The New Curriculum Implementation in Indonesia: A Study in Two Primary Schools

Kartika Yulianti
Indonesia

The new 2013 curriculum has just been implemented recently in Indonesia from primary to secondary school levels. There are a lot of criticisms towards the implementation, especially in the schools' readiness to apply the new curriculum in the real classroom. This study aims to investigate the role of school leaders in the new curriculum implementation. Several aspects were also examined: teacher professional development with regards to the curriculum implementation, how schools involve parents prior and during the curriculum implementation, supporting factors for the implementation and factors that hinder the success of the new curriculum implementation. Data were gathered from school leaders, teachers, and parents. The findings show that school leaders in these schools play an important role by exercising transformational leadership and shared instructional leadership. Continuous teacher professional development and professional learning community are other important factors for the success of the new curriculum implementation. Time constraints and limited resources are reported to be the hindering factors. The findings show that albeit schools acknowledge the importance of parental involvement in students' learning, schools have not given adequate support that parents need in order to be fully involved in their children's learning.

Keywords: school leadership, teacher professional development, parental involvement, 2013 curriculum

Introduction

This article focuses on Curriculum 2013 (K-13) which was implemented by the Indonesian government in order to replace the previous curriculum, Curriculum Education Unit (KTSP), that had been in effect for about 6 years at primary and secondary school levels. In 2013, the new curriculum was tried out in several school models. Then, in 2014, the curriculum was implemented in Grades I, II, IV, and V of elementary schools, Grades VII and VIII of middle secondary, and Grades X and XI of higher secondary schools. However, under the new Minister of Education, as of December 2014, the implementation of Curriculum 2013 was canceled in several schools that just implemented it for one semester.

Curriculum 2013 is characterized by three assessment aspects; cognitive, affective, and psychomotor. Character education, integration of subjects, and the lesson delivery in thematic topics also make this curriculum distinct from the previous one. The implementation of the new curriculum has been criticized, among other things concerning the preparation for putting the new curriculum into practice in the real classrooms.

This study aims to investigate schools' and parents' perceptions towards the new curriculum 2013 and in what way they were prepared for the implementation. The role of school leaders is also examined. In addition, this study also seeks to investigate how school leaders and teachers involve parents in the new curriculum implementation. To profit from parents' involvement, teachers and principals should acknowledge parents' role in their child's education. At school, principals and teachers are key for promoting parents' involvement, but in the 2013 curriculum implementation process there was little focus on parental involvement. A qualitative research method has been employed, and school leaders, teachers, and parents in two primary schools, public and national plus schools were involved.

Correspondence concerning this article should be addressed to Kartika Yulianti, e-mail: kartikay267@gmail.com

Research Questions

1. How do principals, teachers, and parents perceive the new 2013 curriculum?
2. How are school leaders and teachers prepared for the new curriculum implementation?
3. How do school principals support teachers in implementing the curriculum?
4. How do schools and parents perceive the importance of parental involvement in students' learning?
5. How do schools involve parents in the new curriculum implementation?
6. How do parents perceive support from school? What types of parental involvement that are supported by the school?

Background

Curriculum integration originates from the notion that classroom curricula should be connected and relevant for real life (Beane, 1995; Czerniak et al., 1999). As far back as the 1970s, Gibbons (1979) pointed out that improving curricula, for example in the sense that separate, subject-oriented curricula are changed into more integrated curricula, would be highly beneficial for students. Research shows that integrated curricula provide stimulating experiences helping students to make sense of the world around them (Frykholm & Glasson, 2005; Koirala & Bowman,

2003). An example of curriculum integration is the integration of science and mathematics. Furner and Kumar (2007) recommend the integration of science and mathematics in a problem-based learning approach. They argue that mathematics has an important role in helping students to understand the relationships between key scientific concepts. Further they state that "in today's high-tech world, it is important that our young people grow to become confident in their ability to do mathematics and science in an ever-increasingly high-tech globally competitive society" (p. 188).

Studies suggest that school leaders can play a significant role in improving student learning through indirect influence (Leithwood et al, 2004) and practices that establishes school-wide reform efforts as powerful means for leading change within their schools (Klar & Brewer, 2013). Successful principals affect school quality by enhancing teacher quality through professional development, focusing on teachers' motivation and working conditions, involving teachers in decision making and engaging parents and communities (Branch, Hanushek, & Rivkin, 2013; Sebastian & Allensworth, 2012; Seashore Louis et al, 2010; Leithwood et al, 2004). The framework of the study of leadership influence on student learning is summarized by Leithwood et al (2004) in figure 1 below.

Figure 1.
Leadership influences on student learning

158
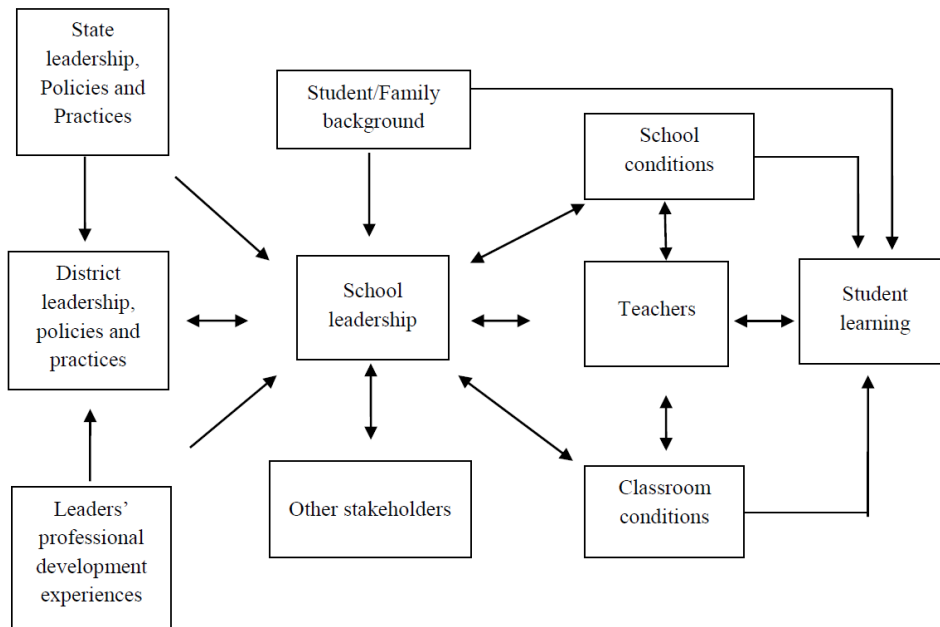
When it comes to educational leadership, two major approaches have dominated the research literature over the past two and a half decades; instructional leadership and transformational leadership (Hallinger, 2003). Transformational leaders seek to build the organization's capacity (Hallinger, 2003) by enhancing the capacity of their followers to their fullest potentials (Hallinger, 2003; Marks & Printy, 2003). Bass (1991) distinguishes the definition of transformational and transactional leadership. He defines transformational leadership as leaders ability to motivate their followers to do more than simple exchanges, to take on challenges and to achieve superior results that exceed beyond prior expectations, whereas in transactional leadership, leaders will reward followers who fulfill their requirements. There are four components of transformational leadership by which leaders influence their followers: charismatic leadership (idealized influence), inspirational motivation, intellectual stimulation, and individualized consideration.

Blase and Blase (1999) describe the two major characteristics of principals' instructional leadership: talking with teachers to promote reflection and promoting professional growth. The strategies through which an effective instructional leader may promote reflections include making suggestions, giving feedback, modeling, using inquiry and soliciting advice and opinions from teachers and giving praise. An effective instructional leader exercises these strategies to promote professional growth: emphasis on the study of teaching and learning, support for collaboration, development of coaching relationships, support for program redesign, application of the principles of adult growth and development to all phases of teacher development programs, and use of action research. There are five dimensions of instructional leadership practices: establishing goals and expectations, resourcing strategically, planning, coordinating and evaluating teaching and the curriculum, promoting and participating in teacher learning and development, and ensuring an orderly and supportive environment (Robinson et al, 2008).

The average effect of instructional leadership on student outcome is three to four times that of transformational leadership (Robinson et al, 2008). Although transformational leadership is necessary, it is insufficient for instructional leadership (Marks & Printy, 2003). But, an integration form of transformational and instructional leadership could improve the quality of pedagogy and student achievement. With regards to curriculum, the principals play an important role in coordinating curriculum reform in the schools by communication with all school personnels, encouraging teachers to take part in professional development program that allow them to successfully incorporate the curriculum change, and continuously transmitting the interest and enthusiasm with new curriculum (Sebastian & Allensworth, 2012; Schagen, 2011; Virgilio & Virgilio, 1984).

Research indicates a positive correlation between parental involvement and student academic achievement (e.g. Fan & Chen, 2001; Yan & Lin, 2005). According to Bloom (1980), parental involvement is parents' aspiration for their children's development and academic achievement, as well as the actions parents take to help their children's learning. Coleman (1988) proposes that parental involvement is a form of social capital of family that depends on the attention that parents give to their children. Grolnick and Slowiaczek (1994) define parental involvement as "the dedication of resources by the parent to the child within a given domain" (p. 238). Epstein (1995) proposes six types of parental involvement: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with community. Parenting is related to providing family support and conditions to support learning. Communicating means creating and maintaining two-way communication between school and home concerning school programs and student progress. Volunteering is to be involved as volunteers to support school programs at the school or in other locations. Learning at home is providing academic learning for children, for example helping children with their homework and discussing their goals. Decision-making is participating in school decisions, governance and advocacy activities. Collaborating with community is to be actively involved in contributing services to the community.

The literature suggests that principal leadership has influence on parental involvement (Hoover-Dempsey et al, 2005; Soodak et al, 2002; Griffith, 2001). "The more

committed, visible, and active principals are in supporting parent-teacher relationships, the more likely schools are to develop strong programs of parent and community involvement" (Hoover-Dempsey et al, 2005 p. 117). Further, Hoover-Dempsey et al (2005) argue that "principal's role in creating school-family trust in relation to a welcoming school climate is especially important because sustainable improvements in school, family, and community relationships require continuous, active, and well-informed that emphasizes meeting parent, teacher, and student needs over time" (p. 117). However, in a study of a new curriculum implementation in New Zealand, Schagen (2011) reveals that in reality, examples of parental involvement in curriculum related decision making are less common, despite principals' beliefs that parents and the community need to have a good understanding of and support changes in pedagogy, assessment, and reporting.

Methods

In this study, a qualitative research method was employed. A principal, two teachers, and two parents in one public and one national plus schools were involved. Semi-structured interviews were conducted on the school sites. For one of the parents the interview was conducted by phone. Prior to the interview, each participant gave informed consent confirming their willingness to be involved in the study. Each interview lasted for approximately 45 minutes. The interviews were transcribed, coded and analyzed.

Findings

How do Principals, Teachers, and Parents Perceive of the New 2013 Curriculum?

Principals and teachers in both schools agreed that the new curriculum is not different from the old one in terms of student-centered learning. However, they found that the new curriculum had a more balanced focus on cognitive, affective, and psychomotor domains than the old one. Another important aspect of the new curriculum is its emphasis on character education that has to be embedded in every lesson. Integration of several subjects into one big theme is another distinct feature of the new curriculum.

One of our informants stated:

"Curriculum 2013 answers concerns a lot of people have about the absence of character education in Indonesia. It makes us aware that up until now our education had only accommodated students' cognitive abilities. Hence, we have to appreciate government's initiative to reform the curriculum. I had been teaching in a national plus school that implement IB curriculum, so I got used to this kind of curriculum. I think, with the new curriculum, teachers in the schools that still apply teacher-centered teaching, now start to realize that teaching and learning has to be student-centered, apply inquiry and constructive methods." (Head of School of the national plus school).

One of the parents in the national plus school found the new curriculum to be too difficult. She preferred the old curriculum as it was simpler and each subject was taught separately. Another parent in the national plus school and a parent in the public school pointed out that no matter the curriculum, students' learning had to be the main focus. Parents in the public school agreed that the new curriculum is more challenging, yet they found it more accommodative to students' cognitive, affective, and psychomotor development. Also, with the implementation of the new curriculum, students became more active and creative since all these three aspects are assessed in their learning process. A parent in the national plus school stated: *"For me it's too difficult, maybe because I am just a high school graduate."* Another public school parent, on the other hand, said:

"I have no problem with whatever the curriculum is. What is most important to me is students' learning. In my opinion, with the new curriculum since lessons of different subjects are taught through integrated topics into one big theme, students can make the inter-relations of things in daily life. For example, with a topic about traditional market, my kid learned about mathematics through buying and selling, she

also learned about environment and biology, for example why garbage smells awful, etc. And, more importantly she learned in meaningful yet enjoyable way."

Another parent in the public school claimed:

"It's challenging yet fun. Under the new curriculum, I see that my kid has become more critical, creative, and active. As the lessons are integrated, she does not rely on textbooks anymore. She began exploring other resources, for example the internet, with my supervision, of course, and other books and learning media. My daughter also has become more confident now since she starts to get used to working in groups during class, and be involved in group discussions and make presentations.

Teachers in both schools reported that time constraints and limited school resources may hinder them in the curriculum implementation. The new curriculum required a thorough assessment for every integrated theme, whereas teachers needed time to prepare the lessons, including developing lesson plans, making the worksheets, developing assessment rubrics, creating teaching aids, or making students' narrative assessment. Also, public schools are not always able to provide the necessary resources because of limited budgets, so teachers had to ask parents to provide them. In the national plus school resources are not really the problem, but they have to order the resources a week before they deliver the lesson in the class.

One of the teachers in the public school said:

"For me, I often find time management difficult because I have a lot of things to prepare before and after class. For example, one day students have to perform drama in the class. The preparation really takes time. For the resources, since the school cannot always provide them, I ask parents to provide them.

Just recently, after the presidential election, Indonesia has a new president and cabinet, including the Minister of Education. The new Minister for Primary and Secondary education has instructed schools that have implemented the new curriculum for 1.5 years to continue applying the curriculum, while schools that have implemented

it for 1 semester only are instructed to go back to the old curriculum. The public school in this study had implemented the Curriculum 2013 for 1.5 years, whereas the national plus school had just started for 1 semester. Thus, the national plus school had decided to apply their own curriculum in the following semesters. The principal of the public school in this study who was also involved in the new curriculum development and as a national instructor in the teachers' professional development program for the curriculum implementation, reported that the new minister's policy was not necessary since numerous schools across Indonesia still wanted to apply the new curriculum.

"I see that many of the public schools across Indonesia that have just applied the new curriculum for one semester still wanted to continue with it. So, I think that was a careless decision to instruct those schools to use the old curriculum. Same as some private schools in Jakarta, they still wanted to apply the curriculum. The minister of education should have examined carefully before making such a critical decision." (Principal of public school).

The principal for the national plus school stated the following:

"I think the problem is rooted from those who just want to get quick results. The fact is that change is never easy, it takes time to see improvement in educational outcome as it is a long process. They don't realize that a system cannot be built in one night. On the other side, many people do not want to leave their comfort zone." (Principal of national plus school).

A teacher stated that:

"Most teachers in this school are passionate and highly motivated, and although they are senior teachers, they still want to learn. Also, the school principal has been really supportive. From prior to the implementation, the beginning

161

and until now, he has never left us alone in confusion. Every Friday we have a meeting that is specially held to address issues in classroom activities. So, I think it takes not only the principal but also teachers in this process of change." (A teacher in public school).

How are Schools Prepared before the New Curriculum Implementation?

Principals and teachers were asked whether they took part in any professional development program prior to the new curriculum implementation. Both principals report that the government through the Ministry of Education had initiated curriculum workshop for teachers and school leaders. There were 52 hour-workshops for school principals where the main topic was curriculum management and evaluation, whereas teachers attended a one week-workshop focusing on instructional skills or pedagogical content knowledge. The professional development program contained workshops focusing on creativity and innovation in teaching and learning, how to develop lesson plans and integrating several subjects into one big theme, assessment, and classroom management. Training for trainers were also held to create master trainers who would be responsible to assist fellow teachers during the curriculum implementation. However, most of the participants in this study found this program to be rather ineffective, as it was delivered only a week prior to the implementation was to take place in the classrooms. Furthermore, a participant reported that the teacher facilitator had insufficient comprehension towards the new curriculum. Most of participants in this study had expected to be involved in continuous professional development and a professional learning community such as lesson study. However, there had not been teacher professional development with regards to the curriculum conducted by the Ministry of Education during the second year of its implementation.

A Head of the national plus school therefore stated:

"It is good that the Ministry of Education has initiated a preparation program for principals and teachers prior to the implementation. However, it was not sufficient since it was delivered only a week before the new

academic year started, not to mention there were too many participants in the workshop so that it was not effective. In my opinion, teachers learning together in school learning communities would be better. I plan to have a Lesson Study community in my school." (Head of School of the national plus school).

A teacher in the public school stated:

"I hope in the second year of the curriculum implementation, curriculum workshop from the Ministry of Education will be conducted again, but it should be continuous, not just hit and run program." (Teacher in the public school).

All participants in this study, including parents, agreed that the keys to success of the curriculum implementation, are school leaders and teachers. Teacher resistance could hinder the process of change. However, school leaders can play an important role to overcome this situation. A teacher stated that:

"Change including change in policy is inevitable. Many principals and teachers are resistant to change. I understand that we cannot blame them for being in their comfort zone too long anyhow. But for me, what I can do is I try to not stop learning." (A teacher in public school).

Another teacher said:

"Yes, many teachers are resistant to change, but I think the school leader should play a role here in shifting their paradigms, because the process of change in Indonesia is usually top down. So, the school leader must be strong enough to overcome teacher resistance." (A teacher in public school).

How does Principal Support Teachers in Implementing the Curriculum?

Integration of several subjects into thematic lessons is another special feature of the new curriculum. Teachers in both schools reported that their school leaders had been

very supportive. Teachers in the national plus school pointed out the practice of shared instructional leadership in the school. Support and help from the Head of School, vice principal of curriculum and instruction, and teacher coordinator had made it easier for them to apply the new curriculum. This teacher-leader team worked together to map every subject and carefully examined the intersection of all topics before integrating them into one big theme to be delivered in each grade. Teachers in the public school also reported that their school principal initiated a weekly meeting to discuss issues related to teaching and learning processes under the new curriculum. The principal of the public school also appointed several teachers to be teacher facilitators who would also play a role as coaches for neighboring schools. Furthermore, there was a weekly meeting where principal and teachers reflected on what they had done and discussed issues that emerged in the class in order to find solutions together.

> *"I think that having a team of teacher-leaders with whom I share the leadership, is a must. I choose the best teachers who have a strong passion and a high motivation to learn. This small team has been working together with me, especially in managing teaching and learning activities and teacher professional development." (Head of School of the national plus school).*

> *"Head of School and some teacher coordinators have been really supportive. They work to ease our burden by mapping several subjects and making the integration. Then they deliver their work to us at workshops. (Teacher in national plus school).*

In both schools, school leaders monitored and evaluated classroom practices and teacher performance at least twice a year. A peer teacher, one person from the teacher-leader team and Head of School would come to observe the class. Upon the observation, teachers were given the chance to reflect before getting feedback from the teacher-leader representative and the peer teacher. In the public school, district supervisor would also come to observe their classes. Feedback from the district supervisor was mainly centered around administrative issues, such as the completeness of assessment documents, instead of giving thorough feedback about the teaching and learning process.

> *"Teacher classroom performance is assessed at least twice a year in this school. I usually ask teachers to reflect on what has been good and what needs to improve before giving my positive and encouraging feedback. Teacher incentive and raise of salary is mostly based on their classroom performance." (Head of School in the national plus school).*

> *"Our principal often come to observe our class. In the first year of the new curriculum implementation, a district supervisor also came to observe. However, I think the district supervisor does not really comprehend what is effective teaching and what learning is all about. He only checked the completeness of assessment documents." (A teacher in the public school).*

How do Schools and Parents Perceive of the Importance of Parental Involvement?

All participants viewed parental involvement as an important factor for students' learning. However, both school leader and teachers in the national plus school believed that parents in their school would get involved only if they had any complaint towards teachers, e.g. when their child report to them that the teachers were not nice to them. The parent representative in the public school also found that a lot of parents did not really care to participate in school activities organized either by the school or school committee.

> *"Parents do not really care. Basically, their main concern is only their child's safety, that their child feels comfortable at school, and teacher creativity. But, they will speak up if they are not satisfied with the teacher's service." (Head of School in the national plus school).*

"I think both school and parents need to work hand in hand for the students' learning, no one is more important than the others here." (A teacher in the public school).

"It is not easy to get parents to participate in school activities, either organized by the school or us as school committee." (A parent in the public school).

How do Schools Involve Parents in the New Curriculum Implementation?

Both schools informed parents about the curriculum change, and in the public school, parents of each grade were invited to attend a meeting about the new curriculum. Both school leaders perceived that their schools had prepared their parents to be involved in the curriculum reform and to help their children in their home learning activities. The public school also informed parents about how their children's learning progress would be assessed in the form of narrative under the new curriculum. The schools invited the parents to attend class activities. A parent in the public school reported that parents were mostly involved in helping the school in organizing out of school activities, such as field trips or family gatherings. Teachers used a communication book as one of the means of communication with parents. They usually informed parents about the weekly theme that their children would learn about in school and homework through the communication book. Teachers also informed parents about things that students needed to bring for their class activities when the school could not provide the resources due to the limited budget. Teachers and parents sometimes communicated via phone. Social media such as Facebook was used to display students' work. Internet was available in both schools, but teachers rarely used e-mail as a means of communication with parents since not all parents were used to it. Instead, several teachers formed a group on Blackberry Messenger or Whatsapp to communicate with parents.

"I communicate with parents mostly through the communication book. I inform them about the weekly themes and homework. Also, when I find that school cannot provide the resources that the students need for their class activities, I inform parents about that

through the communication book. (A teacher in the public school).

How do Parents Perceive of Support from School?

Parents in both schools felt that the school personnel as well as the overall school climate were supportive and friendly towards them. They also found that the school leaders were accommodative to their children's needs. Communication between school and parents were well maintained. However, parents in the public school suggested that the school should organize regular meetings with the school committee and the parent representatives where they could discuss issues related to instruction matters or teaching and learning activities, school activities, and their children's learning progress. The existing activities the school committee and parent representatives took part in were mainly organizing extracurricular activities or school outings. A parent in the public school suggested that the school should to arrange workshops for parents about teaching strategies and give parenting lessons. The knowledge that the parents could get from such workshop could be very beneficial for them, particularly to help their children to learn at home.

"I think it would be nice if the school arranged workshop for parents. Parents need to know effective ways to teach their children at home, especially about how to help them with integrated and thematic subjects." (A parent in the public school).

Discussion

Participants in this study are principals, teachers, and parents in a national plus school and in a high-ranked public school. In these schools, the school leaders and teachers demonstrated some characteristics of instructionally effective school: the attention to curriculum and instruction, the strong instructional leadership role, the emphasis of inspection of processes and outcomes, and the high degree of coordination (Murphy & Hallinger, 1998). According to the participants, the professional development program they

received prior to the curriculum implementation was insufficient, in particular because of the hit and run nature of the program in a relatively short time. Teachers wanted to be involved in a continuous professional development and professional learning community such as Lesson Study, where they could progressively learn in a collaborative manner in their school site. The professional development for teachers with regards to the new curriculum should focus on teachers' content and pedagogical knowledge. Teachers' content and pedagogical knowledge are vital for teachers to understand the content more deeply and how to deliver it to students in effective ways. All the professional development characteristics that school leaders and teachers in this study wanted to take part in are in line with the findings of a number of studies on the characteristics of effective teacher professional development programs (Garet et al, 2001: Supovitz, 2002; Guskey, 2003; Boyle et al, 2004; Penuel et al, 2007). The characteristics are sufficient time and other resources, school or site based, focus on content and pedagogical content knowledge, the form of the activity (workshop vs study group), collective participation of teachers from the same school, grade, and subject, the promotion of collegiality and collaborative exchange to work together, reflect on their practices, exchange ideas, and share strategies.

The school leaders of the participating schools in this study played an important role in the implementation of the new curriculum. They motivated teachers to strive their best to achieve their shared goal of improving students' learning. These school leaders exercised transformational leadership of which the components are: charismatic leadership (Idealized influence), inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1998). In addition to the transformational leadership style, the school leaders also demonstrated instructional leadership. They monitored the teaching and learning processes, they had regular meetings with teachers to discuss, reflect, and find solutions to issues emerging in the classroom, they gave praise and feedback to teachers for their performance during the semester, and encouraged teachers to participate in professional development to enhance their professional skills. The leaders exhibited the strategies of effective instructional leaders for positively influencing classroom teaching, as revealed by Blase and

Blase (2000): talking with teachers to promote reflection, making suggestion, giving feedback, modeling, using inquiry and soliciting advice/opinions, giving praise, promoting professional growth, emphasizing the study of teaching and learning, supporting collaboration among educators, developing coaching relationship among educators, encouraging and supporting redesigns of programs, applying the principles of adult learning, growth, and development to staff development, and implementing action research to inform instructional decision making. Furthermore, the school leaders also created a teacher-leader team to work together with them in helping their fellow teachers dealing with instructional matters. Thus, the leadership practices reported in both schools in this study, it seems like the school leaders exercise transformational leadership and shared instructional leadership. Marks and Printy (2003) argue that transformational leadership is a prerequisite of shared instructional leadership. A strong transformational leader plays a role in attracting teachers' commitment to be involved in shared leadership. Hence, an integration of transformational leadership and shared instructional leadership influences teachers' pedagogy, resulting in improving students' achievements. Findings in this study are in accordance with Schagen's (2011) finding that effective school leadership with capacity of change management is crucial to successful curriculum implementation.

In spite of schools' acknowledgement of the importance of parental involvement in children's learning, interviews with teachers and parents indicated that parents were not completely part of the implementation of the new curriculum. Using Epstein's (1995) parental involvement framework, we find that in both schools support for parental involvement with regards to children's learning exists only in involvement type 2 - communicating, type 3 - volunteering for school events such as school outings and extracurricular activities, and type 4 - partly learning at home. Our findings are similar to Schagen (2011) who reports that in the implementation of a new curriculum in New Zealand, it was common for parents to be informed (type 2 - communicating), less

common for them to be consulted (type 5 - decision making), and even less common for them to be collaborators (type 6 - collaborating with community).

As presented in the findings, time constraints and limited resources are identified to be main barriers to the new curriculum implementation. Lack of time for planning and assessment of students' cognitive, affective, and psychomotor development, as required by the new curriculum, are reported to be the main reasons for teachers' resistance in the curriculum reform. Bantwini (2010) argues that teachers should be provided with adequate time, resources, and opportunities to help them construct their knowledge towards the curriculum reform.

Conclusion

The success of the implementation of the new 2013 curriculum is inseparable from the role of school leaders, teachers, and parents. School leaders play an important role in motivating teachers to be actively participating in the curriculum reform and working to achieve a shared goal of improvement of students' learning outcomes. However, the hard work of the principal will not succeed if he is not supported by the teachers, and to achieve this the principals may form small teams that act as teacher-leaders. In this way, the principals will practice shared instructional leadership. Another success factor is teachers' willingness to be open and flexible to change. Teachers need continuous professional development in order to enhance their professional skills and construct knowledge that they need in implementing the new curriculum.

Although schools acknowledge the importance of parental involvement in students' learning, school support for parental involvement in the schools we studied are still limited to types 2, 3, and 4 of Epstein's six types of parental involvement, which are communicating, volunteering, and learning at home. Time constraint and limited resources are factors that become barriers for curriculum implementation.

Limitation of the Study and Recommendation for Further Study

The picture presented above does not necessarily represent the majority of the schools in Indonesia since the study only involved two primary schools in Jakarta. Further studies of school leadership and parental involvement and their potential collaboration to improve students' learning should be conducted, involving larger samples that represent student populations from primary to secondary school levels across Indonesia. In order to meet this objective, the effect of school leadership styles and practices on parental involvement could be examined, for example by means of regression analysis. In-depth interviews with school leaders, teachers, parents, and students are needed in order to to explore issues that cannot be explained by quantitative analyses. Findings from our study indicate that district supervisors lack understanding of effective teaching and learning. Thus, professional development and district leaders' understanding of good teaching and learning also need to be studied.

References

Bass, B.M. (1991). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics.* Elsevier.

Bantwini, B.D. (2010). How teachers perceive the new curriculum reform: Lessons from a school district in Eastern Cape Province, South Africa, *International Journal of Educational Development, 30*, 83-90.

Beane, J. A. (1995). Curriculum integration and the disciplines of knowledge. *Phi Delta Kappan, 76*, 616-622.

Blase, J., & Blase, J. (1999). Principals' instructional leadership and teacher development: teachers' perspectives. *Education Administration Quarterly, 35*(3), 349-378.

Bloom, B.S. (1980). The new direction in educational research: alterable variables. *The Phi Delta Kappan*, *61*(6), 382-385.

Boyle, B., While, D., & Boyle, T (2004). A longitudinal study of teacher change: what make professional development effective? *The Curriculum Journal*, *15*(1), 45-68.

Branch, G.F., Hanushek, E.A., & Rivkin, S.G. (2013). School leaders matter: Measuring the impact of effective principals. *Education Next, 13*(1), Winter 2013, 62-69.

Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94,* 95-120.

Czerniak, C.M., Weber, W.B., Sandmann, Jr., A., & Ahern, J. (1999). Literature review of science and mathematics integration. *School Science and Mathematics, 99*(8), 421-430.

Epstein, J.L. (1995). School/Family/Community Partnerships: caring for the children we share. The Phi Delta Kappan, *76*(9).701-712.

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review.* 13(1), 1-22.

Frykholm, J., & Glasson, G. (2005). Connecting science and mathematics instruction: pedagogical context knowledge for teachers. *School Science and Mathematics, 105*(3). 127-141, doi: 10.1111/j.1949-8594.2005.tb18047.x.

Furner, J., & Kumar, D. (2007). The mathematics and science integration argument: a stand for teacher education. *Eurasia Journal of Mathematics, Science & Technology, 3*(3), 185–189.

Garet, M.S., Porter, A.C., Desimone, L., Birman, B.F., & Yoon, K.S (2001). What make professional development effective? Results from a National Sample of Teachers. *American Educational Research Journal, 38*(4), 915-945.

Gibbons, J. A. (1979). Curriculum integration. *Curriculum Inquiry, 9(4)*, 321-332.

Glickman, C. (1989). Has Sam and Samantha's time come at last? *Educational Leadership, 46*(8), 4-9.

Griffith, J. (2001). Principal leadership of parent involvement. *Journal of Educational Administration, 39*(2), 162-186.

Grolnick, W.S., & Slowiaczek, M.L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development. 65*(1), 237-252.

Guskey, T.R (2003). The professional development that works. What makes professional development effective. *Phi Delta Kappan,* June, 748-750.

Hallinger, P. (2003). Leading educational change: reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education. 33*(3), 329-351.

Hoover-Dempsey, K.V., Walker, J.W., Sandler, H.M., Whetsel, Darlene., Green, C.L., Wilkins, A.S., & Closson, K. (2005). Why do parents become involved? Research findings and implications. *The Elementary School Journal. 106*(2), 105-130.

Klar, H.W., & Brewer, C.A. (2013). Successful leadership in high-need schools. *Educational Administration Quarterly. 49*(5), 768 – 808.

Koirala, H. P., & Bowman, J. K. (2003). Preparing middle level preservice teachers to integrate mathematics and science: Problems and possibilities. *School Science and Mathematics*, *145*(10), 145-154.

Lee, JS., & Bowen, N.K. (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal. 43*(2), 193-218.

Leithwood, K., Louis, K.S., Anderson, S., & Wahlstrom, K. (2004). How leadership influences student learning. The Wallace Foundation.

Louis, K.S., Leithwood, K., Wahlstrom, K.L., & Anderson. S.E. (2010). Learning from leadership: Investigating the links to improved student learning. The Wallace Foundation.

Marks, H.M., & Printy, S.M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly, 39*(3), 370-397.

Murphy, H. & Hallinger, P (1998). Characteristics of instructionally effective school districts.

Journal of Educational Research, 81(3), 175-181.

Penuel, W.R., Fishman, B.J.,Yamaguchi, R., & Galagher, L.P (2007). What makes profession development effective? Strategies that foster curriculum implementation. *American Educational Research Association, 44*(4), 921-958.

Robinson, V.M.J., Lloyd, C.A., & Rowe, K.J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly. 44*(5), 635-674.

Schagen, S. (2011). Implementation of the New Zealand curriculum: Synthesis of research and evaluation. *Ministry of Education*, New Zealand.

Sebastian, J.& Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning. A study of mediated pathways to learning. *Educational Administration Quarterly. 48*(4), 626-663.

Soodak, L.C., Erwin, E.J., Winton, P., Brotherson, M.J., Turnbull, A.P., Hanson, M.J., & Brault, L.M.J. (2002). Implementing inclusive early childhood education: A call for professional empowerment. *Topics in Early Childhood Special Education*, *22*(2), 91-102.

Supovitz, J.A. (2002). Developing Communities of Instructional Practice. *Teachers College Record* (8), 1591-1626.

Virgilio, S.J., & Virgilio, I.R. (1984). The role of the principal in curriculum implementation. *EBSCOHOSTconnection*, *104*(4), 346.

Yan, W., & Lin, Q. (2005). Parent involvement and Mathematics achievement: Contrast across racial and ethnic groups. *The Journal of Educational Research. 99*(2), 116-12.