

## **The Future of Schooling in Indonesia**

Harry Firman

*Indonesia University of Education*

Burhanuddin Tola

*National Center for Educational Assessment, Indonesia*

### **Abstract**

On the basis of the new Education Law enacted in the Year 2003, which conveys the spirit of educational decentralization, the Government of Indonesia has implemented a number of reforms to change education practices at the school level. The reforms include among other things the implementation of school-based management, a school-level curriculum, school-based teacher professional development, teacher certification, international benchmarking, and national examinations. The reforms are expected to synergically cause an on-going continuous school restructuring to become more autonomous in making local decisions, strong community participations, and effective in delivering quality education services. This paper describes efforts which are being conducted in each area of school reform and concludes with the probable features of future schools in Indonesia as shaped by those reforms.

### **Introduction**

The Republic of Indonesia is one of the Southeast Asian countries. The country is a highly diverse island archipelago consisting of around 13,000 islands along the equator between Asia and Australia. The five principal islands are Sumatera, Java, Kalimantan, Sulawesi and Papua (the western part of New Guinea island). It has a population of 242 million (2005) that comprises of about 3,000 ethnic groups. Indonesia is currently the world's fourth most populous nation, after China, India and the US. With a GDP per capita of USD 1420 (USD 3310 in PPP terms), the country is classified as a lower-middle-income country (World Bank 2008).

According to the current Indonesian national education system, the levels of education in the school system consist of basic education, secondary education, and higher education. Basic education consists of six years of elementary education and three years of junior secondary schools, which has been declared "Nine-year Compulsory Education" since 1994. Secondary education consists of three years of schooling at general senior secondary schools or vocational senior secondary schools.

Indonesia has approximately 170,000 elementary schools, 35,000 junior high schools, 20,000 general senior secondary schools, and 6,000 vocational senior secondary schools. These schools serve around 30,000,000 students in elementary school, 10,000,000 students in junior secondary school, 4,300,000 students in general senior secondary school, and

2,300,000 students in vocational secondary school. The number of schools has increased 4.2 times during the last 35 years. Through this development, the net enrolment ratio (NER) has already achieved 94.30% for elementary schools, 62.06% for junior secondary schools, and 42.64% for general and vocational senior secondary schools (Ministry of National Education 2006).

There are three main priorities that have been determined by the government to develop education in Indonesia: improving equity and access, enhancing quality and relevance, and strengthening management and accountability. However, the focus on achieving the target in completing the basic education program (elementary and junior high schools) by the end of the first decade in the 21st century has given more attention to access than to that of quality and management. Efforts in improving the education in Indonesia have encountered various obstacles: limitations in learning facilities; inadequate quantity, quality, and welfare of teachers; and limitation in the budget for education. As a consequence, the quality of school education in Indonesia has not developed as well as others as indicated by the achievement of 8th grade Indonesian students in TIMSS (Trends in Mathematics and Science Study) in the year 2003, gaining rank 34 for math and 36 for science out of 45 participating countries (Martin et al. 2004).

After political and economic crises, the education reforms in Indonesia were determined by the enactment of Law Number 20 Year 2003 on the National Education System as the legal framework for the development of education. The Law guarantees that students in the basic education program are free from any fees in order to facilitate easier access to education. The Law also determines the standards of curriculum content, processes of education, competency of graduates, personnel in education, facilities, management, funding, and learning assessment as reference points to maintain education quality assurance, and quality control. The management of formal education in elementary and secondary schools is addressed in the Law Number 20 Year 2003 in which the implementation is done through the principles of school-based management as the realization of educational democracy. With this principle, schools are given the freedom to manage schools independently and to get support from people in society to improve the quality of school services.

The dynamics of schooling in Indonesia, started since the enactment of Law Number 20 Year 2003, indicate a paradigm shift in school management as implied by the new law. The Strategic Plan of the Ministry of National Education 2005-2009 (Ministry of National Education 2005) puts priority on the implementation of new practices in school management in the context of decentralization of education, such as developing a school-level curriculum. This refers to national standards, formulated by school committees whose members consist of representatives of society who pay close attention to schools. In line with these ideas, the government maintains a few programs, such as teacher certification, a “block grant” for school operating assistance, school accreditation, and national examinations in order to facilitate school quality improvement (Karlumah 2006). Moreover, technical assistance is provided by several donor countries to undertake pilot projects to develop models of school management, teacher professionalism, and quality of learning. In addition, the existence of

international schools in various cities in Indonesia has also provided models of good practices in the management of quality school education that can be adopted in local contexts. These new schooling phenomena can form a synergistic scenario of school restructuring that has been and will be continuously implemented in Indonesia. School restructuring is a concept that represents fundamental changes in all aspects of schooling, including its mission and goals, organization and management, curriculum and instruction, educator roles and responsibilities, parent and community involvement, and school finance, in ways that lead to improved student learning outcomes (Harvey & Crandall 1988).

Considering the large number of schools and wide geographical distribution of the schools in Indonesia, processes to achieve established school programs and management resulting in even distribution of quality education in Indonesia will be continuing for up to 10-15 more years. Therefore, the features of future schooling in Indonesia will be fully dependent on the scenario of school restructuring as described above.

Further description of school restructuring practices in Indonesia is explored in this paper in order to provide a more comprehensive understanding about the processes leading to the formation of future schooling in Indonesia. The features of future schooling in Indonesia are then presented at the end of this paper as predictions based on the school restructuring processes which is happening at this moment and will continue in the coming years.

## **School-Based Management**

School-based management (SBM) is a model of management providing more autonomy to schools and enhancing the direct involvement of school community (headteachers, teachers, students, staff, parents and society) in making decisions in order to improve the quality of schools under the policy of the Ministry of National Education (Fadjar 2002). The concept of SBM had attracted educational experts in Indonesia by the end of the 1990s, and it was formally adopted as a model of school management in Indonesia with the enactment of Law Number 20 Year 2003 on the National Education System. The concept of SBM was chosen based on the paradigm of decentralization of education which is being applied to solve the ineffectiveness of the centralistic educational paradigm formerly implemented in Indonesia. Centralistic management of education does not educate the school management to creatively develop the school organization, develop the curriculum, manage facilities and learning resources, nor develop community participation. SBM makes the school community an active participant involved in making decisions in relation to school programs including curriculum and its learning strategies. As a result the schools can provide educational services more relevant to the needs of students.

Since the release of the policy on SBM, the central and local governments of Indonesia inform the school community on policies for the improvement of school-based quality, provide guidance and technical assistance for the organization, as well as school management. Each local government in cooperation with local higher education institutions has provided training for headteachers and school committee members to strengthen the necessary management

skills for the school community to implement SBM in their schools. As a result, all government-owned schools in Indonesia have already established school committees lead by community members who pay more attention to the schools. The committees consist of headteachers, teachers, staff, parents, and the members of the community. The local government also empowers the capacity of headteachers to manage schools with regard to strategic planning, financing, and quality assurance.

Various donor countries implemented pilot projects on school management development and enhanced the participation of community people to assist the decentralization process of education in a few regions of Indonesia. For instance, the Japanese Government through the Japan International Cooperation Agency (JICA) had already done studies on the implementation of SBM's model development, through participation in sub-district communities in the Regional Education Improvement Program (REDIP) across five regencies in two provinces; Central Java and North Sulawesi in the years 1999-2004 and then extended up to the year 2008 in the other provinces (JICA 2008). The model of REDIP was also implemented in Nanggroe Aceh Darussalam (NAD) in order to reconstruct education after the Tsunami occurred in 2005. In another example, the US Government through USAID supported the Managing Basic Education (MBE) Project in the years 2003-2006 (The Mitchell Group Inc. 2007) to run school-based and community-based management with emphasis on training for elementary and junior high school teachers to carry out an active, creative, effective, and fun learning program (hereinafter referred to as "PAKEM") in four provinces (East Java, Central Java, Nanggroe Aceh Darussalam, and Jakarta). A few targeting regions for the pilot projects maintain the good practices learned through utilizing their own local budgets.

In the era of decentralization, the expansion of education will be largely dependent on the political leadership in the autonomous regions (regency/municipality). Further efforts to sustain and widen the innovations of SBM and community participation initiated by the central Government and foreign assistance are then dependent on the willingness of the local government and the availability of a budget to support the programs. Meanwhile, the implementation of SBM at the school level will be dependent on the leadership of headteachers. At this moment there are discrepancies across regions and schools in the implementation of SBM. Long term efforts are needed by the central and local governments to support the schools to implement SBM effectively. Nevertheless it is believed that the implementation of SBM is an important factor in school reforms in Indonesia towards establishing schools that are able to work independently and obtain support from stakeholders as well as the local community.

### **School-Level Curriculum**

Since 2006, when Law Number 20 Year 2003 on the National Education System was implemented, the centralized curriculum is gradually being changed by the school-level curriculum which is decentralized to the school level. In the previous curriculum, the

objectives, contents, learning methods, and assessment techniques of the learning assessment were determined by the Ministry of National Education. In the new scheme of curriculum development, the central government, which extends to the Board of National Standard of Education, determines the standard competencies for the graduates from each school level, the standard of curriculum content, and guidelines for developing the school level curriculum based on its rights. In accordance with the national standard and its guidelines, the school community, under the supervision of the local government, designs the curriculum for its own schools. The school-level curriculum consists of several components: vision, mission, and objectives of school education, structure and content of curriculum, calendar of education, and compilation of syllabus and lesson plans for each course. This curriculum development strategy will guarantee that the curriculum is relevant with the needs and conditions of the students. In addition, the sense of belonging to a school community in the curriculum may result in optimum implementation of the curriculum.

The implementation of school-level curriculum gives more freedom to schools and school committees to develop the school curriculum, analyze the internal and external school environment, and determine the vision, mission, and objectives of education initiated by the schools. Then, referring to national standards, each school develops its own curriculum through accommodating the minimum contents of the curriculum determined nationally as well as local contents considered important for the students. The local contents are determined by the school community to develop competencies of the students based on the local resources and specific mission of the schools.

In cooperation with the local government, the schools determine the calendar of school education. In addition, groups of teachers under the coordination of headteachers and school committees prepare the syllabus of courses consisting of components for the targeted competencies, content of courses, learning experience of students, needed teaching materials, and the assessment techniques to be implemented. In order to prepare the implementation of the curriculum at the classroom level, the teachers prepare the lesson plan covering the objectives of learning to be achieved in one learning episode, a learning scenario, teaching materials, and assessment tools to be applied.

The development of a school-level curriculum is a new phenomenon for the school community in Indonesia, consequently, in the early stage of its implementation some obstacles were found in a number of schools. The freedom of schools to create their own curriculum which is relevant with the needs of students can not be fully implemented. The general model of school-level curriculum which is being developed as a model and fully adopted by a number of schools has tended to cause a similar curriculum among schools as to what was being implemented in the centralistic era. The change in the role of schools from curriculum implementer to curriculum developer has made the school community confused. The capacity of school community to analyze the conditions and needs of the students and implement them in school curriculum needs to be further improved. Therefore, school assistance through professional development programs provided for the headteachers and teachers in the context of school level curriculum development is still considered important for several years to

come. In line with the school assistance, capacity building of the educational management in autonomous regions (regency/municipality) managing the curriculum development still remains to be completed.

## **ICT Use in Schools**

Indonesia is one of the countries that has expressed a great concern in putting forth serious effort to reduce the digital divide through extensive use of ICT in various sectors and aspects of life. In 2001, the Government of Indonesia formulated the ICT National Plan under Presidential Instruction No.6/2001. Within the education sector, the ICT plan for education was put forth which has the following priorities: Development of ICT networks for education and research; Development and implementation of ICT curricula; Use of ICT as an essential part of the curricula and learning tools in schools, universities and training centers; Facilitation of the use of internet for more efficient teaching-learning process (Ali, 2004).

On the basis of the ICT National Plan there are several major initiatives have been taken up by the Ministry of Education to enhance the use of ICT in primary and secondary education (Belawati 2005) including:

- (1) ICT Block Grant: A 4,179 USD per school fund has been provided for 174 schools throughout the country.
- (2) Wide Area Network (WAN)-City: The project builds wireless based connection among schools within 30 cities based upon the budget from the Ministry of National Education and participating schools. The WAN-City serves as a distance library, a medium for teleconferencing and as an access to the internet through which all the schools will have a space for developing and hosting their own websites.
- (3) ICT for Vocational Education: Through this project a communication forum known as School Information Network was established among vocational secondary schools (VSSs) in every region utilizing a mailing list application as well as students of VSSs who are taught basic knowledge and skills on information technology.
- (4) School 2000: The project was initiated through collaboration between the Ministry of National Education and the Indonesia Internet Service Provider Association to connect 2000 senior secondary schools to the internet through the development of an educational portal.
- (5) E-dukasi ([www.e-dukasi.net](http://www.e-dukasi.net)): This project is funded by the Ministry of National Education to provide internet-based learning materials for junior secondary and general senior secondary schools as well as and vocational secondary schools students in a number of school subjects, including mathematics, physics, chemistry, biology, electronics, and information technology.

Recently the Ministry of National Education has launched the National Education

Network (Jardiknas) as a superhighway backbone connection for education (Gani 2008). This network aimed: (1) to establish the flow of data, information, and communication among all education offices at the national, provincial, district/city, and university and school levels; (2) to provide free access of intranet connection for all schools in Indonesia; (3) to provide free and cheap e-learning resources; and (4) to facilitate free access for knowledge sharing, research and development. The Jardiknas can be grouped into four zones, namely education office/Institution zone, university zone, school zone, as well as teacher and student zone. Education office zone is focused on data transaction and educational management system information. University zone (Indonesia Higher Education Network) is prioritized for research and development connecting universities in 32 provinces. School zone connects about 10,000 schools to Jardiknas from which e-learning sources can be utilized by schools. Teacher and Student zone connects every teacher and student individually to Jardiknas so that the ICT-based education can be carried out from the school to students' homes. In addition, in 2008 the Ministry of National Education declared a textbook reform to accelerate educational quality improvement. In this reform the Ministry of National Education purchased the copyright of accredited school textbooks, digitalized the textbooks and put them on the web in order to be accessed and downloaded through the internet.

There have been several constraints in the implementation of e-learning at the school level, among other things lack of ICT equipment and infrastructure (including telephone line and reliable electricity supply) as well as unavailability of skillful personnel to manage ICT equipment in many schools, particularly in rural areas. The expensive cost of internet access and limitation of digitalized learning resources written in Indonesian language are the other problems in the utilization of ICT-based education. Those constraints may result in further digital divide among schools in their capacity to deliver quality education services through utilizing ICT-based learning. To cope with those problems the Central Government needs to provide block grant programs and technical assistance for a number of schools, in particular poor schools, to provide appropriate ICT equipment and infrastructure. Besides that, open competitive grants have been offered by the Central Government to develop digitalized learning packages for pre-university education. Considering the huge number of schools all over Indonesia, school ICT capacity building programs will take a number of years to move forward.

## **Teacher Certification**

Law Number 20 Year 2003 on the National Education System indicates that teachers as professionals have to fulfill some qualifications and hold a teacher certificate. Law Number 14 Year 2005 on the Teachers and Lecturers as a derivative of the Law on the National Education System indicates the minimum qualifications of teachers, the teacher certification process, the implication of the certificate in the teaching authority and rights to obtain professional incentive as their additional income. It is determined that the minimum qualification of a teacher is a bachelor in a certain field relevant with the course being

taught. The teaching certificate is the formal proof to be recognized as teachers who fulfill the required competency to teach a certain school subject. The competency of teachers consists of four components: pedagogic, personality, social, and professional. The pedagogic competence relates to the teacher's understanding of the students and the mastery of techniques in planning and implementing effective instructions. Personality competence relates to maturity and personality as a teacher. Social competence relates to competencies to communicate and socialize in social life. Professional competence relates to the mastery of thorough subject content to be taught. Education and training of the teaching profession in the implementation of the Law on Teachers and Lecturers directed to develop the four competencies of teacher's professionalism as defined above.

The endorsement of the Law on Teachers and Lecturers requires the process of certification for tens of thousands of in-service teachers. The previous teaching certificate that had been handed to teachers when they completed teacher education does not automatically transfer to the teacher certificate meant by the new Law. There are approximately 1,900,000 existing teachers who need to be certified therefore the certification process is being done gradually. It is estimated that the certification process for existing teachers will continue for years to come (Wahono 2006).

The regulation of the Ministry of National Education Law Number 18 Year 2007 on the certification of in-service teachers indicates that a competency test is needed by teachers to obtain the teacher certificate which is now done through portfolio assessment. The teacher's portfolio used for certification contains a collection of documents of the teacher's activities since becoming a teacher up to the present, reflecting professional performance. The document consists of among other things formal education background, professional trainings, teaching experience, sample of lesson plans, evaluation made by the headmaster and supervisor, academic achievement, academic papers, attendance in academic forum, experience in professional organizations, and awards that have been given to the teacher. The teacher's portfolio is then evaluated by a special committee from a number of universities. The teacher certificate is provided for teachers who have already passed the evaluation process. Teachers whose scores on their portfolio are less than the minimum score can add new entries in their portfolio or attend a special training.

The objective of teacher certification which is being implemented does not only improve teachers' welfare through their professional incentive, but also improve teachers' competencies and professionalism. The result expected from the certification is the improvement of quality learning performed by teachers in the classroom. By doing so, teacher certification is viewed as one of the important factors in the school reform in order to provide better educational services in the future.

## **International Schools and International Standardized Schools**

The phenomenon of international schools in Indonesia has been growing since the enactment of the Law Number 20 Year 2003 on the National Education System. One of the



articles in the Law makes it possible for foreign educational institutions accredited in their own countries to offer education in Indonesia in accordance with the educational system being run in their native countries, through a number of requirements, among which are: cooperating with educational institutions in Indonesia, involving Indonesian teachers, and providing courses such as Indonesian citizenship and religion. Based on these requirements, it is considered that in a relatively short time, there will be a number of private sectors sponsoring international schools in Indonesia. Recently, it is noted that there are more than 30 international schools open in big cities in Indonesia, such as Wesley International School (American standard), Raffles International School (Australian standard), Jakarta Japanese School (Japanese standard), Jakarta Taipei School (Taiwanese standard), and Singapore International School (Singaporean standard). These international schools maintain the international standard of education running in the developed countries, including the use of an official language. The implementation of an assessment system makes their graduates possible to obtain international certificates that can be used to continue their study in those countries, or even in many other countries.

The phenomenon of international schools in Indonesia cannot be separated from the educational industry. However, the educational services of international schools require high cost and therefore these schools can only be attended by those belonging to rich families. Hence international schools in Indonesia nowadays are considered to be elite schools with a limited enrolment.

Law Number 20 Year 2003 on the National Education System requires the central and local government to develop certain schools considered ready to be international standardized schools. The consideration to develop the international standardized schools is an effort to improve competition in education requiring an international standard. The strategic plan of the Ministry of National Education 2005-2009 (Ministry of National Education 2005) targets the development of international standardized schools in all regions in Indonesia, both for state and private schools. The general criteria of the international standardized schools refers to the national education standard as well as aiming to enlarge, strengthen, enrich, and empower global key competencies, such as international languages as well as information and communication technology.

In order to realize the development of international standardized schools, the Ministry of National Education provides grants to initiate the international standardized schools that have already fulfilled the requirements in the aspects of teachers, facilities, and plans of programs. Through these ways there are many private and government owned schools which are developed into international standardized schools. The determination of the international standardized schools may impact an increase in the schools' budget. Therefore, the sustainability of developing the international standardized schools will be difficult without any increase in the school's budget and as a consequence the cost of education that should be provided by parents is getting more and more expensive.

The existence of international schools, even though with commercial purposes, has opened an international perspective in the school community and encourages the acceleration

of school education programs in order to catch up to the international standardized quality. Recently, the number of international standardized schools is still limited however when it is facilitated by the government, in a few years the number will be increasing. The implementation of international standardized schools will encourage the continuing process of benchmarking of educational quality toward international standardized quality. In this way, the phenomena of international schools and international standardized schools directly contribute to the process of school reform in Indonesia so that in the future the schools can provide international quality of educational services. As a consequence, the quality of Indonesian education can be improved gradually.

### **School-Based Teacher Professional Development**

Teachers are perceived as one of the key factors in the success of education. The improvement of knowledge and skills of professional teachers becomes important for the government to provide programs in the field of education. Top-down types of in-service teacher training has traditionally been employed as the main strategy to improve teachers' professional skills. However the assessment of the impacts of in-service teacher training programs showed an increase in the competencies of teachers' professionalism, but failed in changing the quality of the learning process in schools. After coming back from in-service training, teachers are teaching in their conventional ways. The influencing factor is the unavailability to enable conditions in schools that encourage teachers to consistently do innovations in their learning. Support from colleagues and headmaster's attention can be important factors in changing the teaching behavior of the teachers.

A technical cooperation program between JICA and the Ministry of National Education known as IMSTEP (Indonesia – Mathematics and Science Teacher Education Project) and implemented in 1998-2005, was piloted as an alternative to top-down conventional in-service teacher training with school-based teacher professional development in a few schools (Firman 2005). In this pilot, under the leadership of school headteachers, groups of teachers teaching similar courses facilitated by lecturers of Indonesia University of Education in cooperation with two other universities of education are implementing Japanese lesson study. In the teachers' group discussions, practical instructional problems encountered by teachers can be identified. The group of teachers then design instructional techniques considered to be able to solve the problems being faced by the teachers. A lesson plan collaboratively designed by the teachers is then implemented by a teacher in the classroom, while the other teachers are present in the classroom to observe the class. The teachers' group discussions after the learning is then reflected through considering the implementation of the lesson plan in the classroom, then some revisions from the lesson plan can be made. From the continuous participation of the lesson study activities, the teachers' community under the leadership of the headmaster are developing themselves in the aspects of subject matter, pedagogy, and classroom management. The active participation of the school headteachers in the management of the lesson study can make the innovations run effectively and sustainably.

The success of the pilot program for lesson study has resulted in further implementation of the program initiated by JICA and the Ministry of National Education and the local government to widen the implementation of the school-based teacher professional development in three other regencies in Indonesia under the program known as SISTTEMS (Strengthening In-Service Teacher Training of Mathematics and Science), implemented in 2006-2008. Teachers of Mathematics and Science of Junior High Schools in the three regencies are doing lesson study in eight schools, through the learning implementation stages in the schools where the teachers are teaching. Two junior high schools in one regency are even implementing their lesson study for all courses without any exception.

The strength of the lesson study program as a school-based teacher professional development, compared to the conventional in-service teacher training, is in its ability to change the school climate. Once the lesson study is implemented, the school can function as a learning organization, and the teachers' community functions as a learning community (Firman 2007). The schools are not only used as places where the teachers teach, but are also used as places for learning and making innovations to improve the quality of their learning. The involvement of educational authority in the regencies, supervisors, and headteachers in the management of lesson study has given sustainable support for the teachers to do innovations to improve the quality of education in schools.

School-based teacher professional development in Indonesia seems like a rolling snowball. In the last two years, the central government has disseminated the lesson study program to all provinces in Indonesia. Since the year 2008 Sampoerna Foundation, a prominent foundation moving in the improvement of education quality in Indonesia, had provided grants for the implementation of the lesson study program in three other autonomous regions. The movement of lesson study in Indonesia in years to come will change the school climate and create new traditions in the life of the teacher's community in Indonesia as a learning community. When this climate is well maintained, it may empower the schools to provide quality educational programs.

## **National Examination**

The graduation from each level of schools in Indonesia involves taking the school leaving examination. Since the Indonesia independence and up to the early 1970s, the results of national examinations held by the Ministry of National Education are used as the only criterion for graduation. Since 1974 the policy of the government has changed, and there was no longer any national examination, hence the graduation was fully determined by school examination. The abolishment of the national examination caused a decrease in the quality of education in Indonesia. All schools passed 100% of their students, and the standard of scores is different from one school to another. Even worse was that there were not any serious efforts from the teachers in the implementation of learning, and there were not any challenges for the students to study.

In the early 1990s, the government released a new policy in relation to the national

final examination implemented in a few core courses, but the results did not determine graduation since it remained decided by schools. The score of the national final examination was only used as one component considered insignificant in determining graduation. The change of graduation system made at that moment could not elevate the quality of education in Indonesia that has been in decline. The score given by the schools was so high, and the schools implemented the formula almost neglecting the score of the national examination in determining the students' final score, so that the number of failures each year was almost zero, even in the worst schools. The unavailability of a clear quality standard has caused a loss of awareness in the school community.

In order to elevate back the quality of education in Indonesia, in line with the running of educational reform in the early 2000s, the government has changed the graduation system, in which the national examination is done in three core courses, Mathematics, English and Indonesian, and determines a minimum score level for the national examination for the students' graduation. Although the policy on the new graduation system is in controversy considering the discrepancy of quality of education across schools and regions, the government insists in its decision to determine the passing grade scores. In addition more courses are being added and an increase in the score for a passing grade for the students' graduation is gradually being introduced in order that the schools are triggered to improve the quality of their education. In spite of its controversy about the national examination, the implementation of a national examination as a form of quality control through the results of the schools education, tends to encourage quality assurance in schools, and improve the awareness of the overall school community about the quality of education delivery.

### **Features of Future Schools in Indonesia: An Epilogue**

Law Number 20 Year 2003 on the National Education System is perceived as the legal basis of democratization of education in Indonesia. The reform in school management, curriculum standard, certification and teacher professional development, international standardized quality schools, and national examination explored above are parts of policies that directly improve the performance of schools to provide quality education.

A variety of reform policies restructure the schools through fundamental changes in the school's governance, culture and climate, and relationship with the stakeholders. The implementation of school-based management is expected to change the school governance to independent decision making both in academic and managerial matters, to be more open, accountable and involve the participation of people in the school community. The implementation of a school level curriculum is expected to change the educational programs in schools to be more relevant with the conditions and needs of students. The development of ICT based education is expected to improve the effectiveness of the teaching-learning process in schools. The implementation of teacher certification is expected to guarantee the adequate competencies and commitment of the teachers to run the process of high quality learning. The implementation of the school-based teacher professional development is

expected to change the school climate to become a learning organization, in which all elements in the school community are learning collaboratively. The activity of collaborative learning of teachers' groups may result in innovations in order to solve practical problems in learning, so that the number of students who have lower learning achievement will decrease. The implementation of a national examination as a means of quality control is expected to encourage the implementation of quality management in schools putting more emphasis on quality assurance. As a result, the quality of school education can be maintained.

The process of school restructuring described above is not as easy as turning over one's hand, moreover in the economic, social, and political situations it is considered less advantageous at this moment. However, taking a look at the tendencies in the life of recent schools, the process of school restructuring is successful, and it can predict that future schooling in Indonesia within one or two decades will have the following general features: (1) to have the capacity to manage autonomous educational and financial programs accountably; (2) to initiate democratic and open systems, characterized by the direct involvement of people in the community in the making of any decisions and a close relationship between schools and the stakeholders; (3) to create a learning organization that may result in innovations in problem solving of practical problems; (4) to refer to an international standard in educational processes, including curriculum, teaching materials and learning assessment, so that the school education outcomes are more globally competitive; and (5) to implement quality of management effectively to develop the culture of quality in the school community that can guarantee the quality required by the stakeholders. Through the school features described above, it is expected that future schooling in Indonesia can produce the quality of human resources required to support all sectors of development, especially the development of the economic sector.

## References

- Ali, M. (2004). e-Learning in Indonesia education system. A paper presented at seminar-workshop on e-Learning: The seventh Programming Cycle of APEID Activities, 30 August – 6 September in Tokyo and Kyoto, Japan.
- Belawati, T. (2005). UNESCO Meta-survey on the use of technologies in education: Indonesia ICT use in education. [[http://www.unescobkk.org/fileadmin/user\\_upload/ict/Metasurvey/indonesia.pdf](http://www.unescobkk.org/fileadmin/user_upload/ict/Metasurvey/indonesia.pdf).] (July 1, 2008)
- Fadjar, M. (2002). Book introduction. In I. Abu-Dohou, *School-based management* (pp.xv-xxiii). Jakarta: PT Logos Wacana Ilmu.
- Firman, H. (2005, September). The role of JICA IMSTEP piloting activities in enhancing mathematics and science teacher's professionalism. Paper presented at IMSTEP Working Group Conference, State University of Malang (East Java).
- Firman, H. (2007, November). Critical factors in building learning community: Case study of development of lesson study community in district of Sumedang. Paper presented at Sampoerna

- Foundation Indonesian Teacher Conference 2007, Jakarta.
- Gani, L. (2008). Indonesian e-education initiatives: National case study. [http://www.moe.gov.my/43seameocc/download/] (May 12, 2008)
- Harvey, G. & Crandall, D. P. (1988). What restructuring is: In search of a definition. ERIC Document ED 315918. [http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content\_storage\_01/0000196/80/1f/ee/74.pdf.] (May 12, 2008)
- JICA (2006). Regional education improvement program. [http://www.jica.go.jp/indonesia/english/activities/] (March 9, 2008)
- Karlimah (2006). School operational grants for improving the quality of education. *Isu-Isu Pendidikan di Indonesia*, 3, 19-48.
- Martin, M. O., Mullis, I. V. S., Gonzales, E. J. & Chrostowski, S. J. (2004). *TIMSS 2003 international science report*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.
- Ministry of National Education (2005). *Strategic plan of ministry of national education 2005-2009*. Jakarta: Ministry of National Education.
- Ministry of National Education (2006). *Indonesia educational statistics in brief 2005/2006*. Jakarta: Ministry of National Education.
- Republic of Indonesia (2003). *Law Number 20 Year 2003 on the national education system*. Jakarta: Ministry of National Education.
- The Mitchell Group Inc. (2007). *Final report to USAID/Indonesia on managing basic education (MBE) project*. Washington, D.C.: The Mitchell Group Inc. [http://www.mbeproject.net/evaluation-i.doc.] (March 10, 2008)
- Wahono (2006). Teacher certification. *Isu-isu Pendidikan di Indonesia*, 3, 23-40.
- World Bank (2008). *World Development Indicators Database*. [http://www.siteresources.worldbank.org/ DATASTATISTICS/](June 30, 2008)