

Young Investigator - Towards Creativity and Innovative Mind Through Inquiry Learning Using Qualitative Study

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Abstract

The aim of the study is to introduce a Project Approach in early childhood education in rural preschools in the district of Kota Bharu, a town on the east coast of Malaysia. Most of the teachers of these preschools do not have a formal training in early childhood education. Their knowledge and experience in early childhood education were through hands on and on the job training. The themes are identified from the qualitative data analysis; (1) inquiry learning, (2) teamwork, and (3) communication. By using this Project Approach, teachers are able to prepare themselves to be young investigators by implementing new ideas in teaching children.

Keywords: Inquiry Learning, Project Approach, Sharing, Teamwork, Communication

1. Introduction

Project Approach refers to a set of teaching strategy which enable teachers to guide children through in-depth studies of real world topics. Projects are described as having a complex but flexible structural framework with features that characterize the teaching-learning interaction. When teachers implement the Project Approach successfully, children can be highly motivated, feel actively involved in their own learning, and produce work of a high quality.

The project is like a good story. There is an introduction, bodies and also a conclusion of a story. In Project Approach, the teacher will organize the progression of activities according to the development of the children's interests and personal involvement with the topic of study. During the preliminary planning stage, the teacher selects the topic of study (based on the children's interests, curriculum, availability of local resources, etc.). The teacher need to brainstorm her own experience, knowledge, and ideas and represents them in a topic web. This web will be added throughout the project and will be used it for recording the progress of the project. Projects are defined as extended in-depth investigations of phenomena in the children's own environment that are worthy of learning about. Project work provides a context in which the teacher can encourage learners to apply their growing academic skills in purposeful ways. The teacher has an important part to play in the initiation, implementation and culmination of projects. The activities in project approach provide the opportunities for children to acquire basic concepts and skills to assist them continue learning process in their primary school. (Curriculum Development Division, 2010).

2. Experimental Details

This is a qualitative study to explore the teachers' experience in using the Project Approach as their teaching strategies. 5 teachers have participated in this study. Each participant was interviewed regarding to this Project Approach and the content analysis of the interviewed were analysed to identify the themes.

3. Results and Discussion

Data collection

Results

The themes have identified, in this study there were three main categories and 8 subcategories and for teachers there were three categories as follows: (1) "Inquiry Learning" including "Asking Questions", Motivation and Observation and Discussion; (2) "Teamwork" including "Caring for Each Others" 3) "Communication" including "Communicative Behaviour", "Sharing", Social Interaction and "Story Telling".

Inquiry Learning:

The main thrust of this project is to find the answers to the questions about the topic that the children are investigating. On a field visit to a flower garden, teachers experienced: Participant 1 (a teacher) "children who never asked questions in class, when they went to the field" : *"What are some things you want to find out about the flower?"*. C33 (children): *"waa.. teacher, there are so many flowers in the garden"*. *"This is what flowers teacher?"*. C32 (children): *"Teacher, is this flower smells good?"*. *"What is the color of this tree?"* C31 (children): *"Why there are different colours of the flowers?"* Motivation: Teacher found that children were motivated when they involved in the Project Approach in school. Participant 2 (a teacher): *"The children give suggestions and ideas to plant trees and look how the tree grows"*. C21: *"Teacher, let's together plant the tree" ... "In school, we will learn about how living things grow," "...we will learn how to make observations"* . C22 : *"Teacher, our kindergarten does not have orchids ?*. C20: *"let's plant it" ... "today we have learnt a lot and can we do this activity again? We have a lot of fun"*

Observation and Discussion

The result of this study showed that projects are open-ended and developed through a process of ongoing observation and discussion. Participant 3 (a teacher): *"I made an observation when visited children planted flowers from the beginning until the end of the process"*. *" children can*

follow the activities, if children do not understand, they can ask questions directly and teachers can provide guidance to the children". C1: "Teacher, what kind of flower would you like to plant in this flower pot?". C2: "Teacher, all these flowers are beautiful and there is no flower in my house". C5: "Teacher, the orchid's roots are very long". "The colour of the roots will change when we watered the orchid". C4 : "Hmm...some of the orchids do not fragrant," (Approaching the flowers)

Teamwork

In Project Approach, the activities are usually organised outdoor. The teacher found that children cared for each other and eager to get their experience. Participant 4 (a teacher): *"I see children holding hands, walking together and knowing friends in their group". C27: "This flower has many colours... Udin..Udin..where is Udin ?, he is not here with us". C15 : "Teacher.. teacher.. Udin is not in my group".*

Communication

The Project Approach builds on natural curiosity, enabling children to interact, question, connect, storytelling, communicate, reflect, and more. Sharing: Participant 5 (a teacher):*"The young children learning process are energized, as they become part of a community of investigators and share the findings of their inquiry".C18: "Yaya.. Come and see at this flower, it has many colours". C19: "yellow, red, pink ... beautiful.. Anis, hurry up! Look at this flower. Storytelling: Participant 1 (a teacher): "When it comes to strawberry fruit, the children talk about the fruit they had seen before in Cameron Highlands".. "Saying this tree can grow in a cool place" C10: "Teacher, Strawberry can only grow in a cool place". C11: "My family and I have been visiting the strawberry farm...if this fruit is ripe the color is red". Communicative Behaviour: Participant 2 (a teacher): *"From the beginning of the field, the children talk to each other"..... "each of them is smiling and asking their friends". C40: "Teacher, try to touch the rose, there is a thorn, sharp, I feel sick of my hands" .. "Is it dangerous if we touch this thorn?."C41: "There are also strawberries teachers, hmm... eating with chocolate must be delicious.. . "Social Interaction: children have interaction with people they first met: Participant 4 (a teacher): *"Many children ask the owner of the flower farm... they are eager and ask about how to care of the flowers. C50: "Sister, how many times do we have to water the flower in a day" C51: "if we put too much of fertilizer, will it die?"***

4. Discussion

Teaching using the Project Approach helps teachers to increase the creativity of children, improving thinking skills, communication, innovation, collaborative spirit and inquiry learning. Through Project Approach, children learn the process skills (observing and

exploring), the connections between information, problem solving, organizing information, and communicating and representing (Heroman, 2005)

In this study, teacher experience with children who can communicate directly, tell and do their own planting of flowers. It involves children in investigations of the world as they know and experience it, with support and guidance from teachers designed to reinforce learning based upon children's interests. (Kennedy, Adam S., et al, 2015)

5. Conclusion

The project approach provides early years practitioners with the means to promote a variety of aspects of good foundation stage practice. When involved in project work, children are encouraged to actively participate in the planning and development of their own learning. They gradually become independent learners with the support of knowledgeable adults and gain the confidence to voice their own thoughts and opinions. In conclusion, this study shows there are 3 main themes; inquiry learning, teamwork and communication.

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References

1. Beghetto, RA & Kaufman, JC (2013). Fundamentals of Creativity. *Educational Leadership*, Vol. 70, No. 5, pp. 10-15.

2. Beneke, S. (2000). Implementing the project approach in part-time early childhood education programs. Oglesby, Illinois: Early Childhood Education Center at Illinois Valley Community College.
3. Chard, SC (2009) The Project Approach: Six Practical Guides for Teachers. These guides are available as .pdf files at the following web site:www.projectapproach.org
4. Chard, S.C. (1998). The project approach: Managing successful projects. New York: Scholastic
5. Chard, SC (2013) . The Project Approach to Teaching and Learning : These guides are available as .pdf files at the following web site : [Project Approach](#), [Standards](#), [Teachers Role as Facilitator](#)
6. Figuerido, J. (2012). Implementing a Project-Based Approach : © The Institute for Education and Professional Development.
7. Helm, J., & Katz, L. (2011). *Young investigators: The Project Approach in the early years*. New York, NY: Teachers College Press.
8. Heroman, C. (2005). The Creative Curriculum® study starters. Washington, DC: Teaching Strategies, Inc.
7. Katz LG & Chard, SC (2000) *Engaging Children's Minds: The Project Approach*, Greenwood.
9. Kennedy, Adam S., et al. "The *Project Approach* Meta-Project: Inquiry-Based Learning in Undergraduate Early Childhood Teacher Education." *American Journal of Educational Research* 3.7 (2015): 907-917.
10. Kennedy, A., & Heineke, A. (2014). "Re-envisioning the role of universities in early childhood teacher education: Community partnerships for 21st century learning." *Journal of Early Childhood Teacher Education*, 35(1), 226-243.