

Collaborative and Reflective Practices through Project Approach in Early Childhood Education

Prácticas colaborativas y reflexivas a través del enfoque de proyectos en educación infantil

Masayu Dzainudin

Universiti Kebangsaan Malaysia – MALAYSIA
masdzainudin@yahoo.com

Hamidah Yamat*

Universiti Kebangsaan Malaysia – MALAYSIA
hamidah_yamat@ukm.edu.my

Faridah Yunus

Universiti Kebangsaan Malaysia – MALAYSIA
roslinda@ukm.edu.my

ABSTRACT

The role of collaborative and reflective practices is significant as they help improve teaching and learning in today's technological dependent environment. This article aims to present and discuss an explorative study on early childhood educational practices of employing the Project Approach (PA) to demonstrate the collaborative work between researchers and practitioners as well as the reflective practices. The study employed an Action Research design involving the researcher, two preschool teachers and six children. Data were gathered through observations, interview and reflective journals. Four objectives were set according to the phases of an action research to: i) observe the existing teaching and learning practices; ii) train teachers to be critical reflectors; iii) do a simulation of project work with children at the fieldwork; and iv) critically reflect the collaborative practice in PA. Findings observed the collaboration and reflective practices between the researcher and the teachers transformed the teacher centred approach to a more child-centred as more opportunity for adult-children interactions were provided. The teachers became more responsive towards the children's needs. It can be concluded that with the right methods and tools provided in the training of teachers, teaching practices can be altered to enhance learning.

Keywords: Collaborative, Reflective, Project Approach, Early Childhood Education, Action Research

RESUMEN

El papel de las prácticas colaborativas y reflexivas es importante, ya que ayudan a mejorar la enseñanza y el aprendizaje en el entorno tecnológico dependiente de hoy. Este artículo tiene como objetivo presentar y discutir un estudio exploratorio sobre las prácticas educativas de la primera infancia de emplear el Enfoque del Proyecto (AP) para demostrar el trabajo colaborativo entre investigadores y profesionales, así como las prácticas reflexivas. El estudio empleó un diseño de investigación de acción que involucró al investigador, dos maestros de preescolar y seis niños. Los datos fueron recolectados a través de observaciones, entrevistas y revistas reflexivas. Se establecieron cuatro objetivos de acuerdo con las fases de una investigación de acción para: i) observar las prácticas de enseñanza y aprendizaje existentes; ii) capacitar a los maestros para ser reflectores críticos; iii) hacer una simulación del trabajo del proyecto con niños en el trabajo de campo; y iv) reflejan críticamente la práctica colaborativa en AP. Los resultados observaron que la colaboración y las prácticas reflexivas entre el investigador y los maestros transformaron el enfoque centrado en el maestro a un enfoque más centrado en el niño a medida que se brindaban más oportunidades para las interacciones entre adultos y niños. Los maestros se volvieron más receptivos a las necesidades de los niños. Se puede concluir que con los métodos y herramientas adecuados proporcionados en la formación de los docentes, las prácticas de enseñanza pueden modificarse para mejorar el aprendizaje.

Palabras clave: Colaborativo, reflexivo, enfoque de proyecto, educación de la primera infancia, investigación de acción

*Corresponding author. Faculty of Education, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia.

Recibido: 21/07/2019 Aceptado: 16/09/2019

1. INTRODUCTION

Children learn through learning rather than learning content (Siraj-Blatchford, Taggart, Sylva, Sammons, & Melhuish, 2008). Hence, the learning environment is important in the development of children's learning. They need an environment that enables active and positive interaction and gives children the opportunity to explore spontaneous learning (Hedges, 2011). This can be gained through the Project Approach (PA) (Katz, 1995) as it enhances and guides children to engage with discussion, decide the topic of interest, carry out in-depth observation and investigation of real-world topics. It also involves competence and social skills such as social study, art and creativity; intellectual skills which is analysis, reasoning, synthesis and evaluation as well as academic skills like science, mathematics and literacy (Mendoza and Katz, 2013). The skills are for assisting children to learn based on experiences and understanding through events and phenomena that happen in their surroundings.

PA has therefore been implemented in several Malaysian preschool settings (Rahman et. al., 2011; Rahman et. al., 2012; Ng & Abdullah, 2012; Abdul Rahman, 2015). However, Ng & Abdullah (2012) also discovered that teachers lacked in-depth understanding about the approach itself and therefore affected the implementation of the PA. Meanwhile, Abdullah, 2009 and Hooi et. al. (2013) found that teachers also lack awareness and exposure and have limited understanding about diversity that is vital in implementing the PA. In addition, Yunus (2013; 2014) reported that culture and context play a great barrier to the implementation of PA. Cultural practices have also been found to be a concern in learning among young learners (Yamat, 2013). Hence, in order to minimize the lack of awareness and understanding, there is a need to have consistent collaborative work between researchers, field experts, teachers, practitioners, administrators, and parents. This collaborative effort would assist in understanding the roles of every individuals or parties involved in educating young learners and in the development of their human characteristics (Cole, 2005).

In addition, reflective practice allows practitioners to learn about themselves through their experience, work, and importance to society and culture. It helps improve teaching as begins with teachers identifying a problem context, then defining/refining the context, seeking possible solutions, experimenting with solutions and finally evaluating the result (Murray, 2015). The application of reflective practices helps individuals improve and advance existing or practical practices (Walters, 2013).

Hence, this paper aims to illustrate the collaborative and reflective practices through the Project Approach implemented in one purposively selected private pre-school. The collaborative effort started when the Head of the preschool approached the researcher in her attempt to improve the teaching and learning practices in her preschool. This article therefore begins with a brief literature on Project Approach (PA) and Reflective Practices. The methodological concerns and findings of the study then follow prior to a discussion of the findings and the conclusion of the study.

2. LITERATURE REVIEW

The Project Approach (PA)

PA is an approach known to apply the concept of emergent which is similar to the Reggio Emilia Approach (REA) from Reggio Emilia, Italy. PA and REA both apply long-term projects as educational tool in early childhood classrooms (Glassman & Whaley, 2000). PA has no definite lesson plan (Glassman & Whaley, 2000), but it provides a more well-rounded hands-on curriculum (Beneke, 2000). The project topic emerges from the teacher's observation of children's interest, or proposed by children or both (Katz, 1995). There are three phases in the planning for the PA; that can be done by individual, group or the whole class (Katz & Chard, 2000). The first phase is a process of selecting the project topic. The teacher plays an important role in intriguing children's interest of project topic through discussion; and assisting children to formulate the questions for the investigation in phase two (Helm & Katz, 2001). In the second phase, children will seek the answer(s) for their question(s) and will make preparations for further investigation such as looking up in books, doing internet search, exploring objects, field-site visitations, experts' visits, and other multiple resources. At the end of the phase, the children may have to review the questions that they have developed; to determine which questions have been answered and which that have not been. The children will share their findings of the project topic through documentation such as journal of the progress, models that have been created, drawings or paintings, or other forms of presenting their findings. The children may also conduct an exhibition of their project work; which they could invite their parents and present the process of investigation and findings to them. All these require a substantial amount of team work and definitely the need for collaboration for each of them would have their own roles to be played and tasks to be completed. In addition, through project work, the children learn to understand their roles as learners. They become the explorer and are able to construct the meaning and concept of the topic of interest when they do the research and construing meaning as they seek the knowledge by themselves (Li, 2012). In addition, PA is a curriculum that enhances children's learning through in-depth exploration of particular topic or interest (Katz, 1995; Katz and Chard, 2000; Mendoza and Katz, 2013). Therefore, PA is considered as a learning product in which the process develops children's holistic skills in the aspect of cognitive, physical, social, emotional and self-aesthetic.

Reflective practice

As the goal of reflective practice is continuously improve one's teaching, it has become a criterion for teaching professionals in many countries (Larrivee, 2008, 2009). Larrivee (2008) further introduced four types of reflective practices, namely i) Pre-reflection (does not involve teachers to think through the situations or consider alternatives or adaptations); ii) Surface reflection (technical level of reflection involving strategies and methods from tried and tested experiences which allow them to meet predetermined goals); iii) Pedagogical reflection (teachers seek to improve their practice by combining and applying their teaching knowledge with theories and research they have encountered); and iv) Critical reflection (teachers think

about the consequences of their practices on students). Meanwhile, Murray (2015) introduced an innovative form of collaborative and reflective practices through what she named as collaborative reflective teaching cycles (CRTC). The study illustrated the use of a cyclical approach of teachers collaborating in planning to teach and reflecting on their teaching.

“Reflection practices are challenging assumptions, ideological illusions, social prejudices and cultures, inequities and questions of destructive personal behavior that might silence the voices of others or otherwise they are marginalized” (Bolton 2010, p.5). In Early Childhood Education, how children are taught will determine their overall educational outcomes, the strength of self-esteem and their continued involvement with the world around them (Leeson, 2010). To be a reflective practitioner, researchers always ask themselves. Among the issues that are playing in mind is why is there a need for change? How can a change be made? What should be changed? How to do it? Can change occur? Can people accept changes? How to convince people to accept change? What are the obstacles? What are the advantages and disadvantages? Each of these questions requires researchers to refine critically to better understand. This understanding led the researcher to include reflective practices of an Action Research concept that requires researchers to challenge existing practices for making changes and improvements.

3. METHODOLOGY

The collaboration for the study discussed in this article started when the Principal of the SMART Preschool (pseudonym) approached the researcher to discuss on how to improve the teaching and learning situation in her preschool. SMART Preschool is a private preschool founded in 2012 by the Principal with the sense of responsibility to provide the opportunity for children to learn through hands-on experience and thematic education. Since 2012 to 2014, the preschool has provided meaningful learning to 50 children aged three to six. At the end of 2014, the Principal approached the researcher to discuss on the possibility of collaboration between the researcher, the Principal and the teachers of SMART preschool. The first observation therefore started in 2015.

The purpose of the study reported in this article was twofold. 1. To adapt the PA as a teaching and learning practice in early childhood education at SMART preschool. 2. To implement a collaborative and reflective effort between the researcher and teachers through an action research study. Four specific objectives were set based on the cycles of an action research.

Action research was applied to reach in-depth understanding of situation and to formulate effective solutions to the problems (Stringer, 2004). Through action research, the researcher and the teachers could collaborate in working together to take a systematic action to resolve specific problems within the context of that particular culture. There were four objectives in this particular adaptation and collaboration research which; in line with the steps of an Action Research. They are: i) observation of the existing practices (analyse), ii) plan suitable project work (plan), iii) simulation of the project work with the children (implement), iv) evaluate the implementation of PA (reflect). Each of the four objectives plays a different role:

Objective 1- Observation of the existing teaching and learning practices

Stages of observations were carried out by the academician in order to understand the culture of teaching and learning practice before the adaptation of TPA at the preschools. The purpose of it, was to study the teachers' understanding and their culture and how their culture and context influenced their approach to teaching young children. In addition, the purpose was also to understand their pedagogical practice before approaching them to change their practice - from academic orientation to TPA. This phase also involved taking active steps towards collaborating the research work with the teachers.

Objective 2 – Plan suitable project work

From the observations made of the existing teaching and learning processes, the researcher and the teachers discussed a suitable project that can be implemented based on socio-cultural and context of the local children at the preschool.

Objective 3 – Simulation of Project Work with Children

The key persons started to practice the project work by planning and discussing with children. After the simulation, the researcher and key persons collaborated to reflect and review for the next phase of the PA; specifically on the improvement and enhancement of children's learning.

Objective 4 – Reflective Practice

Reflective practice can develop high level thinking of practitioners (Bolton 2010; Neaum 2013; Jasper 2013). Hence, it was applied during observations, thinking, analyses of the situation and also during decision making for improvement. The reflective is a continuous action that was applied during the whole course of this study. It is also applied as part of the professional development to nurture and improve the practice (Walters, 2013).

Participants

The researcher involved in this study played the role as an observer and facilitator who helped to guide the implementation of the PA. Two preschool teachers were involved as collaborators and they were the key persons in improving their existing practice. These are non-trained and non-qualified teachers in private preschool who were initially using exercise books and employing a teacher-centered approach to teaching and learning practices. In addition, the Principal of SMART preschool was also involved in the discussion and reflection process. (In such instances, the use of the term practitioners includes the Principal and teachers). A total of six children were observed in their natural daily activities in the first and third phase of this study. From the observations, the researchers and

teachers then planned suitable project work that met the children's cultural background (Malay) as well as the teachers' knowledge about the topic in order to achieve more meaningful learning for the children. Table 1 shows a list of participants and their participation type.

Table 1. List of participants

Phase	Participants	Total number	Type of participation
1	a. Researcher (as observer)	1	Observing the teachers teaching and learning practice in naturalistic environment
	a. Researcher (as Facilitator)	1	Observing children and analyzing their interest for project work planning Facilitating teachers with the phases of project work
2			Reviewing the adaptation of project work into Malaysia socio-cultural context
	b. Key person	2	Suggesting the project work based on children's interest and socio-cultural context
3	a. Researcher (as Observer)	1	Observing the teachers teaching and learning practice in naturalistic environment
	b. Key person	2	Facilitating children with the process of project work when needed
4	c. Children	6	Their activities were observed without interruptions or testing
	a. Researcher (as Facilitator)	1	Critically reflecting on the simulation and making any amendments for improvement
	a. Key person	2	Critically reflecting on the practice

Data Collection and Analysis Procedure

Reflective practice was the main resource in collecting the data. The journal and photos from observations were the main tools in analyzing the data. It was gathered from the discussion between researcher and practitioners; and naturalistic observation on the socio-cultural practice. Data gathered from the reflective journal were analyzed to discuss the processes and outcomes of the study.

4. RESULT AND DISCUSSION

Results are categorized into phases and are discussed in terms of the processes and outcome of adaptation and the collaborative research.

Objective 1

From the first observation researchers' identified that teachers preferred children (age 3 to 6 years old) to use text and work books during teaching and learning sessions. They had a structured schedule to follow based on the subjects such as, mathematics, language (English and Malay), science, religious study, as well as art and crafts. Most of the time teachers decided on what children's learning ought to be. There was a time when a teacher asked children what they would be interested to learn, but they were unsure what to do and decided for teachers to choose for them. It was also observed during the scheduled subjects, when teachers asked a question; children often been seen to lose focus in learning and unable to give an answer. It indicated that the children were not used to the idea of them being actively participating in the decision making process.

The researcher reflected that it could be because of the learning culture at the preschool where teachers always gave instructions and decided on the learning activities without negotiating with the children. Children needed to listen and follow without any argument on what should they do and learn. The culture was also lacking in terms of teacher-child interaction. It was always one-way interaction; teacher as instructor and children as receiver. Even though there were times teachers asked children what they would like to learn, because of children were used to be the receiver, they could not decide or give ideas. In other words, they were passive learners, therefore, it is important that teachers be trained on how to create environment where children would feel 'safe and secure' to interact with adults.

Objective 2

Facilitator, key person and expert panel had all decided on planting few plans as the first project work to start with children. It was decided when children showed an earnest interest on how the tree could grow so big and high, and different type of trees that they found within their surroundings. Figure 1 shows the planning notes on planting project as a guideline for key persons before starting the simulation with the children. The discussions are important for the key persons, as they would adapt the project work into teaching and learning without text and work books. The expert panel also agreed that, the planting project will be the benchmark for next project work. This project work will be the first adjustment for them.

Objective 3

The third phase of project work were done without having much difficulties, as children were excited to have the chance to take lead on their own learning. This project work lasted for two weeks. Starting from exploring the beginning to the end cycle of the plant. The key persons showed positive acceptance in allowing children to decide their own learning. They even encouraged children to explore and do their own experiment without giving an instruction as before (Figure3). Moreover, they facilitated children with their project work when needed. Figure 2 shows children digging and putting the soil in a cup to make an experiment whether the soil can be used to plant a seed.

Objective 4

The teachers' reflection showed positive responses in practicing the project approach. They realized children became more of active learners throughout the project work. The learning happened within the process and not only at the end of the lesson, as they practiced before. Teacher-child interactions also increased dramatically during that time. They reflected that:

"...children are becoming active learners...they often ask me lots of questions, and we engage with two-ways interaction, which I and the children didn't do before..." (T1)

"...I enjoy the learning process. I don't have to focus on the subjects, as learning take place at any time within the project work..." (T2)

The teachers also realize the vital of learning that is it should be child-centered for children to be part of the learning processes, as reflected in the following statements:

"...I realized that children need to explore their learning by themselves for them to engage with the learning..." (T1)

"...it is best for children to be able to show interest in learning... rather than we force them to learn..." (T2)

However, the study found that teachers needed continuous training in order to have an effective process of project work with children. They also acknowledged that they needed consistent guidance in order for them to be competent enough to practice the project approach.

5. CONCLUSION

The collaborative work with the practitioners and the reflective practices have helped to identify the problem within the social-cultural practice at the preschool. Discussion and sharing the ideas and solutions with the practitioners provided advantages in terms of planning the project work that were adaptable for children at the preschool. It was shown in this study that change was feasible within the society's context but it was carried out with democratic approach fear that it would be rejected first hand if otherwise conducted. All parties i.e. researchers and practitioners must collaborate to understand both the original context where PA was first introduced and also the new context where it would be applied. As reflected before, a continuous teacher training is necessary to improve their project work practice to enhance children's learning. Therefore, future study must focus on the process of teacher training and the establishment of the general guidelines or module for local context.

ACKNOWLEDGMENT

This research was supported by the grant from the Faculty of Education, Universiti Kebangsaan Malaysia (GG-2019-016).

BIBLIOGRAPHIC REFERENCES

- Abdul Rahman, N. (2015). Pembinaan Modul Berasaskan Pendekatan Projek untuk meningkatkan Kemahiran Berkomunikasi murid tadika. Unpublished PhD Thesis. Universiti Sains Malaysia.
- Abdullah, A. C. (2009). Multicultural Education in Early Childhood: Issues and Challenges. *Journal of International Cooperation in Education*, 12(1), 159-175.
- Beneke, S. (2000). Implementing the project approach in part-time early childhood education programs. *Early Childhood Research and Practice*, 2(1). Retrieved from <http://ecrp.uiuc.edu/v2n1/beneke.html>
- Bolton, G. (2010). *Reflective Practice: Writing & Professional Development* (3rd ed.). London: SAGE Publications.
- Cole, M. (2005). Culture in development. In M. H. Bornstein, & M. E. Lamb, *Developmental Science: An advanced textbook* (pp. 45-101). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Glassman, M., & Whaley, K. (2000). Dynamic Aims: The use of long-term projects in Early Childhood Classrooms in light of Dewey's educational philosophy. *Early Childhood Research and Practice*, 2(1). Retrieved from <http://ecrp.uiuc.edu/v2n1/glassman.html>
- Helm, J. H., & Katz, L. G. (2001). *Young investigators: The project approach in the early years*. New York: Pearson Prentice Hall.
- Hooi, S., Abdullah, M. N., & Abdullah, A. C. (2013). Multicultural early childhood education: practices and challenges in Malaysia. *Australian Association for Research in Education*, 615-632.
- Jasper, M. (2013). *Beginning Reflective Practice* (2nd ed.). Hampshire: Cengage Learning.
- Katz, L. G. (1995). Talks with teachers of young children: A collection. Norwood, New Jersey: Ablex .
- Katz, L. G., & Chard, S. C. (2000). *Engaging Children's Minds: The Project Approach* (2nd ed.). Stamford: CT Ablex.
- Larrivee, B. (2008). Development of a tool to assess teachers' level of reflective practice. *Reflective Practice*, 9(3), 341-360.
- Larrivee, B. (2009). *Authentic classroom management: Creating a learning community and building reflective practice* (3rd ed.). Upper Saddle River, New Jersey: Pearson Education
- Li, Y.-I. (2010). The negotiated project-based learning: understanding the views and practice kindergarten teachers about the implementation of project learning in Hong Kong. *Education*, 40(5), 473-486.
- Mendoza, & Katz, L. (2013). In D. R. Meier, & S. Sisk-Hilton, *Nature Education with Young Children: Integrating Inquiry and Practice* (pp. 153-173). Routledge.
- Murray, E. (2015). Improving Teaching Through Collaborative Reflective Teaching Cycles. *The Research Council on Mathematics Learning*. Spring Edition 2015, Volume 7, Number 3
- Neaum, S. (2013). *Child Development Early years Students and Practitioners* (2nd ed.). London: SAGE Publications.
- Ng, S., & Abdullah, A. C. (2012). Preschool Practitioners' Understanding of Project Approach. *Pendidikan Prasekolah*, 12(1), 17-22.
- Rahman, S., Mohd Yassin, R., & Mohd Yassin, S. (2011). The implementation of project-based approach at preschool education program. *Kongres Pengajaran dan Pembelajaran UKM*, 2010. 18, pp. 476-480. Bangi, Malaysia: ScienceDirect.
- Rahman, S., Mohd Yassin, R., & Mohd Yassin, S. (2012). Project-Based Approach. *World Applied Sciences Journal*, 16(1), 106-112.
- Stringer, E. T. (2004). *Action Research in Education*. New Jersey: Pearson Education.
- Walters, R. (2013). Becoming a reflective practitioner. In R. Envy, & R. Walters (Eds.), *Becoming a Reflective Practitioner in the Early Years* (pp. 78-92). London: SAGE.
- Yamat, H. (2013). Young Malaysian Children's Silence in a Multicultural Classroom. *Science Direct Procedia - Social and Behavioral Sciences* (pp. 1337 - 1343). Retrieved from www.sciencedirect.com
- Yunus, F. (2013). Pelaksanaan Penaksiran Autentik dalam Konteks Pendidikan Awal Kanak-Kanak-Satu Kajian Tindakan. Tesis Doktor Falsafah.
- Yunus. (2014). Cross-cultural adaptation of Developmental Criteria for Young Children: A Preliminary Psychometric Study. *International Education Studies*, 7(13), 130-142.