



---

*Professional Learning Module*  
*Mathematical Thinking: Rethinking Calendar Time*

### How to Use this Resource

The *Mathematical Thinking: Rethinking Calendar Time* module explores the math that is traditionally included in a calendar time activity and addresses these math concepts by providing best practices for using them with children. The information included in the module is based on the *Florida Early Learning and Developmental Standards: Birth to Kindergarten* and provides developmentally appropriate, research-based practices to support young children in reaching expected learning outcomes in the area of mathematical thinking.

The following materials are included in the module:

- **Overview of Calendar Time** includes background information and explores what is traditionally included in a calendar time, addresses the mathematical concepts and skills that are used and asks the question, "Is this an efficient use of time and an effective experience for children?"
- **Knowledge Check** provides the key elements of the mathematical concepts and skills traditionally addressed during calendar time and asks the educator to determine if an instructional strategy is in place or if support is needed.
- **PowerPoint Presentations** include detailed notes with classroom photos and videos of Florida's teachers demonstrating mathematical skills and concepts. The pacing guide supports the understanding of the mathematical thinking skills addressed during calendar time.
- **Instructional Resources** are designed to be used by instructors in the classroom when implementing the mathematical thinking practices.
- **Support Documents** highlight all the key concepts presented throughout the module.
- **Content Resources** provides links to books and articles that support the mathematical thinking concepts addressed during calendar time presented in the module.

**Directors:** As instructional leaders, directors are aware of the instructional planning and practices used in the preschool classrooms, especially if they are using data-informed decision-making. This module can easily be used as an opportunity for directors to establish a community of practice with instructors. A community of practice suggests that the director, instructors, trainers, coaches and other staff participate together in reviewing and discussing relevant educational topics.

For example, after completing the knowledge check, the group can meet to discuss what elements of a quality program or instructional practices are in place and what areas need improvement. A portion of the content is presented by the director and next steps are determined for implementation. Overtime, the group meets to reflect and discuss how the children are responding to the content. The group reviews another portion of the content then plans next steps for implementation. The process continues until the all content has been reviewed and discussed. The knowledge check can be revisited to determine if all elements have been addressed or if more professional learning is needed.



**Coaches and Trainers:** There are many instructional coaches and trainers who support early educators in preschool classrooms. Through observations and conversations with instructors and directors, they may notice instructional practices that need support. The flexibility of the content and resources allows coaches or trainers to pick the materials that are needed to support an instructor's specific need.

For example, the mathematical thinking knowledge check can be used as an observation tool to determine areas of need in implementing specific mathematical concepts and skills. After observing in classrooms, a coach notices an instructor's calendar time experience goes long and children are not particularly engaged. The coach can use the PowerPoint content, support documents and videos that demonstrate the practices then sit side-by-side with the instructor to review and discuss the information. The coach can also model the instructional practices and provide additional support for implementation.

**Instructors:** Many early educators are competent, self-aware and self-motivated. They are able to identify for themselves the areas of practice that they would like to improve. The module can support individual educators or even teaching partners to grow their practice through reviewing and using the instructional resources in the modules as a self-guided learning experience. As a self-guided resource, it is important to begin with the overview document and knowledge check before proceeding with the content. Effective adult learning practices inform us that the first step in beginning any new learning opportunity is to think about what you already know and do as it relates to a specific topic. The knowledge check is designed to help educators determine the next steps for planning their learning experience.



The success of professional learning is determined by how the information is applied in the classroom and how an instructor is able to modify the information to meet the needs of young learners. The quality of a preschool program and the effective use of reflective practice can impact the success of implementation.

**Quality teaching and learning** involves everything that goes on in a preschool classroom where instructors provide a safe, caring, and loving environment for children to learn and grow. A quality learning environment supports the learner in many ways. The principles of quality teaching and learning are:

- Know your standards.
- Use ongoing assessments to plan and implement instruction.
- Purposefully plan for learning goals every day.
- Provide intentional instruction through developmentally appropriate practices to ensure all children achieve expected outcomes at their own pace.
- Monitor children's progress and make adjustments to learning goals.

These principles of quality teaching and learning are embedded in the content, materials, and resources of this module.

**Reflective teaching** is a process whereby teachers think over their instructional practices, analyze how something was taught and think about how their practice might be improved or changed for better learning outcomes for children. Reflective practice involves stepping back, examining your teaching and thinking about what made an activity, lesson or experience successful (or not) and how it might be improved. Reflective practice is driven by the belief that educators can continually improve on their teaching.

The *Developing a Reflective Practice through Quality Teaching and Learning* module is available in the Professional Learning section of the Director Toolkit.