

# **Bridging the Gap between Intended and Implemented Curriculum: Japanese Experience of Education Development**

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## **1. Introduction**

A shift of the EFA focus from access more toward more enhanced quality of learning after the Dakar conference (2000) accelerated curriculum reform at the national level as an integral part of comprehensive educational reform in order to yield established outcomes by EFA (Chisholm and Leyendecker, 2008). In 2007, at the halfway mark to 2015, the EFA Global monitoring report reviewed national policies to advance EFA in thirty countries over the six year period since the Dakar Framework. The policy initiatives were classified under three main policy areas: developing enabling institutions, assuring access to education opportunities and creating opportunities to learn (UNESCO, 2007: 221). The analysis of initiatives introduced at the national level to improve learning revealed that most commonly introduced measures across the regions were curriculum-related reform (23 out of 30 countries for in-depth study), followed by reform of pre-service and/or in-service education, and free textbook distribution (UNESCO, 2007: 222-231). Curriculum reform since EFA has stressed two things in the sub-Saharan region: the need for changing curriculum content relevant to the culture and learner's needs and changing teaching-learning process to be more learner-centred (UNESCO, 2000: 26, 28). Incorporation of HIV/AIDS (Mozambique), family life/population education in the basic education curriculum (Senegal), and use of mother-tongue in early grades (Mozambique) were some examples to reform curriculum relevant to learner's needs.

Curriculum reform as content renewal has a long history in Africa (Obanya, 1994: 4-7; Dembélé and Ndoye, 2003: 139-155). Aid agencies introduced learner-centered pedagogy in Africa as "prescriptions" through educational projects and consultancies funded by the aid agencies since the 1980's (Anderson, 2002: 5; Tabulawa, 2003: 9). It was EFA that urged many sub-Saharan countries to adopt new curriculum for primary education that promotes learner-centered pedagogy as official pedagogy in schools (UNESCO, 2007: 228-231). In spite of long-time efforts to upgrade curriculum content as well as to update curriculum process, the attained curriculum at the learner's level remains unacceptably low in sub-Saharan Africa (Atherton, 2009; Michaelowa, 2001; UNESCO, 2004; Zahang, 2006). This suggests that curriculum policy implementation, in other words, the transformation process of policy into practice, is encountering many problems and obstacles in developing countries. As Verspoor (1989: 131) commented some time ago, when the implementation aspect is neglected, even a good idea or innovative policy initiative would result in low outcomes. It is teachers that transform

curriculum specified as policy and implement it in classrooms. The rift between the two curricula remains wide unless adequate and appropriate attention is given to teachers (Dembélé and Lefoka, 2007: 536-539).

## **2. Reimagining Teacher Problems**

Learning achievements as an outcome are influenced by many factors but “the broad consensus is that ‘teacher quality’ is the single most important school variable influencing student achievement” (OECD, 2005: 26). To raise students’ achievement, it is imperative to enhance teacher quality. Teacher quality has two aspects in this context: teacher quality as a human resources input variable and teacher quality as a determinant of instructional quality as process variable (Bergman, 1996: 586-587). With this concept in mind, I draw on my experience of working in South Africa and Afghanistan to point out some problems concerning teacher quality.

### Teacher quality as an Input variable

- Poor teacher preparation
- Under-qualification
- Low social status
- Low morale
- Absenteeism
- Ineffective use of school days
- Unequal distribution of teacher resources

### Teacher quality as a process variable

- Teacher belief system on learning, learners and teachers conflicting with intended curriculum
- No support in classrooms to transform teaching
- Ineffective use of teaching time

It is believed that variables located closer to learners have more impact on learning outcomes, but are difficult to manipulate by educational administration. On the other hand, system or policy related variables are relatively easier to manipulate compared to classroom process variables. But as Verspoor (1989) and others (Rogan, 2007) point out, implementation of a system or policy is another issue. In the following section, I share some Japanese education development experience which I believe has contributed to the quality of teachers and teaching.

### 3. Japanese Education Development to Bridge the Gap

#### Advancement of Education in Remote Areas: More Equitable Human Resources Management

In most sub-Saharan countries, there exists a substantial learning gap by location of schools (Atherton, 2009; Zahang, 2006). Better qualified teachers have more chances to find a job in an urbanized area, where people usually enjoy more favorable living conditions. In rural and remote areas, poverty may be more serious and parents may prefer their children help the family instead of going to school. Schools are not located within an easily accessible distance. Thus children in remote isolated areas are likely to be less privileged in teacher quality and out of school conditions, both of which influence learning outcomes in direct and indirect ways. This was the case in Japan until the 1950's.

The student enrolment rate rose drastically since the promulgation of the Education Ordinance (Gakusei) in 1872 in Japan, but school attendance of children in isolated and the least populated areas were legally postponed or exempted in case of poverty or unavailability of schools. Many remote isolated areas were unable to establish schools from their own financial resources, but existing schools were often located too far for children to commute every day. As a result, until right after the Second World War, “school establishment exemption areas”, where establishing a school was not required due to harsh living conditions, could be found across the country, especially in rural agricultural farmland areas, isolated mountainous highland areas and on remote islands. In effect, children who were born and lived in these areas were left behind and “lost the opportunity to receive public education for a long time” (Yamaguchi, 2004: 124). A principal recalled the situation in an isolated area of Iwate Prefecture right after the end of World War (1945-1950):

Due to teacher absence since the beginning of the year, one branch school has remained unopened. The village is 36 kilometers from the station, and if there is no truck service, you have to walk for a whole day to get to it. There's no doctor in the village, so the usual spring check of children's health doesn't get held. Even if teachers come, there's nowhere to stay, and nobody wants to provide a room. The village and the school are in a deep valley, and from December to March, the rays of the sun don't touch the school building. The school building is old and the windows are small, so it's not possible to do any work in the school building after classes have finished. We'd like to have more oil for a lamp, but with the present state of oil deliveries, there's not even enough to read a newspaper, much less do any studying. Out of 10 teachers, only the principal has teaching qualifications, while the other teachers are around 20 and haven't even graduated from middle school, so the principal has a really hard time. (Iwate Prefectural Board of Education quoted by Yamaguchi, 2004: 126).

It should be noted that one finds many cases whose villagers secured a place where they could privately provide basic skills to their children under these severe circumstances

(Yamaguchi, 2004: 124-125). It was only in 1954 that a law passed which enforced special measures to advance education in remote areas by government subsidy. Later, legal regulations clarified the criteria to identify “remote isolated areas” and a variety of policies were implemented targeting those schools to advance quality of education. Right to quality basic education has undoubtedly benefitted from the law, but “voices” of teachers who had pleaded for improving poor conditions in these areas generated nationwide movement leading to enactment of the law (Saito, 2004: 27-28).

#### Personnel Deployment Policies : Relocation and Exchange Across Boundaries

After the enactment of the law to advance education in remote areas, there were very few teachers who were willing to work in schools in remote areas. Low salary and insufficient food supplies in remote areas after the war did not attract teachers. As a result the quality of education in remote area was significantly lower than populated areas due to the higher proportion of non-qualified teachers.

This situation began to change after the enactment of the law on local education administration in 1956. The law authorizes a prefecture or designated cities to employ and deploy teachers for schools of compulsory education. From then, a system has started that a municipality is responsible for establishing compulsory education schools and supervising educational staff, while a prefecture assumes the responsibility of payment of salary and employment and deployment of teachers. Across prefectures, the following common principles can be pointed out in teacher relocation:

1. Exchange and relocation of teachers across city and county areas
2. Exchange and relocation of teachers across remote and populous areas
3. Appropriate mix of teacher composition
4. Relocation of staff who have stayed in one school for a long period (Takahashi, 1992: 21)

Besides, some researchers emphasize the importance of teacher relocation from a teacher professional development (TPD) perspective. It is argued that teachers may suffer from mannerism if they work in the same school for a long period and the experience of working in different schools in diverse areas is essential for TPD (Satake, 1992: 32).

From the 1970's, more prefectures introduced a systematic personnel relocation policy to equalize teacher resources irrespective of school location: developing a plan to systematically exchange teachers in remote schools and non-remote schools, not assigning first-year teachers to remote schools or multi-grade classes as a principle, promoting the assignment of mid-career teachers to remote schools, positively considering work experience in remote schools when selecting principals, head teachers and curriculum supervisors (Saito, 2004: 35).

Another tendency among developing countries is a common belief that promotion on the career ladder is to sit in office, away from classrooms. The more distance from classroom teaching, the more promoted but with less knowledge of what's happening in classrooms:

School administrators, district office personnel, regional office personnel, and central office personnel. In Japan, school administrators, especially principals hold quite high status comparative to the top cadre of a local board of education office. It is frequent to relocate educational personnel across the boundary of schools and administration: from local administrator to head teachers, from school cadre teacher to local administrator as subject supervisor. When subject supervisors visit schools, they are able to observe lessons and give suggestions because they have worked as classroom teachers until recently. When they return to schools as principals or head teachers, they can serve as instructional leaders of schools because they have been involved in curriculum and instruction throughout their career in schools and in the local board of education.

#### *Case of Tokushima Prefecture*

In Tokushima Prefecture, for instance, first year teachers usually work in schools in an urban area for three years before they are assigned to rural or remote schools. They are carefully assigned to grades with fewer behavior problems. Teachers are relocated in five to seven years in basic schools. When they apply for an administrative position, their work experience in a variety of school types is considered an advantage. When promoted, it is a common practice to locate them in remote schools for three years.

Teacher relocation has both advantages and disadvantages, but it may be worth considering if a country is concerned about the achievement gap between urban and less urban/remote schools. Teacher career paths should be seriously reviewed in order to retain good teachers in school systems.

#### Continuing Teacher Professional Development

Dembélé (2004: 15) aptly captures the dilemma of quantity and quality issues sub-Saharan Africa faces to achieve EFA goals as follows:

Sub-Saharan African (SSA) countries are currently confronted with a formidable challenge: how to expand the size of their teaching force while improving its quality. In order to achieve universal primary education, SSA will need to recruit 1,362,000 new teachers between 2000 and 2015.... The critical issue is how to ensure that the supply is of the quality desired. This, in turn, raises the important issue of the professional preparation of teachers. Furthermore, given calls for pedagogical renewal, the 2,491,000 practicing teachers will need to be provided with professional opportunities.

In-service learning opportunities will become more important if we expect teachers to work effectively in our rapidly changing society. However dissatisfaction with the conventional approach to teacher professional development (TPD) is prevalent among researchers. Traditionally teacher in-service learning opportunities have been called teacher training or in-service teacher education. Whatever the term is, in-service teacher education has been neglected

compared to pre-service education and it is mostly a marginal add-on to teaching in developing countries (Schwille and Dembélé, 2007: 33; Vespoor, 2008: 223). If provided, in-service education has typically taken the form of a “cascade” model of a large-scale workshop or a short term course in developing countries. This approach represents a transmission model of TPD, whose characteristics include teachers as passive listeners, expert-driven, isolated from the real classroom situation, de-contextualized, fragmented, incoherent, in a brief, one-time workshop or seminar (Ball & Cohen, 1999: 3-4; Collinson & Ono, 2001: 234; Feiman-Nemser, 2001: 1041; Leu, 2004: 1-2; Little, 1993: 4-5; MacNeil, 2004: 2; Villegas-Reimers, 2003: 11-12). The global trend of teacher professionalism has encouraged teachers to develop as “reflective practitioners” with sufficient subject-matter knowledge and curriculum, knowledge of learners and their development, and knowledge of effective teaching in collaborative settings (Bransford, Darling-Hammond and LePage, 2005: 10-11). This is not an easy task. But Leu (2004: 6) is right in pointing out that “as in any other profession, this is achieved not through a passive model of teacher learning but through an active and participatory model of teacher learning”. In this context, Japanese lesson study, continuing, gradual, school-based, lesson-focused, teacher-owned professional development has attracted the attention of researchers and practitioners overseas (Hammerness, Darling-Hammond & Bransford, 2005: 405; Fernandez & Yoshida, 2004: 3; Loucks-Horsley, Love, Stiles, Mundry & Hewson, 2003: 185; Stigler and Hiebert, 1999: 103-127). In the international education development community, lesson study has become one of the “best practices” for JICA to lend to improve math and science education (JICA, 2007; 14; Steiner-Khamsi, 2004: 205).

Much is written about lesson study but it is one aspect or element of a systematic formal professional development required for all teachers. In relation to TPD, two things need special note. One is the initial one-year induction program and the other is TPD for specific functions and duties (Tanaka, Yamamoto, Murata, Adachi and Iseji, 2004: 220-221)

The induction program for new teachers, started in 1988 has in-school and out-of school PD components. A widely accepted assumption in Japan is that early teaching practices and the school where beginning teachers first teach have a lifelong impact on teachers’ development. Once boards of education appoint and assign public school teachers to a school for the compulsory one-year probationary period, they must also appoint mentor teachers in those schools to supervise and advise beginning teachers in teaching performance and other responsibilities involved in initial training. The program consists of in-school mentor-based learning approximately 2 days a week and no less than 60 days a year as well as out-of school training once a week or 30 days per year. The out of school training is held at a prefectural education centre whose staff of experienced teachers is appointed by a prefectural board of education. Mentor teachers have release-time to work with beginning teachers. For example, they are released to observe the new teacher each week and to allow the beginning teacher time to observe other teachers’ classrooms (Collinson and Ono, 2001: 227-228). Support by an experienced teacher in a real teaching context can serve as powerful and practical on-the-job learning for beginning teachers.

### Sharing School Management Leadership

Another type of professional development has to do with shared leadership in Japanese schools. The school principal is the person in charge of school management and makes decisions, but it is impossible for the principal alone to oversee everything that happens in schools and carry out all administrative functions and duties of a school. So, the principal internally delegates functions and duties to all teachers to share considering their career status, subject expertise, qualities, abilities, etc. Schools management organization usually consists of sections such as educational affairs, research and PD, life guidance, health and safety, general affairs and public relations (Yamaguchi, Shindo, and Murata, 2004: 88). The prefectural education centre, responsible for TPD, provides courses for the heads of sections to better perform their functions and duties. In the selection process of head teachers and principals, the experience of and effective service as the head of core sections such as educational affairs and/or research and PD are considered highly important (Makita, 1992: 88-96). There are some criticisms about this system in that it causes teachers to have too much work other than classroom teaching. But it is true that it has contributed to develop a sense of ownership and a sense of responsibility to school management among teachers. It has functions as a mechanism to select potential candidates for school principals as instructional leaders and provide them with the practical experience of school management embedded in context.

## **4. Conclusion**

Japan experienced a dilemma between quantity and quality and an achievement gap due to teacher quality. Political intervention made it possible to equalize the quality of teachers as an input. A formal systemic professional development system contributed to enhance the quality of teaching in classrooms while the sharing of functions and duties make it easy to monitor daily practices. These policies and practices certainly contributed to bridge the gap between the intended and implemented curriculum.

## **References**

- Anderson, S.E. (2002) The double mirrors of school improvement: The Aga Khan Foundation in East Africa. In S. E. Anderson, (Ed.), *Improving schools through teacher development: Case studies of the Aga Khan Foundation projects in East Africa*, 1-19. Lisse, the Netherland: Swets & Zeitlinger.
- Atherton, P. (2009) Schools effectiveness and educational quality across Southern and Eastern Africa. Unpublished manuscript, University of Nottingham.
- Ball, D. L. & Cohen, D. K. (1999) Developing practice, developing practitioners: Toward practice-based theory of professional education. In G. Sykes & L. Darling-Hammond (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco: Jossey-Bass.

- Bergman, H. (1996) Quality of education and the demand for education: Evidence from developing countries. *International Review of Education*, 42(6), 581-604.
- Bransford, J., Darling-Hammond, L., and LePage, P. (2005). Introduction. In Darling-Hammond, L., and Bransford, J. (Eds.), *Preparing teachers for a changing world*, 1-39. San Francisco: Jossey-Bass.
- Chisholm, L. and Leyendecker, R. (2008) Curriculum reform in post-1990s sub-Saharan Africa. *International Journal of Education Development*, 28, 195-205.
- Collinson, V. & Ono, Y. (2001) Professional development of teachers in United States and Japan. *European Journal of Teacher Education*, 24(2), 223-248.
- Dembélé, M. (2004) Pedagogical renewal: The critical role of teacher professional development. *ADEA Newsletter*, 16(1), 15-16.
- Dembélé, M. and Lefoka, P. (2007) Pedagogical renewal for quality universal primary education: Overview of trends in sub-Saharan Africa. *International Review of Education*, 53, 531-553.
- Dembélé, M. and Ndoye, N. (2003) A relevant curriculum for quality basic Education for All. In A. Verspoor, (Ed.), *The challenge of learning: Improving quality of basic education in sub-Saharan Africa*. Association for Development of Education in Africa, 139-165. Paris: IIEP.
- Feiman-Nemser, S. (2001) From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103, 1013-1055.
- Fernandez, C., & Yoshida, M. (2004) *Lesson study: A Japanese approach to improving mathematics teaching and learning*. Mahwah, NJ: Lawrence Erlbaum.
- Hammerness, K., Darling-Hammond, L., & Bransford, J. (2005) How teachers learn and develop. In L. Darling-Hammond, & J. Bransford, (Eds.), *Preparing teachers for a changing world: what teachers should learn and be able to do* (pp.358-389). San Francisco: Jossey-Bass.
- Japan International Cooperation Agency. (2007) *Philosophy and significance of JICA's assistance in mathematics and science education*. Tokyo: Author.
- Retrieved 28 April 2008 from:  
[http://www.jica.go.jp/english/publications/reports/study/topical/philosophy/pdf/philosophy\\_00.pdf](http://www.jica.go.jp/english/publications/reports/study/topical/philosophy/pdf/philosophy_00.pdf)
- Leu, E. (2004). *The patterns and purposes of school-based and cluster Teacher professional development programs (EQUIPI Working Paper No. 2)*. Washington, D.C.: U.S. Agency for International Development. Retrieved 12 December 2006 from: [www.equip123.net/docs/working\\_p2.pdf](http://www.equip123.net/docs/working_p2.pdf)
- Little, J.W. (1993) Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15(2), 129-151.
- Loucks-Horsley, S., Love, N., Stiles, K.E., Mundry, S., & Hewson, P.W. (2003) *Designing professional development for teachers of science and mathematics*. Thousand Oaks, CA: Corwin.
- MacNeil, D.J. (2004) *School- and cluster-based teacher professional development: Bringing*



- teacher learning to the schools* (EQUIP working paper No.1). Washington, D.C.: U.S. Agency for International Development. Retrieved 12 December 2006 from: <http://www.equip123.net/docs/EQ1WorkingPaper1.pdf>
- Makita, A. (1992) A case study of staff promotion. In Z. Sato, and Y. Wakai, (Eds.), *Teaching Personnel Administration: Case study of Japan and Foreign Countries*, 87-96. Tokyo: Gyosei.
- Michaelowa, K. (2001) Primary education quality in Francophone sub-Saharan Africa: Determinants of learning achievement and efficiency considerations. *World Development*, 29(10), 1699-1706.
- Obanya, P. (1994) *Curriculum reform for educational development in Africa: The role of UNESCO*. BREDA Series No. 8. Dakar: UNESCO.
- OECD (Organization for Economic Co-operation and Development). (2005) *Teachers matter: Attracting, developing and retaining effective teachers*. Education and Training Policy Division, Directorate for Education. Paris: Author. Accessed online on November 11, 2008.
- Rogan, J. (2007) How much curriculum change is appropriate? Defining a zone of feasible innovation. *Science Education*, 91(3), 439-460.
- Saito, Y. (2004) Policies and measures to promote education in remote areas: Japanese experience. *Journal of International Cooperation in Education*, 7(2), 25-37. (in Japanese)
- Satake, K. (1992) Review of literature on teaching personnel. In Z. Sato, and Y. Wakai, (Eds.), *Teaching Personnel Administration: Case study of Japan and Foreign Countries*, 31-43. Tokyo: Gyosei.
- Schulle, J. and Dembélé, M. (2007) *Global perspectives on teacher learning: Improving policy and practice*. Paris: UNESCO International Institute for Educational Planning.
- Steiner-Khamsi, G. (Ed.) (2004) *The global politics of educational borrowing and lending*. New York: Teachers College Press.
- Stigler, J. & Hiebert, J. (1999) *The Teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York: Summit Books.
- Tabulawa, R. (2003) International aid agencies, learner-centered pedagogy and political democratization: A critique. *Comparative Education* 39(1), 7-26.
- Takahashi, H. (1992) History of teaching personnel administration after the second World War. In Sato, Z. and Wakai, Y. (Eds.), *Teaching Personnel Administration: Case study of Japan and Foreign Countries*, 17-30. Tokyo: Gyosei.
- Tanaka, S., Yamamoto, S., Murata, T., Adachi, K., and Iseji, H. (2004) Teacher education and training. In Japan International Cooperation Agency, *The history of Japan's educational development: What implications can be drawn for developing countries today*, 205-224. Tokyo: JICA.
- UNESCO (2007) *Education for All by 2015 Will we make it? Education for All Global Monitoring Report 2008*. Paris: UNESCO.
- UNESCO (2004) *The quality imperative: Education for All Global Monitoring Report 2005*. Paris: UNESCO.

- UNESCO (2000) *Education for All: From Jomtien to Dakar and beyond*. Washington, D.C.: World Bank.
- Verspoor, A. (1989) *Pathways to change: Improving the quality of education in developing countries*. Washington, D.C.: World Bank.
- Verspoor, A.M. (2008) *At the crossroads: Choices for secondary education in sub-Saharan Africa*. Washington, D.C.: The World Bank.
- Villegas-Reimers, E. (2003) *Teacher professional development: An international review of the Literature*. Paris: UNESCO International Institute for Educational Planning.
- Yamaguchi, N. (2004) Educating children in isolated areas. In Japan International Cooperation Agency, *The history of Japan's educational development: What implications can be drawn for developing countries today*, 123-132. Tokyo: JICA.
- Yamaguchi, N., Shindo, Y., and Murata, T. (2004) School Management. In Japan International Cooperation Agency, *The history of Japan's educational development: What implications can be drawn for developing countries today*, 79-93. Tokyo: JICA.
- Zahang, Y. (2006) Urban-rural literacy gap in sub-Saharan Africa: The roles of socioeconomic status and school quality. *Comparative Education Review*, 50(4), 581-602.