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**The Japanese Approach to Improving Classroom Teaching:
Lessons for Ghana**

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Abstract

The paper describes how the Japanese In-service training for teachers has implications for Ghana. It discusses the Japanese approach to in-service training for teachers and explores how this model of institutionalised school-based training can be made practicable in Ghana. It is based on the writer's observation of the organisation and conduct of the school-based INSET in Japan, as well as other related literature on the topic. The paper recommends: (a) teacher retention, (b) teachers' sense of professionalism and ownership of the INSET programme, and (c) collegiality among teachers as some of the inputs that can make the system of continuous and sustainable in-service training possible in Ghana.

Education is the cornerstone and agent for improving the productive capacity of the economic, social, scientific and political institutions of any nation (Lockheed & Verspoor, 1991) and primary education is the foundation. In the last decade however, there has been growing concern about the potential of education systems to bring about the desired impact. A number of international studies and discussions on achievement such as the Third International Mathematics and Science Study (TIMSS) reports (Stevenson & Nerison-Low, 1999; Stigler & Hiebert, 1999), UNESCO and World Bank reports (Craig, Kraft & du Plessis, 1998; UNESCO, 1998) have raised alarming concerns about educational standards in terms of learning outcomes. Even in industrialised countries with high results in international comparisons of educational achievement, there is growing interest in how to improve the quality of their education delivery. In this connection, education reforms in many countries have been committed to making the issue of teacher quality and its development the cornerstone of the strategy to improve education quality and increase learning outcomes.

The importance of teacher training and development in the overall quality of basic education has received a lot of attention in the literature (Dove, 1986; Huberman, 1995; Totto, 1997). The role teacher education should play in producing and maintaining an effective teaching force is increasingly becoming an important subject in many developed as well as developing countries. It is in this respect that Japan attaches a lot of importance to its teacher development programmes, especially as the society is predominantly dependent on its teachers for the development of students' personalities, the transmission of the Japanese culture and for instilling high moral standard in students.

The trend of teacher development in Japan is believed to be a very influential factor for increasing learning outcomes, high performance in international examinations such as TIMSS and the overall economic development of the country. Japanese teachers are almost entirely responsible for the physical, intellectual and mental development of children and thus, have a great influence on children's personality development. Teachers are therefore held accountable for any lapses in the education delivery and learning outcomes.

In Japan, it is again widely recognized that the knowledge and understanding of the growth and development of children, as well as the specialized knowledge of pedagogical skills and subjects teachers need cannot be mastered in the initial teacher training alone, but should be pursued continuously throughout their career. Moreover, the law stipulates that the employer shall provide its employees with in-service training opportunities for efficient fulfilment of their duties. In line with these expectations, various in-service teacher training programmes are made available to the teachers at the national, regional and the school level throughout their entire career. The types of in-service teacher training in Japan, the peculiar features of the school-based type and its implications on teacher development in Ghana are discussed in this paper.

Types of In-service Teacher Training in Japan

Basically, there are two types of in-service programmes in Japan, namely the centralised and the decentralised. In the centralised programmes, a large number of teachers are given training at a time in programmes, which may not necessarily have been initiated by the target

group. The decentralised programmes are planned depending on the nature or focus of the need for change in a smaller local target group. Examples of the centralised programmes are those organised: (a) at the university for active teachers (b) by the Ministry of Science, Sports and Culture (MEXT) annually for principals and their deputies, head teachers, coordinating and advising teachers, and (c) by the Municipal and Prefectural Education Centres.

The decentralised programmes on the other hand take the form of formal/informal and voluntary INSET workshops promoted by teachers themselves through participating in district-wide study groups and in-house workshops conducted under the guidance of an instructional supervisor (leading teacher) appointed by the superintendent of schools. The most popular INSET programmes in Japan are a combination of the centre-based and the school-based programmes. The INSET at the Education Centre is peculiar in the sense of its systematised structure of providing a professional growth and development model to ensure that teachers could receive the appropriate training according to their ages and experience in their career.

As real teacher training is believed to occur in their on-the-job experience after graduation from college, Japanese schools are recognised to exist not only as educational establishments to impart knowledge and skills to the young, but also as an organisation for research and teachers' professional development. Many surveys have reportedly revealed that the best way to develop teachers' competence consists of reflecting on their own teaching styles and sharing practical wisdom with colleagues (Sato & Asanuma, 2000).

Some of the researches conducted in Japan suggest that teachers considered INSET at the school the most effective because it integrates theory and practice, and also because apprenticeship is commonly accepted as an effective means for training other professionals (Minamimoto, 1986; Sato & Asanuma, 2000). Moreover, the centralised programmes are believed to be mostly inconsistent with the teachers' needs. The school-based INSET has therefore become a popular activity in almost all Japanese schools to cater for teachers' initiative in their self-development. This deep-rooted historical tradition of staff collaboration and development is recently attracting the attention of the

international community that is still in the process of finding ways for improving teacher quality and increasing learning outcomes.

Of particular interest are the TIMSS results that prompted a team of American educators to investigate the educational factors that might help to understand the different levels of performance in different countries. The research was based on the premise that much of what society expects children to learn is learnt at school, and teaching is the activity most clearly responsible for learning. Focusing on classroom processes in three countries, namely Japan, Germany and the United States of America, the study showed that the differences in teaching methods might have contributed to the exceptionally high scores of some countries like Japan and the embarrassingly low performance of American students (Stigler and Hiebert, 1999). The Japanese system of school-based INSET programme that uses the lesson study approach was particularly found to be an influential factor for the high learning achievement of its students, especially in international studies, and for setting and maintaining national academic standards over a long period of time.

The conclusion drawn was that to improve teaching, teachers should have a means of successfully generating, sharing and contributing to knowledge about what constitutes effective teaching, and the Japanese system is one good example to learn from.

Observable Peculiarities of the School-based INSET in Japan

The school-based INSET in Japan is notably one of the best examples in the world today, a reason for which many industrialised countries like the United States of America are using it as a model for improving their professional development programmes. The following are some of the peculiar characteristics of the programme.

Ensures Continuous Teacher Development

As has been noted, in Japan, certain systems such as the INSET at the Education Centre and in the school have been put in place and institutionalised to regularly update teachers with newly introduced national and local policies in education. As such, it can be said that

Japanese teachers are probably never out of touch with modern ideas of teaching and improving learning outcomes. It must be noted, however, that in Japan almost all teachers stay in the teaching profession till they retire at the age of 60. The low attrition rate accounts for the availability of personnel to support and sustain such a system.

After graduation, Japanese teachers are considered novices who need the guidance and support of their experienced colleagues; thus, the accumulated wisdom of teaching practice is passed on to each new generation of teachers through a systematic effort of continuing professional interaction between teachers (Stevenson & Stigler, 1992).

In a 'Study of the School-based INSET in Japan' (Adu-Yeboah, 2002), it was discovered that though the INSET programmes at the Education Centre may be similar in a lot of ways to that of the school, in the sense that they both have a common objective of improving teachers' professional competence, there is some remarkable difference in the extent to which the content impacts on teachers' professional competence. Even though the centralised programmes address issues of professional concern, teachers in the 4 schools surveyed by Adu-Yeboah (2002) in Hiroshima, Japan considered the INSET at the school the most effective in addressing their problems relating to professional matters and, specifically, to lesson plans.

Makes use of the Lesson Study Method

The lesson study component of the school-based INSET was institutionalised on the premise that to improve teaching, the most effective place to do so is in the context of a classroom lesson. A school-based lesson study mostly focuses on a problem that teachers themselves have identified from their practice; other times it is on problems of national concern in which teachers' input is required in its solution, or recommendations, which teachers are to implement.

The lesson study is characterized by a wide range of activities offering teachers the opportunity to examine all aspects of their teaching: curriculum, lesson plans, instructional materials, and content. A Research lesson is the main component of the lesson study, which is characterized by lesson observations and critical analysis by many teachers (Lewis,

2000; Lewis & Tsuchida, 1998). In an observation of the INSET programmes, a common trend could be identified. Each INSET programme began with a demonstration lesson based on a topic that had been decided on by the teacher-in-charge in collaboration with a committee responsible for the programme. In the 4 schools observed, it was clarified that groups of teachers were responsible for planning and preparing the lesson plans for the demonstration lessons in real classrooms. The concerns of the lessons basically centred on the teaching methods appropriate for presenting a lesson in a new or problematic subject area.

Another common feature of the school-based INSET programmes observed was a teacher conference which followed soon after the demonstration lesson, moderated mostly by the teacher in charge of INSET. A reflection took the form of a recapitulation of the lesson in reference to the lesson plan used, the processes of the lesson, what was successful and what was not, and what accounted for both situations. Teachers were then given the chance to make their observations about the lesson they observed, focusing on the lesson and not the teacher. Firstly, the strengths of the lessons were acknowledged and complimented, and then constructive suggestions were made using concrete and specific incidents/behaviours during the lesson to improve on the weaknesses. Teachers are critical without offending their colleagues because the lessons are treated as joint products whose ownership is shared by all in the group. As such it could be said that in the process, teachers are critiquing themselves (Stigler & Hiebert, 1999). Alternative approaches were also given for trial in subsequent lessons and a revision made.

Transfers Ownership to Teachers

Another peculiarity of the school-based INSET in Japan is that teachers are offered greater autonomy in their professional development and are, therefore, made to play a central role in both planning and implementation of the programme. There is a collective decision-making between committees, subject and grade-level groups, the teacher in charge of the INSET and the entire staff in planning INSET topics and the most appropriate approach or method of delivery. Consequently, in the 'Study

of the School-based INSET in Japan', it was observed that participatory delivery methods were employed very often. In a list of 8 items, teachers highly rated the demonstration lesson (84.5%), observation (80%) and lesson plan discussion (73%) to have had a greater impact on their professional competence than other items (Adu-Yeboah, 2002).

The role of the principal was, however, found to be almost inconspicuous in the planning and implementation of the school-based programmes since that was the least rated among 4 given items.

Portrays Collaboration as a Process and a Product of Professional Development

It has been asserted that in Japanese schools, there has been a deep-rooted historical tradition of staff collaborations that manifest in a number of voluntary and informal interactions. In the study of the school-based INSET (Adu-Yeboah, 2002), six items sought to find out whether or not there existed any form of interaction among teachers, be it formal or informal, and the circumstances in which teachers interacted with their colleagues. Informal peer-consultation on disciplinary problems and lesson plans (83.8% and 83.4% respectively) received the highest scores.

It is pertinent to note that in Japan, the issue that has become a national concern recently borders on student indiscipline in schools. Interestingly, all the 4 schools surveyed indicated collegial consultation on issues concerning indiscipline, followed by teaching methodology. The impression is that teachers feel responsible individually and collectively in solving problematic educational issues of national concern. Secondly, collaboration includes continuing interactions about problems relating to effective teaching methods and observations of one another's classrooms. As already noted, lessons for the school-based programmes are planned collaboratively, and as teachers observe its demonstration, they reflect on their own practice and identify things that can be improved.

There is also an indication of the existence of informal and spontaneous interactions. This was confirmed by informal observation

visits to the schools in the study. It is important to note that in a typical Japanese school, the seating arrangement in the teachers' common rooms is set up (consciously or not) in such a way as to encourage natural interactions among teachers on a variety of issues ranging from professional to secular/social ones. This kind of atmosphere promotes the freedom to share strengths and weaknesses without any inhibitions or reservations.

Demonstrates Teachers' Sense of Professionalism

Japanese teachers see it as their professional duty to develop themselves and their profession through developing knowledge that is relevant to classrooms and which they share among the members of the teaching profession. The strongest reasons teachers gave for their continued participation in the lesson study were those relating to learning (84.7%) and sharing (84.2%) professional experiences (Adu-Yeboah, 2002). Interestingly, 'strong school leadership' as a reason for participation received the lowest score, indicative of the teachers' voluntarism and personal desire to learn and share; not coerced or threatened to participate.

It can be said that the teachers' sense of professionalism contributes to their continued participation in the research lesson in the school-based INSET. This confirms Amagasa's analysis of the elements of organisational climate that promoted the group-oriented behaviour pattern, a characteristic feature of Japanese way of life (cited in Sato and Asanuma, 2000). Another study by the "Japanese Society for the Study of Education" makes a similar discovery about the informal professional culture of teachers, which has maintained the high quality of education in Japan (cited in Sato and Asanuma, 2000).

A few lessons can be derived from this discussion. Firstly, in addition to the centralised programmes of teacher development, it is important to have a system that would bring teachers together, preferably at the locus of the school, to gather, discuss and share knowledge about effective teaching. Teachers should be made to play a central role in the choice of topics and approaches which will best meet their needs because they are directly involved in instructional processes and as such, know best where their needs lie. Should any change occur in teaching, teachers should be the driving force behind that change.

This calls for the articulation of collegial relationships in a non-threatening atmosphere. Such an atmosphere once developed could be nurtured into a culture that would promote peer-consultation and collaboration, consequently generating naturally into professional discussions (INSET) that would come to stay.

It has also been observed that the sustainability of such a system of continuous teacher development depends on teachers' perception of its impact and the support of the larger educational agencies (district education personnel). The implication is that for the above concerns to be operational in a school, a sense of professionalism should be developed in teachers.

Characteristics of In-service Teacher Training Programmes in Ghana

In Ghana, as in many developing countries, a severe deterioration in the inputs in basic education and its consequent effects on learning achievements has been recorded since the late 1970s. In spite of various governmental and donor interventions in the education sector, very little success in delivering quality teaching and learning has been recorded. The most prominent of the identified causes of low learning outcomes is teacher inefficiency (Ministry of Education (MOE), 1997). This situation calls for regular updating and monitoring of teacher efficiency through regular in-service training programmes.

In-service training programmes in Ghana have been provided as crash programmes, donor-sponsored, sporadic and sometimes do not address the real inadequacies of teachers. In the provision of these short-term in-service programmes, which mostly use the cascading approach, teachers have been allowed little or no control over their professional development. Some academic studies and sponsored interventions have confirmed evidence that there is a need for the institutionalisation of a comprehensive, systematic and permanent in-service teacher training programme (Nyiaye, 2000). It must be noted, though that these donor-sponsored and piloted programmes which mostly use the cascading method, are mostly found to be expensive, inadequate and unsustainable.

In search of a more sustainable approach to teacher professional development, the school-based INSET has been proposed as a potential tool to increase the competencies of teachers in basic schools and thereby increase learning achievement (Ghana Education Service, 2001). In response to this, the British Department for International Development (DFID) and the MOE have sponsored the Whole School Development (WSD) project in a bid to give schools the control in planning and developing their teachers. Unlike previous programmes, the WSD initiative is expected to be sustainable. Ghana seeks to achieve its national goal of enhancing the quality of teaching and learning outcomes through a regular and continuous teacher professional development programme, among others. To do this, it is important to learn from the experiences of other countries like Japan which has a 50-year history of school-based INSET.

Possible Challenges to the Adaptation of the Japanese Experience in Ghana

Improving teacher efficiency is the concern of every educational system. Being such a common educational concern, examples from advanced systems could be useful lessons for others that are still struggling to develop and maintain teacher quality. Researchers and educators have become increasingly aware of the need for ideas for improvement to be tested and adapted to the Ghanaian context. It is generally believed that teaching is a cultural activity such that consciously or not, teachers teach the same way they were taught in school (Stigler & Hiebert, 1999). Change in any culturally embedded activity like teaching, should be gradually done in the context of that culture. Its cultural significance notwithstanding, the following lessons from the Japanese teacher development programmes could be practicable in Ghana if its attending challenges are addressed.

Developing a System of Continuous Teacher Development

The centralised and decentralised programmes of teacher development are provided in Ghana. At the national level, regional and district levels, INSET is organised for head teachers, teachers and other education personnel. However, as has been mentioned before, these programmes are not regular and continuous because they are mainly donor-assisted, sporadic and piloted. In many instances, the programmes end with the withdrawal of the sponsorship. This makes the sustainability of the school-based INSET almost unachievable. One possible way of ensuring its sustainability is to encourage teacher-research. Research into problems in specific subject content or pedagogic issues could be carried out at the regional and district levels. Findings of such researches could serve as teachers' contribution to the body of knowledge about effective teaching. This practice could then be nurtured into a professional culture that would come to stay. Given the right support and climate, the school-based teacher development programme could make an invaluable contribution to effective teaching and teacher quality.

Ensuring Teacher Retention

It has been noted that teacher support is among the factors that ensure the sustainability of a programme. In this paper, it has been suggested that the low teacher turnover rate in Japan ensures the continuous availability of personnel for a sustainable school-based programme.

The common practice in Ghana is for basic school teachers to apply for study leave with pay after teaching for 3 years and move out of the basic school teaching or from the teaching profession all together (Akyeampong, 2001). This situation does not ensure continuity in any teacher development programme initiated especially at the school or cluster level. If there were any systematic effort of continuing professional interaction between the teachers at the school level, the accumulated wisdom of teaching practice would be passed on to each new generation of teachers before they embark on study leave or leave the teaching profession.

This makes it necessary therefore to address the issue of high attrition rate among Ghanaian elementary school teachers in order to maintain a regular teacher supply and retention. Support could then be developed and sustainability ensured.

Transferring Ownership to Teachers

The observable trend in the INSET programmes in Ghana is that they are either perceived to be literally 'for the government' or for a donor agency as they are normally initiated by either of them, based on nationally identified teachers' needs. It can be said that most of the time, teachers do not have a sense of ownership for such programmes and so do not give them the needed support that could sustain their institutionalisation.

As was perceived in the Japanese system, it may be necessary to have at the school or cluster level, an organisational structure that would ensure the active interaction of committees, same subject and grade teachers, coordinated by a designated teacher in charge of INSET. In turns, these committees could be made responsible for deciding how and what issues to focus on in the training programmes. This collaborative planning, once established could be another channel for generating professional discussion about what constitutes effective teaching. The head teacher's support, external or middle level support (from regional and district education agency) would also be needed to regularly provide expertise and resources to the school to ensure its sustainability.

Encouraging Collegial Interaction

It has been shown in this paper that the existence of informal and spontaneous interactions is important for the development of a sharing and learning culture among teachers in a school, and a prerequisite for the lesson study method of professional development in the Japanese school-based INSET. Additionally, it has been observed that for such a culture to be operational in a school, teachers must be willing to share their experiences, good or bad with their colleagues, and must also be willing to have their classes and lessons observed and discussed.

In the Ghanaian culture of teaching, however, teachers are isolated in their classrooms, and find it most difficult to discuss their work, especially their challenges, with colleagues. Teachers would, in most cases, be most unwilling to open their classes up for observation and 'criticism'. Lessons are observed only for evaluation purposes; teachers also take very suspicious view of being observed. Thus, there never seems to be the opportunity to observe and learn from the practice of others.

Teachers' rooms are almost non-existent in Ghanaian elementary schools; teachers have their desks and teaching materials in their own classrooms, and interaction among colleagues is almost impossible for as long as teachers remain in the privacy of their closed doors, where they are completely in charge. Such closed doors form barriers to communication, cutting off teachers from their colleagues, consequently, making very little time for interaction with other teachers (Stevenson & Stigler, 1992).

It has been suggested that the climate of the school is determined by the management system and support instituted by the school principal. This spirit is manifested in various forms, including coordinating and managing the learning process (Heneveld & Craig, 1996; Craig, 1996, cited in Craig et al, 1998). By implication, the practice of sharing and learning professional experience from colleagues could be developed through an organisational climate that could promote the group-oriented behaviour pattern peculiar with the Japanese model.

Developing a Professional Culture

In Japan, the high sense of professionalism was found to account for the sustainability of the school-based INSET. The success of programmes aimed at improving teaching and learning is found to be highly dependent on the professional commitment of teachers.

A true professional has been described as one who has command over a substantive body of professional knowledge, as well as a mechanism for improving it, and has a genuine desire to improve her/his practice (Stigler & Hiebert, 1999). Unfortunately, the level of commitment that is associated with the sense of professionalism is very low among

members of the profession in Ghana. According to a 1999 evaluation report of the World Bank-supported Primary School Development Project (PSDP), teachers were not meeting professional expectations, and this manifested in a number of indicators including high teacher absenteeism, frequent loss of instructional time, poor instructional quality, poor management, and inadequate textbooks (Fobih et al., 1999, cited in Akyeampong, 2001). Moreover, even where professional commitment is exhibited, resources are not available to help teachers improve how they teach. Additionally, no system has been provided in which teachers might spend time studying and improving teaching, and thus building a strong consciousness of the demands of the profession.

For the above lessons from the Japanese example to be operational in the Ghanaian context, it is important to develop a sense of professionalism among teachers. A lot of factors influence the development of teacher professionalism. Some of these factors have been found to be related to status, monetary rewards, public recognition, and the images of the profession teachers hold (UNESCO, 1998). Much as policy interventions would be required to address some of these socio-political factors that influence teacher professionalism, it is equally important to be able to identify Ghanaian teachers' perception of professionalism so as to be able to provide the right inputs to address any deficiencies and inadequacies identified.

Conclusion

Having a system of professional development in place is in itself no guarantee that it will thrive; that system must receive the support of all stakeholders, especially the teachers for whom that system is supposed to improve professionally. The articulation of collegial relationships in a non-threatening atmosphere is of primary importance in promoting a learning atmosphere in a school. Such an atmosphere once developed could be nurtured into a culture that would promote peer-consultation and collaboration, consequently generating naturally into professional discussions (INSET) that would come to stay.

Finally, it must be reiterated that the sustainability of the school-based INSET programmes depends on the availability of personnel, on teachers' perception of its impact, and the support it will generate from the

beneficiaries. Moreover, for a programme to achieve its desired impact, the stakeholders or beneficiaries should be made to play a central role in the choice of topics and or approaches which will best meet their needs. The kind of atmosphere prevailing in the school also suggests the level of teachers' support and participation for the school-based programmes.

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