

“I Want to Learn My Phone Number”

Encourage Young Children to Set Their Own Learning Goals

Why ask preschool children to set their own goals for learning? How do children use self-recording and reporting to develop important skills for life-long learning? Find out in this fascinating article.

**Bobbie Gibson Warash,
Keri Smith, and
Amy Root**

Young children’s capabilities continue to be revealed through brain and other scientific research (Marcovitch, Jacques, Boseovski, & Zelazo, 2008). These advances in knowledge have led to the implementation of more progressive learning experiences in preschool programs. More in-depth explorations accommodate young children’s intellect and they help children develop life skills as competent learners.

Some preschool programs now emphasize the development of *executive function*—cognitive abilities that enable children to manage their own behavior and planning. These skills include focused attention, planning, self-monitoring, self-regulation, behavior organization, cognitive flexibility, response inhibition, and resistance to interference (Galinsky, 2010; Albertson & Shore, 2008).

Young children’s executive function skills

- focused attention
- planning
- self-monitoring
- self-regulation
- behavior organization
- cognitive flexibility
- response inhibition
- resistance to interference

For successful futures—in academics and life—these skills need to be developed and strengthened throughout the preschool years. As yet, there are few well-known best classroom practices that encourage the development of young children’s executive function. Therefore, the authors developed a teaching strategy to encourage young children to determine their own goals and achieve those goals through self-recording their progress. Children then present their achieved goals to their peers. Sugges-

tions for implementing this teaching strategy in any early childhood setting are offered here.

Young Children: Planners and Decision Makers

When young children plan, they start with a personal intention, aim, or purpose (Warash, 2001). Depending on their age and capacity to communicate, they express their intentions in actions, gestures, or words (Whitin, 1997). When children participate in the planning process, they grow accustomed to indicating their intentions before acting them out (Hohmann & Weikart, 1995) and partake in a variety of mental tasks.

Initially, children typically make decisions based on their interests. They eventually use their interests and intentions to identify and reach goals for themselves. With adult support, children can formulate purposeful plans and learn to make modifications as needed.

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purposeful plans.**

Planning and decision making are sophisticated tasks, especially in early childhood. Researchers have shown that the rudiments of executive function are evident as early as infancy (Diamond, 1991, 1995). By the preschool years, many children are able to self-regulate and plan (Isquith, Gioia, & Espy, 2004).

Building young children’s planning and decision-making skills has become a priority in some early childhood

classrooms. HighScope, a well-known program, uses an approach that emphasizes children making decisions (Hohmann & Weikart, 1995). This curriculum uses a plan-do-review system in which children plan, carry out, and then reflect on their work.

HighScope is used in programs all around the world because of its premise that children learn best by establishing and pursuing their personal interests and goals. As they pursue their choices and plans, children explore, ask and answer questions, solve problems, and interact with classmates and adults (Hohmann & Weikart, 1995).

Another effort to encourage the development of young children's executive function is the Tools of the Mind philosophy (Bodrova & Leong, 2001). This approach promotes intentional and self-regulated learning in order to instill in children the tools or strategies they need for later academic learning. Tools of the Mind, a Vygotskian approach (1978), is particularly important because its emphasis is on the development of executive functions and their relation to children's planning, which are necessary skills for success in later schooling.

In a Vygotskian classroom, children use language and other forms

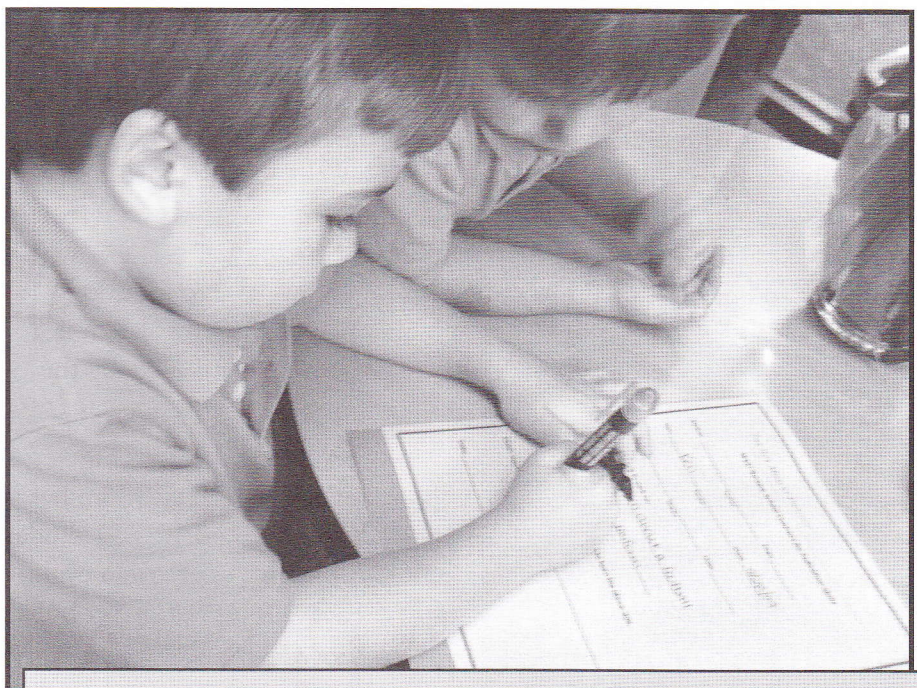


Photo courtesy of the authors

After individual goals are set, the child and teacher sign a contract that includes the date and name of the achievable goal to be learned.

of representation such as drawing, scribbling, and eventually writing to plan their activities (Bodrova, Leong, Hensen, & Henninger, 2000). Young children plan their play using language as a vehicle for developmental growth (Bodrova & Leong, 2001).

Planning their own play is the best means for children to reach a variety of outcomes (Vygotsky, 1978). Enabling children to plan and achieve their own academic goals, therefore, is an appropriate method to foster the development of executive function skills in young children.

Planning and reflection are useful evaluation tools that help with the achievement and fostering of goals (Epstein, 2003).

Planning and reflection are useful evaluation tools.

Planning Strategies for Children

Planning clearly has many positive outcomes for young children. Their planning can be either verbal or in writing. At the West Virginia University Child Development Laboratory (Warash, 2001, 2004) young children make their own decisions about the activities they want to do by using a pictorial contract system. The one-page contract displays icons that represent available activities during their center times.

Why is planning important for young children?

When children plan, they...

- come to rely on their own capabilities to make good choices and decisions.
- experience the relationship between their intentions and their actual actions. Planning is choice with intention, which allows effective mechanisms for developing thinking skills to emerge (Epstein (2003).
- commit themselves to be involved in a task that they believe is important to them. Appropriate challenges stimulate and support their emerging capabilities (Hohmann & Weikart, 1995).
- enhance their predictive and analytical abilities and language skills.
- develop a sense of responsibility for themselves and the choices they make.

The use of contracts encourages children to participate in activities through decision-making and self-direction. The visual representations on the contracts help children to be more aware of their choices. Contracts provide children with scaffolds for planning and decision making.

Self-recording strengthens children's involvement in their learning.

Self-Recording and Sharing Progress

Charting one's own progress seems such a logical thing to do because self-recording can further strengthen children's involvement in their own learning. In one kindergarten class (Moxley & Studwell, 1984), the teacher initially kept records on the children's performance on skills

such as numerals, ABCs, birthdays, addresses, capital letters, lower-case letters, left/right, and rhyming. The rate of the children's achievement of the skills increased dramatically when the children began to keep and display their own records. Self-recording does seem to produce a higher performance rate than if the records were kept solely by the teacher (Whitin, 1997).

More recently, implementing self-evaluation in the classroom has gained attention. Katz (2009) alludes to the importance of children evaluating their own progress in her book *Intellectual Emergencies*.

In addition to self-recording, it has been suggested that children should not only document their progress, but also share their progress with others, including teachers and peers. Some believe that it is crucial that children have the opportunity to share their projects and data visually with their peers (Whitin, 1997). When children share their success orally, they can discuss their individual interpretations of what they

accomplished as they evaluate their progress. Children who identify their progress are more likely to repeat the process due to self-reinforcement (Skinner, 1948, 1953).

Ways to Implement Planning Strategies With Children

Choice making, goal setting, self-recording, and presentation are combined in the 4-year-old classroom at the West Virginia lab school, also known as the Nursery School. This planning process builds on findings about children's abilities to plan and self-record (Moxley & Studwell, 1984; Moxley, 1990; Hohmann & Weikart, 1995; Brown, 2008; Lysyuk, 1998; Warash, 2001).

The classroom typically includes 20 children ranging in ages from about 48 months to 61 months. Children attend for approximately 3 hours each day. The Nursery School has a combination of child-directed activities and teacher-planned activities in literacy, math, science, social studies, and the arts. Here is how teaching strategies to support children's planning are implemented.

Introduce the Idea

The teacher first meets with the children as a group to introduce the idea of determining their own goals. *Goals* are defined as "something you want to learn or be able to do." Examples of suitable goals are suggested, such as print their names, hold a pencil, and learn to identify alphabet letters. Children are encouraged to think of their own goals, but can use one of the examples if they choose to do so. All of the children usually want to participate.

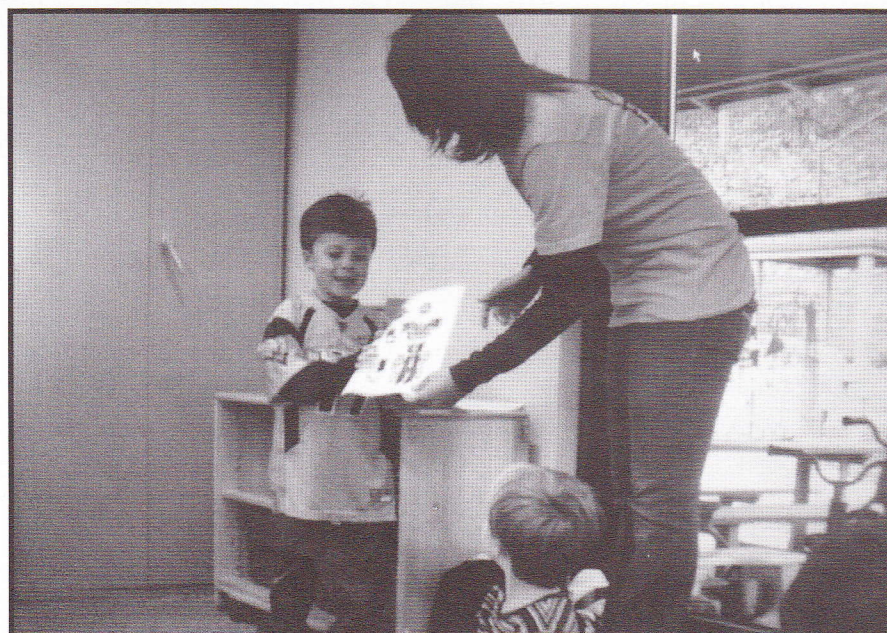


Photo courtesy of the authors

During David's presentation, he stated his goal and recited his entire phone number. The teacher asked him to show the numbers he learned to write. Children discussed what they learned and asked questions.

Set Goals With Individuals

The teacher then meets with each child individually and begins by making sure children understand the concept of a goal. Teachers might ask, "What is a goal?" or say, "Tell me what a goal is."

Depending on the child's answer, the teacher might state, "Remember at circle we talked about goals such as printing your name? A goal is something you want to do better," or "Can you tell me something you want to learn?"

By starting this planning strategy a month or more after children enter the program, teachers have better insights into each child's ability to carry out a goal. Generally about half of the children state an achievable goal when initially asked. A few examples of appropriate goals that children have stated include

- write numbers 0-10,
- write a play,
- read a book,
- make a clay structure, and
- put puzzles together.

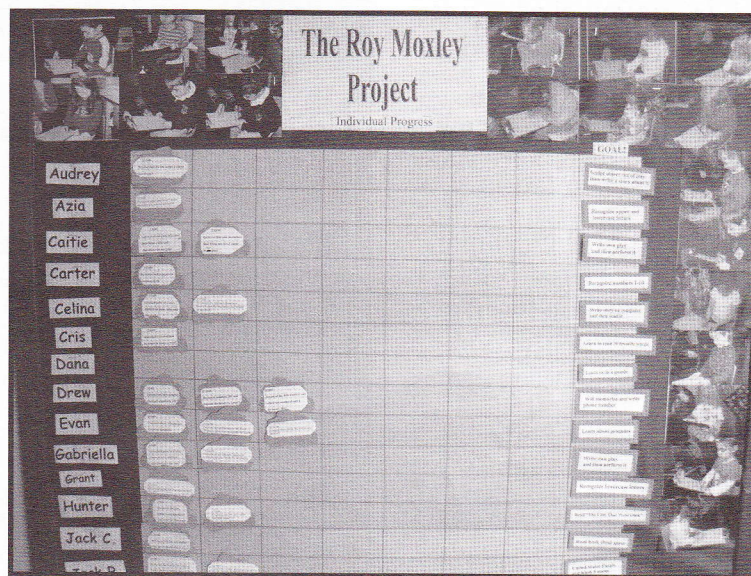
If a child picks a goal that is too difficult, then the teacher can negotiate with the child. The teacher usually offers suggestions as near to the child's goals as possible.

Robbie wanted to learn to read a book, but he could not identify very many letters. His teacher admired his ambition and suggested that he dictate his own personal story about pictures in a book as his goal.

When they began to work on his goal, Mrs. Lopez covered the words on the pages of a familiar book. Robbie dictated his version of the story as the teacher printed the words.

Figure 1.

A classroom bulletin board is used to record up-to-date information on the skills and goals completed by the children. Each time a skill is completed, the teacher adds a brief synopsis of the step to the board.



After individual goals are set, the child and teacher sign a contract that includes the date and name of the achievable goal. The teacher then divides the goals into about seven observable, manageable steps. For example, Melissa decided she wanted to print numbers. Her teacher broke the goal into seven steps. First, she was shown the numerals 0 and 1, and Melissa practiced printing 0 and 1 on her self-recording chart. After this was accomplished, Melissa charted her progress on the chart. The next time the teacher and Melissa worked together, her teacher added one more numeral a day and eventually added two new numerals per session until Melissa could print all of the numerals from 0 to 10. It took seven steps and seven different days to accomplish this goal.

Families are given a note card explaining the goal the child and teacher agreed upon. Patrick wanted to learn to print his five favorite words. His teacher sent a note home explaining that Patrick had chosen the goal of printing his five favorite words. The teacher included the five

words that he wanted to learn to print in the note. After the goal was achieved, his family was notified of the presentation date and time.

Chart Progress

Children work on their goals with the teacher during free play. Each session with a child lasts between 2 and 3 minutes. Children then often work independently to practice the new step and their progress so far.

A classroom bulletin board is set up to keep up-to-date information on the skills and goals completed by the children (see Figure 1). Each time a skill is completed, the teacher adds a brief synopsis of the step to the board so children and their families can review the progress. Families also receive note cards with digital photos of their children and a brief explanation of their progress.

Children keep track of their daily progress on the bulletin board and on their individual charts located in an accessible file. They chart their own progress as the steps are completed. Children can mark their self-

recording chart with any marking of their choice, such as flowers, smiley faces, or icons directly related to the skill. The teacher adds the date and a brief description of what was accomplished during the individual instruction to the self-recording chart. David's story illustrates how the process works.

David wanted to learn to say and print his telephone number, which was an appropriate goal for him. His teacher, Ms. Bridges, prepared a contract for David to sign.

She broke the goal of learning the 10-digit telephone number into seven steps (see Figure 2).

The first session was conducted during free play. David practiced saying the first number and printing it. David recorded his progress by making a smiley face on his chart (see Figure 3).

As he worked toward his goal, David often greeted the teacher excitedly as he recited the numbers he had learned to date.

Figure 3.

Child's self-recording toward his goal of learning his phone number. David started making smiley faces at the bottom and worked to reach the icon at the top.

Figure 2.

Steps to learn to recite and write a phone number (invented numerals are for illustrative purposes only).

Goal: Learn to recite and write phone number.

Skills/Behaviors	Dates
Described what a phone number is and learned the number 3 by repeating it aloud. Wrote the number 3.	2/5/2009
Reviewed the previously learned number 3 and added 0-4. Repeated 3-0-4. Wrote the number 3-0-4.	2/9/2009
Reviewed numbers 3-0-4 and learned numbers 5 & 9. Repeated 3-0-4-5-9. Wrote the numbers 3-0-4-5-9.	2/12/2009
Reviewed numbers 3-0-4-5-9 and added 4. Repeated 3-0-4-5-9-4. Wrote the numbers 3-0-4-5-9-4.	2/23/2009
Reviewed numbers 3-0-4-5-9-4 and added 5 & 5. Repeated 3-0-4-5-9-4-5-5. Wrote the numbers 3-0-4-5-9-4-5-5.	2/24/2009
Reviewed numbers 3-0-4-5-9-4-5-5 and added 5 & 5. Repeated 3-0-4-5-9-4-5-5-5-5. Wrote the numbers 3-0-4-5-9-4-5-5-5-5.	2/26/2009
Reviewed his phone number and practiced writing all the numbers for his presentation.	3/3/2009
Presented achievement of individual goal.	3/5/2009

Present Success

After all observable steps are completed and children achieve their established goals, they have the opportunity to present their accomplishments to all the other children and teachers.

During the presentation (see photo), David was introduced and asked to state his goal. He recited his entire phone number. The teacher asked him to show the children the numbers he learned to write. David discussed what he learned with questions prompted by the teacher.

Additional benefits of children's presentations

Charlie wanted to research penguins as his goal because he already knew a lot about penguins. After researching penguins and completing several activities on the subject, Charlie was ready to present. The teacher asked him many questions pertaining to penguins. Charlie was typically shy and often played alone, so the other children were amazed at his knowledge and how much he talked. In addition to learning more about penguins, Charlie was given an opportunity to shine among his peers. His presentation also enabled him to develop new social skills.

How Teachers Help Young Children Set Their Own Goals

- Introduce the idea of goal setting to the group. Give appropriate, concrete examples of goals.
- Meet with each child. Start the conversation with, "Tell me what a goal is" to make sure children understand the concept. Clarify as needed.
- Ask, "What do you want to learn or be able to do?"
- Negotiate with the child to agree on a manageable, observable goal.
- Write a note to let families know the goal.
- Break goals into small steps.
- Children work on one step at a time with a teacher during free play.
- Children record their progress.
- After the goal is achieved, children present their work to the group.

Peers also had the opportunity to ask David questions.

Teacher Reflections on the Planning Strategy

These are some of the powerful lessons about children's goal setting that teachers in the Nursery School have learned.

Children can, and should, play an active role in the direction of their learning. The individual attention children receive in the goal-setting process demonstrates that their ideas are valued. Children get better and more confident in their goal setting. By providing children with the power of choice, they develop important executive function skills (e.g., decision making, planning), and are self-motivated to achieve their goals. Children often asked to work on their goals. When young children engage in activities that are meaningful, they are more invested in learning (Warash, 2001, 2004).

Children achieve beyond their goals. Charlie, who was shy, became a classroom authority on penguins after he presented his goal to the group. Andrea, another 4-year-old, became more independent, task oriented, and less reliant on her brother for leadership and support. Children participating in their own projects develop skills such as self-management and more elaborate self-recording methods, in part because their progress is concretely recorded, which serves as an intrinsic motivator (Epstein, 2003; Moxley & Studwell, 1984).

Self-recording is an important indicator of goal achievement.

When children self-record their own progress, their attention to their work appears to increase. Often children

initiated work on their goals by asking the teacher instead of being prompted to do so. This behavior of initiating activities and ideas carried over to other classroom experiences.

Children are interested in helping their peers achieve their goals.

Peer instruction is a successful teaching method (Warash, Curtis, Hursh, & Tucci, 2008). Peer modeling encourages children's participation in an activity. Children can assist each other in achieving their goals. Children are interested in each other's goals and often help each other.

For instance, David wanted to learn to tie his shoes. Because the individual work with children took place during free play, his efforts were in full view for all children to see. When Patrick saw David trying to tie his shoe with the teacher's guidance, Patrick asked if he could hold the shoe for David. His encouragement was very rewarding.

At other times, the teacher asked another child to listen to a child's recitation of a predictable book that the child wanted to learn to read. This was extremely beneficial to both of the children.

When teachers encourage young children to set goals and to plan purposely, children practice skills necessary to be competent, lifelong learners. As children take responsibility for monitoring their own progress, the stage is being set for successful academic careers. Children's skills to be active learners apply in all arenas. This goal-setting strategy—for developing executive functions and independence—can greatly enhance any early childhood curriculum.

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Note: This project was conducted in memory of Phyllis Slaughter and inspired by Dr. Roy Moxley, Professor, West Virginia University.

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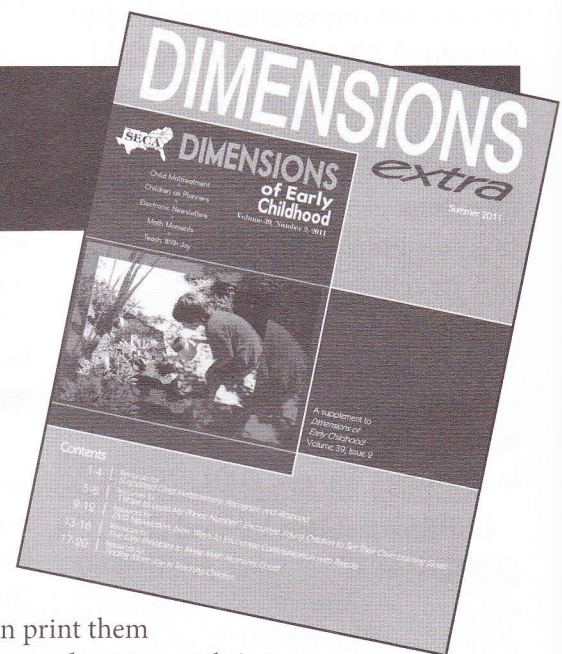
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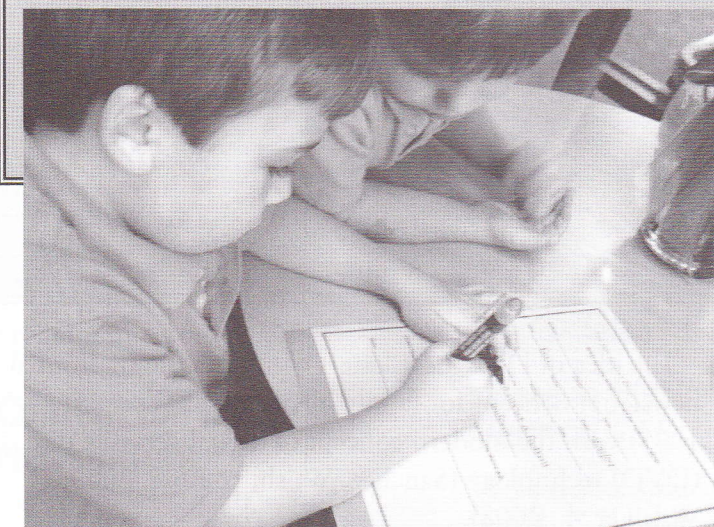
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Encourage these *executive function skills*

Focused attention
Planning
Self-regulation
Response inhibition
Self-monitoring
Cognitive flexibility

Help young children develop executive function skills

Offer good choices.

Ask children to use words, draw, or scribble to plan their activities.

Encourage children to reflect on their accomplishments.

Foster mature play so children can practice skills in pretend situations.

Enable children to assess their own progress.

How Teachers Help Young Children Set Their Own Goals

- Give appropriate, concrete examples of goals to the group.
- Meet with each child. Start the conversation with, "Tell me what a goal is."
Clarify as needed.
- Ask, "What do you want to learn or be able to do?"
- Agree on a manageable, observable goal.
- Let families know the goal.
- Break goals into small steps.
- Work on each step with a teacher during free play.
- Children record their progress.
- Children present their work to the group.

Note: *Dimensions of Early Childhood* readers are encouraged to copy this material for early childhood students as well as teachers of young children as a professional development tool.