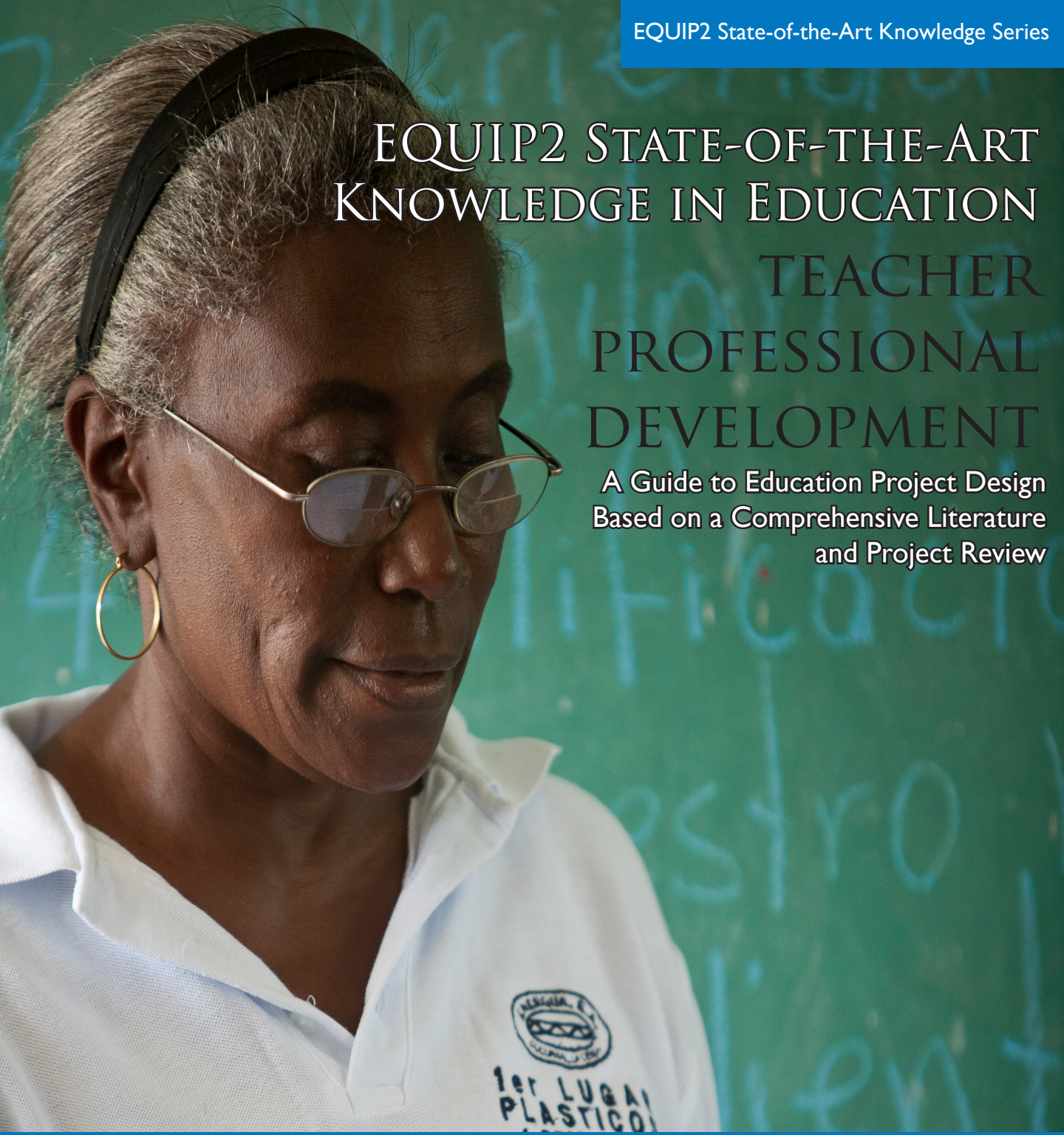# EQUIP2 State-of-the-Art Knowledge in Education

Teacher Professional Development

A Guide to Education Project Design Based on a Comprehensive Literature and Project Review

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USAID FROM THE AMERICAN PEOPLE

EQUIP2

Educational Quality Improvement Program
Policy • Systems • Management

INTRODUCTION TO TEACHER PROFESSIONAL DEVELOPMENT

Clearly, meeting the expectation that all students will learn to high standards will require a transformation in the ways in which our education system attracts, prepares, supports, and develops expert teachers … An aspect of this transformation is developing means to evaluate and recognize teacher effectiveness throughout the career, for the purposes of licensing, hiring, and granting tenure; for providing needed professional development … (Darling-Hammond and Prince, 2007, p. 3)

Improving the quality of education necessarily requires improving the quality of teaching [and] the quality of educational management … [and these] require a major financial and political effort, … significant upgrading in the pre-service and in-service training of teachers, radical changes in the concept of educational management, an overhaul in supervising the delivery of the school curriculum, a new strategy for recruiting the teachers who can be trained to raise the level of student learning … (Carnoy, 2007, pp. 3-4)

The quotes above signal a consensus that a central element of improving the quality of education is enhancing the capacity and commitment of educational personnel. These quotes, however, emphasize that the task involves more than just capacity building or "training" – as it is sometimes mislabeled – of educators. Efforts to reform how teachers and educational leaders/managers perform their roles must also focus on system and policy issues.

This is not to discount the importance of workshops, courses, and other activities designed to enhance educators' capacity. Indeed, there is evidence that capacity building activities not only can increase educators' knowledge and skill, but the availability (and, likely, quality) of professional development programs may facilitate recruitment and retention of educators (see Baker-Doyle, 2010; McKinsey, 2010; Mulkeen et al., 2005). The point is that such activities do not occur in isolation of – and thus their effectiveness is enabled and constrained by – the education system's regulations and incentive structures.

This paper discusses some of the key system and policy dimensions of professional development. It begins by outlining a broad and comprehensive conception of professional development and then identifies a set of principles of effective professional development systems and policies. This is followed by a discussion of critical steps in implementing reforms of professional development systems and policies, and then a consideration of challenges and limitations of doing so, especially

in "developing" countries. The final section lists some of the indicators of success that might be adopted by educators, pre-service and in-service program facilitators, government officials, civil society representatives, and international agencies to monitor and evaluate progress in reforming professional development systems and policies.

Where possible, the discussion in these sections is grounded in the findings of empirical research, conducted in "developing" as well as "developed" countries. Illustrations derived from project and other experiences in a range of societies are also presented. In some places footnotes have been inserted to provide more details on specific points beyond what the average reader may have an interest. Finally, a list of references is provided for readers who may want to explore more extensively the issues addressed in this paper.

CONCEPTUALIZING PROFESSIONAL DEVELOPMENT

Professional development involves the career-long processes and related system and policies designed to enable educators (teachers, administrators, and supervisors) to acquire, broaden, and deepen their knowledge, skill, and commitment in order to effectively perform their work roles (Schwille and Dembélé, 2007). The stages of professional development for teachers have been characterized as consisting of pre-service, induction, and in-service, all of which follow a period termed "apprenticeship of observation" – a stage when individuals are school students and before they enter a formal pre-service preparation program (see Figure 1). A professional development system consists of:

- Organizational providers of pre-service, induction, and in-service programs (e.g., universities/colleges, national/local school systems, teachers' unions, NGOs, private sector firms, international organizations);
- The more or less formally articulated structures and mechanisms that link these organizations (Megahed and Ginsburg, 2008).

Professional development policies define the regulations, standards, assessment procedures, and resources for:

- The provision of pre-service, induction, and in-service programs;
- The recruitment, retention, evaluation, and promotion of educators (Wilson, 2008; Wilson and Youngs, 2005).

Figure 1. Stages of Professional Development

PRINCIPLES

In light of this broad conceptualization of a professional development system, this section identifies eight principles and references some of the relevant literature which provides evidence to support and elaborate on the principles.

1. System structures and policies should insure that professional development programs/activities are articulated across time/stages of the career as well as coordinated and integrated across providers.
This means, for example, that policy frameworks should be comprehensive enough to guide both pre-service and in-service teacher education programs. Following this principle also entails structuring how in-service programs are planned and implemented so that what is offered by the various providers is complementary and builds on teachers' previous professional development experiences (Megahed and Ginsburg, 2008).

2. System structures and policies should promote the use of a collaborative process for identifying needs, designing and implementing programs, identifying or creating materials, and evaluating outcomes of professional development (Roth, 1996).
Involving educators as well as other stakeholders will help to increase the relevance and quality of professional development programs and likely enhance the commitment of those involved to participate and support such activities (Leu and Ginsburg, 2011).

3. System structures and policies should encourage those providing professional development programs to model the capacities (i.e., knowledge, skills, and dispositions) that educators are expected to exhibit in their professional practice.
For a discussion of three broad categories of teacher capacities, see McDiarmid and Clevenger-Bright, 2008. For example, unless sufficient time and financial resources are allocated to various professional development activities and providers are carefully

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selected, those charged with implementing may be constrained from following what is generally understood as best practices (Leu and Ginsburg, 2011).

4. System structures and policies should promote the practice of providing relevant and complementary learning experiences for key members of the educators' role set (i.e., administrators and supervisors as well as teachers) (West et al., 1996).

If professional development activities are not organized in a coordinated manner for the different groups of educators, teachers may either not get the supervisory guidance and support they need to implement curricular or pedagogical reforms or, worse, they may be discouraged or prevented from doing so by administrators or supervisors (Barrow et al., 2007; Ginsburg, 2010).

5. Standards should form a core element of professional development policies.

On the one hand, standards define what individuals (e.g., teachers, school administrators, and supervisors) are expected to know and be able to do, and thus offer a framework for decisions regarding the certification, licensing, promotion, and remuneration of individual educational personnel. On the other hand, standards can define what pre-service and in-service providers and programs need to have and be able to do, and thus offer a framework for decisions about accreditation, approval, and recognition of providers and programs (Imig et al., 2009; Roth, 1996).

It seems worthwhile to elaborate on this fifth principle, given that the standards "revolution," which was already underway in the United States in the 1980s and 1990s has become a global phenomenon (Shanker and Geiger, 1993). For example, Table 1 summarizes the standards for teachers in Egypt, Pakistan, and the United States.

Additionally, Table 2 presents the domains of the national Professional Standards for Teachers in Liberia which were developed with support from the USAID-funded Liberian Teacher Training Program (LTTP), approved by the Ministry of Education in October 2007, and used subsequently as a basis for teacher education curriculum development. Standards can be used to define what school administrators should know and be able to do.

Table 1. Standards for Teachers in the United States, Egypt, and Pakistan

Model Standards for Beginning Teacher Licensing, Assessment, and Development, INTASC USA:	Standards for the Educator in Egypt:	Professional Standards for Initial Preparation of Teachers in Pakistan:
1. Content Knowledge 2. Child Development and Learning 3. Diverse Learning Styles 4. Instructional Strategies 5. Learning Environment 6. Communication 7. Instructional Planning 8. Assessment 9. Professional development and Reflection 10. Collaboration and Relationships *Interstate New Teacher Assessment and Support Consortium* (INTASC), Washington, DC: Council of Chief State School Officers, 1992.	**Domain 1: Planning** 1. Determining the educational needs of the student. 2. Planning for greater targets not for detailed information and small objectives. 3. Designing suitable educational activities. **Domain 2: Learning Strategies & Classroom Management** 1. Using learning strategies to meet students' needs. 2. Facilitating effective learning experience. 3. Involving students in solving problems and in critical and creative thinking. 4. Providing an environment to guarantee equity. 5. Effective utilization of diverse motivation methods. 6. Managing learning time effectively and limiting time wasted. (Time on task) **Domain 3: Knowledge of Subject Matter** 1. Being fully aware of the basis & nature of the subject. 2. Fully knowing methods of research in the subject. 3. Being able to integrate his subject with other subjects. 4. Being able to produce knowledge **Domain 4: Evaluation** 1. Self-evaluation 2. Student evaluation 3. Feedback **Domain 5: Teacher's Professionalism** 1. Ethics of the profession 2. Professional development *National Standards for Education in Egypt*, Cairo: Ministry of Education, 2003.	1. Subject matter knowledge 2. Human growth and development 3. Knowledge of Islamic values 4. Instructional planning and strategies 5. Assessment 6. Learning environment 7. Communication 8. Collaboration and partnerships 9. Professional Development & Code of Conduct 10. ICT Knowledge and Cognition *Knowledge, Dispositions, and Performance (Skills)*, Islamabad: Ministry of Education, 2009

Source: 2011. Leu and Ginsburg

Table 2. Standards for Educators in Liberia and Egypt

Professional Standards for Teachers in Liberia	Domains and Standards of Educational Leadership in Egypt
Domain 1: Knowledge Knowledge refers to the content knowledge, the technical knowledge and practical understanding a teacher needs in order to carry out his or her duties. **Domain 2: Teaching Skills** Teaching Skills refer to the processes, strategies and techniques of planning and implementation of teaching and learning. **Domain 3: Classroom Management** Classroom Management refers to the strategies … used by the teacher to maintain a conducive teaching and learning environment. It includes classroom setting as well as all other arrangements to ensure proper behavior and interactions that enhance learning. **Domain 4: Student Assessment and Evaluation** Student Assessment and Evaluation refer to the process of collecting, analyzing, interpreting and communicating information about students' performance … to indicate students' levels of achievement and to determine and improve the effectiveness of instruction. **Domain 5: Professional Ethics and Behavior** Professional Ethics and Behavior refer to teachers' code of behavior as they carry out their duties. It includes good citizenship, dress code and the teacher's ability to interact with others and society at large. Source: 2007. LTTP	**Domain 1: Institutional Culture** • Standard 1: Clear strategic thinking for education • Standard 2: Organizational structure supporting human interaction **Domain 2: Participation** • Standard 1: Commitment to the values and participatory principles to promote team work, and widen the scope of dialogue, debate and exchange of information and ideas • Standard 2: Effective utilization of information technology to ease the exchange and diffusion of information together with wise decision making to develop education • Standard 3: Community participation. **Domain 3: Professionalism** • Standard 1: Excellence of knowledge • Standard 2: Excellence of skills • Standard 3: Sustained professional development • Standard 4: Professional Ethics **Domain 4: Management of Change and Reform** • Standard 1: Organizational climate in support of creativity and educational changes. • Standard 2: Educational changes focusing on initiative and encouraging innovation and experimentation. • Standard 3: Adoption of scientific inputs to mobilize individuals and concentrate efforts to smooth the progress of change. Source: 2003. MOE

Table 2 also presents the domains and standards for "educational management excellence" adopted by the Egyptian Ministry of Education – along with standards for teachers and student learning – in 2003. Subsequently, with the support of the USAID-funded Education Reform Program, the Egyptian Ministry of Education developed the Management Assessment Protocol (MAP) (LeCzel and Ginsburg, 2011). MAP includes 22 evaluation items covering the four domains and associated

standards listed in Table 2. After pilot testing and undertaking revisions, local supervisors began implementing the MAP in February 2006 in selected districts, collecting data using an observation checklist, a document review checklist, and structured interview questions for school directors, school staff, and community members (Zohry, 2007). In addition, standards can be used to define, assess, and help develop the quality of professional development programs. Standards can be applied to both pre-service and in-service programs, although we focus mainly on standards for pre-service programs, since this is where more efforts have been made (Babcock et al., 2010). Three examples of standards for teacher education programs are presented in Tables 3, 4 and 5. The first example concerns specific standards for teacher educators (Dembélé and Lefoka, 2007, p. 547). Table 3 identifies the standards for (accomplished) teacher educators, which have been promoted by the Association for Teacher Education in the United States.

Table 3. Standards for [Accomplished] Teacher Educators

Standard 1: Teaching
Model teaching that demonstrates content and professional knowledge, skills, and dispositions reflecting research, proficiency with technology and assessment, and accepted best practices in teacher education.
Standard 2: Cultural Competence
Apply cultural competence and promote social justice in teacher education.
Standard 3: Scholarship
Engage in inquiry and contribute to scholarship that expands the knowledge base related to teacher education: discovery, integration, application, and teaching.
Standard 4: Professional Development
Inquire systematically into, reflect on, and improve their practice and demonstrate commitment to continuous professional development.
Standard 5: Program Development
Provide leadership in developing, implementing, and evaluating teacher education programs that are rigorous, relevant, and grounded in theory, research, and best practice.
Standard 6: Collaboration
Collaborate regularly and in significant ways with relevant stakeholders to improve teaching, research, and student learning.
Standard 7: Public Advocacy
Serve as informed, constructive advocates for high quality education for all students.
Standard 8: Teacher Education Profession
Contribute to improving the teacher education profession.
Standard 9: Vision
Contribute to creating visions for teaching, learning, and teacher education that take into account such issues as technology, systemic thinking, and world views.

Source: 2008. ATE

The second example concerns Liberia's National Teacher Education Program Standards. These standards were developed with support from the USAID-funded Liberia Teacher Training Program (LTTP). Beginning in July 2007 with a process of institutional development at Williams V.S. Tubman Teachers College of the University of Liberia, a working group was established to develop draft standards, and in January 2008, the Ministry of Education formally appointed a National Task Force. By June 2009, the Standards were approved by the MOE and the National Council on Higher Education (AED, 2010).

Table 4. National Teacher Education Program Standards for Colleges and Universities in Liberia

Standard 1: Knowledge, Skills, Ethics and Classroom Management
Candidates should develop competence in content knowledge, pedagogical knowledge, professional knowledge, and ethical knowledge, use of technology, visual aids and graphic presentations in getting the subject across to students who should be the center for instruction. The candidate should be capable of creating a conductive, active and time-conscious learning environment.

Standard 2: Evaluation
The program shall put in place an assessment system, which collects and analyzes data … [on] the performance of the program, candidates, supervisors, faculty and staff.

Standard 3: Teacher Qualifications
Teachers shall have a minimum of master's degree with 18 hours in content area. Teachers shall be required to attend at least one professional development seminar or workshop in area of discipline during the school year. … Each program shall have at least two doctoral degree holders.

Standard 4: Teaching Load
The maximum teaching load for a teacher shall be 9–12 credit hours per semester. The compensation for overload shall be documented.

Standard 5: Diversity
Each program shall consider the diverse student population, faculty composition and program offering.

Standard 6: Governance and Resources
Each institution shall financially sustain its program and maintain its facilities and personnel. Each program shall have an organizational diagram that delineates the chain of command of all entities that govern the institution.

Standard 7: Welfare
A unit must ensure that equity exists in the following areas regardless of gender, political affiliation, religious preference, social status, sexual orientation, nationality, physical disability and ethnicity: a) salaries, benefits and other compensations must be based on qualification, experience and the current market value of the position; b) the implementation of curriculum must be relevant, challenging and flexible to meet the needs of all students; c) the rewarding of students' excellent performance in the form of grades, promotions, scholarships and recognition must be flexible and reflect best practices; and d) Disciplinary measures against students for violations should be in a Student Handbook.

Source: 2009. LTTP

The final example concerns the program or institution standards developed by the U.S.-based National Council for the Accreditation of Teacher Education (NCATE), which was created in 1952. In the U.S. context there is another nongovernmental organization, the Teacher Education Accreditation Council (TEAC), which since 1997 has been "accrediting teacher education programs based on their performance in relation to internally derived objectives and standards" (Wilson and Youngs, 2005, pp. 595-599).

Table 5. NCATE Standards for U.S. Teacher Education Institutions

Conceptual Framework

The conceptual framework provides direction for programs, courses, teaching, candidate performance, scholarship, service, and unit accountability. The conceptual framework is knowledge based, articulated, shared, coherent, consistent with the unit and institutional mission, and continuously evaluated.

Standard 1: Candidate Knowledge, Skills, and Professional Dispositions

Candidates preparing to work in schools as teachers or other school professionals know and demonstrate the content knowledge, pedagogical content knowledge and skills, pedagogical and professional knowledge and skills, and professional dispositions necessary to help all students learn.

Standard 2: Assessment System and Unit Evaluation

The unit has an assessment system that collects and analyzes data on applicant qualifications, candidate and graduate performance, and unit operations to evaluate and improve the performance of candidates, the unit, and its programs.

Standard 3: Field Experiences and Clinical Practice

The unit and its school partners design, implement, and evaluate field experiences and clinical practice so that teacher candidates and other school professionals develop and demonstrate the knowledge, skills, and professional dispositions necessary to help all students learn.

Standard 4: Diversity

The unit designs, implements, and evaluates curriculum and provides experiences for candidates to acquire and demonstrate the knowledge, skills, and professional dispositions necessary to help all students learn. ... Experiences provided for candidates include working with diverse populations, including higher education and P–12 school faculty, candidates, and students in P–12 schools.

Standard 5: Faculty Qualifications, Performance, and Development

Faculty members are qualified and model best professional practices in scholarship, service, and teaching ... They also collaborate with colleagues in the disciplines and schools. The unit systematically evaluates faculty performance and facilitates professional development.

Standard 6: Unit Governance and Resources

The unit has the leadership, authority, budget, personnel, facilities, and resources, including information technology resources, for the preparation of candidates to meet professional, state, and institutional standards.

Source: 2008. NCATE

6. Personnel assessments (using tests, performance measures, etc.) for hiring decisions and for career-long appraisals should be:

- Reliable, predictively valid, and cost-effective;
- Balanced with respect to the use of summative assessments for making personnel decisions and the use of formative assessments for identifying and providing for professional development needs (see Wilson and Youngs, 2005);
- Designed with a focus on motivating growth and performance as well as monitoring for accountability purposes (see Imig et al., 2009; Roth 1996).

Some of the relevant issues – as well as potentially useful approaches – related to personnel assessments are reflected in developments in the U.S. in the latter decades of the 20th century. Porter et al. (2001) report that in 1988, the Educational Testing Service (ETS) began efforts to revise the National Teacher Exam and develop the Praxis Series: Professional Assessment for Beginning Teachers. "Praxis I measures basic skills in reading, writing, and mathematics … [and] includes multiple-choice questions and an essay question. … Praxis II includes four types of assessments: core tests of content knowledge, in-depth tests of content knowledge, tests of teaching knowledge, and tests of pedagogical content knowledge … [and] include multiple-choice and constructed response questions … The Praxis III assessment, which evaluates candidates' teaching skills during their 1st year of teaching, … [and] is based on 19 criteria that represent areas of practice … organized into the following four domains: (a) organizing content knowledge for student learning, (b) creating an environment for student learning, (c) teaching for student learning, and (d) teacher professionalism (pp. 263-64). Porter et al. (2001) also describe the creation in 1987 of the National Board for Professional Teaching Standards, which administers assessments of teachers, each of which "consists of 10 exercises, including 6 portfolio exercises and 4 assessment center exercises" (pp. 264-65).

A third development discussed by Porter et al. (2001, pp. 287-288) involves the development of the Tennessee Value-Added Assessment System (TVAAS), which "measures the effects of teacher education institutions, school districts, schools, and teachers on "the academic performance of students in grades 3 through 8 in reading, language arts, mathematics, science, and social studies … TVAAS uses … data on individual students … to control for the effects of their characteristics on their achievement." Although a variety of researchers, educators, and other stakeholders internationally have promoted the "value-added" approach to teacher assessment (Gates Foundation, 2010, p. 5; Imig et al., 2009, p. 153), others have criticized the approach on methodological and other grounds (Baker et al., 2001, pp. 1-2;

Hinchey, 2010, p. 16; Kane and Cantrell, 2010, p. 9; Newton et al., 2010, p. 2; Rothstein, 2010, p. 1).

7. *To encourage educators' participation in and learning from professional development programs, system policies, procedures, and resources for recruitment, retention, evaluation, remuneration, and promotion of educators should emphasize the same knowledge, skills, and dispositions.*
If teachers' promotion or remuneration is does not depend on what one learns in professional development programs, they are likely to take the content of such programs less seriously (see Bray and Mukundan, 2004; Carnoy, 2007; Darling-Hammond et al., 2005; de Moura Castro and Loschpe, 2007; Porter et al., 2001). An example of an effort in this direction is Peru's legal framework for the public school teacher's career, La Carrera Publica Magisterial, which links career levels, areas of wok, and classes of evaluation.

Table 6. La Carrera Publica Magisterial in Peru

Chapter III
Article 7: The Career Structure of Public Teaching   [It] is structured into 5 levels and 3 areas of work. The minimum time at the teaching levels is the following: • First Level: 3 years   • Second Level: 5 years   • Third Level: 6 years   • Fourth Level: 6 years   • Fifth Level: until retirement.
Article 8: Areas of Work   The Public Teaching Career includes 3 areas of work: • Pedagogical Management: Educators who exercise functions of classroom instruction and complementary curricular activities within an educational institution and in the community.   • Institutional Management: Educators exercising direction or subdirection responsibilities, responsible for planning, supervision, evaluation, and institutional management. One can enter the area of institutional management at the second level of the Public Teacher Career.   • Research: Educators who design and evaluate innovation projects, conduct experiments, and carry out educational research.

> **Article 9: Classes of Evaluation en the Public Teaching Career**
>
> There are two classes of evaluation:
>
> - Obligatory:
>   - Evaluation to enter the Public Teaching Career.
>   - Evaluation of work performance, in conformance with [criteria and procedures] identified in articles 24 and 29 of the present Law.
> - Voluntary:
>   - Evaluation for movement to a higher level, in conformance with [criteria and procedures] identified in article 24 of the present Law.
>   - Evaluation to verify possession of the [knowledge], capacity, and teacher role performance that are required to be appointed to a position in the area of institutional management or research.

Source: 2007. Law No. 29062, Government of Peru.

Another example is provided by Egypt's Teacher's Cadre Law (No. 155), which was approved by the People's Assembly in June 2007 (see also Megahed and Ginsburg, 2008; Leu and Ginsburg, 2011). This Law connects the different positions in the field of education, pay levels, and performance and service requirements.

Table 7. Teacher's Cadre Law in Egypt

Section 1: Teachers' Jobs, Equivalents & Participants in the Educational Process
Article 70: The rules of this section are applicable to all teachers who are in charge of teaching, technical inspection or school administration as well as to social workers, psychologists, technological, press and media personnel and librarians.
Article 71: The job roll of teachers consists of the following positions: 1. Assistant teacher 2. Teacher 3. Master Teacher 4. Master Teacher (A) 5. Expert Teacher 6. Senior Teacher
Article 74: Appointment for one of the educational jobs mentioned in Article 70 of this law or promotion to higher positions or their equivalent as mentioned in this section requires meeting the conditions for holding them, obtaining the certificate qualifying for holding the job and passing the training and tests conducted for this purpose.

Article 81: Promotion to the positions stipulated in Article 70 of this law requires meeting the following conditions:

- Meeting the conditions for holding the job to which one is promoted as indicated its description card.
- Spending at least five years in practicing actual work in the immediately lower job or its equivalent level in accordance with the rules decreed by the Minister of Education.
- Obtaining an eligibility certificate to practice the job to which one is promoted.
- Getting two performance evaluation reports ranked as at least above average in the last two years prior to the consideration of promotion.

Section 2: Financial Treatment of Teachers

Article 85: Based on a presentation by the Minister of Education, the Prime Minister issues a decree regarding performance, administration and academic excellence incentives for those who have obtained post-graduate diplomas or master's and Ph.D. degrees in the field of education, as well as the job burden allowance system, over-time, encouragement allowances for certain jobs or areas, and the expenses incurred by those holding teaching jobs in performing these jobs.

Article 86: Those holding the teaching jobs stipulated in this section will be paid an incentive for excellent performance by virtue of a decree by the Prime Minister based on a report presented by the Minister of Education. The decree specifies the amount of incentive and the conditions and rules for granting it. The number of those who are granted this incentive every year should not exceed 10% of those holding the aforementioned positions in each educational administration (idara).

Article 89: Those who occupy the teaching positions referred to in Article 70 of this law and who are in service at the time this section is applied or those will be hired in the future will be paid a teacher's allowance estimated at 50% of the base salary. The set yearly allowance and any rise in salary granted to the government administrative staff will be applicable to them. They will be promoted to the higher financial degree pursuant to the rules of the public servant law. (Arab Republic of Egypt, 2007)

Source: 2007. Law No. 155, Government of Egypt.

8. Other education system policies (e.g., curriculum, examinations, school self-assessment and improvement) should also be consistent with the desired behaviors that professional development processes are organized to promote.

As a counter example, curriculum and examination policies that emphasize memorization and rote learning by students are likely to contradict teacher's use of active-learning pedagogies being promoted in in-service programs (Barrow et al., 2007; Ginsburg, 2010; Kosunen and Huusko, 2002; Vavrus et al., 2002).

STEPS IN IMPLEMENTATION

This section draws on the broad conceptualization of professional development as well as the eight principles discussed above to sketch three general steps toward implementing reforms in professional development systems and policies.

These recommended steps in implementation provide general guidance, but as in any endeavor, one needs to consider the context. That is, opportunities for promoting professional development reforms may be increased depending on what other events have occurred, though this does not mean one cannot begin implementation efforts without these events having occurred. As Mourshed et al. (2010, p. 28) report based on their study of 20 of the world's "most improved" school systems: "Across our sample systems, the impetus required to start school system reforms – what we call ignition – resulted from one of three things: the outcome of a political or economic crisis, the impact of a high-profile, critical report on the system's performance, or the energy and input of a new political or strategic [i.e., technical] leader."

Furthermore, in pursuing these steps for implementing professional development reform, however, one also needs to focus attention on the status of the teaching profession. This is because recruitment and retention of high quality individuals in the profession of education as well as educators' commitment to engage in continuous professional development can be elevated when societal recognition and appreciation are enhanced (see Kim, 2009).

1. Engage relevant providers (e.g., national/local school systems, universities/colleges, teachers' unions, NGOs, private sector firms, or international organizations), beneficiary groups (teachers, school administrators, supervisors), and other stakeholders (e.g., parents, civil society organization representatives, and business owners/managers) in a dialogue focused on the policies, procedures, and resources related to the career structure of teachers, school administrators and supervisors.
The purpose of such dialogue is to identify elements that encourage/discourage:

- Individuals' decisions to become and remain a teacher, school administrator, or supervisor;
- Educators' participation in in-service programs; and
- Educators' efforts to improve their professional practice.

2. Gather input from representatives of all providers, beneficiary groups, and other stakeholders to clarify and reach consensus on:

- Which agencies/organizations are or could be tasked with providing which aspects of needed professional development activities;
- What, if any, policies, procedures, and resources of the professional development system need to be strengthened in order to facilitate planning, implementing, and evaluating programs/activities in a sustainable manner;
- What, if any, policies, procedures, and resources for recruitment, retention, evaluation, and promotion of educators need to be reformed to better reinforce desired behaviors that professional development processes are organized to promote; and
- What, if any, other policies (e.g., curriculum, examination, school self-assessment and improvement) need to be reformed to be consistent with the desired behaviors that professional development processes are organized to promote.

3. Pilot, evaluate, revise, and then implement on a larger scale the various policies, procedures, and resources noted above. This entails engaging relevant providers, beneficiaries, and stakeholders in processes designed to:

- Identify alternatives that promise to be more effective and feasible;
- Seek consensus on alternatives that should at least be piloted on a small scale;
- Implement and evaluate the pilot efforts (including awareness raising and requisite capacity building);
- Revise and seek system-wide adoption of some of the alternatives (building political will, system personnel buy-in, and civil society support); and
- Implement and evaluate the system-wide implementation of some of the alternative (including awareness raising and requisite capacity building).

CHALLENGES AND LIMITATIONS

This section lists some of the challenges and limitations that governments, international organizations, educators, and other stakeholders may face in reforming professional development policies and systems in the education sector.

1. The reform of (human resource, curriculum, examinations, etc.) policies is a complex process requiring careful planning, effective mobilization of political and financial support, phased-in implementation, and strong monitoring and evaluation.
2. It is even more challenging to undertake policy and system reform in these various areas in a coordinated and integrated manner.

3. Ideally, policy and system reform should be based on valid and reliable empirical evidence, but the international research literature has three types of limitations: a) the low quality of the data collected and the rigor of the designs used in many of the studies, b) the contradictory findings across studies, and c) the appropriateness of using findings from other societies to inform decisions in a given context.

4. Reforms of human resource and other policies likely have cost implications, and these need to be factored into the policy analysis and reform efforts (for discussion of these issues in a variety of societal context, see Carnoy, 2007; Duflo et al., 2007; de Grauwe, 2007; Hinchey, 2010; du Plessis and Muzaffar, 2010).

In reflecting on and seeking to address these challenges and limitations, one can draw upon the conceptualization, principles, and steps presented above.

INDICATORS OF SUCCESS

This section identifies general categories of indicators that can be used to monitor progress in implementing reforms of professional development policies and systems. Further details on these and other indicators of success are provided in many of the references listed at the end of this paper, especially those which were cited in the section on principles:

1. Increased satisfaction with the quality (content and delivery) of professional evelopment activities (responses to questionnaires and interviews);

2. Enhanced clarity and legitimacy in the policies and procedures governing selection, promotion, and remuneration of educators (review of previous and current policies and procedures);

3. Improvement in educators' knowledge, skills, and commitment (responses to tests and questionnaires) (see above discussion of National Teacher Examination and PRAXIS series of test);

4. Improvement in educators' behavior in classrooms, schools, school systems, and communities (self-reports and others' observations) (e.g., see the Standards-Based Classroom Observation Protocol for Egypt described in Box 10);

5. Improvement in the knowledge, skills, and attitudes/values as well as access, attendance, and persistence/attainment of the students with whom educators work (directly or indirectly).

REFERENCES

Abd-El-Khalick, F. (2005). *Educational Quality Baseline Study [SCOPE I]*. Cairo: Education Reform Program, 6 September.

Abd-El-Khalick, F. (2006). *Educational Quality Baseline Study: SCOPE II Data Analysis Report*. Cairo: Education Reform Program, 20 December.

Abd-El-Khalick, F. (2007). *Educational Quality Baseline Study: SCOPE III Data Analysis Report*. Cairo: Education Reform Program, 4 November.

Academy for Educational Development. (2010). *USAID/Liberia Teacher Training Program [LTTP, November 2006-May 2010] Final Report*. Monrovia, Liberia: EQUIP2/AED.

Arab Republic of Egypt. (2007). *Teacher's Cadre Law* (approved by People's Assembly in June). Cairo: Arab Republic of Egypt.

Association of Teacher Education. (2008). *Standards for Teacher Educators*. Washington, DC: ATE.

Babcock, J., Babcock, P., Buhler, J., Cady, J., Cogan, L., Houang, R., Neelam, K., Patrick, J., Rosolova, K., Schmidt, W., and Wright, K. (2010). *Breaking the Cycle: An International Comparison of U.S. Mathematics Teacher Preparation*. East Lansing, MI: Michigan State University Center for Research in Mathematics and Science Education.

Baker, E.L., Darling-Hammond, L., Haertel, E., Ladd, H.F., Linn, R.L., Ravitch, D., Rothstein, R., Shavelson, R.J. & Shepard, L. (2010). "Problems with the Use of Student Test Scores to Evaluate Teachers." *Briefing Paper # 278.* Washington, DC: Educational Policy Institute.

Baker-Doyle, Kira (2010). "Beyond the Labor Market Paradigm: A Social Network Perspective on Teacher Recruitment and Retention." *Educational Policy Analysis Archives.* 18 (26): 1-14. Retrieved from: http://epaa.asu.edu/ojs/article/view/836.

Barrow, K., Boyle, H., Ginsburg, M., Leu, E., Pier, D., and Price-Rom, A. (2007). *Cross-national Synthesis on Education Quality Report No. 3: Professional Development and Implementing Active-Learning, Student-Centered Pedagogies.* Washington, DC: EQUIP1/American Institutes for Research.

Bray, M., and Mullikottu-Veettil, M. (2004). "The Decentralisation of Education in Kerala State, India: Rethoric and Reality." *International Review of Education.* 50 (February): 223-43.

Carnoy, M. (2007). Improving Quality and Equity in World Education: A Realistic Assessment. Paper presented at Stockholm University Institute of International Education, September.

Council of Chief State School Officers. (1992). *INTASC, Model Standards for Beginning Teacher Licensing, Assessment, and Development: A Resource for State Dialogue*. Washington, DC: CCSSO.

Darling-Hammond, L.; Pacheco, A.; Michelli, N.; LePage, P.; and Hammerness, K.; with Youngs, P. (2005). "Implementing Renewal in Teacher Education: Managing Organizational and Policy Change." In *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do,* edited by Darling-Hammond, L. and Bransford, J. (Eds.) (2005). San Francisco, CA: Jossey-Bass.

Dembélé, Martial and Lefoka, Pulane (2007). "Pedagogical Renewal for Quality Universal Primary Education: Overview of Trends in Sub-Saharan Africa." *International Review of Education.* 53: 531-553.

de Grauwe, A. (2007). "Transforming School Supervision into a Tool for Quality Improvement." *International Review of Education.* 53: 709-714.

de Moura Castro, C. and Loschpe, G. (2007). *La remuneración de los maestros en América Latina: ¿Es baja? ¿Afecta la calidad de la enseñanza?* Santiago, Chile: Programa de Promoción de la Reforma Educativa en América Latina y el Caribe (PREAL).

Duflo, E.; Hanna, R.; and Ryan, S. (2007). Monitoring Works: Getting Teachers to Come to School. Unpublished paper. Boston, MA: Massachusetts Institute of Technology.

du Plessis, J. and Muzaffar, I. (2010). *Professional Learning Communities in the Teachers' College: A Resource for Teacher Educators*. Washington, DC: American Institutes for Research and EQUIP1.

Gates Foundation. (2010). *Working with Teachers to Develop Fair and Reliable Measures of Effective Teaching: Framing Paper*. Seattle: Bill and Melinda Gates Foundation; http://www.metproject.org.

Ginsburg, M. (2010). "Improving Educational Quality through Active-Learning Pedagogies: A Comparison of Five Case Studies." *Educational Research*. 1 (3): 62-74.

Government of Peru. (2007). *La Carrera Publica Magisterial (Law No. 29062).* Lima: Government of Peru.

Hinchey, P. (2010). *Getting Teacher Assessment Right: What Policymakers Can Learn from Research*. Boulder, CO: National Education Policy Center. Retrieved 17 January 2011 from: http://nepc.colorado.edu.

Imig, S; Koziol, S; Pilato, V; and Imig, D. (2009). Teacher Certification and Credentials: From a Focus on Qualifications to a Commitment to Performance. Pages 141-157 in Saha, Lawrence and Dworkin, A. Gary (Eds.) International Handbook of Research on Teachers and Teaching. New York: Springer.

Kane, T. and Cantrell, S. (2010). Learning about Teaching: Initial Findings from the Measuring Effective Teaching Project. Seattle: Bill and Melinda Gates Foundation; http://www.metproject.org.

Kim, E. (2009). Teacher Policy: Procurement and Disposition of Qualitative Teachers. Understanding Korean Education Policy, volume 8. Seoul: Korean Educational Development Institute.

Kosunen, T. and Huusko, J. (2002). Shared and Subjective in Curriculum Making: Lessons from Finnish Teachers. In Ciaran Sugrue and Christopher Day (eds.), Developing Teachers and Teaching Practice, pp. 234-244. London: Routledge/Falmer.

LeCzel, D.K. and Ginsburg, M. (2011). School Management and Leadership Development: EQUIP1 First Principles Compendium. Washington, DC: American Institutes for Research.

Leu, E. and Ginsburg, M. (2011). Inservice Teacher Professional Development: EQUIP1 First Principles Compendium. Washington, DC: American Institutes for Research.

Liberia Teacher Training Program (LTTP) (2007). Professional Standards for Teachers in Liberia. Monrovia, Liberia: LTTP.

Liberia Teacher Training Program (LTTP) (2009). Teacher Education Program for Colleges and Universities in Liberia. Monrovia, Liberia: LTTP.

McDiarmid, G. W., and Clevenger-Bright, M. (2008). Rethinking Teacher Capacity. In Marilyn Cochran-Smith, Sharon Feiman-Nemser, and D. John McIntyre (eds.) Handbook of Research on Teacher Education: Enduring Questions in Changing Contexts (3rd edition), pp. 134-56. New York: Routledge.

McKinsey (2010). Why Top Students Don't Want to Teach. McKinsey Quarterly: Chart Focus Newsletter, December; Retrieved on 20 January 2011 from: http://www.mckinseyquarterly.com/newsletters/chartfocus/2010_12.htm.

Megahed, N. and Ginsburg, M. (2008, May). Education Program Support in the Area of Professional Development: Documentation Research. Cairo, Egypt: Education Reform Program.

Ministry of Education. (2003). National Standards of Education in Egypt, Volume 1. Cairo. Ministry of Education, Arab Republic of Egypt.

Ministry of Education. (2009). Knowledge, Dispositions, and Performance (Skills), Islamabad: Ministry of Education, Pakistan.

Mourshed, M; Chijioke, C; and Barber, M. (2010). Introduction and Overview. How the World's Most Improved School Systems Keep Getting Better, pp. 14-28. New York: McKinsey & Company.

Mulkeen, A; Chapman, D; DeJaeghere, J; Leu, E.; and Bryner, K. (2005). Recruiting, Retaining, and Retraining Secondary School Teachers and Principals in Sub-Saharan Africa. Washington DC: AED, Global Education Center Working Paper Series.

National Association for Accreditation of Teacher Education (NCATE). (2008, February). Professional Standards for the Accreditation of Teacher Preparation Programs. Washington, DC: NCATE; http://www.ncate.org/Standards/NCATEUnitStandards/tabid/123/Default.aspx.

Newton, X.; Darling-Hammond, L.; Haertel, E.; and Thomas, E. (2010). Value-Added Modeling of Teacher Effectiveness: An exploration of stability across models and contexts. Educational Policy Analysis Archives, 18 (23): 1-23. Retrieved 17 January 2011 from http://epaa.asu.edu/ojs/article/view/810.

Porter, A; Youngs, P; and Odden, A (2001). Advances in Teacher Assessments and Their Uses. Pages 259-297 in Virginia Richardson (ed.), Handbook of Research on Teaching (4th edition). Washington, DC: American Educational Research Association.

Roth, R. (1996). Standards for Certification, Licensure, and Accreditation, Pages 242-378 in John Sikula, Thomas Buttery, and Edith Guyton (eds.), Handbook of Research on Teacher Education (2nd edition). New York: Macmillan.

Rothstein, J. (2010). Review of "Learning about Teaching." Boulder, CO: National Educational Policy Center, http://nepc.colorado.edu/thinktank/review-learning-about-teaching.

Schwille, J. and Dembélé, M. with J. Schubert (2007). Global Perspectives on Teacher Learning: Improving Policy and Practice. Paris: UNESCO Institute for International Educational Planning.

Shanker, A. and Geiger, K. (1993). A Call for Higher Standards for Teachers and Teacher Education. NCATE Quality Teaching 13 (23): 3.

Vavrus, F.; Matthew, T.; and Bartlett, L. (2010). Learner-Centered Pedagogy and Teacher Education in Africa. Draft UNESCO Booklet. New York: Teacher College, Columbia University.

West, B.B.; Jarchow, E.; and Quisenberry, N. (1996). Teacher Education Research in International Settings. Pages 1047-1107 in John Sikula, Thomas Buttery, and Edith Guyton (eds.), Handbook of Research on Teacher Education (2nd edition). New York: Macmillan.

Wilson, S. (2008). The Emperor's New Clothes: Do We Really Need Professional Education and Certification for Teachers? In Marilyn Cochran-Smith, Sharon Feiman-Nemser, and John McIntyre (Eds.), Handbook of Research on Teacher Education: Enduring Questions in Changing Contexts (3rd edition), pp. 851-54. New York: Routledge.

Wilson, S. and Youngs, P. (2005). Research on Accountability Processes in Teacher Education. Pages 591-643 in Cochran-Smith, Marilyn and Zeichner, Kenneth (Eds.) (2005). Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education. Mahwah, NJ: Lawrence Erlbaum Associates.

Zohry, A. (2007). Management Assessment Protocol (MAP). Cairo, Egypt: Education Reform Program.

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