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Stage Manager: The role of kindergarten teacher in using technology in a thematic teaching classroom

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Abstract: In spite of the different perspectives in defining play, the general agreement is that play is a basic right of children in any culture and it comes in many forms because of the cultural context and the specific discipline. This case study in this paper presents how the kindergarten teachers utilized technology equipment appropriately in children' play-based learning within a thematic teaching context in Taiwan. The result came out positively that the role of teacher is essential. The teacher act as a stage manager, provide enough time、space and proper materials (electronic high-tech equipment) at the right time would expend children's learning.

Keywords: technology, play-based learning, kindergarten teacher, Taiwan

1. Play and Technology in early year learning in Taiwan

Play is a spontaneous and natural ability that children have regardless of their cultural differences. The International Play Association (IPA) put together the Declaration of the Child's Right to Play in conjunction with Article 31 under the Convention on the Rights of the Child of the United Nations. Article 31 states that children all over the world have a right "to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts" (Office of the United Nation High Commissioner for Human Rights, 1989). From outdoor to indoor play, from spontaneous play to teacher-guided play, from play for fun to "play to get smart" (Jones & Cooper, 2005), people define play differently depending on what they believe to be its value.

In terms of educational settings, play is a complex activity that allows children to interact with others in social ways, to construct their own knowledge and to relate one subject to another. Developmentally Appropriate Practice (DAP) in Early Childhood Program believed that play is a universal vehicle that children everywhere in the world use to construct their knowledge and to explore the world around them (Bredekamp & Copple, 1997). "Play is the cornerstone for the DAP guidelines for the education of young children in group settings" (Frost, Wortham, & Reifel, 2005). Play is considered a developmentally appropriate practice, especially for young children at the pre-primary level.

In Taiwan, play is listed as one of six content areas in the 1987 National Kindergarten Curriculum Standards document because it is considered as a separate subject rather than as a means for achieving academic goals. Fortunately, throughout the time change, the way of teaching has to be modifying to meet the needs of the young children. A group of early childhood experts and policy makers came to an agreement to revise the National Kindergarten Curriculum Standards into a new form. The new 2012 version of Draft Kindergarten Curriculum Standards clearly states that children learn through play and encourages teachers to integrate play within their whole day learning (MOE, 2013). This can be referring to the Draft Technology in Early Childhood Programs stated by NAEYC (National Association for the Education of Young Children) and the Fred Rogers Center for Early Learning and Children's Media (2011). The Draft suggested that when children interact with technology it should be playful, and teacher has to take the judgment call to determine if a specific use of technology is age appropriate. Young children growing up at ease with digital devices, technology has become pervasive in the lives of many young children. Therefore, to integrate technology into the curriculum or daily routines; it is better to start with what children are interested in and in their play.

2. When play come with technology

In this paper, the case was happened in a four-five years old classroom with two experienced teachers in a public laboratory kindergarten. The design of their thematic curriculum is reflected in the Project Approach, in play-based learning, and in combining them with other learning experiences that integrate knowledge and provide the children with a holistic learning experience. The classroom is set up with learning corners and have several technological equipment (TV, Projector, computers, CD-Player, Cameras). Digital camera is one of the frequently used tools in this classroom. The children can ask for permission to use real digital camera when they needed. The teacher placed an old-fashion camera without batteries in the doll-play corner, the children frequently use in their presented play.

In this case study, on the average they provide 20 to 30 minutes of outdoor play plus 30 to 60 minutes in the learning centers during the morning free exploration time. Learning centers play an important role in giving the children an opportunity to use their imagination to decide what to do after a specific project has been chosen.

Both teachers liked to start their project by brainstorming with the children to find out what they know about the four elements (food, clothing, living, and transportation) that are an integral part of a family's daily life style. The brainstorming sessions revealed that this group of children share many experiences related to shape, especially circular shapes. Then they set up the learning centers to allow the kids to freely explore where circles can be found. They provided plenty of time and a large variety of circle-shaped scattered around the various centers.

Subsequently, a whole series of related activities emerged in connection with each individual element. On November 26, T1 reviewed, with their colleagues, the Circle Project event. Thanks to the changes they had made in the drama center and the opportunity offered the children to explore things freely, their classroom drama center had become the most popular place during morning center time. This led the children to come up with the idea of opening a Circle Restaurant at the Circle Country.

The children want to design they own traffic signs, therefore, the teacher provided real digital camera with supervision, and encourage children to take photo of the signs they seen on camps and the communities. The teachers reflected that these children enjoy playing with the digital camera, and seems learned faster from the signs in the photos they took themselves rather than from the book. Digital cameras not only to take picture for children's portfolio; when it was hold in children's hands, it became a powerful learning tool or as a functional toy for the children.

According to the interview note, the classroom teachers also commented that use of technology in the classroom can scaffold children' ability into a higher level. This can be referred to Vygotsky's view of zone of proximal development (ZPD). When it comes into a classroom environment, children can utilize digital camera to build relationship with their friends and the community (Bonnie B, & Anne S , 2008; NAEYC, 2008). Vygotsky (1976) claimed that play is not the predominant activity during the preschool years, but it is the leading source of development. Play creates the zone of proximal development (ZPD). In a classroom setting, it is commonly observed that young children play individually or in a group setting to act like adults. Children's actions are learned from observing experienced one (teachers, caregiver, or parents) in their daily lives, but are not common roles that the children take at that stage of their lives. Play provides a "context" (Bredekamp & Copple, 1997, p. 14) for young children to practice their newly acquired skills freely and allows them to take on new social roles or solve complex problems that they would not or could not do in real-life behavior.

3. Teacher as stage manager

Spidlberger & McLane (2002) pointed to the benefit of having an adequate amount of adult intervention in children's play "precisely where adults can best assist children in developing new skills and knowledge. In this study, these two experienced-teacher provide various of equipment and enough time and space for children to build up their circle world play. Children want to build a parking lot for all kind of car they made by boxes. They also want to make their own signs to tell their visitors how to drive and where to park. This is the perfect moment where the teacher act as a stage manager (Jones & Reynold, 1992) provide digital camera at the time, to help children to record the signs on campus. As Johnson et al. (1999) suggested, other than being providers who facilitate the children's play, teachers should also be stage manager who "make suggestions to extend the children's ongoing play" (p. 210).

These two teachers also believe that their students' playing time can spontaneously reveal their daily life style and their interests. So they just let the children play without any interference. All they do is observe. A number of episodes observed at the play centers revealed that their students come from families that pursue four basic life styles. This led to the planning of the initial concept web of the circle for their project of the semester. T1 and T2 found out the children were most interested in cooking at the drama play centers, so they added more related props and also asked the parents to provide recycled no-hazard cookware for the children to play. As the number of props grew, so did the number of children wanting to play at the centers, so the teachers had to rearrange things and create more space. In this instance, they had to play the roles of both of stage managers and observers so that the "Circle Project" could be a success and a great learning experience for the kids.

In This case study, It revealed that the teacher as a stage manager perform a vital role to integrate technology gradually by proving appropriate tool (digital camera) at the right time for children to explore and extend their play to a meaningful learning. Technology did not interfere children's learning but accelerate learning and narrow the achievement gap between low-income children and other affluent peers.

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