups on potential research topics and worked with a senior researcher (mentor) from one of the seven participating universities on developing a research bid. Besides the mentoring support, the initiative included five face-to-face one-day workshops, two colloquia, and Virtual Research Environments (VREs). The latter encouraged further communication among teacher educators and provided storage facilities and access to resources. TERN contributed to academic learning and PD of the involved teacher educators, as it created a professional learning environment and developed a more comprehensive knowledge base (Jones et al., 2011).

## ONLINE COMMUNITIES

Ramirez, Allison-Roan, Peterson, & Elliott-Johns (2012) describe the case of novice teacher educators from North America (the USA and Canada) creating an online community to professionally support one another. They used online journaling and dialoguing as well as feedback from their students to study their experiences of beginner teacher educators. They focused on modeling critical reflection and enacting democratic practices. The online community was perceived as a safe space where the teacher educators could examine, enhance, question and develop their practices, receive support and critical thoughts. They felt less isolated and less under pressure. The following are individual reflections of participants by the end of the academic year, as they talk about the importance of a community of practice:

> Laurie: Being part of this collaborative community provided me with a “safe space” in which I could question my teaching practices and the institutional practices in which I am now immersed. Often, my colleagues in this community provided the support and mentoring I was not afforded as the only new faculty member in a long established, nationally respected program. . . . Simply knowing it is not “just me” affirmed my commitment and renewed my passion for teacher education.

> Sandy: I have felt a certain sense of isolation in my fledgling professorship and a concern about rocking the boat in a well-established department. I am struggling with both improving my own practice and making a contribution to my department. With so little experience with other universities, I’m not sure how to gauge some taken-for-granted policies and practices and am hesitant to initiate controversial conversations with my college peers. The collaboration group provides a safe space to ponder and question and test ideas.

> Susan: Re-visiting my own critical reflections, I recognize increased abilities to identify and unpack assumptions and efforts to better frame problems of practice as a teacher educator. The opportunity to have colleagues (albeit "virtual colleagues") with whom to filter "problems of practice" encountered was a vital part of this experience for me – personally and professionally. While it seems ironic that such a rewarding collaboration, for me, was forged with colleagues far from my university campus, similar opportunities were just not a part of my early experiences as a teacher educator and member of faculty.
>
> Valerie: Our community provided me with a space in which I could think "aloud" about my practice. Not always for the purpose of soliciting input; sometimes, simply to organize and analyze my own thoughts. Others' responses to my musings provided opportunities to see my practice through different lenses and prompted me to consider further my taken-for-granted assumptions."(Ramirez et al., 2012, pp. 118–119)

The study shows that the online community proved to be a viable and useful venue for self-study. While the four participants expected that different contexts would influence their development as teacher educators, their collaborative study mainly focused on common experiences that they had as beginner academics.

## INTERNATIONAL COLLABORATION

Collaboration project between the Faculty of Education and Social Work at the University of Sydney, Australia, and the School of Education at Can Tho University, Vietnam, represents a good example of international collaboration of HEIs for the purpose of teacher educators' PD. There were 16 participants involved in the project (2 from University of Sydney and 14 from Can Tho University) with 10 staff members of the University of Sydney providing their contribution from time to time. Besides the development / redesigning of teacher education programs, the project facilitated teacher educators' PD (Laws, Harbon, Nguyen, & Trinh, 2009).

The project lasted from May 2007 to November 2008; it included face-to-face meetings of the two university staff, workshops, and email communication. It was based on the concepts of collaborative, collegial relationships, active learning and trust, respect and reciprocity (Laws et al., 2009). A workshop trainer noted how active the fourteen learners in the group had been:

> Active learning like this, working slowly through my document, deconstructing every little aspect, was the only way I could see that I could show them what exactly I understood in my context about linking outcomes to assessment (Laws et al., 2009, p. 10).

Workshop content was entirely determined by participants over a period of time prior to the workshop. This was done through discussions with workshop participants and staff members of the departments, so that most relevant issues would not have been missed out. The Sydney team drafted the final program and involved faculty members to contribute with challenging and interesting inputs to the proceedings (Laws et al., 2009).

Upon the completion of the project, academics from the Can Tho team have contacted other schools and departments in their university as well as other HEIs to share the model of PD established during the project (Laws et al., 2009).

## INDUCTION PROGRAM

International scholarship shows that there are serious concerns regarding the quality of induction programs for teacher educators (Swennen & Bates, 2010). Members of the Association of Teacher Educators in Europe conducted a study of teacher educators' induction experiences in six countries – Flanders, Israel, the Netherlands, Serbia, the USA, and the UK. They discovered that teachers in none of these countries, except Israel, had satisfactory experiences of induction (Van Velzen, Van der Klink, Swennen, & Yaffe, 2010). Israel seems to be the only country that offers professional support to beginner teacher educators at the national level. This support is provided through the MOFET Institute (Ben-Peretz, Kleeman, Reichenberg, & Shimoni, 2010).

The MOFET Institute implements one-year long induction program for novice teacher educators. The program is based on the idea of learning with colleagues under the guidance of expert teacher educators. It is held one day a week (112 hours overall) for participants who are working as teacher educators in their first or second year in different institutions across Israel. The coordinator for the program is a senior lecturer who has long experience of serving as a teacher educator. Meetings consist of a theoretical lecture, a tutorial / workshop at which participants can connect theory with practice, discuss some issues, raise questions, and seek advice. They also have opportunities of presenting cases from their work. The program evaluation (Shagrir, 2010) showed that the induction was useful in terms of building professional self, learning the language of the profession, being a member of a community of professionals and enhancing professional practical skills. They developed abilities of guidance and reflection. Moreover, the induction seems to have improved teacher educators' work with student teachers during and outside lessons. As the program was implemented throughout the academic year, it helped to integrate the theoretical material into active teaching process and, equally, integrate the practical experiences and challenges into the induction course (Shagrir, 2010).

## ECHANGE PROJECT

The eChange project is a PD project based in the Faculty of Education at the University of Technology, Sydney (UTS), in Australia. The eChange Project is a teacher educators' PD project to support their use of ICT in teaching (Sandra, 2002).

Before introducing this project, there were two types of teacher educators working at the Faculty of Education at UTS. First, those who incorporated technology in their teaching but often got frustrated with problems they encountered in ICT use. Second, those academics who did not know how to use ICT in their teaching and lacked confidence in exploring opportunities related to ICT use in classroom. Considering the existing situation, the eChange project offered support in two areas. First, the project assisted those faculty members who had been using ICT already in solving the

problems that they encountered. For this purpose, a forum was established to reflect on beneficial ways of using technologies and providing assistance to address challenges. Second, the project supported the use of ICT by those teacher educators who had not been using ICT before (Sandra, 2002).

Four strategies could have been used with the second group of teachers: central support, faculty mentoring, technical support in the faculty and the use of external consultants. The university offered centralized support but most of the academics at the education faculty were reluctant to use that support. This could have been because the support was not targeted at this faculty. Technical support that was available at the faculty was not very popular either, as most of the faculty members did not understand the benefits of using ICT in teaching. Also, academics were generally unfamiliar with new technologies jargon used by technical support. The idea of having an external consultant who is a technical expert may not be successful as the person will not have the understanding of the faculty context. It was decided by the faculty dean that the best way for teacher educators to share and implement the ideas of change would be to have two of them coordinating the eChange Project. These two coordinators were teacher educators (not technical experts) from the faculty who have been exploring new technologies in their work. The major factor that contributed to the successful implementation of the project was the fact that the coordinators were academics and not technical experts. Since coordinators themselves were not experts in ICT, teacher educators felt more comfortable about their own technological ignorance (Sandra, 2002).

A committee of early adopters was established. This committee brought together those academics who were engaged in innovative ideas for utilizing ICT in teaching, the faculty technical support person and a member of the faculty management committee. The latter two were useful as they could advise on technical issues and would take suggestions back to the management committee, respectively. The discussions were focused first on pedagogy and then on using ICT to implement relevant pedagogical strategies more effectively (Sandra, 2002).

## STANDARDS AS CRITERIA FOR PROFESSIONAL DEVELOPMENT

There are claims that professional standards need to be considered as the main criteria by which teacher educators' PD can be assessed (Celik, 2011).

There is some criticism against standards, mainly, as related to the way in which they are usually developed (Zuzovsky & Libman, 2006). It is often seen inappropriate that people outside the profession of teacher education set the standards for these professionals. Teacher educators need to be involved in preparing professional standards, as argued by some (Smith, 2003). There is another criticism as well. Some authors argue that standards do not consider the complexity and unpredictability of teaching and learning (Korthagen, 2004). Others argue that there is too much emphasis on professional standards as the main tool for assessment and that such normative systems lead to de-professionalization (Cochran-Smith, 2001; Valli & Rennert-Ariev, 2002).

Supporters of using standards for teacher educators' PD, maintain that professional standards shall be used as guidelines for teacher educators, for decision-makers, program designers, and others. Standards should, however, allow for individual routes to professional competence and growth (Crooks, 2003). In a standards-based system, standards are used as guides and reference points for planning PD and should not be creating an authoritarian assessment system that limits professional autonomy, creativity and development (Ingvarson, 1998).

National standards seem to have influenced teacher educators in the Netherlands. First, the professionals have benefited from having standards that were developed within their own profession. Second, the standards explain the complexity of the pedagogy of teacher education, and focus on the interconnections between cognitive, professional and inter-personal aspects of high quality teaching. Teacher educators can work on their own development not only as subject specialists or schoolteachers, but as teacher educators per se (Murray et al., 2009).

# APPENDIX 2. DATA COLLECTION PROTOCOLS

## INTERVIEW QUESTIONS FOR EXPERIENCED TEACHER EDUCATORS IN SINDH PAKISTAN

Interviewer name: _____

Interviewed faculty member's name: _____

Interviewed faculty member's gender: _____

Institution where the interviewed faculty member works: _____

Interviewed faculty member position: _____

Date of the interview: _____

Location of the interview: _____

### Section 1: Background

**Question 1. We are looking to understand the pathways to the profession of teacher educator. Please tell us how you became a teacher educator.**

**a. What is your education?**

**b. Have you taught in school prior to joining the faculty? What kind of school (primary/secondary; government/private)? For how many years?**

**c. What led you to become a teacher educator?**

**Question 2. What prepared you for this job? (Your education? Teaching experience at school? Additional training?)**

**Question 3. What is your favorite thing about teaching future teachers?**

### Section 2: Philosophy of TE

**Question 4. What is your understanding of the role of a teacher educator? How do you see yourself in this role?**

## Section 3: PD during the first year as a TE

**Question 5. When did you join the faculty as a teacher educator? (what year)**

**Question 6. Thinking back to that time, what challenges did you face during your first year as a teacher educator? Let's discuss areas in which many faculty members have challenges:**

- **a. Content (teaching new courses, availability of materials, etc)**
- **b. Pedagogy (new pedagogies that were not part of training)**
- **c. Research (what topics do you research? What skills you feel you are lacking?)**
- **d. Using technology and its availability (instructional technology; internet, etc.)**
- **e. Handling classes (large classes, teaching adults, students with disabilities, behavior issues) and workload (juggling different expectations)**
- **f. Collaboration/building relationships with older faculty and outside stakeholders**
- **g. Navigating the university/ college system**

**Question 7. How do you address these challenges? What sort of support did you seek/did you receive?**

***Probes:***

a) Figured out himself/herself
b) support is built into the program
c) supporting colleagues
d) supporting principal/ dean/ department head

## Section 4: Challenges in subsequent years and support

**Question 8. What other challenges did you experience in subsequent years?**

***Probes:***

a) New technology
b) New teaching methodologies
c) New courses to teach/new content

**Question 9. What kind of support or training do you currently have available?**

**Question 10. What kind of support or training would you like to have?**

## Section 5: CPD

**Question 11.** **Let us think about new teacher educators (lecturers) in your university/ college. What are the important skills they must have in order to do their job well? What do they usually lack when they first join the faculty?**

***Probes:***

a) Content knowledge
b) Pedagogical skills
c) Research skills
d) Technology skills
e) Communication and collaboration skills
f) Other skills

**Question 12.** **To address the skill gap, what kind of support do they receive when they join the faculty?**

***Probes:***

a) Informal discussions in the staff room
b) mentorship
c) training (one-time vs regular/ periodic)
b) co-teaching, co-research

**Question 13.** **What additional support/professional development could they benefit from?**

***Probes:***

a) Format ( self-study; group training; coaching/mentoring)
b) Frequency/intensity (How long? How often?)
c) Topics

**Question 14.** **What are your thoughts on using technology to support professional development for teacher educators? For example, what do you think about receiving professional development via Internet? Is there sufficient infrastructure in your institution? (e.g., access to computers, stability of electricity, Internet service)**

***Probes:***

a) Do you have a computer issued to you by your institution?
b) (if not) do you know where to go to find a computer to use?

c) Do you have internet in your institution?

**Question 15. Currently, how would you describe your use of technology such as computers and Internet in your work?**

***Probes:***

d) Use for work versus personal use?
e) Using social media?
f) How often do you use computers, on average?

**Question 16. What are major obstacles to teacher educator professional development, and how can they be overcome?**

## INTERVIEW QUESTIONS FOR NEW[12] TEACHER EDUCATORS IN SINDH PAKISTAN

Interviewer name: _____

Interviewed faculty member's name: _____

Interviewed faculty member's gender: _____

Institution where the interviewed faculty member works: _____

Interviewed faculty member position: _____

Date of the interview: _____

Location of the interview: _____

[12] By "new" we understand teacher educators in their first or second year in teacher education profession.

## Section 1: Background

**Question 1. We are looking to understand the pathways to the profession of teacher educator. Please tell us how you became a teacher educator.**

- **a. What is your education?**
- **b. Have you taught in school prior to joining the faculty? What kind of school (primary/secondary; government/private)? For how many years?**
- **c. What led you to become a teacher educator?**
- **d. What is your favorite thing about teaching?**

## Section 2: Philosophy of TE

**Question 2. What is your understanding of the role of a teacher educator? How do you see yourself in this role?**

## Section 3: PD during the first year as a TE/CPD

**Question 3. When did you join the faculty as a teacher educator? (what year)**

**Question 4. As a new faculty member, what are the main challenges do you face? Let's discuss areas in which many faculty members have challenges:**

- **a. Content (teaching new courses, availability of materials, etc)**
- **b. Pedagogy (new pedagogies that were not part of training)**
- **c. Research (what topics do you research? What skills you feel you are lacking? Materials?)**
- **d. Using technology and its availability (instructional technology; internet, etc.)**
- **e. Handling classes (large classes, teaching adults, students with disabilities, behavior issues) and workload (juggling different expectations)**
- **f. Collaboration/building relationships with older faculty and outside stakeholders**
- **g. Navigating the university/ college system**

**Question 5. How do you address these challenges? What sort of support are you receiving?**

***Probes:***

a) Figuring out himself/herself
b) Formal/informal mentoring by colleagues
c) Co-teaching
d) HEC/other training

**Question 6. What kind of support or training would you like to receive?**

***Probes:***

a) Format ( self-study; group training; coaching/mentoring)
b) Frequency/intensity (How long? How often?)
c) Topics

**Question 7. What are your thoughts on using technology to support professional development for teacher educators? For example, what do you think about receiving professional development via Internet? Is there sufficient infrastructure in your institution? (e.g., access to computers, stability of electricity, Internet service)**

***Probes:***

a) Do you have a computer issued to you by your institution?
b) (if not) do you know where to go to find a computer to use?
c) Do you have internet in your institution?

**Question 8. Currently, how would you describe your use of technology such as computers and Internet in your work?**

***Probes:***

d) Use for work versus personal use?
e) Using social media?
f) How often do you use computers, on average?

**Question 9. What are major obstacles to teacher educator professional development, and how can they be overcome?**

## INTERVIEW QUESTIONS FOR EDUCATION DEPARTMENTS IN SINDH PAKISTAN

Interviewer's name: _____

Respondent's name: _____

Respondent's gender: _____

Institution where the Respondent works: _____

Respondent's position: _____

Date of the interview: _____

Location of the interview: _____

## Section 1: Role/Support systems for CPD

**Question 1.** Is there a system for providing CPD to teacher educators at colleges in Sindh? [If yes] Tell me about the system. What does it involve – training and on-site support? Or just training or just on-site support? How often? Who offers the CPD? Who attends? Where does it happen?

**Question 2.** What role does your department play in enhancing the capacity of existing teacher educators in your province? What role do other agencies play?

Probes:

- On the job Training
- Scholarships
- Training workshops in new teaching practices

**Question 3.** Is there any initial training/orientation for the new faculty joining the Teacher Education Colleges/Universities?

If yes, for how long? By who? About what? Where?

**Question 4.** How are participants selected for PD activities? Is there a need assessment? If so, then what is the frequency of the need assessment? Are there any gender considerations?

**Question 5.** How do you think participants for Continuous Professional Development (CPD) should be selected? Should CPD be made mandatory? Which topics should be mandatory? (content, pedagogy, research, technology, etc.)

**Question 6.** Who do you think should provide CPD to TEs? Why?

## Section 2: Resources

**Question 7.** Are there staff specifically assigned to carry out CPD with existing and newly inducted teacher educators? If so, how are they selected? [Follow up to collect JDs]

**Question 8.** Who provides funds for CPD? Is there a budget available or is CPD for TEs dependent on donor/project funds only?

**Question 9.** Who do you think should pay for CPD of TEs and why?

**Question 10.** In the absence of donor support, will you be able to sustain CPD? Why/Why not? If, yes - where do you think necessary resources can be found?

### Section 3: Performance monitoring

**Question 11.** Do you have any mechanism or system for gathering information related to the performance of the faculty? Do you have any mechanism or system for gathering information related to the change in performance of the faculty trained through various CPD programs?

### Section 4: Other

**Question 12.** Are there incentives for TEs to participate in CPD? If so, please explain. Do you think that participating in CPD should be linked with the promotion of teacher educators?

**Question 13.** Do you think that faculty would be interested in CPD via distance mode – either online or otherwise? Why/why not?

**Question 14.** What kind of CPD do you think would be most beneficial to new faculty? To faculty who have been in teacher training for a few years?

## TEACHER EDUCATOR PROFESSIONAL DEVELOPMENT INTEREST SURVEY

**Question 1. Who do you think should be providing professional development to teacher educators? (mark all that apply)**

- ☐ Other teacher educators from my institution, knowledgeable in the topic
- ☐ Teacher educators from other institutions, knowledgeable in the topic

☐ Professional development specialists hired by the provincial government or by my institution

☐ Other (specify)_____

**Question 2. Should teacher educators be able to choose in what topics to receive professional development?**

☐ Yes

☐ No

**Question 3. Should some professional development topics be mandatory for all teacher educators to participate in? If yes, please mark all that apply:**

☐ No, professional development should not be mandatory

☐ Yes, subject-specific content knowledge

☐ Yes, subject-specific teaching methods (e.g., methods to teach literacy or science)

☐ Yes, general teaching methods (e.g., collaborative learning strategies, differentiated instruction, lesson planning, classroom management)

☐ Yes, assessment/testing and data analysis

☐ Yes, practicum/working with schools

☐ Yes, use of instructional technology

☐ Yes, research

☐ Other1 (specify) _____

☐ Other2 (specify) _____

**Question 4. What do you think would motivate teacher educators to participate in professional development? (mark all that apply)**

☐ Professional interest

☐ Meeting new colleagues

☐ Increase in a salary associated with a certification of completion of PD module

☐ Improved ability to apply for other positions

☐ Improved ability to implement research projects and publish

☐ Other (specify) _____

**Question 5. What sort of professional development would you be interested in participating? Please rate your interest in receiving professional development in the following topics (mark one for each line):**

| | Not interested | Interested a little | Moderately interested | Strongly interested |
|---|---|---|---|---|
| Subject-specific content knowledge | 0 | 1 | 2 | 3 |
| Subject-specific teaching methods[13] | 0 | 1 | 2 | 3 |
| General teaching methods[14] | 0 | 1 | 2 | 3 |
| Assessment/testing and data analysis | 0 | 1 | 2 | 3 |
| Practicum/working with schools | 0 | 1 | 2 | 3 |
| Use of instructional technology | 0 | 1 | 2 | 3 |
| Research | 0 | 1 | 2 | 3 |
| Other1 (specify) _____ | 0 | 1 | 2 | 3 |
| Other2 (specify) _____ | 0 | 1 | 2 | 3 |

**Question 6. What is your preference for the mode of delivery of professional development activities? (mark one for each line)**

| | Would NOT participate | Might participate | Would definitely participate |
|---|---|---|---|
| Face-to-face workshops in your home institution | 0 | 1 | 2 |

[13] For example, methods to teach literacy, methods to teach science.
[14] For example, collaborative learning strategies, differentiated instruction, lesson planning, classroom management

| | | | |
|---|---|---|---|
| Face-to-face workshops away from your home institution | 0 | 1 | 2 |
| Self-learning materials | 0 | 1 | 2 |
| Distance learning via Internet | 0 | 1 | 2 |
| Distance learning via CD/video | 0 | 1 | 2 |
| Blended learning (part through technology, part face-to-face) | 0 | 1 | 2 |
| Other (specify) | 0 | 1 | 2 |

**Question 7. Do you have a reliable access to a computer with Internet?**

- ☐ Yes, in my office
- ☐ Yes, at home
- ☐ No

**Question 8. Do you have sufficient proficiency in using a computer with Internet to participate in distance learning via Internet or CD?**

- ☐ Yes, I am completely proficient
- ☐ Yes, I am proficient but need some assistance
- ☐ No, I don't have sufficient proficiency

**Question 9. On average, how many hours a week do you use a computer?**

a. For work: _____(hours a week)

b. For personal use: _____(hours a week)

**Question 10. Would you be willing to participate in the professional development on your own time (unpaid)?**

☐ Yes

☐ No

**Question 11. How many hours of your personal time would be willing to dedicate to professional development?**

_____ (*hours a month*)

**Question 12. Would you be willing to pay for your professional development?**

☐ Yes, I will be willing to pay for it

☐ I will be willing to make a contribution but not pay for all of it

☐ No

**Question 13. Please share any comments about professional development of teacher educators below:**

_____

_____

Demographic Section[15]

Question 14. Institution where you work: _____

Question 15. Your name (if you wish to share): _____

Question 16. Your age: _____

[15] All survey results will be analyzed together and averages will be reported. Individual responses will not be reported.

Question 17. Your gender: _____

Question 18. Number of years you worked as a teacher in primary or secondary schools:

_____

Question 19. Number of years you worked as a teacher educator: _____

## TEACHER EDUCATOR FOCUS GROUP PROTOCOL

FG Lead Facilitator's name: _____

FG Supporting Facilitator's name: _____

Institution where the focus group participants work: _____

Number of participants: _____(total)_____(males)_____(females)

Date of the focus group: _____

Duration of the focus group: _____

Good Morning/Afternoon,

We are here today to talk with you about professional development for teacher educators. First of all, let me see by show of hands how many of your ever participated in professional development?

*[people raise hands]*

I see - nearly everyone participated. Before we continue with the focus group, I would like for you to take a minute to reflect on what you understand by professional development. I encourage you to think not only about the specific professional development that you participated in recently, but in general. Here are some index cards. Can you please write down your definition of PD on a card?

*[distribute index cards, wait till they are filled]*

Let's see what definitions you wrote. Will someone like to read what you wrote?

*[hear from a couple of people]*

Will others agree with this definition?

*[hear ascent/descent]*

Can I please collect these cards? Thank you.

*[collect index cards]*

The type of professional development we'll be talking about today is rather different. We envision a system of professional development in Sindh that is primarily based on self-nomination, self-learning and is not linked to any kind of promotion. This PD would be continuous**,** focused, purposeful, and organized by specific topics. It also offers integrated layers of support and follow-up. Let me explain what I mean.

*[distribute the handouts]*

Please look at the graphic on the first page of your handouts. This graph shows the professional development model that we will be discussing today. This model is based on supported self-learning. The central professional development coordinating body will be providing learning materials to interested teacher educators, and also various kinds of support. We'll call this body CPD Central. At this point, we don't know who might it be; it will be up to the provincial government in Sindh to determine that.

Once established, CPD Central would be providing materials and other support to teacher educators who would like to participate in professional development. As you see in the graph, we envision four kinds of support: first, it's learning materials which could be printed materials or electronic materials (such as learning software or a DVD). Second, a coach that would be providing ongoing and follow-up assistance with the content and practical application of the content. Third, CPD Central would enable collaboration by linking CPD participants with other teacher educators interested in the same content. And finally, CPD Central would host occasional provincial-level seminars and conferences designed to expose participants to new ideas in their areas of interest.

This professional development would be funded by the government of Sindh. Due to budgetary constraints, participation in this professional development would be unpaid and would not be associated with any promotions or increase in pay for the participants. We suggest participants would self-nominate for the participation in this professional development, based on what they themselves perceive are their needs.


Do you have any questions?

Now, let's discuss.

1. Would you be interested in participating in such a PD?
2. What do you think of the idea of self-nomination?
    a. should principals/deans nominate based on need?
    b. Should some pd be mandatory for all? If yes -what topics?
3. What about group (2 + members of the same TTI, or the entire faculty of a TTI) self-nomination? Would you be interested in participating if you could partner with a colleague and study together?
4. Who should develop the materials for self-study? (content-specific materials for guided self-study; materials could be hard copies, delivered electronically [by DVD or email], or located online)
5. The role of the coach will be to offer individualized guidance with CPD. This person will communicate with CPD participants in his/her area of expertise by phone, email and/or visits. This person will not be a supervisor, but rather a help with learning and practicing new knowledge.
6. In terms of collaboration, we would like for CPD participants to be able to be a part of a working group on a subject of the CPD track (across province)

    - Linking TEs who signed up for the same track
    - Linking TEs into "soft clusters" who are interested in collaboration on this specific topics
    - Other?

7. Finally, attending provincial level workshops/seminars/conferences[16] with the purpose of sharing ideas and knowledge.

**Now that we've discussed the elements of this graphic, can you please mark the answers to the questions on page 2 of the handout.**

{WHAT'S IN HANDOUT}

MATERIALS:

1. Who in your view should be developing them?
2. What format would you be most comfortable with for use with self-study?

SUPPORT:

1. The CPD Central will assign a coach to each participant of the CPD. The coach will provide help with learning via email, by phone, or through visits. Would you prefer the coach to be from your institution or from different institution?--MY INSTITUTION --- OTHER INSTITUTION
2. Would you prefer to participate in the CPD just by yourself, or in partnership with a colleague from your institution? ---BY MYSELF ----- WITH A COLLEAGUE----

COLLABORATION:

1. The CPD Central can link you with other teacher educators taking the same CPD track at the same time with you. Would you be interested in sharing your experience/learning with them? ----YES ---- NO
2. The CPD Central can link you with other teacher educators who are experts in the same area with you (NOT the same area as the CPD of your choice). Are you interested in collaboration for the purpose of join research, exchange of expertise, etc? ---YES -----NO---

NEW IDEAS:

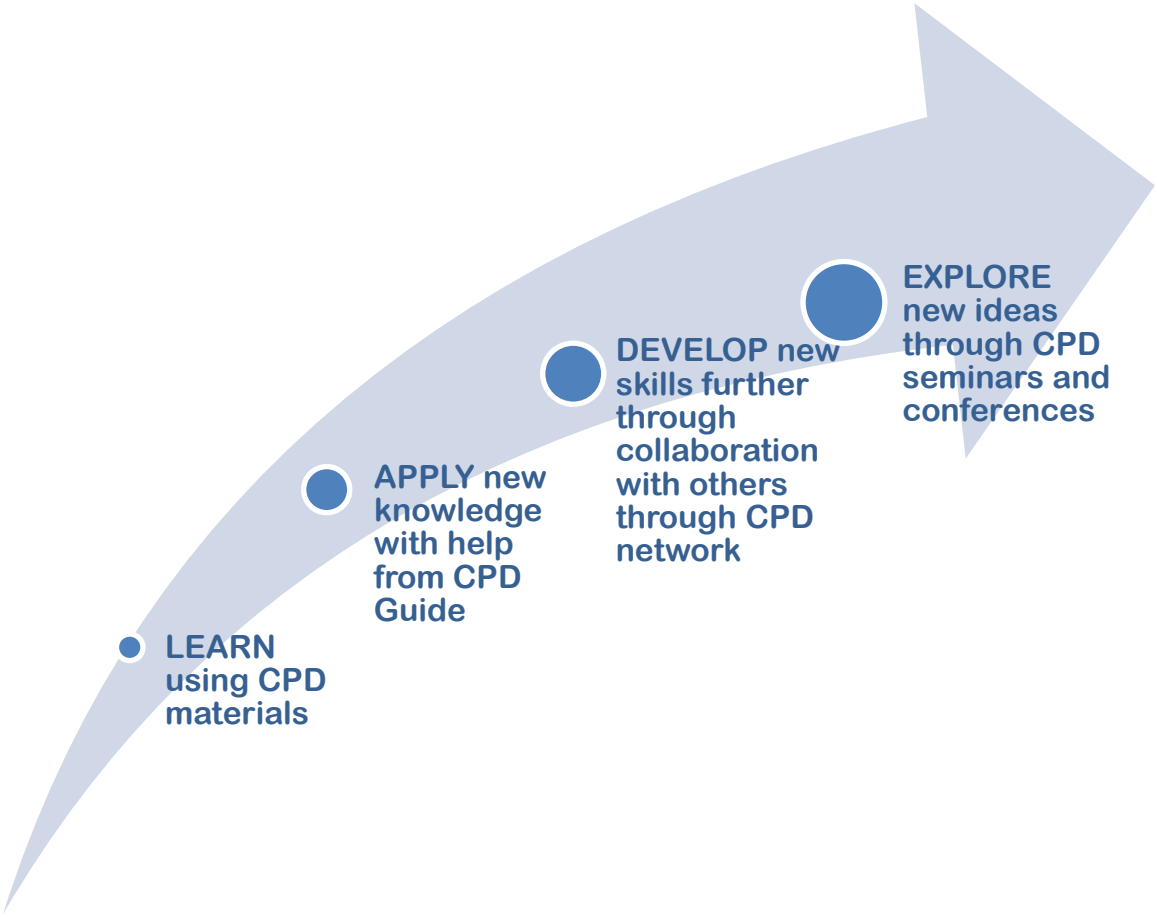
1. Will you be interested in participating in provincial level conferences and seminars at your own expense? ---YES -----NO---
2. Will you be interested in joining a professional association for teacher educators? ---YES ----NO---

8. Now let's discuss CPD progression. Please see the graph on page 3 of your handouts. It shows professional development as a *process* that starts with learning from materials

[16] A database will be set up to track participating TEs; only participating TEs will be invited to attend provincial level workshops/seminars/conferences.

provided by the CPD central, continues to application of the knowledge into practice with support from the CPD coach. Then CPD participants can deepen their knowledge and learn new ideas through collaboration with colleagues and participation in conferences organized by the CPD Central.

Let us discuss. What are your thoughts?




Now that we've discussed this graph, please turn to page 4 of your handouts and mark your answers to the questions there.

{WHAT'S IN HANDOUT}

1. Do you support the CPD steps identified in the picture above?

----Yes --- No---

2. If something is missing, please explain.
3. In the picture above, please circle the CPD steps that is of particular relevance/importance to you.

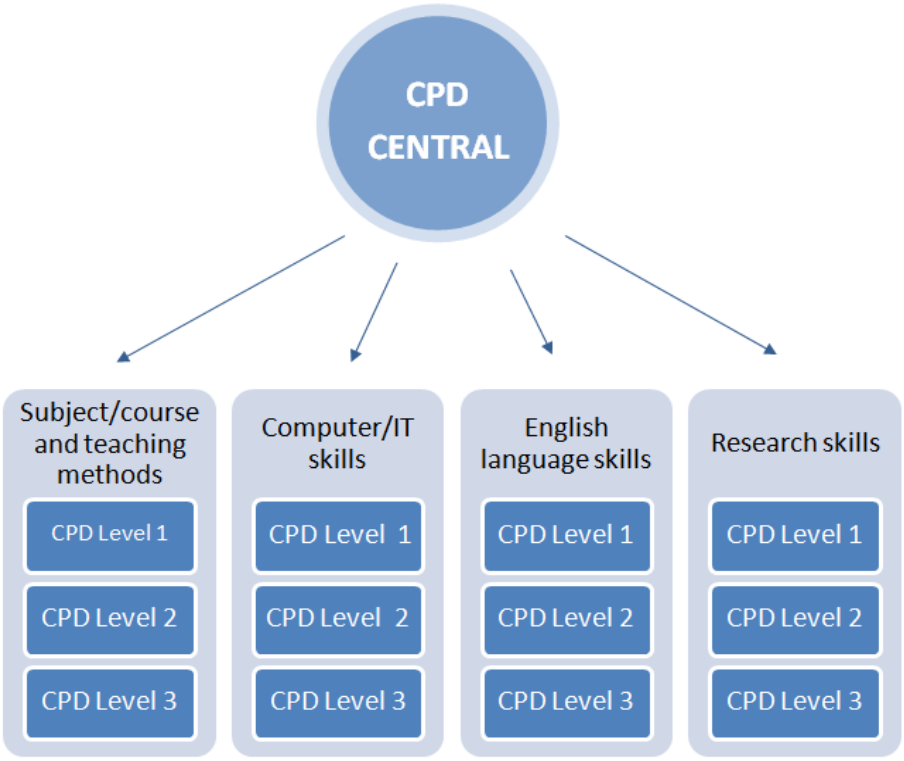
9. Finally, let's discuss topics of the proposed CPD. Please turn to page 5 of your handouts. It shows that we propose four main topics for the continuous PD of teacher educators. The first topic has to do with the content-specific knowledge and the associated teaching methods. For instance, you may be assigned to teach Child Development course, but you don't have any background in Child Development. So you might be interested in selecting this topic for your professional development.

Or you might be interested in learning about research methods and data analysis, so you might be interested in choosing Research track of the CPD.

All tracks are designed for self-learning; learning materials and coach support provided by the CPD Central. Participation in the CPD will not be associated with promotions or increase in pay.

How interested would you be in participating in each track on your own time? Do you think there are areas of PD need for teacher educators that are not listed here?

CPD TOPICS




On page 6 of your handout, please answer questions. Please circle one answer per track.

{WHAT'S IN HANDOUT}

1. **Subject area content and teaching methods:**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

2. **Computer skills**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

3. **English language skills**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

4. **Research skills**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

10. My next question concerns the qualities that teacher educator should possess. On page 7 of your handouts, you will find words that might describe a teacher educator. Please circle the ones that you think are most important in describing a teacher educator. Also you may add words that are not there.

[WAIT TILL THEY ARE DONE]

11. And finally, If participation in professional development is NOT linked to promotion or pay increase, why would teacher educators participate? On page 8 of your handout, you will find a few reasons why. Please select the most appropriate and also put down what you think might be the reasons.

[WAIT TILL THEY ARE DONE; **COLLECT THE HANDOUTS**]

Thank you all for participating in this focus group! Your answers will help us design the most relevant professional development for teacher educators in Sindh.

## TEACHER EDUCATOR FOCUS GROUP HANDOUT

### CONTINUOUS PROFESSIONAL DEVELOPMENT SUPPORT MODEL


QUESTIONS ON THE SUPPORT MODEL

MATERIALS:

3. Who in your view should be developing them? _____
4. What format would you be most comfortable with for use with self-study?_____

SUPPORT:

3. The CPD Central will assign a coach to each participant of the CPD. The coach will provide help with learning via email, by phone, or through visits. Would you prefer the coach to be from your institution or from different institution?--MY INSTITUTION --- OTHER INSTITUTION
4. Would you prefer to participate in the CPD just by yourself, or in partnership with a colleague from your institution? ---BY MYSELF ----- WITH A COLLEAGUE----

COLLABORATION:

3. The CPD Central can link you with other teacher educators taking the same CPD track at the same time with you. Would you be interested in sharing your experience/learning with them? ----YES ---- NO

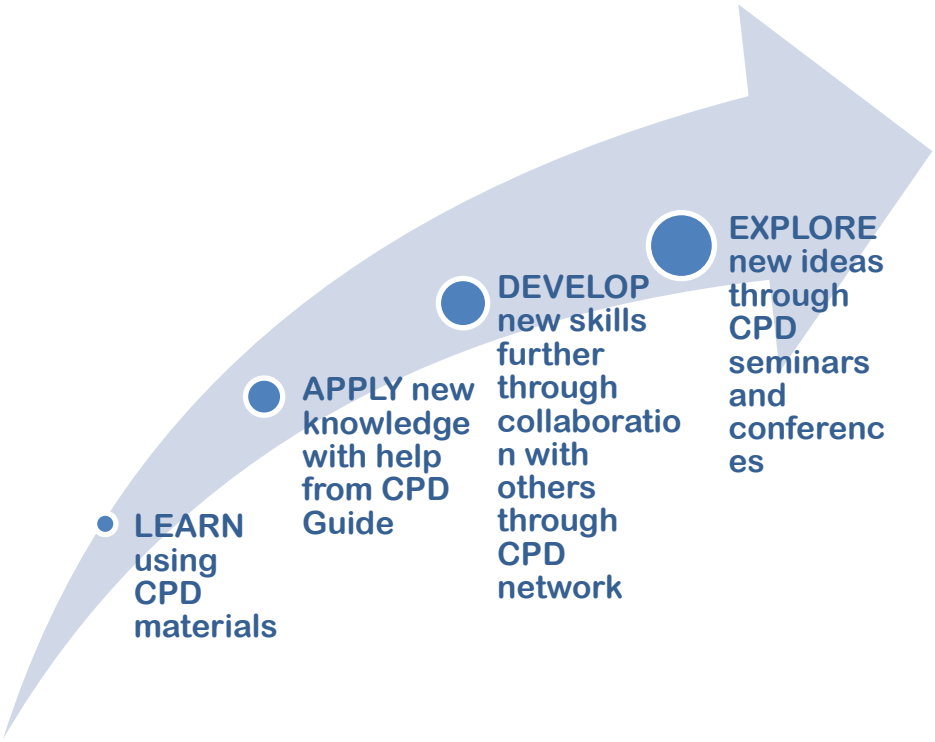
4. The CPD Central can link you with other teacher educators who are experts in the same area with you (NOT the same area as the CPD of your choice). Are you interested in collaboration for the purpose of join research, exchange of expertise, etc? ---YES -----NO---

NEW IDEAS:

3. Will you be interested in participating in provincial level conferences and seminars at your own expense? ---YES -----NO---

4. Will you be interested in joining a professional association for teacher educators? ---YES ----NO-

CPD PROGRESSION




QUESTIONS ABOUT CPD PROGRESSION

4. Do you support the CPD steps identified in the picture above?

----Yes --- No---

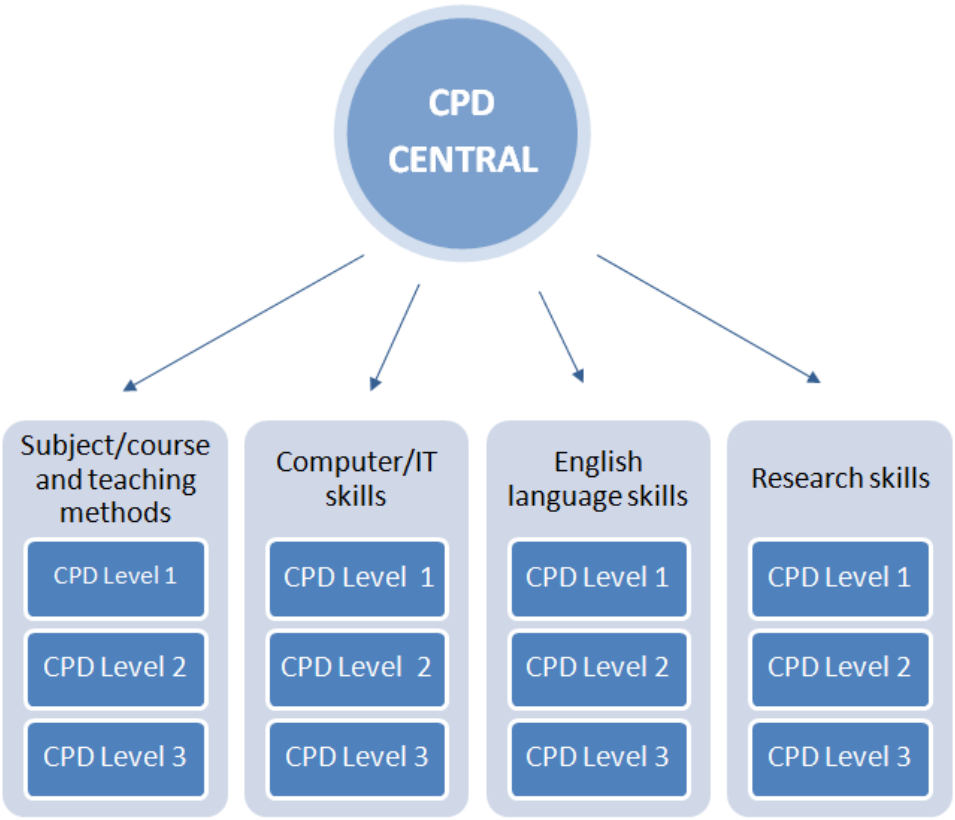
5. If something is missing, please explain below.

   _____

   _____

6. In the picture on the previous page, please circle the CPD steps that is of particular relevance/importance to you.

CPD TOPICS




QUESTIONS ABOUT CPD TOPICS

How interested are you in participating in CPD in the following topical areas? [Please note the CPD is done on your own time and is not linked to promotion or increase in pay]

5. **Subject area content and teaching methods:**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

6. **Computer skills**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

7. **English language skills**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

8. **Research skills**

NOT INTERESTED----------A LITTLE INTERESTED----------VERY INTERESTED

Below, you will see words that might describe a teacher educator. Please circle the ones that you feel are ***particularly important*** in describing a teacher educator. You may also add words that are not there.

Professional

Interested in learning

Former school teacher

Open to new ideas

High expectations from all students

Honest

Fair

Role model

Values diversity

Collaborative

Mentor

Coach

Teacher

Experienced

Subject specialist

Respected

Skilled

Expert

If participation in professional development is NOT linked to promotion or pay increase, why would teacher educators participate? Below, you will see some reasons why teacher educators might choose to participate. Please circle the ones that you feel are ***the most likely*** reasons. Or you can circle the reasons that apply to you. You may also write down other reasons.

Professional satisfaction

Enjoyment

To stay up to date with new ideas and methods in teaching and learning

To stay up to date with my subject

To work with other professionals

To help me do my job well

Other:

# APPENDIX 3. REFERENCES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