

【School Education Reform Series】

Teachers as
Reflective Practitioners in
Classroom Teaching

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School Education Reform Series

School education has become one of the most essential institutions in modern society. Tremendous resources have been invested in schools. Most modern societies have made it compulsory for their young people to spend a lengthy period of time in education. The effectiveness and efficiency of school education have been viewed as the necessary conditions for the development and prosperity of all modern societies. With the development of global economy and the emergence of the information age, all societies are under pressure to improve or even reform their school education system, if they are to enhance, or at least to maintain, their competitiveness in the ever-changing world economy.

How should Hong Kong equip its new generation to meet the challenges of the 21st century? School education reform is certainly one of the key issues in this matter. Which direction should our school reform take? What school reform programs should we adopt? How should we summarize and evaluate the existing school reform programs? How should we share, disseminate and promote those school reform programs that have been proven effective?

To address these issues, the Hong Kong Institute of Educational Research publishes the School Education Reform Series. It aims to provide local educators with a forum to exchange their ideas and experiences on the matter. To these ends, this series will publish research results, program designs, summaries of practices and experiences, and evaluative reports pertaining to school reforms in Hong Kong.

Teachers as Reflective Practitioners in Classroom Teaching

Abstract

There is a move toward teachers as reflective practitioners in recent years, and this movement has recognition for teachers to be active in leading school reform, development and improvement. This study examines: (1) how teachers (N = 34) work with the nine Assessment for Learning elements in their teaching; (2) their reflection on teaching effectiveness; (3) their own suggestions for improvement as evidenced in the reflective statements from the self-reflection form; and (4) how they intend to improve the teaching schedule/content with the learning evidence collected inside/outside the classroom. The findings of this study show that teachers' reflective practices can contribute to three different areas: curriculum development, instructional development, and teacher professional development. We propose that reflective practitioners can act in a "reflective spiral" that starts with planning, acting, observing and then reflecting. The study shows that reflective practitioners are professional experts who are able to assure the quality of teaching with self-enhancement and self-improvement.

Background

Early Childhood Education in Hong Kong has undergone dramatic changes for the past few years, which are related to the education reform of curriculum development and

school improvement. The Education Bureau (2010b) states that “the aim of pre-primary education in Hong Kong is to provide children with a relaxing and pleasurable learning environment to promote a balanced development of different aspects necessary to a child’s development such as the physical, intellectual, language, social, emotional and aesthetic aspects” (para. 3 under section 1 “Pre-primary Services”). Therefore, pre-primary education provides children with a significant foundation for life-long learning and whole-person development. Although both kindergarten and primary school teachers are now facing the new expectations of the education reform, they can be benefited directly from the professional development and training in the process of academic expansion. What teachers need most is to enhance their teaching skills about pedagogical matters and explore more from teaching exercises. When discussing the instructional practice of teachers, it is believed that “effective self-reflection is a key component of excellent teaching” (Bell, Mladenovic, & Segara, 2010, p. 57), and “reflective practice can be a beneficial process in teacher professional development” (Ferraro, 2000, para. 1). The aim of this paper is to review the work on teachers’ reflective practice, which has been identified from teachers’ reflective statements followed by the class observation of their teaching exercise in the Quality Education Fund (QEF) project entitled “From Assessment for Learning to Promoting Self-regulated Learning in Early Childhood Education (Kindergarten & Lower Primary Levels).” The project was conducted by the School Development and Evaluation Team (SDET) of The Chinese University of Hong Kong.

The Trend of Reflective Practice for Early Childhood Education in Hong Kong

In 2000, the Hong Kong Education Commission (2000) published *Learning for Life, Learning through Life: Reform Proposals for the Education System in Hong Kong*, which proposed initiatives “to enhance the professional standards of early childhood educators” (p. 49, para. 8.1.4) and “to enhance quality assurance mechanisms” (p. 56, para. 8.1.19). Learning from this, it is essential to upgrade the academic qualifications of early childhood teachers. Later, the Curriculum Development Council (2006) published the *Guide to the Pre-primary Curriculum* to provide “general directions for curriculum development for pre-primary practitioners: to widen the space for learning; to be child-centred; to respect individual differences; to promote motivation for learning and to care for children’s needs” (p. 10). In other words, there is a trend of promoting kindergarten teachers to be reflective practitioners “who review, reconstruct, reenact, and critically analyze their own and their students’ performances, and who formulate explanations with evidence” (McIntyre & O’Hair, 1996, p. 2).

To put it simply, reflective teachers determine the curriculum and instruction proactively. They act with practices to improve classroom teaching and make an impact on their students, school and community. Bell et al. (2010) highlights Kahn et al.’s (2006) review that reflective practice brings several benefits for academic development, including “increased capacity for reflective processes; enhanced capacity for practice; development of personal qualities; establishment

of supportive relationships between those involved in the reflective processes; and transformation of practice” (p. 58). It is understandable that self-reflective exercises can enhance teachers’ ability to facilitate and support teaching and learning with appropriate performance. In short, “reflective teachers scrutinize their procedures, make decisions, and alter their behavior” (Tompkins, 2009, p. 223) when practicing teaching and promoting a good learning environment for students. Indeed, if engaging teachers in analyzing their own thoughts for personal inspection, introspection and analysis, teaching can be improved (McIntyre & O’Hair, 1996). That is why there is a trend of conducting self-reflection by teachers, most likely after teaching, in order to “emerge professional effectiveness involving the reflection of the knowledge of selecting teaching content, purpose and methods; the values transmitting to students, colleagues and parents; and the skills of teaching and managing school matters” (Fung, 2004, p. 13). As a result of reflective practice, teachers can improve their teaching techniques and acquire new knowledge of learning theories and teaching methods.

What Is Assessment for Learning?

Assessment for Learning (AfL) is a connection of learning and teaching with assessment. This is a way to narrow the “gap” between students’ learning and the desired goal. When teachers practice AfL, students know what they are expected to learn. Throughout the teaching process, teachers and students work together to assess students’ learning and achieve learning improvement ultimately as students are informed of their learning performance. In this case, self-

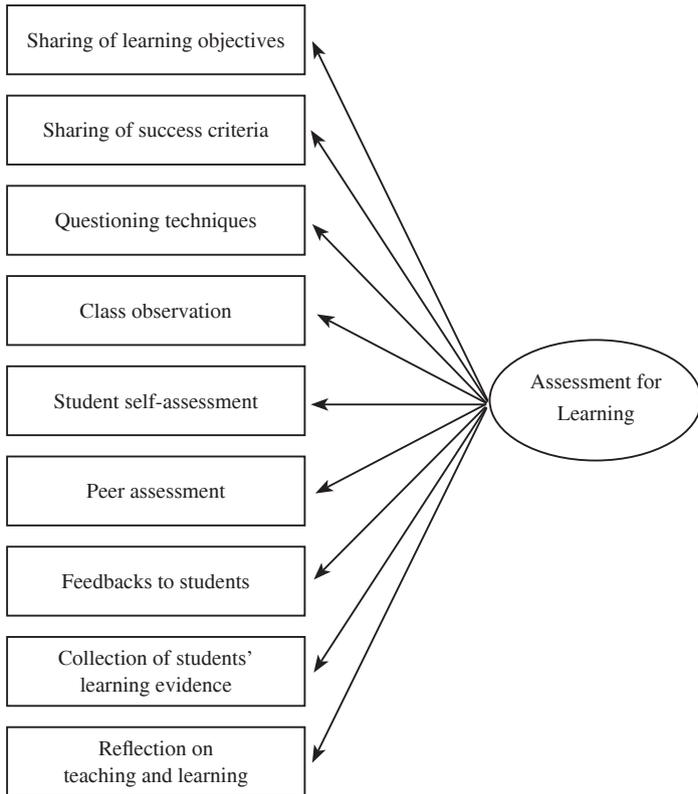
reflective formative assessment is urged and AfL will occur in different stages of the learning process with quality feedback.

Why AfL? It is acknowledged that every student is unique and has his/her own ability and various potentials. In order to promote better learning, AfL has been conducted “as an integral part of the curriculum, learning and teaching, and feedback cycle” (Education Bureau, 2010a, para. 2). In the report entitled *Learning to Learn — The Way Forward in Curriculum Development*, it was recommended putting more emphasis on AfL (Curriculum Development Council, 2001, pp. 80–81). It is important that teachers “identify and diagnose student learning problems, and provide quality feedback for students on how to improve their work” (Education Bureau, 2010a, para. 1). Similar to the above ideas, in the AfL project of the SDET, teachers are encouraged to:

(a) share their learning goals with their students at the beginning of the lesson; (b) utilize effective questioning techniques to tap students’ understanding; (c) use effective feedback strategies; (d) encourage peer and self-assessment to enable students to recognize their strengths and weaknesses for improving their own learning. (Pang & Leung, 2008, p. 9)

Besides elements (a) to (d), “collection of pupil’s learning evidence” and “reflection on teaching and learning” (Pang, 2008) are the other two dominant elements to achieve the aim of AfL (see Figure 1). Teachers regularly collect evidence and revise data from a variety of information sources including students’ work in progress, portfolios, observation, interactive

Figure 1. Theoretical Framework for Assessment for Learning in Classroom Teaching



Source: Pang (2008).

conversation, and so on. With the evidence and revised data, teachers can provide quality feedback to the learners who are capable of reaching new levels of learning and achieving their full potential. In the self-reflective process, “the individuality of feedback, by its very nature, has the facility to support weaker learners and challenge more able learners” (Jones,

2005, p. 5). With formative assessment, teachers can (Boston, 2002):

1. know the progress of students' learning and make necessary adjustment;
2. try alternative instructional approaches with minor modifications or major changes to support further teaching; and
3. offer more chances of practice in order to help students set the goal of improvement.

These advantages of formative assessment can also help to enhance students' success when the previously mentioned evidence or feedback is broadly used to support the adaptation of teaching and learning to meet students' needs. Thus, AfL is mutually beneficial to teachers and students.

An Overview of Reflective Teaching

What Is Reflective Teaching?

Educators almost always reveal the fundamental works of John Dewey. Dewey tended to consider reflection as “notions of open-mindedness, responsibility, and wholeheartedness” (cited in Tompkins, 2009, p. 224):

Open-mindedness implies that one looks for and listens to multiple viewpoints even if an alternative stance challenges deep-seated beliefs. Responsibility entails a search for the truth, taking into account any unintended consequences. Wholeheartedness involves a commitment to an examination of values, actions, consequences with the intent to learn something new. (Cited in Tompkins, 2009, p. 224)

Dewey also contrasted “routine action” with “reflective action” (Pollard, 2002, p. 12). He considered reflection “to be an active and deliberative cognitive process which involves sequences of interconnected ideas that take into account underlying beliefs and knowledge” (see Pedro, 2006, p. 130). Apart from Dewey’s (1933) *How We Think*, which introduced the concept of reflection, Schön (1983, 1987) also had great influence on the study of reflection, especially in his writing *Educating the Reflective Practitioner* (Schön, 1987). Schön (1992) categorized three levels of reflection: reflection-in-action (rapid reaction and repair), reflection-on-action (review and research), and reflection-about-action (re-theorization and re-formulation). For these aspects, Schön (1992) emphasized the professional use of teachers’ expertise to examine a problem and try to test different solutions. He also encouraged teachers to become “researchers in practice” who can construct new theories when they try out day-to-day teaching activities (Tompkins, 2009). When Pedro (2006) talked about Valli’s (1993) view on the value of practicing reflection, he stated that “teachers can exercise professional judgment to adapt and modify their skills in response to students’ needs and curriculum goal” (p. 130).

Pollard (2002) considered that “reflective teaching is applied in a cyclical or spiraling process, in which teachers monitor, evaluate and revise their own practice continuously” (p. 15). As mentioned by Pollard, there are numerous key stages in the reflective process. First, practitioners plan for their teaching as well as make decision on the plans and pedagogies upon curriculum implementation. Then they act on teaching. After that, they collect data for further reflective

process. At last, they analyze and evaluate the data for reflection practice. The cycle is iterative and continuous from time to time.

Reflective Teaching as Action Research

Ferraro (2000) claimed that reflective practice can be defined as action research. Action research roots in Dewey's proposition of reflective practice. Price (2001) stated that "action research has been frequently advocated as a means of engendering reflective practice and promoting educational change" (p. 43). Sowa (2009) also relates reflective teaching to action research which is a form of practitioner research. Action research "encourages teachers to become lifelong learners, makes them more open to developing a variety of teaching methods and verifying whether these methods work" (Sowa, 2009, p. 1027); it can promote professional growth and encourage classroom teachers to think and build "their own practical theories of teaching" (p. 1027). Moreover, action research can help teacher-educators for teacher preparation. Teachers may think of the interconnection among action research, pedagogies and other teaching changes. Through this, teachers can learn more about the pedagogical content knowledge to teach the subject matter (Price, 2001). Under this circumstance, teachers always act as reflective practitioners. Elliott (1991) considered action research as "the study of a social situation with a view to improving the quality of action within it" (p. 69). Like the process of reflective teaching, action research is a "self-reflective spiral" — a cycle of action and reflection, including different phrases of planning, acting, observing, and reflecting. This cycle of research is cyclical and iterative.

Reflective Teaching with Situated Practice

Being reflective practitioners with situated practice, teachers take critical and continuous feedback upon teaching experience in their particular school setting. Ovens and Tinning (2009) pointed out that “it is apparent that a different form of reflection is enacted within the different settings” (p. 1130). We do believe that reflection is a situated practice that enables a relationship between participants and the social context. Indeed, teachers encounter their journey of teaching under different situations when pedagogical thinking is informed by various reflective activities. As suggested by Lave and Wenger (1991), “there is no activity that is not socially situated” (cited in Ovens & Tinning, 2009, p. 1125). From this perspective, it is suggested that the reflection of teachers on different conditions and contexts of their work will support them to learn more and change their teaching practices to fit for their own or unique classroom settings.

Reflective Practitioners in Early Childhood Education

With reference to this study, the in-service kindergarten teachers and primary school teachers act like reflective practitioners who enrich their own personal reflection on their work and try to refine teaching practices as a result. They are the so-called action researchers who improve their understanding of teaching and develop their learning after gaining feedback from their colleagues, or peers, and the professional coaches. Actually, “conducting action research and generating practical theories can help teachers develop praxis, transform their perceptions of themselves and help connect them to the values they espouse” (Sowa,

2009, p. 1027). This paper is to explore how these in-service teachers enact self-reflection differently in different settings — according to situated practice (i.e., in different levels in schools and in different schools). These proactive participants have reflected on different situations and constraints embedded within their schools and social contexts in which they teach and work (McIntyre & O’Hair, 1996).

The Role of Peer Coaching in Reflective Teaching

Peer coaching is originally advocated by Joyce and Showers (1983). It is a form of professional development strategy for educators to consult, discuss, evaluate, and share about one another’s instructional practices with a view to ensuring quality teaching. It is an important tool for effective reflective teaching. By sharing in conversations with the coaches, teachers can reflect on their teaching and refine their practices; they can learn and grow in the process of coaching. When refining the concept of reflective practice, Schön gave the definition that “reflective practice involves thoughtfully considering one’s own experiences in applying knowledge to practice while being coached by professionals in the discipline” (see Ferraro, 2000, para. 2). Vagle (2009) also contended that “teachers develop new skills through an iterative process that involves learning, experimenting, and reflecting — and suggest that this learning process can be supported by skilled coaching in peer support groups” (p. 584). Bell et al. (2010) later states that “reflective practice is an iterative process rather than a one-off event” (p. 58). It is recommended that with peer coaching, which is accompanied with mutual reflection, teachers can share their knowledge and skills at

a newer and more fruitful level. By this, a whole-school development culture will be established.

Self-directed Professional Development

According to Minott (2010), self-directed professional development is “the development of practical and/or work-related knowledge under the direction of the individual” (p. 330). It can be connected with reflective teaching in the following ways:

Firstly, reflective teaching shifts the responsibility for developing knowledge away from a preceptor and places this on the individual. In other words, it enables the development of self-directed autonomous professionals, who take responsibility for their own professional learning (Calderhead, 1992). Secondly, the employment of reflection-on-action and reflection-in-action are processes that create knowledge about classroom practice and students (Schön, 1983; Zeichner & Liston, 1996), and the building of knowledge is an important aim of all professional development activities. Thirdly, an attitude of self-directed inquiry into one’s practice and the development of knowledge based on inquiry are requirements of reflective teaching. (Minott, 2010, p. 331)

It is important for teachers to act on professional expertise for guaranteeing high-quality teaching and hence effective student learning. In view of the nature of teaching, it is believed that professional development and learning should not stop at all (Pollard, 2002). Thus, the reflection process will become “a constructive spiral of professional development

and capability” (Pollard, 2002, p. 5). Since reflective practice occurs in a classroom setting, the professional development of teachers should be integrated with educational practice and the role of reflective practitioner should be shaped in a supportive school community. With the competence of reflection, reflective practitioners will act as professionals who involve exploration and articulation in their teaching, and represent their own ideas and knowledge throughout the process of reflective practice (Osterman & Kottkamp, 2004).

A Research into Teachers’ Reflective Practices in Hong Kong Schools

The AfL project of the SDET is sponsored by the QEF from 2008–2010. During the research process, School Development Officers (SDOs) of the SDET visited each participating school and conducted class observation. The SDOs, who played as peer coaches, have given specific and appropriate verbal and written feedback to the teachers who will use the feedback to guide further teaching improvement. The feedback will also be used as a reference for self-reflection. In the theoretical framework for AfL (Figure 1), there are nine elements indicating the main concern of the AfL project. In the later part of this paper, we would like to discuss how teachers reflect on these AfL elements after class observation and then adjust their instruction to lead student learning. Thus, the reflective elements in the theoretical framework are those practical items/approaches used to develop reflective practice for teachers in the mode of formative assessment which is carried out formally and informally in their daily learning and teaching.

This study aims at exploring: (a) teachers' self-reflection practices on the effectiveness of using the nine AfL elements and the respective recommendations for improvement; and (b) how teachers use the evidence collected inside and outside the lessons to adjust their teaching practices.

Data Collection

The sample was from a group of 10 primary schools and 10 kindergartens that have participated in the project of AfL. SDOs were assigned to conduct class observation ($N = 34$). They would observe whether the teachers had used the AfL skills and teaching strategies in the observed lessons. They also needed to fill in the observation form when conducting the observation. After that, the SDOs would share and discuss the comments with the teachers who also had to return the self-reflection form ($N = 34$) in which they wrote their feedback. The findings from the reflective statements and ideas will be reported and illustrated in the following sections.

Research Findings

All the findings were drawn from the 34 self-reflection forms returned by the teachers participated in the class observation of 34 lessons. Every teacher filled in one form (see Appendix). Each form was divided into two parts. In the first part (Part I), teachers were required to rate on the teaching effectiveness with regard to the nine AfL elements, followed by giving some recommendations for improving teaching. In the second part (Part II), teachers stated how they would use the evidence collected inside and outside

the classroom, and suggested some follow-up actions and adjustments for future lessons.

From the reflection forms, there is substantial reflective evidence showing what the teachers learn and know during the clinical portions (i.e., reflective practices) of the AfL project. As for their own effectiveness on teaching, most teachers gave a rating of 3 and 4, with a few giving a rating of 2. The following findings are teachers' critique on their own teaching performance, or teaching effectiveness, and their recommendations for improvement.

Teaching objectives

First, about the main ideas of teaching objectives, teachers agreed to make connection with students' daily life and the theme of the teaching unit. Also, teaching objectives should have a focus to help students concentrate on a point of study easily. Second, teachers reflected that when they teach in class, they must clearly state the teaching objectives to the students. Some teachers suggested using written format to show the objectives precisely and concisely on the board for easy understanding for the students. Third, for the mode of presenting the objectives, teachers suggested that students read them aloud together as this will reinforce their memorization of the objectives. Fourth, in order to let students clearly know the objectives, teachers advised posting up the objectives in an observable place in the classroom. Besides, teaching objectives should not be presented only at the beginning of the lesson; they should also be restated at the end of the lesson so that students can reframe their understanding with the main points for their learning.

Success criteria

Similar to teaching objectives, the success criteria should also be stated clearly before the teacher carries out teaching activities. Teachers can deliver the success criteria to students directly by their own description, illustration and explanation. Teachers can also try to lead students to speak out the criteria by themselves or to share with other students. The main advantage of this method is that there are interactions between students and teacher, and that the lesson will move from teacher-centered to student-centered. Throughout the process of the teaching activities, teachers can repeat the success criteria to the students to remind them of the central ideas of the lesson. Needless to say, teachers should make these ideas easy to understand, more concrete and more approachable but not intangible or abstract. In addition to oral reminder, teachers can also use written words to highlight what students need to do to complete the learning tasks. Professional decisions of success criteria are made by the teachers who can lead students to learn from the prior knowledge of learning.

Questioning techniques

Questioning skills are important in quality teaching and learning. Most of the teachers agreed that they should become effective questioners. Some teachers thought that they are the models of questioners in front of their students. Therefore, they need to use professional questioning techniques and ask quality questions. With respect to the AfL project, some teachers emphasized the frequent use of Question-Pause-Name-Praise (Q-P-N-P) technique which is an effective

and efficient way of driving students to think and respond. Teachers also have to raise their awareness of clarifying the questions repeatedly when asking a question. Besides, teachers need to give sufficient wait-time for the students to prepare for answering the questions. If students do not understand the questions, the questioners (teachers) should rephrase or re-edit the questions in order to make the answering or responding process smooth and successful. Besides, the teachers also suggested asking a range of relevant questions to motivate students to think, to respond, and to act accordingly. Other teachers pointed out the wise use of redirecting and relating questioning techniques as well as high-order thinking questions and open-ended questions. As regards the target students of asking questions, the teachers advised inviting more passive students to answer the questions and encouraging those responded actively to help the weaker ones. This can help to narrow the gap of individual differences. However, some of the teachers thought that they could not manage easily those techniques in their classes. Thus, they need to practice more and expose themselves broadly to different classes and students in order to gain more experiences.

Observation

Only a few teachers suggested improvement in the area of “observation,” yet their opinions are all useful and meaningful in enhancing observation skills. Teachers themselves are expected to:

- observe students’ responses more and respond to the questions they raised;

- observe students' facial expression to check whether or not they are attentive and interested in the questions;
- observe students' performance of taking a task in the teaching and learning activities so as to adjust the arrangement and schedule of the lesson planning;
- observe students' use of and response to their own prior knowledge, with a view to adjusting the teaching progress; and
- observe and listen to students' dialogues and questions so as to motivate them to work and to respond to them positively and actively.

Feedback

Quality feedback to students is very important. During the teaching and learning process, teachers thought that they can identify students' strengths and weaknesses and in turn give suitable and appropriate feedback so that students can have a better understanding of their learning performance. It is believed that if students know their own strengths and encouragement is given, they will be more confident and more willing to learn. On the other hand, if students know their own weaknesses, they will be eager to improve with goals and targets in their learning. It is significant that the feedback from teachers needs to be concrete and solid so that students can enrich their learning skills effectively. Apart from quality, some teachers of the AfL project also claimed that the frequency of giving feedback is also essential as this creates a need for students to think and reflect on their own learning from time to time or continuously.

Self-assessment

Self-assessment is a mode of assessment in AfL educational setting. It involves making judgments about students' own work. Students can assess their own presentation, reports, projects, and so on. It is considered highly valuable that self-assessment can help students make critique on their own work and therefore the teachers in the project of AfL extremely encouraged their students to self-assess. Teachers agreed that self-assessment is a form of formative assessment. One teacher recommended students assessing themselves with the score sheets while others suggested using oral assessment. Some teachers also admitted that self-assessment can nurture the habit and motive of self-evaluation which is a good means of self-reflection. In the self-assessment process, students will know their own strengths and weaknesses, and hence achieve self-enhancement and self-improvement. However, self-reflection may cause harm to students' self-value and self-esteem. Teachers agreed that students need to share more with others, to be more active to show their ideas in self-assessment, and to treasure the chance of self-assessment. Teachers recommended that self-assessment should be carried out during or after teaching. Some teachers found that their students do not have good and enough assessment skills to evaluate themselves. Therefore, it is important to equip students with the necessary self-assessment skills during the lesson.

Peer assessment

In peer assessment, teachers reflected that the role of assessor shifts from teachers to students who will review and

evaluate others' work during or after the lessons. One teacher proposed that demonstration of peer assessment is needed for students. With this, they can have better understanding of the requirements and standards, and know how to assess or evaluate others with appropriate comments and how to give achievable targets for others to work on. Another teacher agreed that more opportunities should be provided to students to conduct peer assessment so as to reinforce student-student and student-teacher interaction. Throughout the process, students will have in-depth and profound thinking. This can stimulate advanced learners to be more active and to have self-reflection and improvement. For those less advanced or less proficient learners, on the other hand, they can get some fruitful feedback from the capable ones. A teacher suggested that peer assessment can be carried out at the end of a teaching activity as a summative assessment. But the teacher also suggested having it during an activity. Both oral and written assessment are welcome and accepted. More time is needed for this kind of assessment to enhance teaching and learning.

Collection of learning evidence

Keeping learning evidence is another important work for teachers. The teachers of the AfL project admitted that with more understanding of students and their performance from their projects, portfolios, pictures, essays, and so on, the teaching progress will be benefited in return. They agreed to take follow-up actions to justify the progress of teaching and learning and get further improvement. They can also adjust the teaching goals and content according to students' needs

and interests. Nevertheless, teachers should remember to give students adequate time to finish their work and allow them more time and space to think.

Teachers' reflection on teaching

This is an action for the reflection on teaching and learning. Teachers thought that reflection should be taken for students. Teachers must be mindful that reflection is a process. They agreed that good reflective teachers dedicate their time on both teaching and reflection. Apart from this, teachers should provide appropriate atmosphere for students to ask for help when they encounter learning problems during the lesson because teachers thought that students' questions are also a source of reflection. Besides, students can evaluate their own work by taking into consideration their pictures, written work and situated learning. However, students may not know the reflection techniques, so teachers are the main contributors guiding students' self-reflection. It is well-known that self-reflection can be a process of evaluating one's strengths and limitations. In short, throughout the reflective process, teachers are the leaders or guides for taking students together to revise the teaching progress and the learning content.

For the second part of the reflection form, teachers would make use of the learning evidence collected inside/outside the classroom to revise their teaching schedule/content. In this part, teachers also take intensive self-reflection on teaching preparation, planning, design and development. The ideas reflected by the teachers of the AfL project are summarized as below.

Reflection on the process of learning and suggestions for improvement

1. *Provision of discussion time* — In the process of AfL, students need much more time to think and learn. Students can “learn from errors” when they are discussing with others in the learning activities. Moreover, students can also practice high-order thinking when sharing their ideas with teammates. During the discussion, peer assessment and learning opportunities are enhanced simultaneously in the classroom.
2. *Situated learning practice* — Teachers found that when students could have followed the success criteria already, it might be good for them to add more different situations related to teaching. For example, when teaching for the questions “What do you like to eat/drink?”, teachers are advised to set up different situations for students to learn (e.g., in the supermarket, in the toy shop, in the book shop, etc.). This can allow oneself to understand more about the complexity, uncertainty and various natures in learning and teaching.
3. *Timely feedback and constructive guidance* — This can provide clear goals for students to learn. When teachers do this, students can know their own strengths and weaknesses for further improvement. Teachers can also compare the performance of students during or after teaching and give feedback to them to reinforce their learning.

4. *Demonstration strategy* — After students share the ideas within their own groups, some students will be selected to have a presentation in front of the class. The lesson will be more interesting and there will be more interaction among the students and the teacher.

Reflection on the process of teaching and suggestions for improvement

1. *Relevance and coherence for teaching* — When implementing the curriculum of AfL, teacher reflection has great importance in the planned curriculum. It can prevent fragmentation of the curriculum since teachers have collected enough evidence inside and outside the classroom. The evidence provides supporting data for teachers to reconstruct the curriculum in advance. The reflection emphasizes the significance of connecting the curriculum in meaningful ways with students' learning experiences.
2. *Reflecting on competences* — Reflection involves a “willingness to engage in constant self-appraisal and development” (Pollard, 1997, p. 10). Teachers reflected that they had known more about the “individual differences” of students and suggested how to cater to them. This includes their active concern about the ability of their students and their own competences in teaching them. Teachers will know their full capacity to teach and the way for further development. They can become self-reflective and self-managing in the end.

3. *Awareness of professional development* — Teachers emphasized the observation of students' performance, the analysis of students' answers, the checking of students' work, and the correctness of students' assessment (self and peer). In other words, teachers often based their teaching on careful connection to students' learning. With the practically relevant and useful evidence from them, teachers will educate themselves to be concerned with the wholeness of the classroom and aware of the need of professional growth. "Teachers can confidently expect to achieve an appropriate state of professional competence through adopting processes of reflective teaching" (Pollard, 1997, p. 24).
4. *Communication with parents* — Teachers reflected that students could collect interesting materials for lessons with the support and help from their families. The intention for teachers to propose parent-child relationship in the process of learning for their students is to engage with the social settings in their sphere of teaching.

Discussion

With the above reflective evidence and reflection of the teachers which was extracted and generalized from the reflective statements in the 34 reflection forms, we believe that they can contribute to "support the progressive development of higher standards of teaching" (Pollard, 2002, p. 16). We are aware of the process of reflective teaching. This process provides a dynamic basis for teacher action. This

is a teacher-based and action-research movement with self-reflection on teachers' teaching. As a reflective practitioner, a teacher should have good analytical and evaluative skills to process practical enquiry about teaching and do pragmatic judgment. The participating teachers in this study have got reflective teaching which requires specific attitudes of "open-mindedness, responsibility, and wholeheartedness." These three attitudes are the central and vital ingredients for the kind of professional commitment — reflective practice. Being a reflective practitioner, a teacher will be attentive to self-awareness about the impact of his or her performance that will create chances for professional growth and development (Osterman & Kottkamp, 2004; Pollard, 2002).

When talking about the reflective practice or teachers as reflective practitioners, we focus on the saying "thinking about teaching" (Dymoke & Harrison, 2008). The participating teachers in this study have self-reflection by themselves according to the nine AfL elements. From the generalization of the findings, we have categorized the participating teachers' contribution to the following three aspects.

Curriculum Development

With reflective practice, teachers (as reflective practitioners) will conduct self-reflection on the whole teaching plan and individual lesson plans. Certainly, they must have critical look on their teaching and learning. After reflecting on the plans, with the aid of the lesson reflection form, they can

start to identify what needs to be changed. For example, teachers may think that they should readjust the teaching objectives for the lesson, set suitable and concrete success criteria, or add self-assessment and peer assessment to show how a particular teaching session can be run. This takes them from the formally technical kind of reflection toward a more essentially practical level of designing and developing their curriculum. The critical level is the highest level in the hierarchy of reflective practice. Teachers will then critically reflect on the “ethical and political dimensions of educational goals and the consensus about their ends” (Dymoke & Harrison, 2008, p. 8) when they plan and implement the curriculum.

Instructional Development

What is the best time for reflection? How are different time frames beneficial for teaching? Referring to Schön’s (1983) critique, reflection has two time frames. They are called reflection-on-action and reflection-in-action. The former occurs before and after an action whereas the latter engages during the action. Thus, reflective practitioners reflect both “in” and “on” action. In the process of the instructional practices, there are actions, understandings, and judgments that teachers carry out spontaneously (Zeichner & Liston, 1996). The participating teachers in this study put much effort on these activities about their teaching practices. Being reflective practitioners, teachers will be “framing and reframing problems in light of information gained from the settings in which they work” (Zeichner & Liston, 1996, p. 16). The practitioners sustain to reflect in and on action.

They also try to learn from their practice from time to time and within “the process of reflection spirals.” The practitioners, with their own experiences, will reinterpret and reframe the teaching situation and try to change it from new perspectives. If this dynamics can be carried on, teaching quality can be refined frequently. They would also like to gain some more new experiences after reflecting on their previous experiences in the end.

Teacher Professional Development

There is a strong relationship between reflective practice and teacher professional development. Since reflective practice always occurs in a classroom setting, professional development should be integrated with educational practices. Osterman and Kottkamp (2004) thought that the ultimate purpose of traditional professional development is “knowledge acquisition,” but for reflective practice, “the learning goal is not merely acquiring knowledge but creating and applying knowledge in effective and appropriate ways” (p. 15), and in the end, making improvement in professional practice through behavioral change. This process of treating knowledge, similar to the process of building and construction, intends to focus on the idea of “constructivism.” We know that a reflective practitioner is an action researcher who “engages in a continuing process of self-education” (Osterman & Kottkamp, 2004, p. 17). This kind of education is implemented in a dialectic, collaborative, and contextually based mode. Reflective practice also adopts various strategies to engage the learners. In short, reflective practice is an effective strategy for professional development.

With the findings in the second part of the reflection form, we have highlighted the two perspectives of reflection for students and teachers — that is, for learning and for teaching. It is believed that both the learners and instructors can take the role of practitioners. They are the most important sources of insight into teaching that we can access.

When conducting reflective teaching for students, it is suggested that teachers should provide sufficient time for students to discuss and share the teaching content within a situated learning environment. This is very important because too little time for discussion in an AfL lesson will block the way for students to get a holistic picture in a reflective sight. As a result, both students and teachers cannot critically reflect on learning and teaching. However, the purpose of reflective teaching is for teachers to explore how much they, as reflective practitioners, can see from their practice in new ways. Time is essential for the practice of self-reflection. In the process of reflection, students are expected to receive timely feedback or guidance since these are constructive and useful for their further learning. Demonstration of students' learning and work are encouraged (Brookfield, 1995, p. 121). "Students say that hearing their own anonymous comments reported back to them as part of a commonly articulated class concern somehow legitimized what had formerly been felt as a purely private and personal reaction" (Brookfield, 1995, p. 122). This has shown that students can benefit from reflection also.

For teachers, the advantages of self-reflection on teaching are:

1. Knowing more on how to design the planned curriculum and implement the taught curriculum, so that teachers can draw on several disciplines from reflection to construct a holistic, hopeful and meaningful focus for study;
2. Understanding more about their own teaching competence and students' learning capacities, so that they can make changes through mediating, scaffolding and extending their understanding;
3. Promoting professional development by the idea of "flow." It "means the degree of continuity and coherence which is achieved in a learning session" (Pollard, 2002, p. 246). Teachers will learn from the beginnings, the transitions and the endings of the lessons. It is believed that "consistency and reinforcement of desirable behaviors can be important here" (Pollard, 2002, p. 246). Teachers can work on the "recurring challenges" (Pollard, 2002, p. 246). On the other hand, professional development can be obtained from different teaching and learning strategies through the process of self-reflection achieved by self-assessment, self-actualization, self-enhancement, and self-improvement;
4. Facilitating the work with parents. Reflection shows that teacher-parent and student-parent interaction is highly recommended and appreciated. It is also suggested that school behavioral policies (e.g., the study work of the students, the application of daily-life context in learning and teaching) can be more relevant to the community they serve. With this, the effect and influence will be more positive.

Conclusion

This paper aims to reintroduce the concepts of reflective teaching to both teachers and policymakers, and recall the importance of teachers playing the role of reflective practitioner. In the literature review, we try to define what “reflective teaching” is since it is subject to different orientations. By showing the process of reflective teaching, we also want to highlight how it relates to the “reflective spiral.” It sounds good to indicate that reflective practice is interrelated with action research in the “spiral cycle,” starting with planning, then acting, observing, and reflecting. The form of research for this paper is similar to this iterative and cyclical process which reflects on practice, takes an action, reflects again, and takes further action. In fact, each cycle points the way to different actions for improvement in the following stage. Very often, reflective practitioners act within the situated context that they will find various ways to change their own behaviors and to improve themselves. Indeed, peer coaching is usually integrated into reflective practice when practitioners get oral and written feedback from their coaches. In the process of peer coaching, practitioners also reflect on their own practices and try to apply the knowledge to their own teaching. Teachers, as reflective practitioners, are professional experts who can assure the quality of teaching; they are the initiators of professional development.

There are 20 participating schools, with 34 teachers taking the role of reflective practitioner in the AfL project. The findings have shown that teachers reflected positively with the nine AfL elements. They got a lot of positive ideas

to support further teaching practices. They had feedback from the so-called coaches (i.e., SDOs) and started to reflect and present themselves with the reflective statements on the self-reflection form ($N = 34$). When stating how to make use of the learning evidence that teachers collected inside/outside the classroom to revise their teaching schedule and content, there come two reflection aspects: one for students/learners, and the other for teachers/instructors. To conclude, reflective practice was shown to have contribution to curriculum development, instructional development, and teacher professional development. When talking about how to revise the teaching schedule and content, it was found that time for discussion, self-assessment and peer assessment, and demonstration are all very important. Using reflective teaching, practitioners should strongly and consistently associate their reflection with effective teaching behaviors for improving the curriculum, understanding the competence of teachers and students, promoting professional development, and facilitating the work within the community.

In fact, reflective practitioners not only accelerate themselves to be good action researchers, effective curriculum developers, and professional experts, but also exert influence on students' achievement and learning improvement in the long term.

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Appendix: Teacher Self-Reflection Form

QEF Project on “From Assessment for Learning to Promoting Self-regulated Learning in Early Childhood Education (Kindergarten & Lower Primary Levels)” (2008–2010)

School:	Teacher:
Class:	Date:
Time:	Topic:

Part I

AfL Elements	Effectiveness*						Suggestions for improvement
	4	3	2	1	0	NA	
Teaching objectives							
Success criteria							
Questioning techniques							
Observation							
Feedback							
Self-assessment							
Peer assessment							
Collection of learning evidence (Inside/outside class): By questioning, observation, collecting students' work, etc.							
Revising teaching progress/content: Through questioning, observation, etc.							

* Please put a “✓” where appropriate.

Part II

I will make use of the learning evidence which I collected inside/outside class to revise my teaching schedule/content as follows:
