Chapter 3
Tech-Knowledge in Japanese Early Childhood Education

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ABSTRACT
This chapter describes how Japanese early childhood education promotes children's socialization through the use of technology and play in group-oriented environments. The chapter also presents the traditional Japanese view of the child and of early childhood education, Japanese strategies in developing children's socialization skills, changes in the use of technology in the field of early childhood education, and recommendations for educators.

INTRODUCTION
The technological revolution has been rapid and fluid in society. While business use was evident, educational applications are just now being explored. Educators are often resistive to computer use in classrooms for different reasons. To understand teachers' perceptions about technology in early childhood education is important because such perceptions directly influence children's technology-related experiences in classrooms. On the other hand, their attitudes and viewpoints toward technology affect their teaching styles and efforts (Levin & Wadmany, 2008; Prairie, 2005). Theories and research on technology and play are multifaceted and individual teachers’ perceptions of what constitutes developmentally appropriate technology and play in early childhood settings vary widely. One source of understanding teachers’ perceptions of the appropriate implementation of technology and play is Japanese early childhood education. In these settings technology is implemented to support children’s play and is based on the Japanese cultural belief that play is valued for itself rather than how it is related to education. In this sense, teachers consider children to be creators of play activities as well as controllers of such activities. The role of the teacher is to support and to facilitate children’s learning and development through the use of play and technology. For these reasons, examining how
Japanese early childhood education programs and educators implement technology and play in the classroom can contribute to the field of early childhood education.

It is well accepted that the Japanese are fascinated with technology (Better than People, 2005; Hey, Big-Spender, 2005), and that “Japan is considered to be one of the leading countries in terms of persevering in the development of technology” (Izumi-Taylor, 2008a). Some people who have visited Japan comment that “Japan has two faces; one is facing the future, and the other is looking into the past” (Izumi-Taylor, 2008, p. 9). Technology permeates the Japanese culture to such a degree that today some Japanese people utilize robots to care for the sick and elderly as well as to do housework. However, at the same time, Japanese people are rigid about keeping their culture and traditions intact (Iikura, 2007) and value transmission of cultural wisdom and knowledge in a group-oriented environment to generations that follow. Such cultural transmission can be seen in the educational approaches used by Japanese with young children.

Japanese preschools are called kindergartens and are attended by children from three to five years of age (Taylor, 2004). The first two years of Japanese kindergartens are the equivalent of preschools in the United States, and the third year is comparable to that of the American kindergarten. Traditional Japanese preschools strive to offer children relaxed, play-oriented, and child-centered programs in group-oriented environments in order to promote their social skills (Izumi-Taylor, 2006). This educational environment is based on play activities that unify and integrate all elements of children’s development and learning. This approach is supported by the National Curriculum Standards for Kindergartens (The Ministry of Education, Culture, Sports, Science, and Technology, 2000), which states that children learn best through play and that play is their everyday activity.

Japanese early childhood educators integrate play and technology in order to support children’s development and learning in group-oriented environments. While the main focus of Japanese early childhood education is to guide children in developing basic human attributes (such as social skills, empathy, cooperation skills, etc.) rather than teaching them academics, teachers do use age-appropriate technology in order to enhance cooperative play. This approach is different from traditional skill reinforcement technology as seen in many programs in the United States. The children in Japanese programs guide the selection and use of technology through their interest and play rather than the teacher’s interest. The teachers support the children’s play by offering ample opportunities to engage in technology-related activities. Examining the ways Japanese teachers use such activities can provide some insight to other early childhood educators as to how to implement play and technology for young children. Studying and researching various cultures’ ways of offering education to children suggest a way for teachers to reflect on their own teaching (Taylor et al., 2004). This chapter describes how Japanese educators support children’s socialization skills through the use of technology and play.

The organizing perspectives of this chapter will focus on two professionals’ perceptions and experiences with Japanese early childhood education: the first author writes from the experiences of a Japanese early childhood educator for over 25 years and the second author from the experiences of a Japanese native who has been enculturated in the United States educational system for over 36 years but works in both systems. The first author provides the practitioner’s knowledge from the developing use of technology in Japanese kindergartens across twenty-five years of teaching. The second author, with seventeen years of experience observing and researching early childhood education in Japan, working in the United States provides insights into experiences between both countries. The first author has an insider’s knowledge of such an environment, whereas the second author...
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