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# Implementing EFA Strategy No. 9: The Evolution of the Status of the Teaching Profession (2000-2015) and the Impact on the Quality of Education in Developing Countries: Three Case Studies

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#### 2015

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GMR 2015 Background Paper

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# Abstract

This research investigates the changes in the status of the teaching profession during the EFA years (2000-present). Using a modified version of Quinn (1997) as the framework, the study has used the following components to assess changes in the status of the teaching profession: credentials, induction, professional development, authority/self-governance, and compensation. Teacher commitment is used as a proxy for educational quality. This study finds that the overall trend in the status of the teaching profession has improved at best and unchanged at worst. While induction and professional development displayed negative trends, credentials and authority both showed positive increases. Compensation (by contract type) and commitment were unchanged. These results are influenced by the positive trends in job satisfaction. Three case studies - Indonesia, Kenya, and Morocco - provide deeper context into the complicated nature of adjusting the status of the teaching profession and introduce a framework to help mitigate potential challenges for measuring the status of the teaching profession for future researchers.

## 1. Introduction

"Meeting in Dakar, Senegal, in April 2000, we, the participants in the World Education Forum, commit ourselves to the achievement of education for all (EFA) goals and targets for every citizen and for every society...To achieve these goals, we the governments, organizations, agencies, groups and associations represented at the World Education Forum pledge ourselves to:

(ix) Enhance the status, morale and professionalism of teachers."

(World Education Forum, 2000)

The Education for All (EFA) goals coalesced 164 governments and many partner organizations to raise the global bar on basic education for all children regardless of gender, race, ability, economic status or geographic location. Twelve strategies served as the underlying structure designed to contribute to the implementation and success of the six EFA goals. Strategy No. 9 was to "enhance the status, morale and professionalism of teachers." While significant strides have been made in the past 15 years, none of the six EFA goals will be achieved by 2015. There are innumerable reasons why the goals will not be achieved and this paper investigates the challenges associated with increasing the status of the teaching profession.

As with any occupation, there are numerous ways to evaluate the status of the teaching profession. These measurements include economic or monetary rewards, sociological prestige, internal satisfaction, educational attainment, educational achievement of students, perceived and real power, and health risks, to name a few. Additionally, there are various units of analysis through which to evaluate the selected measures. One might investigate the status of the teaching profession through the eyes of teachers, school administration, the state, school level stakeholders (i.e. parents and/or students), or society as a whole (i.e. how one group of workers perceive teaching as compared to their occupation or others). While this research draws on data from multi-national organizations and ministries of education to investigate the changes in policies which might influence the status of the teaching profession, to the extent possible the authors utilized classroom level data to capture the experience of teaching through the eyes of the teachers. Because teachers in primary schools typically occupy the lowest occupational status, and teachers in upper secondary teachers represents the average of the selected measures in their specific country contexts.

The paper begins with an overview of the challenges experienced by countries in relation to implementing Strategy No. 9. Next, the framework for the analysis is briefly discussed and particular adjustments explained. Third, data from TALIS 2008 and TALIS 2013 are presented to illustrate the trends in the status of teaching. Fourth, paper moves to investigate three country case studies -. Indonesia, Kenya, and Morocco - to carefully examine the policy environment in which Strategy No. 9 was being implemented. The paper concludes with recommendations and final comments.

# 2. Challenges of the state in relation to maintaining or increasing the status of teaching

"There is no universally agreed way to measure social status or ranking of an occupation."

(Varkey Gems Foundation, 2013)

The 12 strategies designed to support the six EFA goals did not strictly define what a state must, should, or ought to do. Instead, they focused "on the ways in which actors within countries can be supported by co-operation with regional and international agencies and institutions" (UNESCO, 2002, p. 10). In particular, UNESCO (2002) articulated several ways to support countries in the implementation of Strategy No. 9, including calling attention to the following aspects of teacher professionalism:

- working conditions;
- job descriptions;
- appointment mechanism;
- harmonizing national standards of the training, remuneration and certification of teachers;
- implementing a carefully planned teacher deployment policy and practice;
- improving the teacher recruitment process;
- establishing sub regional minimum standards for entry in the teaching profession;
- developing a code of professional and ethical conduct for teachers;
- increasing the emphasis and resources for in-service teacher training (UNESCO, 2002).

The positive aspect of this international strategy is that it has provided states with a comprehensive foundation to develop policies to support teachers, while allowing enough flexibility to articulate their own solutions based on context-specific needs. At the same time, this flexibility is somewhat problematic because of an absence of agreed-upon definitions, a lack of a systematic measurement framework, insufficient financial resources to implemented policies, as well as challenges related to accountability, advocacy, and alignment with EFA goals. These challenges are discussed below.

#### **Absence of Agreed Upon Definitions**

To start, there are a host of terms and definitions utilized in various sectors to convey the status of an occupation or a profession, ranging from a focus on occupational esteem, identity, attitudinal attributes, or prestige among others (See **Table 1** below). This variation can lead to confusion in articulating the precise aspect of teacher professionalism being addressed, implemented, and measured.

Term	Definition	Source
Occupational esteem	"The regard in which an occupation is held by the general public by virtues of the personal qualities which members are perceived as bringing to their core task."	(Hoyle, 2001)
Occupational identity	"The conscious awareness of oneself as a worker."	(Skorikov & Vondracek, 2011)
Occupational prestige	"Public perception of the relative position of an occupation in a hierarchy of occupations"	(Hoyle, 2001)
Occupational status	"A category to which knowledgeable groups allocate a particular occupation."	(Hoyle, 2001)
Professionalism	"The attitudinal attributes and ideology of those who are considered to be, or aspire to be considered as, professionals. These include a belief in the value of expertise, rigorous standards, and a public-service orientation."	(Quinn, 1997)
Professionalization	"The degree to which occupations exhibit the structural attributes, characteristics, and criteria identified with the professional model."	(Quinn, 1997)
Professionalization vs. professionalism	"Although professionalism is often considered part of the professionalization process, it is not considered a reliable indicator of the professional model."	(Quinn, 1997)
Teacher professionalization	"Professionalism depends not on compensation or status but on the affirmation of three principles in the conduct and governance of an occupation: 1. Knowledge is the basis for permission to practice and for decisions that are made with respect to the unique needs of clients; 2. The practitioner pledges his first concern to the welfare of the clients; 3. The profession assumes collective responsibility for the definition, transmittal and enforcement of professional standards of practice and ethics."	(Darling- Hammond, 1990)

Table 1. Terms and definitions utilized for professional status

Source: Authors.

#### **Baseline Challenges**

The need for accurate data in low- and middle-income countries is indisputable. The challenge of increasing or maintaining teacher status is complicated by the absence of not only this data but also a more systematic measurement framework. Unlike gross enrollment or repetition rates, there is no generally agreed upon measure of teacher status. Instead, it is more of an amorphous concept subject to location, teaching level, and perspective. The absence of a systemic measurement strategy makes it difficult to assess if a change has occurred and, if so, for whom.

#### **Financial Challenges**

Although the Dakar Action Framework boldly stated that no country seriously committed to education would be denied funds to achieve the EFA goals, the reality is that many countries were lacking resources to a devastating degree. The United Nations set an international benchmark of 20% of a state's national budget or 6% of GDP to be allocated for EFA goals. However, in 2004, most African countries averaged allocating between 5% to 10% of state budget to EFA goals, listing education as a low national priority, often being ranked fifth or lower (African Network Campaign for Education For All, 2004). From the launch of EFA, donors and governments alike began decreasing monies dedicated toward the six EFA goals and by 2014, basic education was globally underfunded by \$26 billion USD a year and continued its downward spiral (UNESCO, 2014). This decrease in funding was particularly problematic to states if one of their objectives was to raise teacher compensation. Teacher compensation is typically

the single largest line item in a state's education budget. Therefore, even small decreases in funding can have debilitating effects on compensation schemes.

#### **Accountability Challenges**

While the level of finances committed to a project is important, equally essential is ensuring that the designated funds reach the intended targets. The World Bank has conducted Public Expenditure Tracking Surveys (PETS) for nearly 20 years. These surveys found tremendous fluctuation in the percentage of resources that reach the recipient from the origin. For example, the Uganda 1996 survey found that only 13% of per student nonwage funds distributed annually by the central government reached schools. Specifically, 73% of schools received less than 5% of their funds (World Bank, ND). This example of "inefficient intersections," or the loss of funds when monies or resources are passed from one level of government to another, exemplifies the need for transparency and accountability (Steiner-Khamsi et al., 2009). Therefore, the monies that were committed to Strategy No. 9 may not have made it to its intended destination. In the case of Uganda, a unified coalition of policy makers and educators lobbied to decrease the number of layers through which teachers' salaries flowed. They were successful in their attempts and today the Ministry of Finance makes direct deposits into the teachers' accounts (Moriarty et al., 2010).

#### **Advocacy Challenges**

Although the last two decades have witnessed the increase in the number and power of coalitions demanding policy changes that are needed to achieve EFA goals, many challenges remain. In Brazil, although, teachers enjoy work stability, freedom of association and a relatively early retirement, they are so poorly paid that newly qualified teachers often leave the profession in less than four years if another opportunity exists (Education in Crisis, 2012). The Brazilian teachers' union fought for the Teachers' Wage Floor Law that set a baseline for the least amount a teacher could be paid based upon experience, location, and credentials (Moriarty et al., 2010). However, while the law was approved by the Brazilian Congress, it has faced significant challenges being enforced. In 2011 alone, 10 strikes took place as teachers fought to have their wages legally adjusted (Education in Crisis, 2012). Similarly in 2004, Guatemala First struggled to provide teachers with increased access to higher education and thus, an opportunity to increase their professionalization and compensation. However, the government pushed back on these efforts and opposed any real reform to this effect (Moriarty et al., 2010). In Colombia, the National Government issued Law 715 of 2001 as a temporary measure to curtail expenditures in light of the economic crisis experienced by the country. This law froze any growth on available resources resulting in the slow decline of available resources especially funds designated for teachers' salaries in the poorest and most marginalized communities. This law is due to be enforced until 2016 (Moriarty et al., 2010). These examples highlight that states experience significant challenges in both allocating funds to pay teachers and further in enforcing policy changes that have been approved by national governments.

#### **Contextual Challenges**

Perhaps no other country depicts the critical importance of context when designing and implementing international strategies, like the 12 crafted to support EFA, more so than Zimbabwe. At the turn of the century, Zimbabwe was the darling of Africa with a literacy rate of 98% and a solid education system as compared to its neighboring states. However, by 2006, teachers were being targeted for their role in defeating the ruling party. Violence and political deadlock ensued and teachers fled to neighboring countries to avoid persecution (Moriarty et al., 2010). In addition to persecution, health risks also play a critical role in context. Education systems in Sub-Saharan African countries, including Zimbabwe, have been decimated by HIV/AIDS leaving orphans, infected teachers, and grappling policy makers in its wake.<sup>1</sup> While Strategy No. 9 notes the recruitment of new teachers, this is at odds with the efficiency policies attached to wage bills. Specifically, the IMF's attempts to decrease wage bills when recruiting and hiring new teachers is desperately needed (African Network Campaign for Education For All, 2004).

#### **Alignment Challenges**

This misalignment between country priorities and EFA goals became evident after the EFA Protocol (2000) was established. Despite the protocol, some countries did not adjust their participatory plans (African Network Campaign for Education For All, 2004). This absence of revisions implies that either the participating countries and the EFA goals and protocol were in near perfect alignment or that the countries had little intention of migrating from their original plans. For example, while EFA placed its emphasis on basic education, South Africa argued basic education was not their focus and that technical and higher education was their priority (African Network Campaign for Education For All, 2004). This misalignment between the EFA and country levels goals placed a formidable barrier directly between policy and practice and the strategy to increase or maintain the status of teaching was not exempt.

## 3. Theoretical framework

To evaluate the trends of the status of teaching across time and in different contexts, this paper utilizes a modified version of Quinn's (1997) framework, which aligns with the stated strategy of enhancing the status, morale, and professionalization of teachers as noted by the Dakar Framework for Action:

"Teachers at all levels of the education system should be respected and adequately remunerated; have access to training and on-going professional development and support, including through open and distance learning; and be able to participate, locally and nationally, in decisions affecting their professional lives and teaching environments. Teachers must also accept their professional responsibilities and be accountable to both learners and communities."

(World Education Forum, 2000, p. 20)

<sup>&</sup>lt;sup>1</sup> Please see The World Bank (2009) "Courage and Hope: Stories from Teachers Living with HIV/AIDS in Sub-Saharan Africa" for insight on the impact of the disease on teachers, students, and education systems.

Similarly to Quinn (1997), this paper uses credentials, induction, professional development, authority, and compensation as the individual components that impact the status of teachers.

**Table** 2 below teases apart Strategy No. 9 as noted in the Dakar Framework for Action (World Education Forum, 2000, p. 20) and the International Framework to Put the Dakar Framework for Action on Education for All into Operation (UNESCO, 2002, p. 10) to illustrate the alignment with the Quinn (1997) framework.<sup>2</sup>

World Education Form (2000)		UNESCO (2002)		Quinn (1997)
Access to training	$\rightarrow$	<ul> <li>Teacher recruitment process;</li> <li>Harmonizing national standards of teacher training and certification;</li> <li>Establishing sub regional minimum standards for entry in the teaching profession</li> </ul>	$\rightarrow$	Credentials
Access to support	$\rightarrow$	Increasing the emphasis and resources for in-service teacher training	$\rightarrow$	Induction
Access to on-going professional development	$\rightarrow$	Increasing the emphasis and resources for in-service teacher training	$\rightarrow$	Professional Development
Participate locally and nationally in decisions affecting their professional lives and teaching environments	$\rightarrow$	Developing a code of professional and ethical conduct for teachers	$\rightarrow$	Authority
Adequately remunerated	$\rightarrow$	Harmonizing remuneration of teachers	$\rightarrow$	Compensation

Table 2. Alignment of Quinn (1997) framework to the World Education Forum (2000) andUNESCO (2002)

Source: Authors.

One important change the authors made to Quinn's (1997) framework was replacing standardized test scores as a proxy for educational quality. Instead, this paper uses teacher commitment to represent educational quality. The authors offer three reasons for this adjustment. First, recent studies have shown that there is no correlation between the status of teachers and student outcomes (Varkey Gems Foundation, 2013). Second, other studies have a found that commitment is negatively related to employee turnover (Cooper-Hakim & Viswesvaran, 2005) and counterproductive employee behaviors (Dalal, 2005). Finally, research shows that there is a significant and positive relationship between organizational commitment and job performance (Kapagoda, 2011).

<sup>&</sup>lt;sup>2</sup> The International Framework to Put the Dakar Framework for Action on Education for All into Operation (UNESCO, 2002, p. 10) included the following components that were absent from the Dakar Framework for Action (World Economic Forum 2000): working conditions, job descriptions, appointment mechanisms, and implementing a carefully planned teacher deployment policy and practice.

For the purpose of this research, this paper applies the following definition of teacher status:

"The degree to which occupations exhibit the structural attributes, characteristics, and criteria identified with the professional model."

(Quinn, 1997)

The five individual components utilized from Quinn (1997) have the following definitions:

- **Credentials:** The use of professional criteria for hiring teaching job candidate and if the teacher is instructing in the subject for whom he or she was formally trained (p. vii).
- **Induction:** The provision and perceived effectiveness of induction and mentoring programs for beginning teachers (p. vii).
- **Professional Development**: The extent of participation of teaching staff in activities sponsored by professional teaching organizations and financial support for a teachers' continuing education (p. vii).
- Authority: The extent of influence collectively wielded by faculties over school policymaking and individual autonomy exercised within their classrooms (p. vii). For the purpose of this research, this definition is expanded to include self-governance, which is defined as professional organization's ability to enforce behavioral and ethical standards for those practicing in a particular industry or profession. This may include control or substantial influence over admission policies, curriculum, and accreditation policies of professional training institutions (Hodson & Sullivan, 1995) in (Quinn, 1997, p. 7).
- **Compensation:** This component includes the highest salary levels offered by schools (p. vii). This definition has been expanded to include the structure of these compensation schemes and contract type.

The working definition for teacher commitment is noted below:

• Commitment: A strong motivation and commitment to teaching (Chang, 2014, p. 34).

A more detailed table is included in the Appendices of this paper. This appendix table documents the exact variables utilized from TIMSS (1999, 2011) and SACMEQ (I, III) inclusive of the variable names and survey.

# 4. Evidence on trends in teacher status- TALIS 2008 and TALIS 2013

"Teachers are essential players in promoting quality education, whether in schools or in more flexible community-based programmes; they are advocates for, and catalysts of, change. No education reform is likely to succeed without the active participation and ownership of teachers."

#### (World Education Forum, 2000)

Low- and middle-income countries are not isolated in their attempts to increase or maintain the status of teachers. TALIS 2008 and 2013 provides robust data to compare the changes in the status of teachers in OECD member and partner countries. This portion of the analysis isolates only those countries that participated in TALIS 2008 and 2013 and evaluates the change in those previously defined components associated with the status of teachers. These countries (n=15) include: Austria, Brazil, Belgium (Flanders),<sup>3</sup> Bulgaria, Denmark, Estonia, Italy, Korea, Malaysia, Mexico, Norway, Poland, Portugal, Slovak Republic, and Spain. The following section organizes the TALIS 2008 and TALIS 2013 findings into the previously defined six components.

#### Credentials

The trend in the educational attainment of lower secondary teachers is positive. Teachers with below an ISCED Level 5 of education decreased by 18% and teachers with an ISCED Level 5B education decreased by 15%. Conversely, the number of teachers achieving an ISCED Level 5A education increased by 13%. However, the largest gain was seen in the teachers with an ISCED Level 6 education. The percentage of lower secondary teachers with this level of educational attainment increased by 142%.<sup>4</sup>

	Below ISCED Level 5	ISCED Level 5B	ISCED Level 5A	ISCED Level 6	Total
<b>TALIS 2008</b>	1,740	4,927	43,600	401	50,668
<b>TALIS 2013</b>	1,433	4,201	49,090	971	55,695
% Change	-18%	-15%	13%	142%	10%

Table 3. Changes in lower	secondary teacher	educational attainment
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Source: TALIS 2008; TALIS 2013.

TALIS 2013 asked lower secondary teachers to state how much formalized education or training they had had in content, pedagogy, and practice for the subject they instruct. Positively, 70% of these lower

<sup>&</sup>lt;sup>3</sup> For the sake of brevity, Belgium (Flanders) is noted as Belgium (Fl) for the balance of this report.

<sup>&</sup>lt;sup>4</sup> TALIS 2008 phrased the question as: "What is the highest level of formal education that you have completed?" The choices were as follows: "1. Below ISCED Level 5, 2. ISCED Level 5B, 3. ISCED Level 5A Bachelor degree, 4. ISCED Level 5A Masters degree, 5. ISCED Level 6. TALIS 2013 phrased the question as: "What is the highest level of formal education you have completed?" The choices were as follows? 1. Below ISCED Level 5, 2. ISCED Level 5, 2. ISCED Level 5, 3. ISCED Level 5B, 4. ISCED Level 5B, 4. ISCED Level 5B, 3. ISCED Level 5B, 4. ISCED Level 5B, 4.

secondary teachers stated that they had been educated in all of the subjects they instruct. Twenty-one percent of the teachers noted that they were fully trained for some subjects and 9% said that they were trained for none subjects they instruct. Upon closer examination, one finds that Brazilian teachers make up one third of those who stated they received no training in content, pedagogy, or practice for the subjects they instruct. While it is a positive finding that 70% of teachers have been formally educated for all of the subjects they instruct, it is difficult to ascertain if this is an improvement since the question was asked in a slightly different manner in TALIS 2008. In TALIS 2008, over 90% of teachers stated that the subjects they instruct were included in their teacher training but it did not parcel out content, pedagogy, and practice as was done in TALIS 2013. From the basic percentages, it appears as though the number of teachers who are fully training for the subjects they instruct through teacher training decreased by 20%. However, the more nuanced way in which TALIS 2013 framed the question may have adjusted the responses.

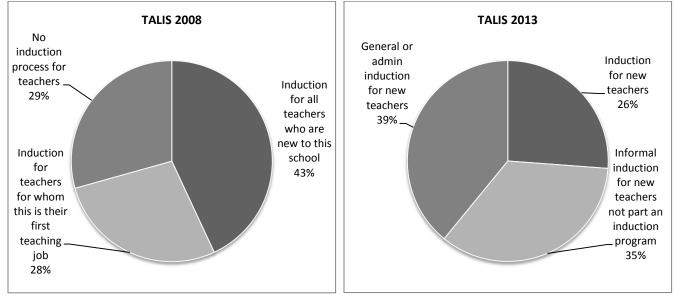
#### Induction

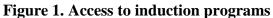
Induction programs are designed to help teachers new to the profession or the school acclimatize into the environment. TALIS 2008 and TALIS 2013 phrased the question on induction slightly differently.<sup>5,6</sup> TALIS 2008 included a response option for those principals whose schools did not offer induction programs for beginning teachers or teachers who are new to the school. In 2008, 43% of principals said that there was a formalized induction program at their school that was designed for teachers new to the school and 28% stated that there was an induction program developed for teachers who were in their first year of the profession. The remaining 29% responded that there was no formal induction process at their school. In 2013, 26% of principals stated that there was an induction process for new teachers, 35% responded that there was an informal induction process for teachers but it was not part of a more formalized induction program, and the remaining 39% said that there was a general or administration induction for teachers. Isolating the answers to address the presence of a formalized induction program, one can deduct that the percentage of those principals who answered affirmatively to the existence of an induction program decreased by 10% (See

<sup>&</sup>lt;sup>5</sup> TALIS 2008 did not include a question on the teacher questionnaire about access to induction programs. Because this information was included in both the TALIS 2008 and the TALIS 2013 Principals questionnaires, this information was included in lieu of data from the teacher questionnaires.

<sup>&</sup>lt;sup>6</sup> In TALIS 2008, the question was phrased as "When a teacher begins teaching at this school, does he/she undertake a formal induction process?" The choice of answers included: 1. Yes, for all teachers who are new to this school. 2. Yes, but only for teachers for whom this is their first teaching job, 3. No, there is no induction process for teachers who are new to this school. In TALIS 2013, the question was phrased as "Do new teachers at this school have access to an induction program?" The choice of answers included 1.There is an induction program for new teachers, 2. There are informal induction activities for new teachers not part of an induction program, 3. There is a general and/or administrative introduction to the school for new teachers. For comparability purposes, in TALIS 2013, principals who responded that the program was informal (option 2) or a general and/or administrative introduction (option 3) were noted as not having a formal induction program. Therefore, options 1 and 2 in TALIS 2008 corresponds to option 1 in TALIS 2013 and option 3 in TALIS 2008 corresponds to options 2 and 3 in TALIS 2013.

**Figure** 1 below).<sup>7</sup> This finding suggests a potential negative trend in the prevalence of induction programs. However, given the nuanced ways in which the questions were phrased in TALIS 2008 and TALIS 2013, caution should be given to this finding.





Source: TALIS 2008; TALIS 2013.

<sup>&</sup>lt;sup>7</sup> This percentage was derived by summing the responses to TALIS 2008 (n=2,013) and TALIS 2013 (n=3,836) and dividing by the total responses for that question (TALIS 2008 n= 2,849; TALIS 2013= 6,296) and then subtracting the difference.

**Figure 2** below details the variation in access to induction programs as noted by the principals of the 15 countries being evaluated. Brazil showed the largest increase in the number of principals who affirmatively stated that their schools offered at least informal induction programs.<sup>8</sup> This number increased by 20% between 2008 and 2013. Mexico and Spain also saw an increase by 15% each. Italy was the only country that remained virtually unchanged. Poland, Belgium (Fl), Australia, and Slovak Republic all demonstrated at least a 30% decrease in the number of schools, which provided at least informal induction programs for their teachers regardless if they were new to the profession or new to the school.

<sup>&</sup>lt;sup>8</sup> These numbers are derived by summing the totals of TALIS 2008 options 1 and 2 and TALIS 2013 options 1 and 2.

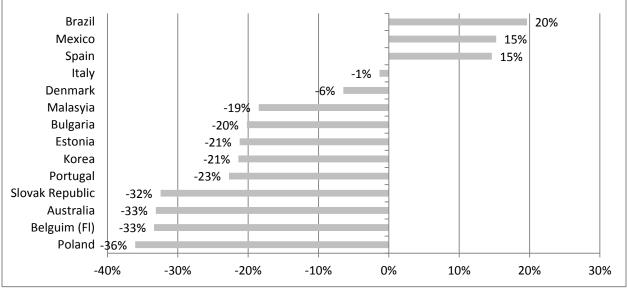


Figure 2. Changes in access to induction programs

Source: TALIS 2008; TALIS 2013.

#### **Professional Development**

While it is difficult to compare the responses in TALIS 2008 to TALIS 2013 due to the variation in the questionnaire wording, one can investigate the variation within the countries for the two years being assessed. In 2008, Korea had the highest percentage of teachers (55%) who participated in professional development within the last 18 months and Norway's teachers had the lowest rates (31%) of participation. This results in a 24% spread. In TALIS 2013, 46% of teachers in Korea noted that they had participated in professional development in the past 12 months. Compared to 26% of teachers in Belgium (Fl), this results in a 20% spread. Although the variation between TALIS 2008 and TALIS 2013 decreased by 4%, minimums and maximums have also lowered. The percentage of teachers who participated in professional development decreased by 5% (TALIS 2008 31%, TALIS 2013 26%) and the maximum decreased by 9% (TALIS 2008 55%, TALIS 1013 46%). These figures suggest a slight negative trend in the percentage of teachers who participated in professional development decreased in professional development <sup>9</sup> (See **Table 4** below).

<sup>&</sup>lt;sup>9</sup> TALIS 2008 assessed professional development by asking the following in the teacher questionnaire "During the last 18 months, did you participate in any of the following kinds of professional development activities, and what was the impact of these activities on your development as a teacher?" The choices for professional development activities included: a. Courses/workshops (e.g. on subject matter or methods and/or other educational-related topics), b. Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational problems), c. Qualification program (e.g. a degree program), d. Observation visits to other schools, e. Participation in a network of teachers formed specifically for the professional development of teachers, f. Individual or collaborative research on a topic of interest to you professionally, g. Mentoring and/or peer observation and coaching, as part of a formal school arrangement. TALIS 2013 included the following professional development question "During the last 12 months, did you participate in any of the following professional development. Furthermore, this report does not include an analysis of the amount of time spent in professional development. Furthermore, this report only includes responses to the same categories asked in TALIS 2008. Two extra categories ("observational visits to businesses premises, public organizations,

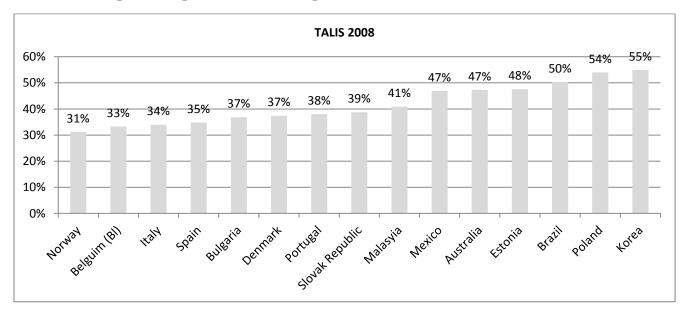
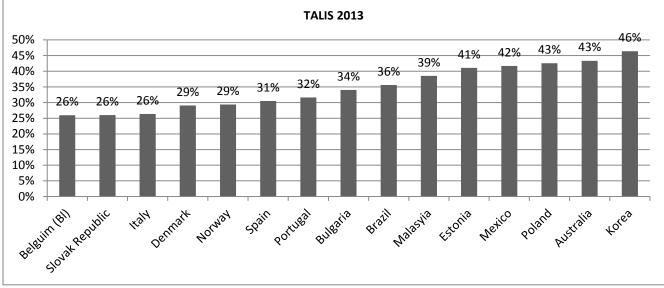


Table 4. Participation in professional development activities

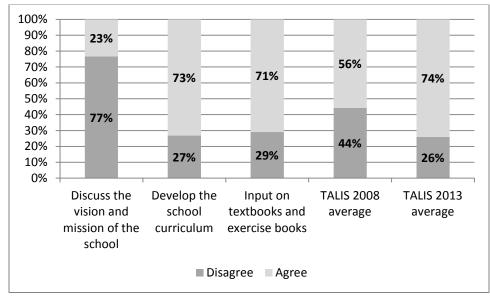


Source: TALIS 2008; TALIS 2013.

non-governmental organizations" and "in-service training courses in business premises, public organizations, non-governmental organizations") were not asked in TALIS 2008 and therefore, not included in this analysis.

#### Authority

Overall, the trend in teacher authority was positive. In 2008, approximately 55% of teachers felt that they had some input on the school vision, the curriculum, and resources such as textbooks and exercise books. In 2013, this percentage increased to nearly 75%.<sup>10</sup> While TALIS 2013 did not parcel out what type of authority teachers enjoyed, TALIS 2008 detailed the responses and large differences were found. For example, less than 25% of teachers agreed that they had some authority in the school vision and mission and nearly 75% of teachers stated that they had some authority with regard to developing the school curriculum (See **Table 5** below). Importantly, there were no questions asked on either TALIS 2008 or TALIS 2013 regarding self-governance or the presence and role of teachers unions.



#### Table 5. Authority on school decisions

Source: TALIS 2008; TALIS 2013.

<sup>&</sup>lt;sup>10</sup> In TALIS 2008, this question is phrased "How often do you do the following in this school?" The first three subjects relate to authority. They are a. Attend staff meetings to discuss the vision and mission of the school, b. Develop a school curriculum or part of it, c. Discuss and decide on the selection of instructional media (e.g. textbooks, exercise books). The answer choices are 1. Never, 2. Less than 1 time per year, 3. Once per year, 4. Three to four times per year, 5. Monthly, 6. Weekly. To increase comparability to TALIS 2013, these answers were combined as "agree" (1, 2 and 3) and "disagree" (3, 4, and 5). TALIS 2013 did not ask as detailed questions as TALIS 2008. Instead, one question (TT2G44A) was phrased as "This school provides staff with opportunities to actively participate in school decision." The following choices were given 1-strongly agree, 2-strongly disagree, 3-agree, 4-strongly agree. For comparability to TALIS 2008, these were recoded as "agree" (1 and 2) and "disagree" (3 and 4).

## Compensation

**Figure 3** below illustrates different examples of compensation schemes and the associated challenges or benefits of each. Most developing countries fall into Quadrant IV, where salaries start low and stay low. These countries may experience both attraction and retention problems. Whereas countries in Quadrant II which have low starting salaries but progression salary ladders, may only experience attraction challenges. The opposite is true for countries in Quadrant III, which have high starting salaries but may experience high teacher attrition should other opportunities arise. Countries in Quadrant I structure their teacher compensation schemes that allow for a competitive starting salary and progressive salary ladder to encourage high retention rates (Harris-Van Keuren, 2011). Neither TALIS 2008 nor TALIS 2013 asked teachers questions regarding their compensation packages. Given the importance of this information in measuring the status of teachers, the authors encourage the OECD to consider including brief question on this topic.

QII	QI
Competitive Starting Wage	Competitive Starting Wage
and	and
Compressed Salary Ladder	Progressive Salary Ladder
(Retention Challenges)	(Competitively Proportioned)
QIII	QIV
Low Starting Wage	Low Starting Wage
and	and
Progressive Salary Ladder	Compressed Salary Ladder
(Attraction Challenges)	(Attraction and Retention Challenges)

#### Figure 3. Salary compression and progression matrix

Source: Harris-Van Keuren 2011.

The presented above matrix is heavily influenced by the type of employment contract teachers are offered. This report finds that the composition of the teaching cadre by contract type is consistent from 2008 to 2013.<sup>11</sup> In both years, the percentage of teachers who were permanently employed was between 83% and 84%. The percentage of teachers who were hired on a fixed contract for more than 1 school year was between 5% and 6% and those who were hired on contracts for one school year or less was between 12% and 13%. Therefore, the trend on the employment of teachers by contract type is unchanged.

**Table 6** below shows the percent change in the number of teachers hired by contract type and the overall increase or decrease in the number of teachers hired by country. For example, Brazil had a spike in the overall percentage of teachers hired by contract at 127% but the majority of those hired were on fixed term contracts and not permanent hires. Italy demonstrated a cut in the number of teachers despite the

<sup>&</sup>lt;sup>11</sup> TALIS 2008 phrased the question as "What is your employment status as a teacher at this school?" Potential answers were 1. Permanent employment (an on-going contract with no fixed end-point before the age of retirement), 2. Fixed term contract for a period of more than 1 school-year, 3. fixed-term contract for a period of 1 school-year or less. TALIS 2013 phrased the question in the same way as TALIS 2008.

type of contract<sup>12</sup> and Spain showed an increase in the percentage in the number of teachers permanently employed and fewer teachers hired with fixed-term contracts. Therefore, while the trend for the percentage of teachers hired by contract is unchanged overall, there is notable variation depending on the context.

	Permanently employed	Fixed-term contract: More than 1 school year	Fixed-term contract: 1 school year or less	Number of Teachers Hired by Contract
Australia	-7%	-24%	-15%	-9%
Belgium (Fl)	-4%	-25%	-23%	-8%
Brazil	106%	269%	177%	127%
Bulgaria	-19%	-25%	-37%	-21%
Denmark	-5%	260%	33%	-3%
Estonia	2%	15%	-6%	2%
Italy	-36%	na	-37%	-36%
Korea	-14%	188%	2567%	0%
Malaysia	-27%	-97%	-96%	-30%
Mexico	-17%	137%	30%	-6%
Norway	20%	102%	27%	22%
Poland	39%	-50%	-20%	23%
Portugal	36%	-29%	2%	20%
Slovak Republic	10%	28%	21%	12%
Spain	8%	-56%	-8%	1%
<b>Contract Type</b>	7%	40%	17%	10%

Table 6. Employment contract type TALIS 2008 to 2013, (% change)

Source: TALIS 2008; TALIS 2013.

#### Commitment

The impact of a teacher's commitment to their students and the profession cannot be understated. Teacher professionalization advocates have argued that a stronger commitment of teachers is one of the outcomes most likely to be positively affected by teacher policy reforms (Quinn, 1997). Commitment can be measured using several different indicators. These include time spent with students afterschool (in a non-compensatory role), meeting with parents, participation in parent-teacher committees and/or one-on-one meetings, financial and time investments in voluntary professional development, mentoring, and years of work experience as a teacher to name a few. It can also include verbal commitments. In this paper, trends in the years of work experienced are investigated as well as verbal commitments.

Similarly to the trend in hiring by contract type, the years of work experience between 2008 and 2013 have remained relatively unchanged. There is small variability on the extremes. For example, the percentage of teacher with less than two years of work experience decreased from 8% to 5% and those

<sup>&</sup>lt;sup>12</sup> Italy does not have fixed multi-year contacts and therefore, there is no data available for this category.

working for more than 20 years increased by 5% (from 35% to 40%). While these percentages demonstrate increased commitment by the existing teachers, it could also highlight a decrease in the overall attractiveness of the occupation in light of other options for those just entering into the workforce. Portugal, for example, had such a low number of new teachers in 2013 that the percent registered as zero. In fact, Norway and Korea were the only two countries that had higher percentage of teachers in their first two years of working in 2013 than in 2008 (See **Table 7** below).<sup>13</sup>

	TALIS 2008			TALIS	TALIS 2013			
Country	first 2	3-10	11-20	20+	first 2	3-10	11-20	20+
	years	years	years	years	years	years	years	years
Australia	11	28	25	35	7	31	25	37
Belgium (Fl)	9	35	22	34	8	35	27	30
Brazil	10	39	32	19	5	29	32	35
Bulgaria	6	17	29	48	3	11	23	63
Denmark	9	35	17	39	5	36	26	33
Estonia	6	21	27	46	4	17	24	55
Italy	6	20	21	53	2	24	28	46
Korea	6	26	33	34	8	25	23	45
Malaysia	10	37	37	16	8	33	36	23
Mexico	9	28	29	34	5	24	24	46
Norway	8	32	21	39	9	32	29	30
Poland	8	32	30	31	3	23	34	41
Portugal	4	24	47	26	0	11	45	43
Slovak Republic	8	29	22	41	6	24	31	39
Spain	6	28	31	35	1	24	33	41
TALIS Average	8	29	28	35	5	25	29	40

Table 7. Years of work experience as a teacher (%)

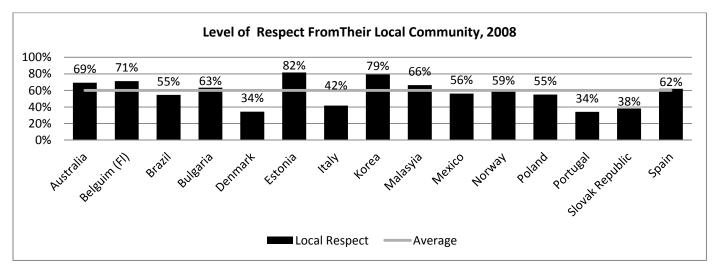
Source: TALIS 2008; TALIS 2013.

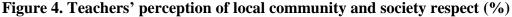
One way to consider the status of the teaching profession is to ask teachers about whether (and to what extent) they believe that society values the work they do. **Figure 4** investigates the level of respect teachers believe they receive from local communities in 2008 and from society as a whole in 2013. Because these questions were poised differently, they ultimately elicit different answers and while the answers are not directly comparable, they are informative.<sup>14</sup> For example, the level of respect teachers experience from the local community varies dramatically. In 2008, teachers in Denmark and Portugal

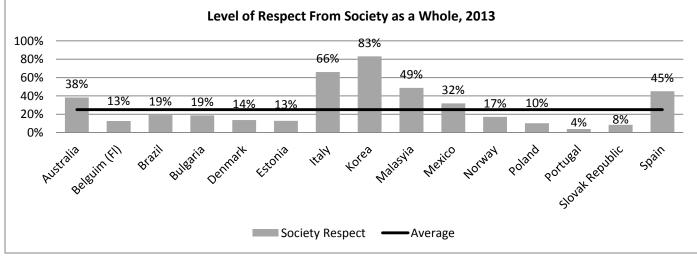
<sup>&</sup>lt;sup>13</sup> TALIS 2008 phrased the question as "How long have you been working as a teacher?" The potential answers were 1. This is my first year, 2. 1-2 years, 3. 3-5 years, 4. 6-10 years, 5. 11-15 years, 6. 16-20 years, 7. More than 20 years. TALIS 2013 phrased the question as "How many years of work experience do you have at this school?" Open answer response.

<sup>&</sup>lt;sup>14</sup> TALIS 2008 phrased the question as "Teachers in this local community are well respected." The answer choices were 1. Strongly disagree, 2. Disagree, 3. Agree, 4. Strongly agree. TALIS 2013 phrased the question as "I think that the teaching profession is valued in society." The answer choices were 1. Strongly disagree, 2. Disagree, 3.Agree, 4.Strongly agree.

noted the lowest levels of respect felt from their local communities at 34%. In contrast, teachers in Estonia and Korea felt a much higher level of respect from their local communities at 82% and 79% respectively. The average level of respect from a teacher's local community was, on average, 60%. Because the question was phrased differently in TALIS 2013, it is impossible to assess if the same countries felt differently about the level of respect garnered from their local community. Instead, TALIS 2013 inquired about the level of respect teachers received from society as a whole. On average, only 25% of teachers from these 15 countries felt that teachers were respected by society. Korea again topped the list with 83% of teachers expressing that society respected the teaching profession and Portugal was again at the bottom of the list with only 4%. Given the incomparable nature of the data, no conclusions can be drawn on the trend in this category.

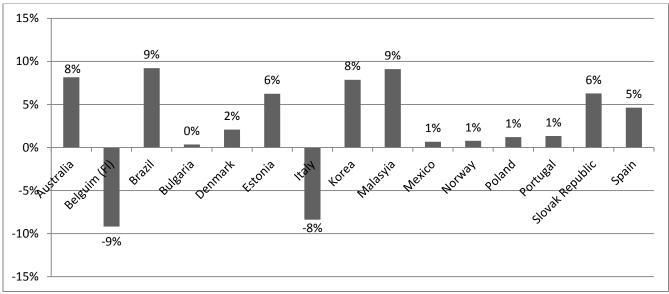






Source: TALIS 2008; TALIS 2013.

Finally, TALIS 2008 and TALIS 2013 asked existing teachers how satisfied they are with their job.<sup>15</sup> The results were mixed. On average, 87% teachers surveyed in TALIS 2013 reported being satisfied with their job. This is a slight decrease from the 90% satisfaction level of TALIS 2008 teachers. **Figure 5**, organized alphabetically, illustrates the change in teacher satisfaction across the 15 countries included in this analysis. Belgium (Fl) and Italy both noted a decrease in the percentage of teachers satisfied with their teaching jobs, while Australia, Brazil, Denmark, Estonia, Korea, Malaysia, Slovak Republic, and Spain experienced a positive increase. Only Bulgaria remained unchanged. While Mexico, Norway, Poland, and Portugal all noted very small, yet positive increases. Overall, there appears to be positive trend in teacher satisfaction.



#### Figure 5. Teacher satisfaction with their job (%)

Source: TALIS 2008; TALIS 2013.

Taken together, the overall trend in the status of teachers is positive at best and unchanged at worst. While induction and professional development displayed negative trends, credentials and authority both showed positive increases. Compensation (by contract type) and commitment were unchanged. These results are influenced by the positive trends in job satisfaction. In light of these findings, there remains one interesting final statistics. Despite these previously mixed results, almost 75% of teachers in 2013 would choose to be a teacher again if given the choice. This fact generates some concluding thoughts. First, if such a large percentage of teachers would choose the profession again, then whose perspective of the profession are researchers interested in? If there is an interest in decreasing teacher attrition (especially for teachers new to the profession), then the perspective of the teachers with less than 5 years of work experience is of critical importance. However, if there is an interest in increasing the types or numbers of individuals attracted to the profession, then the thoughts of prospective candidates become the necessary focus. In short, because the status of the profession varies by the context, policy makers

<sup>&</sup>lt;sup>15</sup> TALIS 2008 and TALIS 2013 phrased the question as "All in all, I am satisfied with my job." The answer choices were 1. Strongly disagree, 2. Disagree, 3. Agree, 4. Strongly agree.

and researchers should see this as an advantage to craft more customized solutions. Researchers might consider asking more fine-tuned questions. Perhaps asking "What is the status of teachers?" is informative for assessing the profession in comparison to other professions, but it is relatively unhelpful when crafting policy to address a particular challenge at hand. For example, one might ask "How do we increase the status of primary teachers in rural locations (so there is greater supply of qualified individuals for these positions)?" More nuanced questions might lead to more targeted strategies that generate more effective results. This is further discussed in the Recommendations section of the paper.

# 5. Case studies

This report provides case studies for three countries. These include Indonesia, Kenya, and Morocco. These countries were selected because they participated in either TIMSS or SACMEQ and all classified as "low-income" or "lower-middle income" counties by the World Bank<sup>16</sup> (for more information on the data sources and limitations for the case studies, see **Appendix 1** and for a summary of the variables included within each component see **Appendix 2**). This portion of the paper explores the context for each of the components of teacher status. Different from the first half of this paper, these case studies explore the context for each of the components of the components of the status of teaching profession. These details allow for a richer comparison between countries and a deeper (and fuller) understanding of the environment in which Strategy No. 9 was being implemented.

# **Case Study 1: Indonesia**

Indonesia, which is the wealthiest of the three countries in the study, has experienced a significant growth in GDP (PPP) from \$790 in 1999 to \$3,557 in 2014 (See

<sup>&</sup>lt;sup>16</sup> See World Bank economic classifications in addition to other grouping measures at www.data.worldbank.org/about/country-classifications

**Table** 8 below). Notwithstanding the growth in GDP, Indonesia has had the lowest percentage of GDP slated for educational expenditures compared to Morocco and Kenya. However, its investment in education has gradually increased from 2.5% of GDP in 2000 to 2.8% of GDP in 2014. In real terms, education spending practically doubled between 2000 and 2014, partly from the fulfillment in 2009 of a constitutional commitment to spend 20% of the government budget on education (Chang et al., 2014). Most of this additional spending went to teachers through increased recruitment as well as significant improvements in pay (Cerdan-Infantes & Makarova, 2013; also, see discussion in sections below). Examining the individual components which influence the status of teachers, the data supports the conclusion that the policy and practice changes implemented by the Indonesian government may have had a positive effect on the status of teachers. Each component and the corresponding data are associated in turn below.

Indicator	Indo	nesia*
mulcator	2000	2014
Population (in millions)	$209^{1}$	247 <sup>2</sup>
GDP per capita (PPP) (in US\$)	$790^{1}$	3,557 <sup>2</sup>
Educational Expenditures (% of GDP)	$2.5^{3}$	$2.8^{4}$
Teachers' salaries (% of total educational expenditures)	93.0 <sup>14</sup>	59.8 <sup>8</sup>
Gross enrollment (in millions)		
Primary	28.5 <sup>10</sup>	$30.8^{12}$
Lower Secondary	$9.4^{10}$	$12.2^{12}$
Upper Secondary	5.3 <sup>10</sup>	9.3 <sup>12</sup>
Teaching cadre (in millions)		
Primary	1.3 <sup>15</sup>	1.9 <sup>16</sup>
Lower Secondary	$605,458^{15}$	837,017 <sup>16</sup>
Upper Secondary	404,738 <sup>15</sup>	570,018 <sup>16</sup>
Education structure	6-	3-3
Net Enrollment Rates (%)		
Primary	$92^{20}$	$92^{21}$
Lower Secondary	$60^{20}$	$71^{21}$
Upper Secondary	39 <sup>20</sup>	51 <sup>21</sup>
Academic calendar	July t	o June

Table 8. Indonesia economic and educational statistics

\*In Indonesia, the division in secondary school is termed "junior secondary" and "senior secondary."

**Source:** 1. World Bank Development Indicators; 2. World Bank Development Indicators 2012 data; 3. World Bank Development Indicators 2001 data; 4. World Bank Development Indicators 2011 data; 5. World Bank Development Indicators 2010 data; 6. World Bank Development Indicators 2009 data; 7. UNESCO UIS 2012 data; 8. World Bank Educational Statistics 2011 data; World Bank Educational Statistics 2009 data; 10. UIS UNESCO 2000 data; 11. UIS UNESCO 2013 data; 12. UIS UNESCO 2012 data; 13 UIS UNESCO 2009 data; 14. Estimated from World Bank 2007 Publication; 15. World Bank Educational Statistics 2011 data; 16. World Bank Educational Statistics 2011 data; 17. World Bank Educational Statistics 2003 data; 18. World Bank Educational Statistics 2013 data; 19. World Bank Educational Statistics 2004 data; 20. BPS-RI data, www.bps.go.id, accessed May 29, 2014; 21. BPS-RI,Susenas 1994-2012. These data are 2012. 22. UIS UNESCO 2002; 23. UIS. UNESCO 2012 gross enrollment data; 24. UIS. UNESCO 2003 gross enrollment data.

#### Credentials

The 2005 Teacher Law was instrumental in defining competencies of Indonesian teachers in four areas (pedagogic, personal, social, and professional), incorporating these competencies into national teacher standards, and defining the teacher certification process and the qualifications required for such certification. Importantly, the Teacher Law linked teacher certification to strong financial incentives. Teachers with a four-year university degree or with a high rank in the civil service (rank IV) or very senior teachers qualify for certification. In this context, certification implies a doubling of income, which is used to motivate teachers to become more committed to and productive in their profession.

According to the Law, all Indonesian teachers must be certified by 2015 and training courses have been made available through teacher education institutions, regular universities with teacher education faculties, the Open University, centers for the development and empowerment of teachers and education personnel, and cluster-based working groups.

The available data suggests that these changes have contributed to the increase in the number of qualified teachers in Indonesian schools. Specifically, Chang et al. (2014) report a significant increase in the percentage of teachers with a four-year degree between 2006 and 2011 based on the teacher census of the Unique Identifier for Educators and Education Personnel (NUPTK). Since 2006, the percentage of teachers with a four-year degree increased by 176%, while the number of teachers with less than two-year post-secondary diploma decreased by 23% (See **Table 9** below).

Table 9. Number and education of primary school teachers in Indonesia

Year	Teaching Cadre	Untrained	Post-Secondary Diploma				Master's	Doctorate	Total
			1 year	2 year	3 year	4 year	Degree	Doctorate	Totai
2006	(n)	414,310	11,673	586,709	24,431	209,798	1,198	4	1,248,123
	(%)	33.19	0.94	47.01	1.96	16.81	0.10	0.00	100.00
2011	(n)	388,454	11,647	449,720	211,406	578,111	5,579	8	1,644,925
	(%)	23.62	0.71	27.34	12.85	35.15	0.34	0.00	100.00
Difference	(n)	-25856	-26	-136989	186975	368313	4381	4	396802
	(%)	-6.24	-0.22	-23.35	765.32	175.56	365.69	100.00	31.79

**Source:** Adapted from Chang et al. (2014). Based on 2006 SIMPTK/NUPTK and 2011TUPTK teacher census. Note: Teachers of Islamic schools are not included in these figures. SIMPTK=Management Information System for Educators and Education Personnel. NUPTK=Unique Identifiers for Educators and Education Personnel

Similarly, TIMSS data reveals the growth in the number of qualified teachers between 1999 and 2011 and an increase in the percentage of teachers working in their area of specialization (See

**Table** 10). In 1999, for example, 19% (n=24) of TIMSS math teachers in Indonesia majored in both math and education and by 2011, this rose slightly to 25% (n=40). The rising percentages in both the number of qualified teachers and teachers working in their areas of academic specialization suggest that the 2005 Teacher Law had important positive effects by encouraging unqualified teachers to upgrade academic qualifications. As Chang et al. (2014) emphasize, it is likely that these changes are directly attributable to the financial incentives internal to the certification program.

Year	Degree Specialization	( <b>n</b> )	(%)
1999	Majored in math and education		0.19
	Major in education but not math		0.03
	Majored in math but not education		0.51
	All else	35	0.27
	Total	129	1.00
2011	Majored in math and math education	40	0.25
	Major in math education but not math	33	0.20
	Majored in math but not math education	74	0.46
	All other majors	13	0.08
	No formal education beyond upper secondary	2	0.01
	Total	162	1.00

#### Table 10. Indonesian teacher certification by major

Source: TIMSS 1999; TIMSS 2011.

Importantly, an experimental study by DeRee et al. (2012) points out that the introduction of the certification process, and the accompanying financial incentives made available for teachers, have also positively contributed to the financial wellbeing of Indonesian teachers. In particular, DeRee et al. (2012) found that certification could lead to a 27 percentage point decrease in the likelihood of teachers holding a second job because the professional allowance decreases the need to rely on such jobs to supplement income. The study also suggests that this income effect is also reflected in a decrease in the number of teachers who report problems financially supporting their households. Potentially, this could also reduce teacher absenteeism, while enabling teachers to participate in professional development and/or devote more time to their profession.

#### Induction

In Indonesia, Ministerial Regulation on an Induction Program for New Teachers (2010) has articulated specific guidelines for school principals, school supervisors, and senior teachers to conduct an induction program for new teachers. According to the regulation, "when new teachers pass the induction program, they can become permanent, fully paid government officials and are eligible for certification" (Chang et al., 2014, p. 64). Acknowledging that a beginning teacher requires closer supervision and mentoring, this policy has linked the beginning teacher induction program and the school's classroom assessment report with the certification process and completion of the probationary period. Importantly, the government has made funding available (through the BERMUTU program) for a professional development program to strengthen the capacity of principals and supervisors (Chang et al., 2014).

The implementation of the induction programs has started in the early 2010s, after the modules had been prepared and piloted to support the induction procedure, as well as training materials developed to initiate the process. Furthermore, core teams have also been trained at the national and district levels to

support the implementation of the induction program. Although it is too early to evaluate the effectiveness of the new teacher induction program, the aim and design of the program have a promising potential in effectively mentoring new teachers at the school level during their probationary year.

#### **Professional Development**

In Indonesia, the 2005 Teacher Law created a framework of effective policies and procedures that both assure the quality of the process and encourage continuing professional development of teachers. This framework has created a more systematic program of continuing professional development that links backward to the teacher appraisal process and forward to salary increments and career progression (Chang et al., 2014). The implementation of the framework is supported by teacher working groups, which bring teachers together in a forum to discuss teaching problems and to work cooperatively to undertake common tasks such as curriculum development, the creation of teaching aids, and the design of test items. According to Chang et al. (2014), these teacher working groups, which have existed for decades, are expanding in their reach and relevance in the improvement of its members' cognitive and pedagogical abilities (p. 187). The Government of Indonesia is also working on developing a distance learning professional development program, which would be useful for teachers in distant or difficult contexts in which they cannot get to institution-based in-service programs and perhaps not even to cluster meetings (Chang et al., 2014, p. 51).

According to TIMSS (2011), 60% of Indonesian teachers stated that they received professional development in critical thinking methodology in the last two years, while more than 70% received professional development in their subject content areas and assessment (See **Figure 6** below).

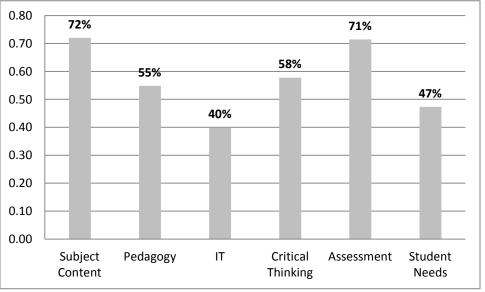


Figure 6. Indonesian teachers who received professional development in the last two years, by content

Source: TIMSS 2011.

#### Authority

As part of a broad decentralization of governance responsibilities to districts, the Indonesian government adopted school-based management (SBM) principles through regulations in the National Education Law of 2003. According to Chang et al. (2014), "SBM is a form of education governance that grants responsibilities and authority for individual school academic operations to principals, teachers, and other local community-based stakeholders. The expectations are that local, and often shared, decision making will lead to more efficient and effective policies and programs aligned with local priorities, which in turn will lead to improved school performance and student achievement" (p. 35). A study by Chen (2011)<sup>17</sup> on the implementation of SBM revealed that although the basic SBM structures (such as district-level supervision and teacher councils) and processes (such as principal-teacher consultations) were nominally in place, successful implementation of the SBM program would require greater clarity of the roles and responsibilities of the various administrative levels of the system, more capacity building of all the system's actors, and a stronger commitment to its goals and objectives. Importantly, Indonesian Teachers Union seems to be fairly active and regularly speaks out on the issues of child labor, school curriculum, teacher wages, and other topics.

#### Compensation

In 2008, teachers' salaries in Indonesia were not competitively structured. During that time, the starting salary for a junior secondary teacher was approximately 40% of the average per capita income. Compare this to the Philippines that offer a starting salary around 145% of the average income (UNESCO, 2010; Chang et al., 2014). The top salaries showed the largest disparity. In Indonesia, a primary school teacher earned \$1,002–\$3,022 per year or a mere 50% of gross domestic product (GDP) per capita, while their Pilipino and Thai counterparts earned over twice as much in terms of GDP per capita. This translates into a fourfold greater salary than the same teachers in Indonesia (Chang et al., 2014, p. 18). In light of this disparity, Indonesian official implemented a salary reform, which not only increased salary levels through certification but it also made teaching an attractive profession. Now, "certified teachers earn substantially more than other individuals with similar levels of education. In fact, certified teachers can earn approximately twice as much as individuals with similar qualifications" (Chang et al., 2014, p. 157).

#### Commitment

Compared to 1991, Indonesia is experiencing slightly lower percentages of teachers with working experience at 1-5 years and 6-10 years of experience and stronger dip at 11-15 years. The percentage increase in the number of teachers with over 16 years of experience is perhaps a positive indicator of a growing teacher dedication and commitment to their profession in the last two decades (See

Figure 7 below).

<sup>&</sup>lt;sup>17</sup> The study was based on face-to-face surveys of principals, teachers, school committee (SC) members, and parents in 400 elementary schools; surveys of district staff in 54 districts; and case studies in a subsample of 40 schools in Indonesia.

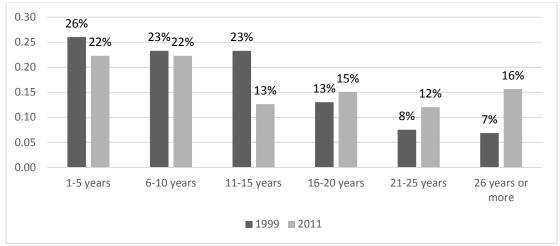


Figure 7. Indonesian teacher average teaching experience

Source: TIMSS 1999; TIMSS 2011.

# Case Study 2: Kenya

Despite being the poorest of the three countries, Kenya had the highest percentage of expenditures dedicated for education, with 6.7% of GDP dedicated to education expenditures in 2014. Since 2000, enrollments in primary education increased from 65% to 82%, while enrolments in lower secondary upper secondary education increased from 26% to 31% and from 16% to 30% respectively.

Table 11 details economic and education statistics for Kenya for years 2000 and 2014. However, an analysis of the components utilized for this study reveal that the status of teachers as a whole may have declined or at best remained constant during the EFA years.

Indicator	2000	2014		
Population (in millions)	311	43 <sup>2</sup>		
GDP per capita (PPP) (in US\$)	$406^{1}$	943 <sup>2</sup>		
Educational Expenditures (% of GDP)	$5.2^{1}$	6.7 <sup>5</sup>		
Teachers' salaries (% of total educational expenditures)	—	71.3		
Gross enrollment (in millions)				
Primary	5.0 <sup>10</sup>	7.1 <sup>13</sup>		
Lower Secondary	$1.2^{10}$	1.7 <sup>13</sup>		
Upper Secondary	$0.8^{10}$	1.5 <sup>13</sup>		
Teaching cadre (in millions)				
Primary	$146,205^{15}$	152,848 <sup>17</sup>		
Lower Secondary	25,794 <sup>18</sup>	50,949 <sup>17</sup>		
Upper Secondary	49,045 <sup>18</sup>	50,949 <sup>17</sup>		
Education structure	8-4	6-3-3		
Net Enrollment Rates (%)				
Primary	$65^{10}$	82 <sup>13</sup>		
Lower Secondary	$26^{21}$	3113		
Upper Secondary	16 <sup>21</sup>	30 <sup>13</sup>		
Academic calendar	January to November			

#### Table 11. Kenya economic and educational statistics

**Source:** 1. World Bank Development Indicators; 2. World Bank Development Indicators 2012 data; 3. World Bank Development Indicators 2001 data; 4. World Bank Development Indicators 2011 data; 5. World Bank Development Indicators 2010 data; 6. World Bank Development Indicators 2009 data; 7. UNESCO UIS 2012 data; 8. World Bank Educational Statistics 2011 data; World Bank Educational Statistics 2009 data; 10. UIS UNESCO 2000 data; 11. UIS UNESCO 2013 data; 12. UIS UNESCO 2012 data; 13 UIS UNESCO 2009 data; 14. Estimated from World Bank 2007 Publication; 15. World Bank Educational Statistics 2011 data; 16. World Bank Educational Statistics 2011 data; 17. World Bank Educational Statistics 2003 data; 18. World Bank Educational Statistics 2013 data; 19. World Bank Educational Statistics 2004 data; 20. BPS-RI data, www.bps.go.id, accessed May 29, 2014; 21. BPS-RI,Susenas 1994-2012. These data are 2012. 22. UIS UNESCO 2002; 23. UIS. UNESCO 2012 gross enrollment data; 24. UIS. UNESCO 2003 gross enrollment data.

#### Credentials

Since 1999, Kenya has experienced a decrease in the percentage of teachers with greater than a secondary school education. In 1999, over half of the teachers surveyed in SACMEQ I had more than a secondary education. In SACMEQ III (2011), this percentage had plummeted to 16% (see **an grade** 6 reading teachers)

Table 12 below details the change in the education levels achieved by Kenyan grade 6 reading teachers)

Academic Level	1999		2011		Change	
	( <b>n</b> )	(%)	( <b>n</b> )	(%)	( <b>n</b> )	(%)
Secondary School or less	1,501	0.47	1,916	0.84	415	0.78
Greater than Secondary School	1,664	0.53	353	0.16	-1311	-0.70
Total	3,165	1.00	2,269	1.00	-896	_

#### Table 12. Kenyan teacher educational achievement

Source: TIMSS 1999; TIMSS 2011; SACMEQ I; SACMEQ III.

Additionally, the percentage of certified teachers teaching grade 6 reading decreased from 97% in 1998 to 90% in 2010 (See **Table 13** below). A decrease in the percentage of teachers with certification is perhaps related to the problems related to the implementation of Free Primary Education Program, which was introduced in 2003 to guarantee free primary education for all. The program has resulted in a dramatic increase in school enrollments - from 65% in 2000 to 82% in 2014 - leading to overcrowded classrooms (especially in urban centers) and a shortage of qualified teachers. The Government of Kenya has responded to this by raising the academic requirements for entrants into teacher training institutions. Since 2004, the requirement has been that an applicant must have obtained a minimum of grade D (plain) in mathematics and C- (minus) in English. If admission requirements are not met, pre-service teacher training graduates could not enter the teaching profession. However, this policy has not been fully implemented in practice. Given the continuing problem of teacher shortages, schools have been hiring teachers without minimum qualifications. As Bunyi et al. (2011) explain, the few untrained teachers in the public schools are generally employed at school level by the Parent Teacher Associations (PTAs) to ameliorate the shortage of teachers (p. 5). The decrease in the number of qualified teachers in Kenyan education could potentially negatively influence the quality of teaching

Teacher Training or	1998		2010		Change
Certification Completed	( <b>n</b> )	(%)	( <b>n</b> )	(%)	(%)
Yes	3,060	0.97	3,993	0.90	-0.07
No	105	0.03	443	0.10	2.01
Total	3,165	1.00	4,436	1.00	

Table 13. Kenya teacher training or certification

Source: SACMEQ I: SACMEQ III.

#### Induction

The induction of teachers in Kenya is scheduled for a two-year 'probation period' as specified in the Teachers' Service Commission (TSC) code of regulations (Republic of Kenya, 1986). At the end of the period, TSC may confirm or terminate appointment. The period of probation may be extended by one year if the newly appointed teacher does not exhibit appropriate skills, behaviors, and/or attitudes necessary for the teaching profession. During the two years of probationary period, the principal offers advice, guidance, and assistance to the newly appointed teachers to ensure successful transition into the teaching force (Dawo, 2011)

Available data reveal that an increasing number of teachers in Kenya do not benefit from the induction program. According to the TIMSS data, the number of teachers who did not receive in-service training courses during their first two years increased by just over 20% (n=183). In 1999, slightly over 50% of teachers received not in-service training as compared to approximately 40% in 2011. All levels of inservice teaching declined in the time being evaluated. However, for those teachers who did receive inservice training there is compelling evidence that it was effective. Over 80% of teachers stated that the training was either effective or very effective and less than 1% believes that in-service training was not worthwhile (See **Table 14** below).

In-Service Courses	199	)9	20	10	Chan	ige
( <b>n</b> )	( <b>n</b> )	(%)	( <b>n</b> )	(%)	( <b>n</b> )	(%)
0	1,625	0.51	1,808	0.41	183	-21
1 to 5	812	0.26	2,444	0.55	1,632	115
6 to 10	447	0.14	157	0.04	-290	-75
11 to 20	281	0.09	20	0.00	-261	-95
20 or more	0	0	7	0.00	7	100
Total	3,165	1.00	4,436	1.00	1,271	

Table 14. Kenya number of in-service teacher training courses

Source: SACMEQ I; SACMEQIII.

**Figure** 8 below shows that as the number of in-service training courses increased, the number of teachers who took these classes decreased, revealing a negative change in the percentage of teachers who took higher numbers of courses. Overall, these declines in the percentages of teachers who received in-service training during the induction period can negatively impact the status of the teaching profession in Kenya.

These findings are confirmed by other studies (Ajowi et al., 2011) Drawing on a sample of 78 head teachers, 78 heads of departments, 140 newly appointed and teachers in secondary schools in Kisumu North, East and West Districts, the findings of the study revealed that no systematic induction process for newly appointed teachers was practiced in schools. The study also suggested that the needs of newly appointed teachers were not considered and that a lot of disorganized information was given to newly appointed teachers in the first two days after which they were left to swim and sink. The study recommended that the Ministry of Education should provide an induction blue print to schools, train mentors, and provide funds for implementing more meaningful induction processes in schools.

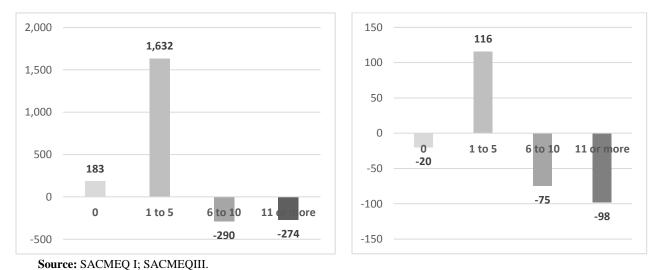


Figure 8. Kenya changes in teacher participation in in-service training

#### **Professional Development**

Kenya's in-service teacher training relies primarily on Teacher Advisory Centers (TACs), which were established in 1970s to provide school-based professional teacher development. The establishment of TAC included the hiring of TAC teacher educators appointed from experienced primary school teachers and stationed at the district and zonal education offices to assist schools teachers on various aspects of teaching and learning (Bunyi, 2011). The responsibilities of TAC teacher educators include organizing and coordinating seminars, workshops, and refresher courses for teachers on curriculum changes and pedagogy, as well as inducting new teachers. However, numerous studies have revealed that TAC centers are facing major challenges, including poor equipment, lack of adequate means of transport to access schools, insufficient training of tutors to meet the needs of the teachers (Onyango, 2007) (Kosgey, 2011). In the last few decades, TACs have been the recipients of various in-service teacher training programs provided by numerous local and international NGOs, as well as development partners – often without the collaboration of or coordination by the MOE. As Bunyi et al. (2013) points out, inservice training opportunities have thus become uncoordinated and "usually dictated by the area of interest of the particular NGO" rather than the needs in schools' key curriculum areas such as lower primary reading and mathematics (p. 38).

The importance of in-service teacher education has been recognized by Kenya's education policy makers who call for a well-coordinated system of in-service training as a prerequisite for the success of the free primary education (FPE) initiative (Sessional Paper No. 1 of 2005 by the RoK, 2005). In 2005, the Ministry of Education (MOE) has identified in-service training (INSET) for primary teachers as one of the 23 investment programs in the Kenya Education Sector Support Program (KESSP) 2005-2010 (Ministry of Education of the Republic of Kenya, 2005). The aim of this policy initiative was to better coordinate the various in-service teacher training initiatives available through TACs. However, no coherent policy or program has been developed to achieve this aim, resulting in inconsistent in-service

teacher training opportunities – both in terms of access and quality. In other words, the importance of in-service teacher education has been recognized in policy rhetoric, but little has been done to initiate and implement programs aimed at improving the access, relevancy, and quality of in-service teacher education programs in Kenya.

In Kenya, there seems to be a theoretical recognition of the importance of continuing professional development of teachers, but lack of institutionalization to improve the quality of in-service programs (see previous section). In-service training efforts are not linked to certification or salary increases, and in-service training programs are not well coordinated among the different service providers. Despite these disconnects, Kenyan teachers see the benefits of professional development. In 1999, 90% of Kenyan teachers stated that professional development was "very important." In 2011, teachers were asked about their access to teacher resource rooms. Over 70% stated that they had access to one. However, of those that had access, a little over half of the teachers went to the center to collaborate, generate new ideas, or gather materials. The lack of effect on salary or certification may explain in part Kenyan teacher's lack of motivation to seek out resource rooms for support. Importantly, however, no mention was made as to how far the resource room was from the teacher's school or if there were resources or staff available to assist. Access and quality of the resource centers are again issues of governmental organization. The heads of schools place little importance on the professional development of staff. In 2011, providing professional development ranked 4<sup>th</sup> out of 6<sup>th</sup> in terms of what is the most important use of time. Administrative duties were selected as the most important task.

#### Authority

In Kenya, decentralization efforts began in 1983 and included a mixture of different trends: (1) deconcentration (the presence of local representatives of the ministry); (2) devolution (local government exists and can take initiatives in the field of education); and (3) school autonomy (schools receive funds directly from the central government and in secondary schools teacher recruitment is partly in the hands of their boards of governors) (de Grauwe et al., 2011). In its 2003 report, the Ministry of Education rearticulated the importance of decentralization with the objective of improving efficiency in the education sector. The goals include decentralization of school registration services, administration, finance, accounting services, and teacher management. For example, schools are asked to develop school plans, which are linked to the transfer of grants from the ministry directly to the schools, within the framework of the Free Primary Education Policy. However, most decentralization efforts revolve around the expansion of complementary service provision and resource mobilization, and only vaguely address civil society's (including teachers') role in the expansion of citizen voice. As Mundy et al. (2008) note, decentralization reforms in Kenya (as well as Burkina Faso, Mali, and Tanzania) have mixed implications for greater citizen and civil society engagement: "they introduce confusing and sometime overlapping authority structures; they lack clarity about balance between CSO [civil society organizations] roles in mobilizing local resources as versus citizenship voice; and they are often resisted by key actors in the sector" (p. 13).

Kenya's teachers' unions have historically played powerful oppositional roles that contributed to the

transition to democracy (Brown, 2004; Mundy et al., 2008) and they continue to represent large constituencies that at least in theory, can be mobilized in opposition to government policies. Importantly, Kenyan National Union of Teachers (KNUT) maintains strong links to international teachers' unions (including Education International), often with a focus on political bargaining. In 2013, Kenyan teachers were on strike several times, including a strike to demand higher wages as well as a strike to protest against government's refusal to pay their allowances as a result of previous strikes. As Mundy et al. (2008) note, however, the overall policy context in Kenya is aimed at containing capacities of Teachers' Union, thus reducing its overall strength in policy processes (p. 14).

#### Compensation

In Kenya, teacher salaries are often delayed. Teacher strikes are common and generally revolve around the issues of inadequate or delayed teacher wages. In 2012, the Government of Kenya and the Teacher Union signed an agreement about the realignment of teacher salaries: "The payment of Hardship allowance will apply to teachers serving in designated hardship areas while payment of Special School allowance will be applicable to teachers teaching in Special Institutions/Units who have the requisite qualifications." Hardship allowance is paid at the rate of 30% of the basic minimum of each grade in the realigned salary. Special School Allowance is paid at the rate 10% of the basic minimum of the realigned salary in the respective grades.

#### Commitment

In 1999, Kenya experienced a steady decline in the experience level of teachers. However, in 2011, there is a notable drop in the number of teachers who have been in the profession less than 5 years. There is a smaller decrease in the percentage of teachers who have been in the field between 6-10 years and 11-15 years (See **Figure 9** below). This could be a signal in the decline of the status of profession and prospective teachers opting for other occupational options. The largest percentage of teachers has been in the profession between 16-20 years. Further research is required to determine why there is notable spike in this category.

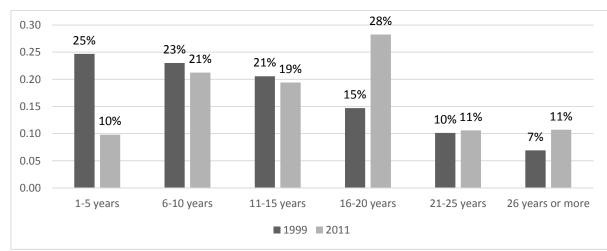


Figure 9. Kenyan teachers average years of teaching experience

Source: SACMEQ I; SACMEQIII.

As with any country, the importance of context cannot be understated. During the EFA years, Kenya has been grappling with an HIV/AID epidemic, wide spread violence following the 2007 political elections, and frequent droughts which put further strain on the economic system. While the data suggests that the status of teachers as a whole may have remained the same or decreased, the conditions under which Strategy No. 9 were implemented deserve recognition.

# **Case Study 3: Morocco**

**Table 15** below denotes the economic and educational statistics for Morocco in 2000 and 2014. Between 2000 and 2014, the percentage of GDP allocated for educational expenditures and the percentage dedicated specifically for teachers' salaries decreased. The impact of this is discussed further in the Authority section of this Morocco case study.

Indicator	2000	2014
Population (in millions)	29 <sup>1</sup>	33 <sup>2</sup>
GDP per capita (PPP) (in US\$)	1,276 <sup>1</sup>	2,902 <sup>2</sup>
Educational Expenditures (% of GDP)	5.8 <sup>1</sup>	5.4 <sup>6</sup>
Teachers' salaries (% of total educational expenditures)	85.8 <sup>6</sup>	72.3 <sup>6</sup>
Gross enrollment (in millions)		
Primary	$3.7^{10}$	$4.0^{12}$
Lower Secondary	$1.1^{10}$	1.5 <sup>12</sup>
Upper Secondary	$0.5^{10}$	$1.0^{12}$
Teaching cadre (in millions)		
Primary	127,582 <sup>15</sup>	155,754 <sup>19</sup>
Lower Secondary	54,053 <sup>15</sup>	$60,010^{20}$
Upper Secondary	36,746 <sup>15</sup>	47,350 <sup>17</sup>
Education structure	6-3	-3
Net Enrollment Rates (%)		
Primary	75 <sup>10</sup>	97 <sup>11</sup>
Lower Secondary	44 <sup>24</sup>	63 <sup>23</sup>
Upper Secondary		
Academic calendar	September	r to June

#### Table 15. Morocco economic and educational statistics

**Source:** 1. World Bank Development Indicators; 2. World Bank Development Indicators 2012 data; 3. World Bank Development Indicators 2001 data; 4. World Bank Development Indicators 2011 data; 5. World Bank Development Indicators 2010 data; 6. World Bank Development Indicators 2009 data; 7. UNESCO UIS 2012 data; 8. World Bank Educational Statistics 2011 data; World Bank Educational Statistics 2009 data; 10. UIS UNESCO 2000 data; 11. UIS UNESCO 2013 data; 12. UIS UNESCO 2012 data; 13 UIS UNESCO 2009 data; 14. Estimated from World Bank 2007 Publication; 15. World Bank Educational Statistics; 16. World Bank Educational Statistics 2011 data; 17. World Bank Educational Statistics 2003 data; 18. World Bank Educational Statistics 2013 data; 19.

World Bank Educational Statistics 2004 data; 20. BPS-RI data, www.bps.go.id, accessed May 29, 2014; 21. BPS-RI,Susenas 1994-2012. These data are 2012. 22. UIS UNESCO 2002; 23. UIS. UNESCO 2012 gross enrollment data; 24. UIS. UNESCO 2003 gross enrollment data.

#### Credentials

Data for Morocco demonstrate an increase in the percentage of teachers with the highest level of education since 1999. During this time, elaborate policies have been put in place to improve the quality of the teaching force by articulating clear teacher certification/qualification standards. In particular, a major step has been taken in 2011 to strengthen pre-service teacher training – pre-school/primary, lower secondary and upper secondary – by re-structuring it into a three-year undergraduate qualification and a follow-up year in one of the newly created Regional Teacher Training Centers (CRMEF). The Government has also established clear competency guidelines that all new teachers must master as they graduate from this two-stage training system. These policy changes are reflected in part in the data.

**Table 16** below depicts the change in the percentage of teachers with greater than a secondary school education. In 1999, only 5% of the TIMSS teachers surveyed had greater than a secondary school education and by 2011, this percentage jumped to nearly 25%. This increase in teacher credentials could positively impact the status of teachers in Morocco.

Table 16. Moroccan	teacher level	l of academic a	achievement
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Academic Level	19	1999		2011		Change	
	( <b>n</b> )	(%)	( <b>n</b> )	(%)	( <b>n</b> )	(%)	
Secondary School or less	287	0.95	206	0.77	-81	-0.19	
Greater than Secondary School	16	0.05	61	0.23	45	3.33	
Total	303	1.00	267	1.00	-36		

Source: TIMSS 1999; TIMSS 2011.

#### Induction

As previously noted, one of the challenges with measuring the status of teachers is the absence of data in low to middle income countries. Morocco is no exception especially on topics related to teacher induction programs. This lack of data might be due to Morocco's recent emphasis on pre-service and inservice distance teacher training programs. Access to high quality education, especially for those teachers in remote areas, remains a hurdle for many countries including Morocco. In response, Morocco has turned to technology as a potential solution (Lahmine, Darhmaoui, Agnaou, Messaoudi, & Kaddari, 2013). The results of recent studies on blended learning strategies appear to be positive but there is little data on the impact of distance learning for those teachers who fall in the gap- directly between preservice training and in-service training. Given the absence of data on this component, measuring its change across time becomes problematic. However, it is also telling that this aspect of teacher training may be weak, if not omitted, from the stages of teacher training in Morocco.

#### **Professional Development**

According to the World Bank (2013), in-service teacher training in Morocco has been scaled back, as the Ministry of Education (MEN) is looking for a mechanism, in association with teacher unions that enables teachers to pursue their professional development without reducing their class-contact time (p. 30). Also, as previously discussed, Morocco's distance learning is designed to reach teachers in remote rural areas. In the meantime, the lack of coordination may be impacting the level of teacher quality. As shown in **Figure 10** below, Moroccan teachers were lacking in higher order training. For example, only 28% of Moroccan teachers stated that they received professional development in critical thinking in the last two years. However, the collaboration of the government with the teachers' union could signal an increase in teacher authority in Morocco. These conflicting messages may suggest that the status of the teaching profession has remained constant. Teacher authority is discussed more below.

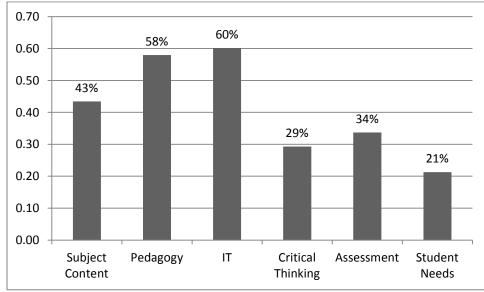


Figure 10. Moroccan teachers who received professional development in the last two years

#### Authority

In Morocco, decentralization of the governance of the education sector is underway, even though effectiveness of these reforms remains a key challenge. The World Bank (2013) reports that the capacity of the Regional Education Offices (AREF), which have been granted some administrative and financial autonomy, has improved over time. The AREFs have played an important role in leading the reform program at the regional and sub-regional levels. However, decentralization reforms appear not to reach teachers who remain not engaged in building community school partnerships (Elmeski, 2012).<sup>18</sup> While teachers may not have gained authority through decentralization processes, they have attempted to maintain their authority through active participation in Morocco's National Teachers Union, which is

Source: TIMSS 1999; TIMSS 2011.

<sup>&</sup>lt;sup>18</sup> The study consisted of 2,400 parents and teachers who were contacted to fill out surveys, and 156, parents, teachers, and principals who were called for interviews. In summer 2010, surveys were sent to 1,200 parents and 1,200 teachers in 120 public schools.

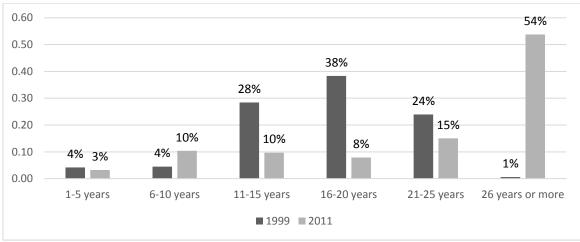
working actively in the areas of child labor, rural education, teacher salaries, and other issues. During 2011-2013, for example, Moroccan teachers staged massive strikes (including a hunger strike in 2013) over the decrease of teacher salaries and benefits.

#### Compensation

According to the African Development Bank (2013), the salaries of general education teachers in Morocco are well above (almost double) the international benchmark for countries with the same level of development as Morocco. In 2008-2010, teacher salaries in Morocco amounted respectively to 3.7 (1.37 times the GDP per capita) for primary education and 5.5 (1.70 times the GDP per capita) for secondary education (African Development Bank, 2013, p. xv).

#### Commitment

Morocco's teacher experience levels paint a very different picture. Teachers with less than 10 years of experience have extremely low percentages. These low numbers may suggest that teaching is not an attractive option for individuals entering into the labor market. Indeed, the largest percentage of teachers has over 26 years of experience (See **Figure 11** below). While this demonstrates considerable dedication, it is also potentially extremely problematic when this cadre exits the profession.



#### Figure 11. Moroccan teachers' average years of teaching experience

Source: TIMSS 1999; TIMSS 2011; SACMEQ I; SACMEQ III.

Morocco is not unique in the mixed messages presented in the data. This case study shows that because there are positive, negative, and missing data for the components that influence the status of teachers, definitely expressing a trend for this country is problematic. Morocco is an excellent example of the complicated nature of implementing and measuring Strategy No. 9.

# 6. Recommendations

The authors propose that utilizing a more systemic measurement strategy for the status of the teaching profession could help mitigate some, but not all, of the challenges expressed earlier with regard to implementing Strategy No. 9. One suggested framework is in **Table 17**. **Error! Not a valid bookmark** 

**self-reference.** This framework focuses on the three most influential questions when considering whether (and to what extent) the status of teachers has changed. These questions are:

- What is the problem to be addressed?
- Whose opinion matters?
- What is the baseline measure?

Sociologists investigate the status of profession in relation to other professions. For example, does society as a whole consider teachers to have a higher status than, for example, accountants? While education researchers and policy makers are interested in these types of overarching questions, more often questions related to the status of teachers are prompted because of an existing challenge. The first column of the table below offers a sampling of potential problems to be solved, for example, to decrease the percentage of students who graduate from pedagogical institutions but opt not to enter into the teaching profession. Teachers who choose to work in positions other than teaching is a different problem than not having enough trained teachers to fill positions. In the first instance, there are teachers available, but they simply choose not to teach. These two problems require different solutions, perspectives, and baseline measures.

The second column addresses the question of "Whose opinion matters?" While society's opinion as a whole is important, often it is impractical and unnecessary to try to change the mindset of the general population. Once the problem is identified, the population whose opinion is the most important becomes clear. In this working example, the opinions of prospective pedagogical applicants (e.g. those who are approaching high school graduation) become essential to understanding how they view the status of teachers. The third column addresses the final question "What is the baseline measure?" In this continued example, measuring a change in the number or type of applications into pedagogical institutions becomes the baseline measure.

The authors recognize that this list is not complete and that some components may carry more weight than others. Further research on this is encouraged.

Finally, the authors encourage the OECD to consider including questions addressing the ability for teachers to self-advocate and the role and purpose of teachers' unions. Additionally, questions regarding compensation inclusive of structure could be extremely insightful.

Problem to be Addressed	Perspective	Baseline Measure
Increase the number of applications to pedagogical institutions		
Increase the type of applications submitted to pedagogical institutions (e.g. by desired grade, subject, or geographic location to teach)	Teacher candidates	Evaluations
Increase diversity in terms of the characteristics of the pedagogical institution applicants	Inactive teachers (trained teachers not working in the profession)	Satisfaction
Increase the conversion rate of soon-to-be pedagogical graduates into a teaching position	Active teachers (currently working in the profession	Inputs
Increase retention rates of new teachers working in the profession	Stakeholders (parents and students)	Policy change
Decrease the number of inactive teachers (trained teachers working in other occupations)	Administrators	Average years teaching
Increase the capacity for existing teachers to self-governance	Community	Retention rates of beginning teachers
	Society	Admission to pedagogical universities
	State	Commitment
		Aspirations to enter into the teaching profession
		Entry into the teaching profession

Table 17. Suggested framework to evaluate the status of teachers

Source: Authors.

# 7. Conclusion

This study has aimed to assess changes in the status of the teaching profession since the launch of EFA in 2000, focusing on the following components: teacher credentials, induction, professional development, authority/self-governance, and compensation. Drawing on OECD's TALIS data and three qualitative case-studies (Indonesia, Kenya, and Morocco), this study finds that the overall trend in the status of the teaching profession is improved at best and remained unchanged at worst. While induction and professional development displayed negative trends, credentials and authority both showed positive increases. Compensation (by contract type) and commitment were unchanged. These results are influenced by the positive trends on job satisfaction.

# Appendix 1. Teacher status components, definitions, and variables

Component	Credentials	Induction	Professional Development	Authority	Compensation	Commitment
Definition	Use of professional criteria for hiring teaching job candidate	The provision and effectiveness of induction and mentoring programs for beginning teachers.	The extent of participation of teaching staffs in activities sponsored by professional teaching organizations and financial support for a teachers' continuing education	The extent of influence collectively wielded by faculties over school policymaking and individual autonomy exercised within their classrooms; a professional organization's ability to enforce behavioral and ethical standards for those practicing in a particular industry or profession.	The highest salary level offered by schools and the structure of these compensation schemes.	A strong motivation and commitment to teaching
	Area of study	In-service teacher training	Evaluations	Authority over monies spent, supplies, and budget	Chronological compression	Non-compensated time spent with students
	Completed teacher training	Mentoring	Guidance from other teachers, head of school, and/or school Inspectors	Influence on pedagogy and curriculum	Permanent or non- permanent; fulltime or part- time	Number of times spent meeting with parents
Variables	Highest level of education achieved	Induction programs	Professional development courses	Influence on school policies	Salary compression	Years teaching
	_	_	_	Presence and influence of teachers unions	Supplements and allowances	The desire to leave the occupation should another occupational opportunity arise
			_		Workload	

Source: Authors.

# Appendix 2. TIMSS and SACMEQ variables utilized

		International A	ssessments (SACMEQ I, III; TIMSS19	999, 2011)	
Assessment (No. of utilized variables per assessment)		SACMEQ I (n=X)	SACMEQ III (n=X)	TIMSS1999 (n=X)	TIMSS2011 (n=X)
Component	Definition				
		Sch-Q14-Highest level of education (STPRIM, STSECOND, STPOSTSE)	Teach-Q4-Highest level of education achieved (TOACADEM)	TeachM-Q15- Highest level of education achieved (BTBGEDUC)	TeachMS-Q4-Highest level of education achieved (BTBG04)
		Sch-Q15- Teacher training (years) (STTRGNON, STTRGLT1, STTRGONE, STTRGTWO, STTRGTHR, STTRGGT3)	Teach-Q5-Teacher training (years) (TOPROFES)	TeachMS-Q16a-Teacher training certificate (BTBGTRAC)	TeachMS-Q5-Major of study (BTBG05A-BTBG05I)
Credentials	Use of professional criteria for hiring teaching job candidate and if the teacher is	Teach-Q4- Highest level of education (TQPRIMAR, TQSECOND, TQPOSTSE)	Sch-Q42-Teacher highest level of education (STCHPRIM, STCHJSEC, STCHSSEC, SCHALEV, STCHTERT, STCHTOT2)	TeachMS-Q16b- Years of pre- service teacher training (BTBGYETR)	TeachMS-Q18-Feeling of preparedness on general pedagogy (BTBM18A-BTBM18E)
	instructing a subject for which he or she was formally trained	Teach-Q5-Teacher training (TQPROFFES)	Sch-Q43-Teacher training completed by teaching cadre (STCHNOTT, STCHSHOR, STCH1YR, SCH2YR, STCH3YR, STCHMORE, STCHTOT3)	TeachMS-Q17-Major of study (BTBGCMAS, BTBGCMA1- BTBGCMA8; BTBGMMAS, BTBGMMA1-BTBGMMA8)	_
		_	—	TeachMS-Q18- Masters degree in what major of study (BTBGMMAS, BTBGMMA1- BTBGMMA8)	_
	The provision and perceived effectiveness of	Teach-Q7-In-service training, no of courses attended in career (TINSERV)	Teach-Q7-In-service training, no. of courses (TINSERVC)		—
Induction	induction and mentoring programs	_	Teach-Q8-In-service training, no. of courses (TINSERVD)	_	—
	for beginning teachers.	_	Teach-Q9- In-service training was effective (TINSERVE)	_	—
Professional Development Devel	Sch-Q21-Full school inspection (SYRINSPE)	Teach-Q22-School head advice on teaching (TPRINADV)	TeachMS-Q7-Professional development activities (BTBGACT6)	TeachM-Q29-Professional Development in math related topic and general pedagogy (BTBM29A BTBM29G)	
	by professional teaching organizations and	Sch-Q22-Importance of school head activities (SACTOBJE, SACTPROF)	Sch-Q14-Professional development of teachers (SACTHD05)	_	TeachS-Q28-Professional Development in science related topics and general pedagogy (BTBS28A-BTBS28G)

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	for a teacher's continuing education	Sch-Q23-Most important activity of the school head (SACTMOST)	Sch-Q52- Full school inspection (SYRINSP)	_	Sch-Q17c-Monioring teachers implementing educational goals, h- developing a climate of trust among teachers, i- initiating ways to help teachers who have problems in the classroom, j-advising teachers on pedagogy (BCBG17C; BCBG17H- BCBG17J)
		Teach-Q23-Inspector visited number of times (TINSPV95, TINSPVV94, TINSPV93)	Sch-Q53- No of times inspector has visited in last year (SINS2006)	_	Sch-Q13-Teacher evaluations math, peer review, etc. (BCBG13A- BCBG13B; BCBG13D)
		Teach-Q24-Role of the inspector (TINSPADV, TINSPRCI, TINSPIDE, TINSPOBJ, TINSPCUR, TINSPMAT, TINSPDEV, TINSPLIT, TINSPMTH, TINSPCON)	_	_	Sch-Q14-Teacher evaluations science, peer review, etc. (BCBG14A-BCBG14B; BCBG14D)
		Teach-Q25-Head of school advise you on pedagogy (TPRINADV)	-	—	-
		_	Teach-Q23-Access to and use of education resource centers (TRCENTRE, TRCVISIT, TRCUSE1-TRCUSE6)	TeachMS-Q6- Cooperation and collaboration (BTBGSK5)	—
	The extent of influence collectively wielded	_	Sch-Q14-Discussing educational objectives with teaching staff (SACTHD04)	TeachMS-Q10-Influence over content, materials, supplies, and budget (BTBGINF1-BTBGINF4)	_
	by faculties over school policymaking and individual	_	_	TeachMS-Q9-Meetings with other teachers regarding content and instruction (BTBGMEET)	TeachMS-Q10- Meeting with other teachers regarding content and instruction (BTBG10A-BTBG10E)
Authority	autonomy exercised within their classrooms and a professional organization's ability to enforce	_	_	Sch-Q7f-demonstration lesson to teachers, g-discussing educational objectives with teachers, l- teacher training (BCBGAC06, BCBGAC07, BCBGAC12)	_
	behavioral and ethical standards for those practicing in a	_	_	Sch-Q6- Promote teacher collaboration (BCBGCOL1- BCBGCOL3)	_
	particular profession.	_	_	Sch-Q8-Authority over actions such as budget, curriculum, etc. (BCBGRP01-BCBGRP05)	—
		_	—	Sch-Q9-Authority over curricular aspects (BCBGIF06-BCBGIF08; BCBGIF15)	—

		_	—	Sch-Q21 and Q23- Teacher recommendation vs others for math or science placement (BCBMUFC5, BCBSUFC5)	—
		_	_	StudMS-Q13a,b,c-Teacher's ability to manage student behavior (BSBMCLS1-BSBMCLS3)	_
		Sch-Q16-Teacher housing provided (STLIVPRI, STLIVSCH, STLIVRES, STLIVGOV, STLIVAGE)	Teach-Q6a-g- Number of pupils (no variable name)	TeachMS-SBQ1-Number of students in your class (BTBMBOY, BTBMGIRL, BTDMSIZE)	TeachMS-Q12-Number of students in your class (BTBG12)
		Teach-Q11-Number of periods per week	Teach-Q3-Permanent and non-permanent teachers (TOPERMNT)	TeachMS-Q5- hours/periods for math and science (BTBMSUB1- BTBMSUB9)	TeachMS-Q17-Number of hours and minutes per week, math or science (BTBM17A, BTBM17B)
		Teach-Q12-Number of minutes spent teaching per week	Teach-Q15-No. of lessons taught per week (TNPERIOD)	TeachMS-Q4- Number of hours/periods formally schedule to each in one school per week (BTBGTOTL)	Sch-Q16-Use of incentives to fill teaching positions (BCBG16A, BCBG16B)
	The highest salary level offered by schools, the structure of these	_	Teach-Q16- How long is each period in minutes (TMINPER)	TeachMS-Q8-Hours worked per week (BTBGALTO)	_
Compensation	compensation schemes, the number of shifts taught, and the number of students per class	_	Teach-Q19- Subjects taught (TTEACHRD, TTEACHMA, TTEACHSC, TTEACHSS, TTEACHHS)	Sch-Q3a-FT teachers (BCBGFTTE)	_
		_	Teach-Q20- Subjects trained to teach (TTRAINRD, TTRAINMA, TTRAINSC, TTRAINSS, TTRAINHS)	Sch-Q3b- PT teachers (BCBGPTE)	_
		_	Sch-Q41-Permanent and non-permanent teachers (STCHPM, STCHTM, STCHPF, STCHTF, STCHTOT1)	_	_
		_	Sch-Q51-Shifts (SSES1P- SSESS5P; SESS1C- SSESS5C)	_	_

Source: Authors.

## Appendix 3. Case study data source and limitations

Indonesia and Morocco participated in TIMSS 1999 and TIMSS 2011. In the 1999 TIMSS assessment, 39 countries evaluated the mathematical skill sets of 8<sup>th</sup> graders. In 2011, the survey included 45 countries and analyzed the skill sets of 4<sup>th</sup> graders and 8<sup>th</sup> graders. In TIMSS (1999, 2011) only two countries, Morocco and Indonesia, had World Bank classifications of "lower-middle income economies" and both countries assessed 8<sup>th</sup> graders in 1999 and 2011. The third country, Kenya, participated in SACMEQ I (1995-1998) and SACMEQ III (2005-2010). SACMEQ I and SACMEQ III included 7 and 15 countries respectively in the assessments. Of these countries, Kenya was the only low-income country included in both versions of SACMEQ. The selection of countries is discussed more in the Limitations section of this paper (See **Table 18** below).

Assessment	SACMEQ I	SACMEQ III	TIMSS	TIMSS
Years Administered	1995-1998	2005-2010	1999	2011
Grade	6	6	8	8
Subjects	Reading	Reading	Math	Math
	Teacher	Teacher	Teacher	Teacher
Constituents	Head of School	Head of School	Head of School	Head of School
Total Number of Participating Countries (n)	7	15	39	45
Administered by	SACMEQ Coord	inating Centre	TIMSS & PIRLS International Study Center	
Countries included	Kenya		Indonesia	
in this analysis			Могоссо	

Source: Authors.

Both TIMSS and SACMEQ included non-academic assessments for constituents such as students, parents, teachers, head of schools, and government officials. The unit of analysis for this evaluation is at the school level and considers teaching through the eyes of teachers and the heads of schools. As noted in **Table 19** below, there was considerable variation in the number of observations included in each assessment. However, both of the administrating agencies (SACMEQ Coordinating Centre and TIMSS & PIRLS International Study Center) have employed extensive protocol to ensure the comparability of the data.<sup>19</sup>

 Table 19. Observations per test by country and constituents

Assessment	SACMEQ I	SACMEQ III	<b>TIMSS 1999</b>	<b>TIMSS 2011</b>	<b>TIMSS 1999</b>	<b>TIMSS 2011</b>
Country	Kenya		Indonesia		Morocco	
Head of School	3,216	3,233	150	170	349	270
Teacher	3,165	3,233	150	170	349	279

Source: SACMEQ1; SACMEQ III; TIMSS 1999; TIMSS 2011.

The authors of this paper acknowledge the limitations associated with this research. First, and most importantly, the absence of longitudinal datasets in low and middle income countries that consistently include status oriented variables. Second, as demonstrated in (Treiman D., 1977), there is considerable variation in the status of teachers *by teaching level* (Pre-K, primary school, lower secondary school, upper secondary school, and tertiary

<sup>&</sup>lt;sup>19</sup> See the following websites for more information on reliability and validity protocol: TIMSS <u>www.timssandpirls.bc.edu</u>; SACMEQ <u>www.tiep.unesco.org</u>.

education) and *across* countries. Berkman & Macintyre (1997) note that some occupational status indicators can be unstable and at best can provide a snapshot of a particular time. The final limitation is devising a scale that is applicable across multiple contexts. International comparisons can be difficult because different cultures conceptualize occupations and their associated level of prestige in different ways (Kunst & Mackenback, 1994) (Berkman & Macintyre, 1997)

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# **Data Sets**

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