Technology Activities

- Science and engineering practices can be developed through the use of tablet-based games, especially if there is embedded guidance with hands-on learning opportunities.

- Share digital experience time with an adult so that it is based on time together and not just technology usage.

- Drawing apps can inspire creativity.

- Puzzle apps support the development of problem -solving skills.

- Shape matching apps can foster the recognition of shapes in a game-like environment.

TECHNOLOGY AND LEARNING

In a study of preschool families, it was found that children are learning through their interactions with technology. Four areas of learning are supported through the use of technology:

1. Acquiring Operations Skills
2. Extending Knowledge and Understanding of the World
3. Developing Dispositions to Learn
4. Understanding the Role of Technology in Everyday Life

However, all learning is shaped by family environments and parental values and attitudes.

Plowman, Stevenson, Stephen & McPake (2011)

GROW
the Seed of Learning

Learning in a Digital World

" Moderate use of technology with a focus on shared digital experiences, particularly in the early years " will allow families to enjoy screens and the learning that can transpire from digital applications – Getting Smart, 2019

Three Principles for Using Media to Support Pre-K Learning

(Rubenzahl et al., 2016)

1. Age Appropriate

Use age appropriate technology that supports learning. This may include letter and number practice or drawing and puzzles apps. Creative problem solving can be inspired through art apps. Children can be encouraged to work on apps together.
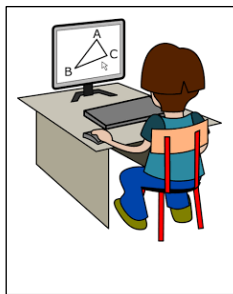
2. Designed for How Children Learn

Children benefit from repetition. Apps should be easy and provide children with oral directions and feedback. They should not be overwhelming with too many activities.

"Children who were in active play for 1 hour per day were better able to think creatively and multitask." – Mather & Anderson, 1999.

3. Choose Apps that Increase Interaction

Interactive media responds to children's actions. They may develop literacy skills through identification of letters, sounds and words. As children become proficient in these skills it is more beneficial to use an actual book. When choosing an app, it is important to consider a child's fine motor skills and the dexterity of small fingers.

The American Academy of Pediatrics discourages screen use for children under two and recommends limiting older children to two hours per day.

PLAY

Preschool child benefit from unstructured play opportunities. Play is brain building and builds executive functioning and school readiness skills. Early learning and play are social activities that foster the development of language and thought. The key is a balance of unstructured playtime and purposeful play with adults. Each child requires a different balance, but the "serve-and-return" aspect of play requires caregiver engagement.

https://pediatrics.aappublications.org/content/pediatrics/142/3/e20182058.full.pdf