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Teacher policies for underserved populations A synthesis of lessons learned and best practices

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Executive Summary

Teacher policies in countries with “Education for All” and Millennium goals objectives must aim both to attract and prepare candidate teachers, and to guarantee continuously improving teacher’s quality.

In developed countries, this implies the policies are oriented towards opening the recruitment to other professions, creating incentives for attracting, deploying and retaining high quality staff in schools, especially in schools with specific needs. Professional development of teachers is seen as part of teacher management and is increasingly linked to the requirements of the knowledge society and Life Long Learning objectives.

In developing countries, especially in Sub Saharan Africa, South East Asia and Latin America, governments, communities and international agencies are implementing multiple teachers polices and strategies, mainly to face a dramatic teacher shortage. Policies of contract teaching and community schools are currently among the most important initiatives. There is evidence that in underserved communities – and possibly elsewhere – contract teaching and community schools addressing urgent needs that the public system cannot quickly deal with.

On contract teachers, our comparative assessment shows:

- A key contribution of the contract teacher policy is its positive impact on *equity*, by addressing the urgent schooling needs of ethnic and minority groups and isolated populations especially in rural areas. It also permits flexibility to respond to urgent needs and to adjust to changing situations. However it is less clear the impact on equity if there is no mainstreaming policy. Impact on the *quality* of education is less clear, partly due to lack of robust evaluations. Only in underserved communities, where the overall education quality is very low, introduction of contract teacher(s) has better chances of contributing to improvement of quality.
- As per the contribution of teacher contract policies to the *efficiency* of education, the debate is still open. Despite the fact that salaries of contract teachers are significantly lower than those of permanent teachers, there are hidden costs of training, monitoring, and introduction of new simplified curricula etc and that does not permit to affirm that that the model is cost effective.

Most international reviews conclude also on the need of much better country context specific integrating contract teachers to the teaching force. A much more complex effort is needed in order to manage on the mid and long term both the “contract teacher” and the regular teachers. This implies to support them through continuous professional development, mentoring, and provision of sound career opportunities to guarantee lower turn over and impact on education quality.

On community schools our main conclusions are:

The community schools are models where the local communities are involved at various levels, including hiring and paying teachers. The strong advantage of community schools is that they are more able to reach underserved populations, are cost efficient for the central budget, given the community support and that they may include from the start a mechanism of accountability between teachers, school directors and families. A weak point may be the weak link and integration with the formal education system, with the risk of creating a second tier parallel system for the poorest, where its low cost community sustained structure may precisely create an excuse for lack of government oversight and support, or a mainly donor steered environment.

When communities and donors end up supporting contract teachers and community schools without much connection with the general public education system, there is a risk of creating a parallel system by and for the poor. Guaranteeing that these programs include phase out planning and sustainability is crucial. According to international reviews, few currently do so, especially in Senegal, Nicaragua and Egypt.

Concerning teacher management and education, two tendencies are crucial: (a) the school based training and on going teacher professional development and (b) the use of new technologies for teacher education and training.

Teacher Incentive schemas start to be present in the policies for attracting, retaining, deploying and educating teachers, especially in disadvantaged areas. Teacher incentives affect teachers' self-esteem and status. These incentives are very much contextualized and while may work for one country may not be appropriate for other (volunteer teachers in Senegal and Mali).

Other issues with strong policy consequences in the direction for addressing teacher shortages and quality especially in the under served communities are the issues of teacher emigration, of the gender in the teaching force and finally the role of teachers and HIV/AIDS.

The key lesson of this review of teacher policies in developing countries coincides with the conclusion of the recent World Bank Report (Independent Evaluation Unit, 2007): ***ultimately it is the quality of teachers that will respond to the EFA goals and not only the numbers of teachers.***

1. INTRODUCTION

The most recent research and international reports (UNESCO 2006, OECD 2005) assert that the improvement of education access, quality, equity and efficiency depends mainly on attracting competent people to the teaching profession. In fact, providing high level access and high quality of education for all students, depends significantly on the quality of teachers employed. Still, teachers represent the most significant and costly resource to improve schools.

In developed countries teachers are expected to prepare children for the knowledge economy, to make them self-directed, and learn them to become life long learners. In these countries, teacher policies tend to respond to the quality imperative and to the need for renewing the ageing teacher population. However, these goals present enormous challenges. For instance, an important number of teachers will retire until 2010 – e.g. half of the current teachers will retire in the US until 2010 -. Also, turnover rates among new teachers are increasing, especially in low income schools (Johnson, Berg, Donaldson, 2005).

In developing countries, more and better trained teachers are needed to achieving universal primary education (Education for All goals - EFA). Yet, beyond quantitative objectives in terms of increasing the number of teachers, teacher policies in developing countries now have to respond also to (i) quality imperatives, in particular improving students learning outcomes; and to (ii) equity issues, in terms of guaranteeing to reach the underserved populations. In fact, the challenges in many developing countries are huge and costly: school systems are receiving an increasing number of students, and governments have to recruit more teachers, to improve the teaching quality for better learning outcomes, and to deploy teachers better in order to reach underserved communities.

Among developing countries, the need for teachers is highest in sub-Saharan Africa and South and West Africa. The sub-Saharan Africa region will until 2015 need to raise the amount of teachers by 68% - from 2,4 to 4.0 million - in order to achieve universal primary education. However, between one fifth and one third of the current teachers are without proper qualifications (UNESCO, Institute of Statistics 2006). Thus, for reaching the EFA goals by 2015, the challenge is recruiting more, raising the quality of teachers and deploying in manners that better serve underserved communities,. This has to happen under rather challenging fiscal conditions, and with teacher salaries representing in all developing countries the largest share of educational expenditures (UNESCO, Institute of Statistics 2006).

While there are different priorities for teacher policies in developing and developed countries, the key issues in all countries are increasingly the same: management issues of quality and equity, and in particular the management of teacher demand and supply. Therefore, lessons learned from teacher policies and strategies in developed countries can and should inspire the policies in developing countries, even though if the contexts and priorities (access versus quality) may be radically different.

The present paper is an analysis of results of studies and evaluations of the effectiveness and sustainability of teacher policies, strategies and practices on recruiting retaining and retraining teachers in specific countries, with special focus on community schools, contract teacher policy and professional development for reaching disadvantaged groups.

This paper analyzes teacher policies and strategies in terms of (a) policy formation, (b) policy impact (effectiveness) and (c) policy sustainability and scale up. The main objective is to identify policy efforts to improve teacher recruitment, retention and professional development, obstacles to such efforts and how they are overcome. The *criteria* for selecting the countries took into account to what extent the teacher policies in a country or region (i) are targeted to reach and improve the quality of education services towards disadvantaged groups of students; (ii) provide evidence of impact evaluation (effectiveness); (iii) dispose a plan for sustainability and scale up, including conditions to be effective and how they link to government policies.

The first part of the paper consists of a review of literature regarding the main features of teacher issues and effective policies of teacher recruitment, retention and professional development in selected countries. The second part consists of a more detailed analysis of key policies in selected countries regarding: (1) policies and strategies used to attract, recruit and retain teachers, particularly in hard-to-reach areas; (2) their effectiveness. A third part summarizes the findings regarding the impact of these policies on increasing access, improving quality and addressing equity. The policies are observed in length of time in their context and within the local national dynamic.

2. TEACHER ISSUES AND POLICIES TO ADDRESS NEEDS OF PARTICULAR TYPES OF TEACHERS/SCHOOLS IN DEVELOPED COUNTRIES

In developed countries teacher policies are currently mainly focused on addressing the need to improve the quality of teaching, although shortages and surplus are also key issues. Main concerns (OECD, 2005) are (i) the attractiveness of teaching as career choice; (ii) developing teacher' knowledge and skills; (iii) recruiting, selecting and employing teachers; and (iv) retaining effective teachers in schools. Proposed policies to address these concerns - in this case *not* especially focused on underserved communities are of two kinds: first, strategies that concern the teaching profession as a whole and seek to improve its status and labor market competitiveness and to improve teacher development and school work conditions; second, strategies that focus on attracting and retaining particular types of teachers, and attracting teachers to work in particular schools.

Hereafter we present an overview of issues and policies implications for particular types of teachers/schools, including country paradigms (OECD 2005).

2.1. Attracting people to the teaching profession: targeted responses and incentives

Attracting candidates to the teaching profession has two sides: quantitative and qualitative. The quantitative dimension is the teacher shortage in specific specialization and serving the disadvantage or isolated communities. The qualitative dimension is the trends and compositions of the teacher workforce (academic background, gender, knowledge and skills). Consequently, the policy implications involve more targeted responses including stronger incentives for teachers with skills that are in short supply, and encouragement and support for teachers to work in challenging schools or difficult locations. For instance in France, a number of initiatives has been implemented in order to improve the distribution of teachers across the schools: the establishment of a teacher salary bonus in schools belonging to a priority education zone (challenging socioeconomic urban areas); the creation of a number of positions requiring specific qualifications; the granting to recent graduates from initial teacher education of bonus points which improves their chances of successfully applying for their preferred schools; the creation, in the priority education zones of Paris's suburbs of special group teaching posts to which teacher trainees with well developed strategies for improving school outcomes can apply.

Australia has developed specific policies for attracting teachers in rural areas (Box 1).

Box 1. Attracting teachers to remote and rural areas in Australia

"In Australia, schools in remote and rural areas have been experiencing difficulties in attracting and retaining teachers. To encourage teachers to teach and remain in those areas beyond the minimum required service period, special incentives and teacher education programs are offered in most States, as illustrated by Queensland and New South Wales.

The Queensland Remote Area Incentive Scheme provides teachers who teach in remote and rural schools with financial benefits and support, including:

- Compensation benefits ranging from AUD\$ 1 000 to 5 000 per year, plus an additional payment for dependants to offset the travel costs to certain districts.
- Incentive benefits ranging from \$2 000 to \$5 000 per year to encourage teachers to remain in rural and

remote schools after the designated service period.

- Induction programs for newly appointed teachers to assist preparing for service in rural and remote areas.
- Additional leave ranging from 5 to 8 days to cover leave to travel to major centers to conduct urgent personal business, including medical and dental appointments.

The New South Wales Department of Education has developed a pre-service teacher education program, “*Beyond the (Great Dividing) Line*”, to provide students with first-hand experience of living and teaching in rural areas. Students in the second, third and fourth years of their initial teacher education visit rural areas and become guests of the schools for three days. In 2002 about 400 students from eight universities participated in the program. Nineteen participants in the 2001 program who completed their education in 2001 accepted permanent appointments in 2002 to “Beyond the Line” schools.”

Source: OECD 2005, p51.

Plans and alternative programs for teacher certification are implemented in developed countries to face (i) the quality issue raised by traditional models of initial training and (ii) the reduced number of teachers certified.

In several states in the USA were recently developed ***alternative teacher certification programs*** in an effort to attract strong candidates who otherwise might not enter teaching. Advocates of alternative certification programs did contend that this type of programs might be more successful in attracting larger numbers of candidates including men, teachers of color, teachers willing to work in hard-to-staff settings (Haberman, 1999), and experienced professionals from other fields who wanted to teach, but were discouraged by the extensive requirements of a traditional program. By 2005, 47 States and the District of Columbia had at least one alternative teacher certification program. The alternative teacher certification program had thus become a widely used model to recruit, train, and certify new teachers (Feistritz and Chester, 2003). These programs are shorter, less expensive, more convenient, and more practically oriented than traditional university-based programs. A recent study (Johnson, Birkeland, Peske 2002) compares original aims and observed results of these programs, and formulates recommendations, as summarized in box 2.

Box 2: Findings and recommendations for Alternative Teacher Certification Programs in US

Key findings on alternative teacher certification programs in the USA are as follows. Programs were either statewide or locally-grounded in their orientation. The programs provided brief, inexpensive, convenient, and practical training and that was a strong incentive for candidates—particularly those entering teaching at mid-career. However, the incentives introduced limit on capacity, because often the very incentives that attracted candidates (brief, inexpensive, convenient and practical training) reduced the resources available to provide training and support for new teachers. Thus, it was difficult for program administrators to deliver the quality of preparation they had promised. Most programs relied primarily on recruitment and selection to ensure the quality of their future teachers. New teachers’ readiness for teaching depended not only on what their program offered, but also on the skills and experience they brought to the training and the support they received in their schools. The study proposes four (4) recommendations for policy makers at state level for developing and managing the programs:

- Consider the tradeoffs between centralized and decentralized approaches by the state to alternative teacher certification program implementation.
- Align the goals and design of programs.
- Recognize that reducing the resources available to programs while increasing expectations of what they must do will likely compromise the quality of preparation that can be offered.

- Create incentives for partners to collaborate in providing programs that offer high-quality preparation.
- Recognize the state's ongoing responsibility to regulate entry into teaching.

Source: (Johnson, Birkeland, Peske 2002)

As we will see, lessons learned with alternative teacher certification programs in the USA are valuable for the challenges confronted in many developing countries.

2.2. Recruiting and employing teachers: broadening the criteria for teacher selection

Generally the main criteria to recruit and select teachers are certification and qualification, citizenship, proficiency in the language of instruction, medical and security tests. As the French experience teaches us (Box 1), a key issue is whom to deploy to difficult school areas. The best candidates, with good prospects in the market, may not be satisfied with a short term assignment in difficult schools. For encouraging best candidates to enter the teaching profession or to serve “difficult” schools some countries are introducing well structured and resourced programs of induction and deployment policies (OECD 2005 p. 89).

School involvement in teacher recruitment and selection is growing in importance. In those developed countries where local education governance is well developed, school management and autonomy is a tradition and communities and parents are involved since longtime in schools. It has been proven that the greater school involvement in teacher selection and personnel management helps to improve educational quality, and accountability, as the case of Denmark and Ireland shows below. The positive impact of school involvement in recruiting teachers is less obvious in developing countries, where transparent local governance, tradition and capacity for school management are not evident. The cases of Denmark and Ireland illustrate the capacity of local instances including schools, municipalities and unions (Box 3), to recruit and select teachers.

Box 3. Recruitment and selection of teachers in Denmark and Ireland

Denmark

The recruitment of teachers is the responsibility of municipal authorities. As a result of greater decentralization of decision-making, many municipalities have, however, delegated the power to appoint teachers to the schools, either for all teachers or for teachers on fixed-term contracts. At the school level, a Selection Committee is appointed to examine the applications for teaching posts. The committee includes the principal, the union and parents representatives to the school Board of Governors. It selects a number of applicants, conducts job interviews and assesses the qualifications of the applicants, after which the Board of Governors or the principal makes a decision and sends the recommendation to the head of the municipal administration (if the power to appoint is not delegated to the school). Applicants are expected to have familiarized themselves with the school's values and profile. Many principals also expect the applicants to make an exploratory visit to the school before the application is sent.

Ireland

With the exception of schools operating under Vocational Education Committees at secondary level, teachers in Ireland are not assigned to schools by a central agency. Teachers apply directly to schools for positions, at their own discretion. The school management board, as the appointing body, makes the arrangements for appointment. The Department of Education and Science sets out the general regulations regarding the quota of teachers which schools can employ and guidelines on appointment procedures. It

does not exercise a direct role in the deployment of teachers among schools. Applications and *curriculum vitae* are submitted after advertisement. A selection committee is appointed by the school Board of Management. Short-listing of candidates occurs, according to agreed criteria. The interview process is conducted according to due process guidelines. It typically includes an assessment of academic achievement, qualitative analysis of past experience, teaching skills (*e.g.* as assessed during demonstration class at initial teacher education level or as reported during the probationary process), interpersonal and other skills. The Board of Management makes the appointment in accordance with the order of merit recommended by the committee. Whenever an appointment is made, unsuccessful candidates have a variety of mechanisms through which they can appeal the decision of the Board of Management. Appeals can be made to the Equality Authority, the Employment Appeals Tribunal, or directly to the Minister for Education and Science.

Source: OECD 2005 p.152

2.3. Retaining effective teachers in particular types of schools: providing more support for beginning teachers

The evidence suggests that attrition and turnover rates are not uniform across schools, and tend to be higher in schools located in disadvantaged areas, (i.e. teacher turnover in London was 21% in 2000/01, while 14% in the north of the country). Relevant policies for retaining effective teachers in particular schools are evaluating and rewarding effective teaching; responding to ineffective teachers; providing more support for beginning teachers; improving working conditions; improving leadership and school climate; providing more opportunities for career variety and diversification; providing more flexible working hours and conditions. More support for beginning teachers is crucial given that high attrition rates are experienced by beginning teachers. Also, criteria and process used to allocate teachers in schools should ensure that new teachers are not concentrated in the more difficult and unpopular locations (OECD 2005 p.206). Table 1, summarizes policies directed to particular types of teachers or schools.

Table 1: Teacher policy objectives in OECD countries

Policy objective	Targeted to particular types of teachers or schools
1. Making teaching an attractive career choice	- Expanding the supply pool of potential teachers - Making reward mechanisms more flexible - Improving entrance conditions of new teachers Rethinking trade-off between student teacher ratio and average teacher salary
2. Recruiting, selecting and employing teachers	- Broadening the criteria for teacher selection - Making a probationary period mandatory - Encouraging greater teacher mobility
3. Retaining effective teachers in schools	- Responding to ineffective teachers - Providing more support for beginning teachers

Source: OECD, 2005

The OECD study draws the following common teacher policy directions: (i) Emphasis on teacher quality over teacher quantity; (ii) developing teacher profiles to align teacher development performances and school needs; (iii) viewing teacher development as a continuum; (iv) making teacher education more flexible; (v) transforming teaching into a knowledge-rich profession; (vi) providing schools with more responsibility for teacher personnel management. While the above policies concern developed countries, they may provide information on teacher policies directions, on teacher professionalization.

3. TEACHER POLICIES FOR REACHING UNDERSERVED POPULATIONS

Since the 1990s, many studies agree that policies addressing the challenge for recruiting, retaining and retraining teachers, especially in order to prepare schools and teachers for universal education and for reaching the underserved communities are complex in design, planning and implementation and often imply strong trade offs. A supplementary difficulty is that there are few rigorous evaluations showing the long term impact of such policies.

This chapter is reviewing current national policies, main issues, challenges and promising practices of selected teacher policies in seven (7) countries: Senegal, Mali, Egypt, Niger, Colombia, Nicaragua and Romania. We pay particular attention to “contract teacher policies”, community schools, professional development and incentive schemas for teachers, and distance education. We look whether these policies (a) are targeted to reach and improve the quality of education services towards disadvantaged groups of students; (b) provide evidence of impact evaluation (effectiveness); (c) dispose a plan for sustainability and scale up, including conditions to be effective and how they link to government policies. We also look at policy implications related to teacher emigration, gender issue, and role of teachers on AIDS programs. This chapter is based primarily on country and regional case studies, seeking to show their effectiveness in terms of improving access, equity and quality.

3.1. A dramatic need for more and better quality of teachers.

In developing countries, the main challenge is how to recruit the necessary number of teachers in order to meet the goal of universal primary education, given a chronic shortage of qualified teachers (Global Monitoring Report-WB 2006 and UNESCO-Institute of Statistics 2006). However, raising enrollments and universal primary education are necessary but not sufficient to ensure basic literacy and numeracy. As a recent evaluation (IEG-World Bank 2006) concludes, “*key to reduce poverty is basic knowledge and skills not educational attainment*”, and strategies to attract teachers in underserved communities in developing countries has had varied degree of success, see Box 4.

Box 4: Policies to attract teachers to rural and underserved areas

“Implemented strategies to attract teachers to rural and underserved areas had varied degree of success. In many countries the teacher shortage in marginalized areas has undermined efforts at improving learning among disadvantaged. For instance in Uganda, the average pupil: teacher ratio is 55:1 but in poor areas goes to 90:1. Among strategies to attract teachers to underserved areas are: construction of teachers houses (Uganda), cash incentives (Peru, Tunisia), and local recruitment of teachers, especially of women. But the new professional requirement for teachers will make more difficult to find people to go to the rural areas, especially women teachers with higher qualifications. That is the reason that countries are supporting community management of schools and are hiring at local level (but also less qualified).

Source: Independent Evaluation Group (IEG), From Schooling Access to Learning Outcomes An Unfinished Agenda, The World Bank 2006, p.45

Therefore, in order to achieve the EFA objectives, it is urgent to provide underserved populations in developing countries not only with more teachers, but also with better teaching quality.

An additional emerging challenge for developing countries is the teacher shortage for secondary education, which is expected to aggravate with the arrival of larger number of students from primary to secondary schools the coming years (WB 2005). Main teacher shortage reasons are reported to be illness of teachers, small number of teachers prepared through the teacher training institutions, unattractive working conditions especially in rural and disadvantaged areas and no sufficient budget for paying teachers initial training and salaries.

Common policies for addressing teacher shortages that mainly affect underserved populations include in general some kind of combination of (i) shortening teacher training, (ii) utilizing distance education courses, (iii) teaching more subject areas, (iv) locally hiring contract teachers, (v) using teacher mentors, (vi) implementing teacher meetings (networking), and (vii) increase head teacher responsibilities for supporting teachers. Additional policies tend to be developed in parallel to the public school system, such as community schooling (EQUIP2, 2006). Some policies are surprisingly creative and out of the box, e.g. recruitment of teachers among educated unemployed persons without specific teaching preparation (the case of contract teachers in Senegal).

Not all these policies are new. In some francophone countries, including in sub-Saharan Africa, contract teacher practices were already introduced since 1960s. However since 2000, these policies are expanding and intensifying under the imperative for reaching the EFA goals.

Recent studies evaluate some of the policies and strategies to recruit, retain and retrain teachers in selected groups of countries. A review of the studies helps to better understand trade-offs - such as increasing teacher supply and lowering educational standards - and highlights innovative approaches.

3.2. Contract teacher policies

Contract policies are spreading since the 1990s. One of the reasons for this is pressure to realize EFA objectives. It is therefore urgent to examine contribution of contract teacher policies to equity, quality and efficiency of the education system.

Contract teacher policies have been in particular adopted in francophone sub-Saharan countries - in some countries already since the 1960s (Senegal) - and more recently in East Africa, SE Asia and Latin America. The contract teacher policy is one of the main answers to face teacher shortages and thus to move towards providing access to basic education to all (EFA goals). The rationale to hire contract teachers has typically been of three kinds: (1) fiscal reasons: insufficient resources to hire permanent teachers; (2)

deployment reasons: the contract teacher can more easily be hired locally in the needed areas; and (3) accountability reasons: hiring by the local community supposedly increases accountability.

An overview of contract teacher policies provides the following key characteristics (Duthilleul 2004, Fyfe 2007):

- Education requirement and terms of employment of contract teachers differ among countries.
- The contract teacher option brings a necessary flexibility to the system to adjust to changing situations and urgent needs.
- Countries vary in the spread and use of contract teacher policy, but in general they tend to be more used in poor, rural and remote areas.
- The most visible contribution of the contract teacher policy is its positive impact on *equity*, by addressing the schooling needs of ethnic and minority groups and isolated populations especially in rural areas. It brings also flexibility to the system to respond to urgent needs and to adjust to changing situations (Duthilleul 2004). It may also be a source of employment to educated youth, as in Senegal.
- The contribution of teacher contract policies to the *quality* of education is less clear. First it is difficult to measure through vigorous evaluation the impact of contract teacher policy on quality. In certain cases, (Nicaragua Duthilleul 2004) there is evidence of impact on quality. In that case because the overall education quality is low, the introduction of contract teacher(s) may not worsen the already poor situation of education quality and may in fact be contributing to improve it.
- As per the contribution of teacher contract policies to the *efficiency* of education, the debate is still open (Fyfe 2007, Buckland 2000). Despite the fact that salaries are generally very low in comparison to those of permanent teachers, hidden costs have to be calculated in a cost analysis such as costs of training, monitoring, new simplified curricula etc.

From the teacher perspective, as a labor force, some have argued (Fyfe 2007) that additional trade offs of the contract teacher policy are negative, in particular an increasingly demoralized teaching force evidenced by teacher absenteeism and turnover and a fractured teaching force that cannot be sustained long term. The same study concludes that a long-term sustainable answer to teacher shortages is not to institutionalize low cost, non-professional teachers, but to improve working and living conditions that make teaching an attractive profession.

Bourdon al. (2007) looks at the impact of contract teachers at student performances. It finds out that contract teachers do relatively better for low ability than for high ability students. The study concludes that contract teachers are better positioned than civil servant teachers to work in more difficult learning environments and to react to the needs of students with the most serious learning deficiencies. They thus tend to reduce existing inequalities on overall student outcomes. (Second, ...p.37

In fact, most reviews (Duthilleul 2004, Fyfe 2007) recommend an *integrated model* by (a) integrating contract teacher into the teaching force after completion of educational

requirement, while supporting their continuing development, and (b) developing strategies for sharing the job with regular teachers. The Fyfe study (2007), in a more radical way, recommends that governments adopt a time-bound strategy to phase out the use of contract teachers by 2015 in line with Education for All (EFA) quality goals.

Regarding short term management of contract teachers, three recommendations emerge (Duthilleul 2004, Fyfe 2007, Mulkeen , Chapman 2007) ,

- a) Provide the contract teacher with adequate training and support for the job.
- b) Produce accountability towards the community tends to improve results regardless of whether they are regular or under contract.
- c) Create incentives to reward good teaching and opportunities for career growth are essential to retain teachers.

As a synthesis, we can conclude that the “contract teacher” model seems to be a flexible way to hire teachers for urgent needs at local level and save money from a long, costly and not very effective initial teacher training program. It may also help – at least at the short term - to improve equity. But a systematic effort has to be made to manage the contract teacher together with regular teachers, to support them better with professional development and mentoring, and to provide sound career opportunities in order to retain them and have an impact on education quality. Key lesson based on the “contract teacher” model analysis is that long term policies must guarantee the integration of contract teachers in the teaching force.

The case studies of Senegal, Nicaragua, Mali and Niger below provide illustrations.

3.2.1. SENEGAL: An integrated contract teacher policy

Context: In Senegal the main reason that led to introducing since mid nineties a teacher contract policy was the shortage of teachers, especially in the rural areas and the budget constraints. In the mid nineties, teachers’ salaries represented over six times the GDP per capita and up to 90 per cent of the education budget.¹ The government had no resources to hire new teachers as public servants. In addition, until 1996, only about 200 teachers were prepared yearly at the institutions of initial teacher training while the country needed around 2,000 new teachers per year.

The contract teachers’ policy: In 1995, Senegal introduced an experimental program of recruiting volunteers to rural schools, who would receive a small remuneration and could eventually become contract teachers after two years of service and obtaining a Certificate of Pedagogical Aptitude (provided by the Ministry of Education) .The volunteers had to serve two years, and receiving a grant of 50,000 FcF per month - the salary of a full time public service teacher being 200.000 FcF - and a short training. An additional difference in labor conditions is that contract teachers – contrary to permanent teachers - do not receive housing and teaching subventions. This policy, in addition to fiscal reasons already mentioned, was conceived to offer a chance to youngsters qualified with a baccalaureate or university diploma, but unemployed.

¹ Y.Duthilleul, op.cit. p.33

Scale up: Through this system, since 1996, around 1200 volunteers yearly have been recruited, trained and sent to work in the villages to reach the children in rural areas out of school. The experiment was scaled up in 2000-01: new legislation determinates that all teachers hired at divisional level would be volunteers and would receive an initial teacher training of three months' duration. In 2004 the government expanded the period of volunteering from 2 to 4 years² and enlarged the initial training from XXX to 3 months. Since 1995, about 25,000 volunteers have been recruited and have worked as primary school teachers.

The contract teacher policy has evolved since 1995 into a national policy by 2006. The recruitment of volunteers has increased to around 2,000 volunteers per year, based on an entry examination. By 2004, 42% of primary teachers on Senegal were contract teachers and 44% civil servants teachers (Mingat 2004)

Evaluation and evidence that the policy is reaching the disadvantaged groups and improves the quality of education: There is evidence that the model of volunteer teachers has contributed to improving the enrollment in primary schools, especially of those of rural areas. The gross enrolment ratio for children of all ages has risen from 69 percent in 2000 to 83 percent in 2005 (CIDA Senegal, 2007). MoE officials assert that through the "contract teacher" schema, more and better educated teachers are going to work in rural areas and that volunteer teachers are succeeding better than teachers with normal initial training in the exams to become contract teachers. Senegal has opted for an integration model that permits volunteering teachers through exams to become contract teachers and through other exams and requirements to become regular teachers. Thus individuals who aspire to a teacher career can enter as a volunteer while foreseeing a career development path in teaching. However, no robust evaluation is available.

Issues: The main issue in the case of contract teachers in Senegal seems to be the management of volunteer teachers at local level. The teacher union in Senegal denounces mismanagement of contract teachers and a difference on volunteer salaries between regions. There are also some denouncements of corruption and miss management with grants of volunteer teachers in the national media. (Press in Senegal, April 2007).

Lessons learned: The Senegal experience shows how design of teacher policies can make good use of local needs in a specific country context. The contract teacher program in Senegal seems successful in terms of attracting (remunerated) volunteers with qualification to the profession because the program provides them with concrete incentives in terms of perspectives within the teacher career. The Senegal experience underlines the importance of an effective, transparent and accountable management mechanism for the local and central level.

3.2.2. NICARAGUA: Contract teachers in autonomous schools

² République du Sénégal, Ministère de l'Éducation, Le développement de l'Éducation Rapport National du Sénégal, Direction de la Planification et de la Reforme de l'Éducation Août 2004.

Context: Nicaragua was in the 1990s one of the poorest countries in the LAC region with one of the lowest enrollments (NER 75.4), including high drop out and repetition rates. About 1/3 of teachers were without any preparation, and this percentage was higher in rural areas ((Duthilleul 2004). Most of these non qualified teachers were primary school graduates, who had received only some short initial training.

The policy: The government introduced in 1993 a decentralization policy promoting school autonomy in order to improve quality and efficiency. A new category of so called “autonomous” schools was introduced as a decentralized model, versus the centralized traditional schools. School councils are hiring teachers in these autonomous decentralized schools and receive the same legal status as teachers in centralized schools. Financial transfers were made to school councils who were given the power to hire and fire teachers within the existing legal framework governing teachers’ rights, and it could offer them additional financial incentives (bonus payments) on the basis of performance. Teachers in autonomous schools serve a one-year probationary period. This probationary period can be extended to two years if the school council deems performance as unsatisfactory. Teachers in autonomous schools have to teach a minimum of 35 pupils per class, while there is no minimum required in central controlled schools.

Evidence that the policy is reaching the disadvantaged groups and improves the quality and efficiency of education: Since the contract teacher policy was implemented in Nicaragua in 1994 and until 2004, results show an increase of the net enrolment rates in primary schools from 75% to 83.5 % and in secondary schools from 20 to 38.7%. Also dropout rates have been reduced from 14% to 6.5%. A more specific look at achievements of students shows that 3rd grades of autonomous schools have statistically better results in language and math than 3rd graders in centralized schools. But the difference in the results between 6th graders is not significant. However, national achievement tests also indicate that most third and six grades in the country have very poor achievement of the curriculum content, as explained by Duthilleul (2004).

Scale up: By 2002, about one third of all primary and secondary schools, receiving more than 50% of the total student population, have become autonomous, and their teachers are hired by the School council (Duthilleul 2004).

Issues: Contract teacher programs in Nicaragua has contributed since its introduction in 1994 to bring more children in schools, especially from poor and disadvantaged areas. However, the model requires parents and communities to contribute for paying teacher incentives, creating an equity issue. While teachers are integrated in the teaching profession, even with the bonus payment, teacher salaries continue to be very low contributing to teacher shortages.

Lessons learned: In Nicaragua, the contract teacher model clearly plays an important role on reaching underserved population. The integration of contract teachers in the teaching force stabilizes and improves the morale of teachers. However, as the Nicaragua model also shows, the quality improvement is not given, since the contract teacher model alone cannot make the difference in terms of students’ achievements.

3.1.3. MALI: less integrated and sustained policy for contract teachers

Context: At the start of 1990s only 22% of children were enrolled in public primary schools in Mali. Children in Mali are among the poorest in the world and repetition rates are very high: 19 % per cent per year (2002). The pass rate for children of 6th grade primary school exam is about 50% (2002). Since the beginning of the 1990s the GoM, with substantial external assistance from the World Bank the USAID and many other donors (WB 2007b), focused to improve the access to primary schools in order to bring more children in primary schools. Budget constraints for teacher salaries and shortage of trained teachers were the main obstacles to reach the access objective. To respond to that challenge the government promoted the (i) introduction of double shift teaching (b) redeployment of teachers form administrative positions to classroom positions; and (c) emphasis on the recruitment of contract teachers.

The contract teacher policy: “Contract teacher” has been the main policy to respond to the teacher shortage in Mali and to address the very low access to primary education that was initiated in 1992 (CONEFEM 2005) to address the increased demand for primary schooling. In the early days, contract teachers were mostly young graduates that were supposed to receive a training of 3 months. The policy was expanded gradually and by 2002, contract teachers represented more than 86% of teachers in primary schools. Between 1992 and 2004 around 11.500 contract teachers were recruited either by the government or by local communities. In addition communities started to open community schools in Mali since the 1990s, supported mainly by USAID funding and operated by a school management committee (SMC). As a consequence the number of community school teachers that are also contract teachers increased from 1,106 in 1996 to 5,808 in 2003. The SMC hires and pays the teachers. Teachers are required to live in the village and have at least adult literacy training, instead of formal schooling. The MoE created a special category of teachers for the community schools, in order to be able to hire less qualified teachers and pay them outside the existing salary scales. Teachers on community schools have very low levels of formal schooling: 42% of them, versus 58% of public school teachers, have completed lower secondary. The teachers’ lack of formal education is supposed to be compensated through an ongoing support and supervision provided by the NGOs and the local education authorities. The NGOs – paid by cooperation - provide initial 4 week training over the course of three months and plans a two week follow-up in service each year.

Evidence that the program is reaching the unreached and improves quality: Community schools have increased access to primary education for the poor children mainly in rural areas, reduced costs and increased quality through provision of text books, teacher training, teacher supervision and community management (WB 2007b). In fact, access to primary schools in Mali has increased - GER increased form 26% in 1990 to 71% in 2004 - thanks in part to community schools. However, remote communities were left to finance themselves and as a result GER there averaged 19% per year in 2002.

Scale up and phase out: The contract teacher program was scaled up very quickly. A sustainability issue at least for the community schools and teachers payment was raised since 2003 was not anymore available. The communities that were supported through external the country assistance must now rely entirely on the funds they generate locally in the very poor communities to continue to operate their schools. As it was underlined in a USAID evaluation not only does this present a real challenge to many communities it also renders community schools inherently inequitable. Why should parents who send their children to public schools not have to pay for the operation of their schools, while parents in villages with community schools cover the entire cost of their children's education (DeStefano 2006).

Issues: According to a recent WB study (2007b) contract teachers recruited by the government and communities have very little if any pre-service teacher education. The government has struggled to provide them with some kind of short-term training. In Mali, the contract teacher policy has helped to decrease salary expenditures, but it has had a major negative impact on educational quality.

Lessons learned: In the case of Mali, no system was foreseen to integrate contract teachers in the teaching force. Also the costs for salaries (community schools) and training were mainly upon the communities and donors. Contrary to Senegal no incentives were created to make this start in professional life through teaching attractive to young and qualified volunteers. Without integration in teacher policies in general, without perspectives of further career, and without appropriate training support, and largely financed by external donors, the contract teacher model is essentially a non sustainable low quality emergency measure.

3.4. NIGER: Teacher Salary Policy

Context: In Niger, in 2000, only one out of every five children completed primary school -- along with Chad and CAR, one of the lowest completion rates in the world. The government struggled to expand schooling, devoting a high share (31%) of the domestic budget to education, and 60% of its education budget to primary schooling. However, it received little external support and could not afford to hire more than 250 new teachers per year. Surprisingly, by 2005, Niger was one of the world's best performers in terms of progress in bringing children through its primary education system. What had changed?

Teacher Salary Policy: A key factor was a politically difficult reform of teacher salary policy: the Government froze (2001) the recruitment of civil service teachers and promoted expansion with new "contract teachers", hired on shorter but renewable term, at a lower salary level (on par with the average teacher salary across low income countries). Due to the reform, teacher hiring has jumped from 250 to 2,500-3,000/year. The 16,000 new contract teachers have more than doubled the teaching stock, and made the unit costs of primary education more fiscally sustainable. Enrollments have doubled -- from 530,000 to 1.1 million children in school -- representing a 16.6% yearly increase. Children in rural areas have been the biggest beneficiaries, with enrollments increasing from 38% to 51% between 2002 and 2005, closing the gap with the national average.

The Government's reform has increased the primary completion rate from 26% in 2002 to 36% in 2005 and reduced geographic disparities. Donor assistance to Niger has tripled from about \$10 million to \$39 million per year since it joined the FTI in 2002 and donors have made concrete progress in merging missions and using common performance indicators. The Government's education sector plan, agreed with donors under the FTI process, is tackling key issues such as lagging girls' completion rates, by introducing targeted stipends, and trying to improve school functioning with local School Management Committees and a new information tool: performance: "monitoring sheets" which compare schools' resources and results are posted in each school.

3.3. TEACHERS IN COMPLEMENTARY SCHOOLING MODELS

The complementary models for reaching underserved populations are educational approaches that rely on community, nongovernmental and government collaboration. They entail schooling models that reach disadvantaged students who would otherwise not have access to education. The programs intend to complement the formal public education system by offering children an alternative route to achieving the same learning outcomes as student in regular schools, usually at lower costs. The costs are shared among government, NGOs and community/families. Flexible strategies for hiring teachers are at the center of the complementary schooling models.

A recent USAID/AED synthesis of eight (8) country case studies (Afghanistan, Bangladesh, Egypt, Ghana, Guatemala, Honduras, Mali, Zambia) (EQUIP2 2006)³ reports that these approaches can effectively reach and educate otherwise underserved populations in various geographical, political and social contexts. The study evaluates the complementary schooling model as very effective in terms of access, completion, and learning outcomes. In all eight cases, teachers are locally recruited with ongoing regular supervision and training, in response to the severe shortage of teachers in the underserved communities. In fact, the complementary education model relies on the premise that individuals capable of teaching primary schools reside in or near each village. This implies that complementary schools function with less qualified, because locally recruited teachers. The recruited individuals in these locations dispose however of some critical advantages: (a) they live where the schools are; (b) they know the children and families, and are trusted by the community; (c) they are hired by the community and therefore directly accountable; (d) they recognize often their pedagogical limits and are more receptive for training and support; (e) they are initially willing to work with much less compensation and in many cases are volunteers.

Because teachers of complementary programs are less formally educated and minimally compensated, they are supposed to receive regular training and support. According to the 8 case studies, teachers in complementary programs (a) receive an initial training, usually of a duration of a view weeks; (b) are monitored through visits by a field staff or teacher; (c) participate in meetings with other teachers to reflect their practice; (d) are enrolled in

³ DeStefano, Joseph.2006. Meeting EFA: Reaching the Underserved through Complementary Models of Effective Schooling, . Washington DC.: Educational Quality Improvement Program 2 (EQUIP2), Academy for Educationa Development (AED).

follow up training during the year and/or at the end of the schools. The study emphasizes that while teachers are poorly compensated, they are provided with an extensive on the ground network of teachers and school support supervision.

In the 8 cases studies, the community schools are either (a) completely separated from the public system, (b) or somehow linked, or (c) gradually integrated in the public school system. For instance, the Egyptian case provides a sound experience of ongoing integration of schools and teachers in the public system (see below the case of Egypt). When the community schools are separated from the public system (the case of Mali) there is no sustainability strategy for contract teachers employed by communities in community schools and once donors and specific programs of support towards the community are ending, then the poor communities are not able to provide any salary to the contracted teachers.

The case of community schools for girls in Egypt presented below illustrates the strong points of a policy option towards integration of community schools in the public school system.

3.3.1. EGYPT: Women Teachers for Community Schools for Girls

Context: In 1990 enrollment rates for girls in Upper Egypt were below the national average; in some small communities there were no schooling facilities. The quality issue was a national concern.

The policy: Since then a successful community school initiative was launched by UNICEF/Egyptian MoE for increasing access of young girls especially from poor communities to schools. The project initial objectives were to increase the enrolment, primary school completion and facilitation of learning especially for girls living in small rural communities and also cost effectiveness (Zalouk 2004). In terms of access for girls during the period 1995-2000 the community schools were expanded to 202 school sites and enrolled 4,656 students, 70 per cent of which are girls (Zalouk 2004). The community schools were mainly established in small hamlets in the project areas where enrolment rates for girls were as low as 10 to 15 per cent. In the “Community school project” - teachers work as facilitators and are mostly young women selected by the community, and provided with pre-service training and continued support. The MoE pays salaries for these teachers, provides materials and support curriculum and teacher training and UNICEF developed the mode for quality community-based education. Communities play an important role, including by providing additional teaching and supervising of students. NGOs contribute on management supervision and ongoing evaluation for schools. Young women are recruited locally to be facilitators. Special attention is paid to their capacity for innovative creativity and sensitivity to children needs. Their minimum level of education has to be primary plus 3 years. The selected teachers undergo a three phase pre-service training of about two months, that initiates them to teamwork and teaching methodologies, and included observations in existing community schools. Once they complete their training, they are becoming part of the Egyptian teaching force and receive a salary that is a level below that of formally certified teachers.

Evidence on quality of education: The project seems to succeed the initial objectives in terms of enrolment, primary school completion, and facilitation of learning and cost effectiveness (Zalouk 2004). In terms of access for girls during the period 1995-2000 the community schools were expanded to 202 school sites and enrolled 4,656 students, 70 per cent of which are girls (Zalouk 2004). In small hamlets in the project areas where enrolment rates for girls were as low as 10 to 15 per cent, (Farrell 2003) By 1999-00 in the halmets where community schools established, the available data is that in 202 community schools were enrolled 4,656 students, 70 percent of whom were girls (Zalouk 2004).

In terms of quality of learning for girls, Zalouk (2004) reports that children of the rural community schools, from 1997 through 2001, performed well in the official examinations in third and fifth grade. Including, in three governorates, the community schools outperformed their public school third and fifth grade district.

In terms of cost and cost effectiveness the community schools have a lower unit recurrent cost (\$114 per students per year) than the national public schools (Zalouk 2004).

Scale up: Based on solid partnership between the Government and UNICEF, the Egypt Community schools programs were initially seen as a “seed bed” for reform rather than a project for scaling up. The strategy was never to expand the community schools system over the whole territory but rather to keep it small in geographic scale to evaluate its quality and spread lessons to regular one classroom schools.

The current (2005) phase of the community school initiative includes transfer of schools from UNICEF to the MoE, as well as continued evaluation of lessons learned. And donors are not involved anymore. At the same time, UNICEF yearly adds 25 new community schools to maintain a total number of about 300 schools.

Issues and lessons for policy development: The strong point of the community schools in Egypt is that they are not creating a separate system of “community schools for the poor”, but are integrated in the wider Egyptian school system. Every year about 25 of the 300 community schools are handed over to the MOE and incorporated in the public system. At teacher recruitment level and incorporation in the teacher body, the cooperation with the MoE is very strong.

4. TEACHER MANAGERIAL ISSUES: PROFESSIONAL DEVELOPMENT, INCENTIVES, EMIGRATION, GENDER AND TEACHERS ON HIV/AIDS ENVIRONMENT

4.1. TEACHER PROFESSIONAL DEVELOPMENT

Recent reviews on effective teacher retraining and professional development in developing countries (Craig, Kraft, Plessis, 1999), on underserved minority communities (Darling-Hammond 2006) and on Teaching for the Knowledge Economy (Hargreaves 2003) converge in a main central conclusion: *appropriately empowering teachers is*

crucial. In their study on promising practices in teacher education programs in five countries (Bangladesh, Botswana, Guatemala, Namibia and Pakistan), Craig, Kraft, & Plessis (1999) provide five key findings and recommendations: (1) Teacher education can make a difference to student achievement; (2) Teachers need to be actively involved in the change process; (3) Teacher development has to be considered as an ongoing professional development and support; (4) Teacher professional development is a process and not an event; (5) Alternative teacher education programs should be considered. The study underlines that **“practical training, based on the realities of the classroom and ongoing on-the-job support, is the critical factor on any successful teacher education program”**. The study highlights the importance of providing a range of incentives for different stages of teachers’ careers to attract suitable candidates to teaching, establish job satisfaction and improve instructional practice. A recent World Bank review confirms the importance of incentives for improving teacher quality (Vegas Umansky 2005).

The following sections are presented below: (a) a model of school-based Professional Development for empowering rural teachers in Romania, (b) and the Teacher Professional Development through distance learning.

4.1.1. ROMANIA: School-based Professional Development (PD) for Empowering Rural Teachers

Context: Over the last 16 years, the Romanian education sector has gone through a wide range of systemic changes, steered in part by the perspective of Romania’s accession to the European Union in 2007. Education reform focused on re-orienting the school system on more student-centered outcomes and performance-based approaches, creating a new dynamic and producing a number of systemic changes. The most recent reform phase is focusing on bottom-up approaches, on the implementation processes and the concrete quality assurance mechanisms at school and class level – i.e. school improvement, staff development, professional development, technical support and assistance for teachers to improve class activities, teaching and learning aids, assessment of students’ performances, school-based curriculum, school and community relationship etc.

PD policies for rural teachers: In Romania, national policies and strategies of school based professional development and teacher empowerment in the rural areas of the country are implemented since 2003. The policy is part of the wider National Rural Education Program for empowering rural schools and the education of students in rural areas. In Romania, the *School-based Teachers’ Professional Development (SBTPD)* involves all regions of the country, more than 10,500 schools and approximately 150,000 teachers. The aim of the *SBPDT* policy is to encourage schools to analyse their own training needs and to implement an ongoing *customised school-based professional development* program of the staff. Central components of the policy are: (a) Development by an expert group of a *Professional Development Support Pack* consisting of ten modules for teachers that will be spread out in all rural schools; (b) Selection and training of a number of *three – four mentors for each county* of Romania; (c) *Intervention of the mentors in schools:* the role of the mentors is to concretely work in all schools in order to identify training needs and priorities and, based on that, to support the staff in organizing

the school-based professional development; (d) The concrete *professional development process* that is carried out in schools when teachers take over this process.

Evidence on quality of education: While the program is still under implementation, a number of positive results are evident (Crisan 2006):

- In 2005, 95 % out of the staff of the schools already involved participated in the program; data show that, before 2004, only 30% of rural teachers was participating in any kind of in-service training;
- Increased motivation of teachers for professional development and school improvement: approximately 35% of rural teachers started subject-based up-grading courses;
- Increased level of team work in schools, and of cooperation among staff members, as well as increased staff involvement in solving every day problems at school, contributing to better school and community relationships;
- Participation of teachers in the decision concerning their own professional development increases their motivation.

In terms of impact on student performances (Crisan 2006) evidence shows that in the last year (2005) the national examination for grade VIII as applied to all schools in Romania, showed improved performance of rural schools versus previous years.

Issues to be addressed: The number of mentors is not sufficient to cover all rural schools with quality mentoring; the mentors should also be specially trained for better monitoring the school-based professional development of teachers; the monitoring and evaluation instruments and indicators of the whole process should be improved.. Better mechanisms and instruments should be developed in the future so that students' performances can be better correlated with inputs at the level of TT and TPD. The program should be spread to include urban schools as well.

Lessons for policy development: The Romanian model of school based professional development addressing the needs of rural schools, has produced a number of relevant changes at the level of national TT and accreditation policy. Before the project, exclusively face-to-face in-service training was offered in central and regional training institutions. Accredited training programs were only the programs provided by universities.

- Currently, the PD program of the *Rural Education Project* has created a more flexible accreditation system; school-based PD activities – once they follow clear criteria and achieve the standards required by the National Center for Teacher Training - can be accredited without mayor challenges..
- Due to its success, the Professional Development Program is increasingly replicated at urban schools.

The new vision and strategy on TT and TPD designed and implemented in the framework of the Rural Education Project in Romania show: (a) the need for consolidating and strengthening *at school level* the changes that have been promoted from the *top* of the system, in a *centralized way*; and (b) a paradigm shift from *extensive and centralized*

development to intensive and decentralized development, and to the development and implementation of appropriate mechanisms to better ensure and monitor the quality of the education.

4.1.2. Teacher Professional Development through distance learning. A specific mode of providing teacher professional development is the mode of distance learning. The ICT development all around the world and the investment from both governments and international community on introducing ICT in the school systems has a (potential) strong impact on Teacher education, both initial and in-service. Evaluation data of Teacher professional Development through distance learning are often weak. An UNESCO report (2001) on the basis of ten (10) case studies⁴ about the use of distance education (DE) for teacher education assess the most appropriate uses of open and distance learning applied to teacher training, its effectiveness and its costs (table 2).

Table 3 : Teacher Education through Distance Education: 10 case studies, (UNESCO 2001)

Effectiveness	Cost	Used Media and Technologies	Management
i. DE can reach more teachers than conventional programs, especially the mass media. ii. No clear information about completion rates, but drop outs in some cases is higher than in conventional programs. iii. Few evidence of the extent to which knowledge gained translated into knowledge applied in fostering children’s learning.	DE can be at an economic advantage over conventional provision, depending on scale, choice of media, technology and program design.	Printed materials, radio with audio-cassette, television. ICTs are expanding and CD-roms	i. Universities ii. Distance Teacher College iii. Donor Funded projects iv. Consortium (public-private partnerships)

The UNESCO report (2001, p.38) traces the need for further comparative analysis of DE and more conventional forms of teacher education in five areas:

- (a) Analysis on cost effectiveness.
- (b) Efficiency rates on such dimensions as enrolment, completion and success.
- (c) Effectiveness and impact on teaching and learning, especially related to ICT use.
- (d) The policy environment as related to regulation of telecommunications or media.
- (e) Systematic evaluation of teacher education through distance education.

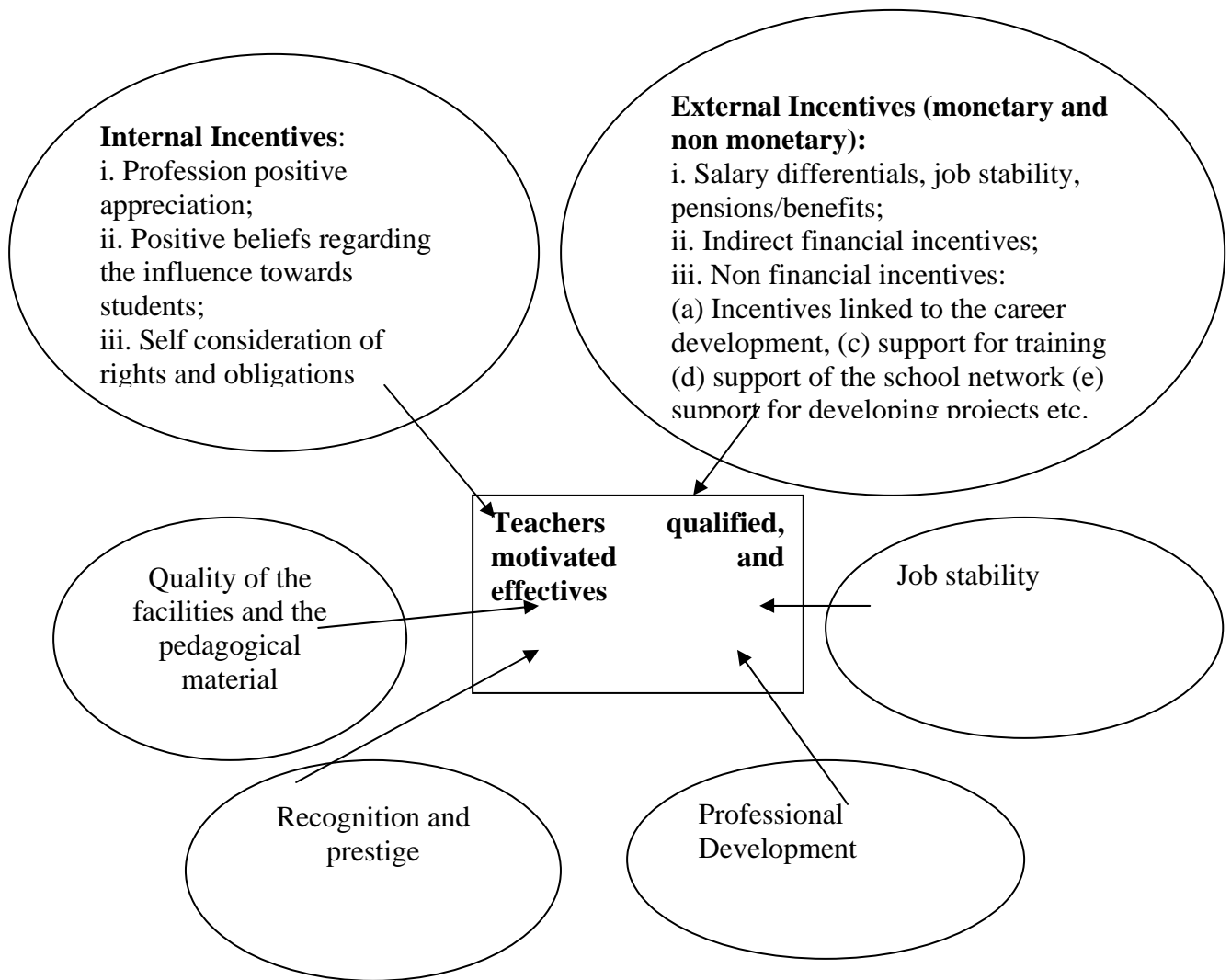
4.2. Teacher incentive schemas and policy implications

The described policies on attracting, recruiting, selecting and retaining effective teachers include clear teacher incentive schemas. Teacher incentives are part of the teacher management. Thus, ultimately, changes in teacher-incentive structures can affect who choose to enter and remain in the teaching profession, as well as the quality of their daily work in the classroom. International studies show that more and more countries are

⁴ The cases studies were developed for Brazil, Burkina Faso, Chile, China, India, Mongolia, Nigeria, South Africa, (two studies) United Kingdom.

introducing different schemas of teacher incentives for improving the quality of teaching and impact positively on student learning outcomes (Vegas, Umansky 2005). Figure 1 shown below is a synthesis of different categorizations of teacher incentive schemas that policy makers should consider when committed to introducing or enhancing incentive-based teacher career development reform planning. Figure 1 shows different types of incentives for attracting, retaining and improving teacher practices: internal and external; monetary and non monetary; work conditions related; professional development related; job stability related; recognition and prestige related.

Figure 1. Type of incentives of qualified, motivated effective teachers



Source : Adapted from Vegas E. Umansky I., 2005, *Improving Teaching and Learning through Effective Incentives*, Washington DC, The World Bank and A. Zafeirakou 2002. *Teachers professional*

In general, two principles guide the orientation towards a comprehensive incentive-based reform: (i) an incentive-based structure that recompenses teachers’ competences and performances linked to students achievements; (ii) an incentive-based reform that is combined with other components of teacher policy, in particular recruitment, career development and professional development. Lessons learned from incentive based policies in various countries while suggest how to proceed and how to think about the issues related to incentives, they are saying few “what works”. Thus, it is not recommended to simply copying incentives that may have worked in one country, and may look as if they will work in another country.

Mexico and Chile are two countries where systems of teachers’ incentives for improving students’ results were introduced. An evaluation (Vegas, Umansky 2005) showed that in the individual performance based system (Mexico) no effect was observed, while in the school based incentive system (Chile) some impact on student results was identified (see table 4 below).

Table 4: Performance based incentive reforms for teaching and learning? Mexico and Chile

<p>Mexico. Type: Individual performance-based pay awards permanent promotion of teachers. <u>Evaluation finding:</u> no apparent effect on improving student performances</p>	<p>Chile. Type: A school level performance-based pay program. <u>Evaluation finding:</u> Results are slightly more hopeful than in Mexico.</p>
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Source: Vegas, Umansky 2005

Additional lessons on how to proceed and how to think about design and implementation of incentive-based teacher management reform are emerging from further Latin American case study analysis (Vegas, Umansky, 2005) as shown in the table below:

Table 5: Key lessons for introducing incentive based teacher schemas in Latin America

<ul style="list-style-type: none"> a) Careful incentive design and implementation, including multiple scenarios, are key to effective impact. b) Teachers do not always respond to incentives in predictable ways. c) Teacher unions have an important role on planning and implementing incentive-based teacher reforms. d) How and (how strongly) incentives and the desired outcomes are linked matters. e) Reward size may not be large enough to stimulate improved teacher effort and performance. f) If not all hard working teachers are receiving a reward, but only a few, and then there is no impact. g) Incentives may not reward actual or sustained improvements in teaching and learning. h) Increased accountability is a powerful but limited tool for improving teaching quality.
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Source: Vegas, Umansky, 2005

4.3. GENDER TEACHER PROFILE AND POLICY IMPLICATIONS

The growing feminization of teaching in most developing countries is an important trend. In 2004, 59% of primary and secondary teachers in the world were women. In more than half of OECD countries, 80% of teachers are female. In sub-Saharan Africa, women teachers in primary schools represent 45%, and in South and West Asia 44% (UNESCO-IS 2006; OECD 2005) that represents a significant increase since twenty years.

The influence of female and male teachers on girls and boys participation and performance is still an open debate. Concerns about growing feminization of teaching are linked to the idea that male teachers may provide positive male role models for disengaged boys and that primary school women teachers could provide a positive role model for girls. Both assumptions are difficult to evaluate. One thing that is clear is that in countries where there are large gender disparities among teachers, this appears to have a negative impact on reaching girls and young women (UNESCO, Institute of Statistics 2006). This is very well illustrated in the case of Afghanistan (Box 4).

Box 5: Afghanistan: the impact of gender ratios and distributions on girls' education

“Afghanistan illustrates the importance of considering gender ratios and distribution. Access to primary education for girls and the availability of female primary teachers are still limited, particularly in more conservative regions. In 2004, women constituted about 22% of national primary teachers (AREU, 2004). Yet this figure masks wide variation across the country. For example, in Kabul 78% of primary teachers are women but less than 10% are in areas outside of the city. Relatively few female teachers live in these areas because of traditional restrictions on their education. Efforts are needed to ensure that women teachers are not overly concentrated in the cities to the detriment of rural girls, whose access to education may depend upon them”.

Source: UNESCO, Institute of Statistics, 2006, p.40

In this context, a key policy implication for reaching underserved communities is that women teachers can be focalized to be hired in specific socio cultural environments in order to reach girls especially in rural areas outside schools. Such policies were successfully implemented in the case of community schools in Egypt. Another “*female teacher incentive system*” can be found in Yemen (2006), although it follows a less successful effort of deployment of female teachers in communities with very low girl attendance, as can be seen in Box 6.

Box 6: Female teacher incentive Scheme in Yemen: from local volunteers to contract and permanent teachers

Gender equity is an issue in Yemen, with 55% of primary school-aged girls in schools and less than 30% in rural areas. Many studies have indicated that the lack of female teachers at the school level is one crucial factor resulting in low girls' enrollments.

A policy of female teacher incentive schema have been tried by the government to locate teachers especially females in rural areas by giving them housing benefits and salary premiums. This was an unsustainable solution because many teachers have left the villages after a temporary stay.

The second policy that the government implements is to employ girls with some education, who are from the village, and train them so that they can begin to provide a key input to the delivery of education in rural areas. But often girls are teaching in a volunteer basis because they do not qualify to be teachers or because there is shortage of funds to finance their expenditures.

The government launches a new initiative is the Female Teacher Incentive, that will transform eligible volunteer female teachers in to qualified teachers. It will also facilitate the recruitment of permanent female teachers located in the rural areas in the Government Civil Service system. The initiative will have a pilot phase for 400 teachers covering the most deprived governorates and districts across the country.

In that initiative, volunteer female teachers will be selected and receive a simple pre-service training and will receive a certificate upon completion of the training. The certified female teachers will sign a 3 contract with the school headmasters and will be paid each month.

Source: *The World Bank, Middle East and North Africa, Education Sector*

4.4. TEACHER EMIGRATION AND POLICY IMPLICATIONS

Teacher emigration and mobility are phenomena that also may affect the efforts to reach and to provide better education to underserved communities. Mobility refers to the number of teachers that stay at the same school (stayers), move to another teaching or non teaching assignment inside the education system (movers), leave the profession (leavers), or leave their country to work as teachers in another country (teacher emigration and expatriate teachers), mostly due to surplus teachers in their own country, to shortage in other countries or to a mix of both. In the United States, 84 per cent of teachers who were teaching during the 2003-04 school year, remained in the same school ('stayers'); 8 per cent moved to a different school, ('movers') and 8 per cent left the profession ('leavers') (NCES 2007).

Teacher emigration potentially connects teacher experiences among developed and developing countries. More and more teachers from developing countries such as India, and Philippines are hired to work in schools in Great Britain and the United States. There are indications that the mobility of teachers is growing. In the United Kingdom (and in disadvantaged parts of London in particular), because of teacher shortages, about 100 private agencies are involved with recruiting teachers from abroad. In 2000, around 10,000 overseas teachers were recruited to teach in the UK. India may become the world's largest supplier of trained school teachers to developed countries, especially in mathematics, science and English. Although accurate statistics of the swelling migration of teachers are unavailable, already about 10,000 secondary teachers from India are working outside the country and there is a growing demand for Indian teachers.

Concerns have been raised about the impact of recruiting teachers from developing countries with a shortage of educated workers (Barling and Hallgarten 2002) A set of protocols was signed by commonwealth Ministers of Education in order to mitigate any negative impact of teacher recruitment among countries.

In Arab countries teacher emigration refers to expatriate teachers to the rich Golf countries in need of teaching force. Teachers from Egypt, Syria, Jordan and Tunisia are leaving their country to work for the Golf countries. The emigration of teaching force has multiple impacts - some positives, others negatives - and the role of expatriate teachers across the Middle East and North Africa region varies greatly. Some countries, most notably **Egypt**, have long treated qualified teachers as a major national export. Not only does teacher migration offset domestic unemployment, it generates substantial remittances as Egyptian workers abroad send part of their earnings back to their families at home. Other countries, notably **Yemen**, **Oman** and **Saudi Arabia**, have long depended on the import of expatriate teachers (often Egyptian) to offset their domestic teacher shortages. In **Saudi Arabia** expatriates made up 40 percent of the secondary teaching force. In **Oman** they comprise 76 percent, with the preponderance of expatriates teaching at the lower secondary level. Expatriate teachers are mostly males. In a study of female teachers in nine MENA countries (Ayyash-Abdo, 2000, p 196) found that, with the

exception for **Oman**, over 95% of female teachers are nationals of the country in which they teach.

Table 6. Oman: Expatriate Teachers and Administrators in MoE Schools, 1998-99

	Elementary	Lower Secondary	Upper Secondary	Total
% of Expatriate Teachers	10.8	67.5	76.3	42.5
% of Expatriate Administrators	2.0	32,5	20.9	21.3

Source: World Bank (2001, April) The Sultanate of Oman: Cost Effective Study for the Education Sector, Washington DC, p 8.

While the use of expatriate teachers represented a solution to earlier teacher shortages in Arabic countries, virtually all concerned countries now seek to minimize the practice and nationalize their teaching force. Hiring expatriates is generally more expensive than hiring citizens. Parents often worry about the relevance and cultural appropriateness of the instruction they provide, and countries with high domestic unemployment (virtually all MENA countries) want to avoid the political fall-out of importing foreign teachers. Research (Abdulmalik and Chapman 1994) found meaningful differences in pedagogical approaches used by Egyptian and Yemeni teachers in Yemen.

Teacher emigration from developing to developed countries is increasing. Expatriate teachers are still strong phenomenon among Arabic countries. Less women teachers are expatriate teachers. While teacher emigration has in general a positive impact on life and economic status of emigrated teachers, there are some trade offs such as cultural shocks and deprivation of good teachers in developing countries. The paradox is that now that developing countries are increasingly in need of well trained teachers to accomplish EFA goals, educated teachers are leaving their country to work abroad.

4.5. TEACHER IN HIV/AIDS ENVIRONMENT AND POLICY IMPLICATIONS TEACHERS

International organizations as International Health Organization and WB dealing with this issue consider that teachers are seen as role models and that their individual knowledge and skills are the crucial determinant of the quality of education. According to the WB program, HIV/AIDS is a topic which teachers themselves need to understand and be willing to discuss if we want to reach the learners. However, in traditional societies, teaching about the sexual dimension of HIV/AIDS has proven to be particularly challenging, and teachers may need to acquire specific skills to address this role effectively. Overall, teachers will require institutional support to respond to this challenge and this may include access to care and treatment. Box 8 below describes preventive programs with a particular responsibility for teachers for 4 countries.

Box 7: The key role of teachers in the response to HIV and AIDS in South Asia

Nepal: A life-skills based education program for grades 1-10 is being developed as part the national five year education plan, and piloted in 10 districts. Three key preparatory activities have helped guide the development of the program: (i) a 2002 survey of teenagers in Nepal as a basis for life-skills development and HIV and AIDS prevention; (ii) in 2003, an assessment of the impact of HIV and AIDS on the education sector in Nepal; and (iii) also in 2003, a review of the grades 1-10 Health and Social Studies textbooks and teacher's training manuals for substance/drug abuse and HIV and AIDS prevention education.

Sri Lanka: A life-skills based education program was introduced into the school curriculum for grades 7-9 in 1997. The key focus areas are values, reproductive health, preventing HIV and AIDS, preventing substance abuse, gender issues, and related topics of violence prevention and conflict resolution. More recent discussions have emphasized the need also to address HIV and AIDS prevention within the context of overall school health and well being, including improved nutrition. Stronger synergy between the work undertaken by the Health and Education sectors is being developed.

India: The Ministry of Human Resource Development and the National AIDS Control Organization (NACO), in collaboration with development partners, are scaling up programs for educating adolescents about HIV and AIDS. The plans call for training teachers and peer educators in conducting courses and leading study groups on HIV and AIDS awareness and prevention. The programs aim to reach at least 33 million students in secondary schools over the next three years.

Pakistan: A project run by a UNICEF partner, AMAL Human Development Network Pakistan, is working with Pakistan's top pop group "Strings" to reach the most vulnerable and isolated children. The project uses music to provide children and young people who are out of school, and often working or living on the street, with access to life-skills, non-formal education, basic health information and hygiene training.

The World Bank (2006) recommends making teacher training part of HIV/AIDS prevention policy and strategy work. It also shows that HIV/AIDS prevention requires that teachers develop skills in participatory methods through: pre-service training and materials; in-service training and materials; and messages and approaches that help teachers to protect themselves.

In most countries with preventive programs and a role for teachers, preventive education is more frequently taught as part of in-service training than pre-service teacher training. While both are necessary, new teachers may be more readily trained in the participatory methods that are required to teach the subject. Teacher training institutions frequently overlook the benefits of helping teachers to protect themselves form HIV/AIDS.

4.6. POLICIES FOR SECONDARY TEACHERS

Two recent literature reviews (World Bank 2007; Mulkeen, Chapman, and DeJaeghere 2004) assess the policies and strategies for attracting, recruiting and retraining secondary teachers in six (6) sub Saharan countries⁵ First, both studies assess existing teacher initial education in the examined countries as expensive and not very effective in terms of quality and producing the needed number of teachers. Second, the studies identify across the examined countries few policies to address the teacher shortage. In terms of solutions, a first policy option is recruiting secondary leavers -students who just finished secondary

⁵ The countries are Ethiopia, Ghana, Guinea, Madagascar, Tanzania and Uganda.

school- to secondary teaching. This policy is often non systematic and tends to pull in an insufficient number of teachers. A second policy option is to hire contract teachers and pay them through school or community fees. The contract teacher policy has two main weaknesses: (a) the issue of less stable source of remuneration that creates absenteeism, and (b) a retention of contract teacher issue that the schools themselves have to address. The contract teacher policy, according to the above studies, becomes successful if there is integration of the contract teachers in the public system. If contract teachers becoming part of the civil service teaching force may stabilize the teaching corps and provide quality teachers in difficult areas schools or in subject areas.

The two reviews suggest two paths for increasing school teacher supply. The first path focuses on *teacher education* and proposes an orientation towards (i) more creative and out of the box, alternative teacher education preparation policies; (ii) more flexible models of pre-service preparation. This can be done by (a) expanding existing teacher preparation programs, (b) moving trainees through existing programs faster, (c) introducing a new balance between pre-service and in-service programs and (d) develop a strong ongoing professional support programs for serving teachers.

The second path is to increase the supply of teachers through improving *teachers working conditions*, a request strongly voiced by teachers. According to that option, many of the difficulties in attracting new teachers and retaining current teachers can be addressed through effective teacher deployment practices and improved conditions of service. This would include such items as adequate pay, humane treatment, and consistent, caring policies, mentorship programs to support new teachers' induction to the field, opportunities for professional support and bonding among peers, salary bonuses for excellent teachers and more responsibility for head teachers for supporting teachers within their schools.

4.7. TEACHERS REQUEST: IMPROVING WORKING CONDITIONS

In general, common policies for addressing teacher shortages include some combination of shortening teacher training, utilizing distance education courses, teaching more subject areas, hiring locally contract teachers, using teacher mentors, implementing teacher meeting, increase head teacher responsibilities for supporting teachers, in order to help balance future teacher supply and demand. DeJaeghere, Chapman, and Mulkeen (2004) show that in some cases, teachers and head teachers react negatively to the introduction of some of the above policies. The same study, by looking at how teachers, head teachers and managers react to policies for increasing shortage in six African countries⁶, shows that (a) teachers, head teachers, and administrators are unfavorable on shortening initial service training; (b) teachers support shortening pre-service preparation when combined with increased supervision of graduates when they enter the teaching force; (c) teachers support increasing teacher training and distance education as a supplement for increased mentorship for new teachers and enlarged opportunity for teachers to network with each other; (d) teachers stronger support a bonus pay; (e) teachers favor having head teachers take more responsibility against increasing teachers practices. The study found also

⁶ Ghana, Ethiopia, Tanzania, Guinea, Madagascar, and Uganda

found, that teachers favor strategies that improve conditions of service for those already in the teaching force, over strategies to increase the inflow of new teachers.

Overall, policy solutions that are low cost and technically easy to implement (e.g. mentoring and teacher networks) are often supported by teachers (DeJaeghere, Chapman, Mulkeen 2004). Policy options that do not have strong value acceptability (e.g. shortening pre-service training) encounter greater difficulty in rising to the policy agenda. As the same study concludes “*While this policy (shortening pre-service training) is attractive to international planners or government leaders, they have a substantial task ahead of them in persuading those closer to the schools of the merit of the idea (p.22)*”

5. SYNTHESIS

The three tables that follows present in a synthetic and comparative way, (a) policy implications for particular types of teachers or schools in developing countries, (b) organization and management of contract teacher policies, and (c) impact of contract teachers and community schools in terms of equity, efficiency and quality.

Table 7 illustrates the type of policies in developing countries for attracting recruiting selecting and employing teachers that are called to serve especially the underserved populations.

Table 7: Policy implications for particular types of teachers or schools in developing countries

Policy objective	Targeted the underserved and particular types of teachers or schools
1. Making teaching an attractive career choice	Providing the opportunity for community teachers to become part of the main steam teacher employees Improving entrance conditions through training and support of new teachers
2. Recruiting, selecting and employing teachers	Broadening the criteria for teacher selection Create incentives for serving the underserved communities Targeting young unemployed, graduates in divers areas
3. Retaining effective teachers in schools	Improving working conditions for teachers Propose a career path

Source: OECD, 2005

Table 8 below schematizes the organization and management of the contract teacher policies. The schema refers to five countries and includes the reasons of reform, the recruiting and training policy, the duration of contract, the source of financing, the management and the level of integration within the teaching force.

Table 8: Organization and management of contract teacher policies

Country	Senegal	Mali	Niger	Egypt	Nicaragua
Category	Volunteers teachers	Contract teachers – community teachers	Contract teachers	Community women teachers	Contract teachers in Autonomous schools
Reasons for reform	Limited state resources	Limited state resources, community initiatives	Limited state resources	Community and donors initiative	Limited state resources
Recruiting policy	Junior secondary + selection process	(a) Grades 11 or 12 (b) For community schools flexible	Junior secondary + 1 year of teacher training + selection	Primary or secondary school, locally recruited	
Training	3 months, 6	3 months	1 year	On going	

Policy	months after 2000			training	
Duration of contract	2 years for volunteers – half become permanent	Permanent	Permanent contract after 4 years of experience	Renewed	
Integration in the teaching force	Yes after examination	No for the community school teachers	In progress	Yes, after Requirement	
Source of financing	State	State Donors/community	State + Aide	Communities	State + communities + private
Employer Management	Decentralized level	Decentralized level Donors/community	Decentralized level		Decentralized level

The next table 9 synthesizes the impact of contract teachers and community schools in terms of efficiency equity and quality

Table 9 : Impact of contract teachers and community schools in terms of equity, efficiency and quality

	Senegal	Mali	Niger	Egypt	Nicaragua
Impact on access	Yes	Yes	Yes	Yes	Yes
Impact on quality (a)	Improvement in education completion	Improvement in education completion	Improvement in completion	Improvement in students performances	Some improvement in students performances
Impact on efficiency	Indications but not evaluation	Indications but not evaluation	Indications but not evaluation	Indications but not evaluation	Indications but not evaluation
Scale up sustainability	Yes Yes	Yes No	Yes Yes	No Yes	Yes Yes

(a) World Development Indicators 2006, World Bank.

References

- Ballou, D. & Podgursky, M. (1998). *The case against teacher certification. The Public Interest* (132): 17-29.
- Ballou, D. and Podgursky, M. (1998). Teacher recruitment and retention in public and private schools. *Journal of Policy Analysis and Management* 17(3): 393-417.
- Bender, Diarra, Rdoh, Zielgler, 2007. Evaluation of the World Bank Assistance to Primary Education in Mali, A country Case Study. Independent Evaluation Group, Working Paper, The World Bank, Washington DC.
- Bourdon, Frolich, Michaelowa, 2007. Teacher Shortages, Teacher Contracts and their Impact on Education in Africa, Working Paper, Institute for Research in the Sociology and Economics of Education, University of Bourgogne, Dijon, France.
- Crisan A. 2006. School-based Professional Development of Teachers: a Challenge of the Romania World Bank Rural Education Project – IBE/UN ESCO, The 2nd International Forum on Teacher Education, Teacher Professional Development for Quality Education for All (EFA) Policies, Research and Innovative Practices, 25-27 October 2006 (Shanghai, China)
- Darling Hammond, Linda.2000. Teaching as a Learning Profession.
- Darling-Hammond, L., Berry, B. & Thoreson, A. (2001). Does teaching certification matter? Evaluating the evidence. *Educational Evaluation and Policy Analysis* 23(1): 57-78.
- Darling-Hammond, L., Holtzman, D., Gatlin, S.J. & Heilig, J.V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. Palo Alto: Stanford University.
- DeStefano, Joseph.2006. Meeting EFA: Reaching the Underserved through Complementary Models of Effective Schooling. . Washington DC.: Educational Quality Improvement Program 2 (EQUIP2), Academy for Education and Development (AED).
- Duthilleul (2004). International Perspectives on Contract Teachers and their Impact on meeting Education for All, The cases of Cambodia, India and Nicaragua, Synthesis Report, presented at the Conference “Primary School Contract Teachers”, Bamako, Mali, 2004, UNESCO IIEP, Paris.
- Farrell, J. 2003. Case Study: The Egyptian Community Schools Program
- Feistritzer, C. E. & Chester, D.T. (2003). *Executive Summary: Alternative teacher certification: A*

state-by-state analysis 2003. Washington, D.C.: National Center for Education Information.

Fyfe A., 2007. The use of contract teachers in developing countries: Trends and impact, Working Paper, International Labor Office Geneva May 2007

Graig H. Kraft R., du Plessis J. *Teacher Development, Making an Impact*, USAID/The World Bank, 1998.

Haberman, M. (1999). Increasing the number of high-quality African American teachers in urban schools. *Journal of Instructional Psychology* (26).

Hanushek, E. A., J. Kain, D. O'Brien and S. Rivkin (2005): The Market for Teacher Quality, NBER, Working Paper 11154, <http://www.nber.org/papers/w11154> (accessed 4/02/2007).

Heckman, J., H. Ichimura and P. Todd (1997): Matching as an Econometric Evaluation Estimator:

Hargreaves, Andy. 2003. Teaching in the knowledge Society: Education in the Age of Insecurity. New York: Teacher College Press.

Independent Evaluation Group (IEG), From Schooling Access to Learning Outcomes An Unfinished Agenda, The World Bank 2006, p.45

Iqbal, F. Nagwa R. 2004. Increasing Girls' School Enrollment in the Arab Republic of Egypt". Paper Prepared for the World Bank and presented at Scaling Up and Poverty Reduction: A Global Learning Process and Conference in Sanghai, China.

Johnson, S.M., Birkeland, S., Donaldson, M., Kardos, S., Kauffman., Liu, E. & Peske, H., 2004. *Finders and Keepers: Helping new teachers survive and thrive in our schools*. San Francisco: Jossey Bass.

Lewin, Keith M., 2002. The costs of supply and demand for teacher education: Dilemmas for development. *International Journal of Educational Development* 22(3): 221-242.

Lewin, K. (2003). The cost and financing secondary education in sub-Saharan Africa. First Regional Conference on Secondary Education in Africa (SEIA), Kampala, Uganda, June 9-13, 2003

Mingat, A. 2004. La renumeration de l'enseignement primaire dans les pays francophones d'Afrique sub-saharienne. Paper presented at the Conference on Contract teachers, Bamako, Mali, 21-23 November, 2004.

Mulkeen A., Chapman D. Dejaeghere J. Leu E., 2007. *Recruiting, Retaining, and Retraining Secondary Schools Teachers and Principals in Sub-Saharan Africa*, World Bank Working Paper no 99, Africa Region Human Development Department, The World Bank, Washington DC

National Center for Education Statistics, Teacher Attrition and Mobility: Results from the 2004-05 Teacher Follow up Survey, First Look, Schools and Staffing Survey, US Department of Education, 2007

OECD 2005. *Teacher Matter Attracting, Developing and Retaining Effective Teachers*, Paris OECD

OECD, 2004. *The Quality of the Teaching Workforce*, Policy Brief, OECD, The Observer

PASEC (2005a): *Les enseignants contractuels et la qualité de l'enseignement de base I au Niger : Quel bilan?*, Dakar: CONFEMEN.

PASEC (2005b): *Impact du statut enseignant sur les acquisitions dans le premier cycle l'enseignement fondamental public au Mali*, Dakar: CONFEMEN.

Vegas E., Umansky U., 2005. *Improving teaching and learning through effective incentives. What can we learn from Education Reforms in Latin America?* The World Bank, Washington D.C.

US Department of Education, 2003. *Identifying and Implementing Educational Practices, Supported By Rigorous Evidence A User-Friendly Guide*. Institute of Education Sciences National Center for Education Evaluation and Regional Assistance

World Bank (2001, April) *The Sultanate of Oman: Cost Effective Study for the Education Sector*, Washington DC

Zafeirakou, Aigli. 2007. « *Teacher and Teacher Quality in Egypt. Issues and Policy Orientations* », Paper for the Egypt Strategic Note, MENA-HD

Zafeirakou A., 2005. *School Management and the Changing Roles of School Directors (case studies Bulgaria and Romania)*. Sector Analytical Work, ECA-HD-Education

Zafeirakou A., 2002. *Teachers professional Development: What incentives for Teachers to Participate?* A Background Paper for the Bulgaria Program for Modernization of Education, ECA, World Bank

Zafeirakou, A., 2001. *In-Service Teacher Training in the European Union: Exploring Central Issues*, in *METODIKA*, Journal of Theory and Applications of subject teaching methodologies, in pre-school, primary, secondary and Higher Education, no 3, 2002, University of Zagreb

Zalouk, Malak. 2004. *The Pedagogy of Empowerment: Community Schools as a Social Movement in Egypt*. Cairo, Egypt: American University in Cairo Press.