Using Outcome Statements vs. Lesson Planning Grids to Measure Children’s Learning

When planning an integrated curriculum that provides a wide variety of classroom activities for children, teachers often find a formal planning grid or chart helpful. Each square might correspond to a specific learning center, and the teachers list activities such as songs, finger plays, or art materials based on the topic or theme. While these planning forms may show parents and administrators what the teachers are planning to do each day, structured planning forms do not articulate the goals for learning.

As an alternative, we suggest that programs emphasize learning outcomes to provide clear statements of the measurable learning that will take place, while allowing teachers to focus on what is relevant and meaningful for children. Outcome statements articulate clearly and completely the learning and performance that students will demonstrate. This article describes the process required to move beyond a structured planning form to learning outcome statements that allow teachers to focus on what the children will learn rather than what the teachers will teach.

Let the Children Be Your Guides

As you begin to plan a thematic unit, challenge yourself to find topics that come directly from the children. While most children will enjoy a popular topic such as pets, consider what is happening in the world around them. Find the time to sit and observe the children at play. What do the children discuss when they are alone? What do they notice day after day on the playground? One child may be enthralled by the regular visit of the garbage truck every Friday morning. Another child may notice the bird in its nest outside the classroom window. Yet another child may inquire at the lunch table about which foods are healthy. Through the process of observation, we can discover topics that emerge from the interests of the children. Watch, listen, take notes, and let the children guide you to a topic that is worth in-depth study.

■ When talking with the children about the garbage truck, you can discover what they find interesting, perhaps where the garbage goes next, which might bring up topics of recycling and conservation.

■ The bird watching might initiate a theme related to animals and their homes, or perhaps a study of different characteristics of feathers.

■ The discussion of food might bring you to a study of gardens, cooking, or the topic of farm-to-table movement.

Trust that observation will help you identify topics that are more interesting and meaningful than anything that could come out of a planning book. Let the children be your guides.

Guidelines for Practice

NAEYC’s developmentally appropriate practices framework serves as the
Creating Learning Outcome Statements

Whether teachers are expected to follow NAEYC accreditation standards, Common Core Standards, Early Learning Guidelines, state licensing regulations, Head Start Performance Standards, or a combination of these, outcomes can be written and adjusted based on the participants in the group. We tend to look at these standards and then formulate what we want to teach the children. Instead, consider what you want the children to learn based on these standards and begin to formulate activities with specific outcomes in mind.

Learning outcomes are specific statements of children’s performance that can be demonstrated at the end of the activity or lesson. Outcome statements set our expectation for what students will be able to do and how they will apply that knowledge or skill. A learning outcome is a statement of the measurable learning that is intended to take place as a result of instruction. These statements include a verb phrase and an impact. For example:

As a result of this activity, the children will be able to:

- describe materials birds use to build their nests.
- stack blocks four high.
- compare several different feathers or birds.

Look carefully at the verbs in the examples above. Notice that they are statements of anticipated effects of instruction in terms of skills or demonstration, not merely statements of activities. They describe what the students will be able to do or think as a result of instruction. Furthermore, they can be measured in some manner. Action verbs are important because they indicate what the —

children should specifically be able to do at the end of the activity or lesson.

The following are NOT learning outcomes. Do you see why?

- The students will go on a field trip to an aviary.
- The students will listen to a reading of the book *Backyard bird watching for kids: How to attract, feed, and provide homes for birds* (Harrison & Harrison, 1997).
- The students will keep journals about birds.
- The students will sing songs about birds.

These activities might fill the blocks of a planning grid, but they do not describe what children will be able to do as a result of the activity. In the first example, no evaluation is possible other than counting heads to see who attended the field trip.

Learning outcomes should be stated in terms of specific, measurable, action oriented, realistic, and time-bound. These are called SMART goals or SMART learning outcomes. Therefore, learning outcomes for this activity could be expressed as follows:

As a result of their field trip to the aviary, the children will be able to:

- name two characteristics of birds.
- compare the homes of two birds.

See how these are SMART outcomes? They are specific, measurable, and action-oriented in that you know exactly how to assess the learning. Just ask the children! Additionally, this is time-bound as this goal can be met after the visit to the aviary.

It is important to remember that while these rules for writing learning
outcomes are helpful in describing what children will demonstrate, including all of the possibilities for a lesson is not practical. Ideally, learning outcomes should be drafted in terms that are specific enough to inform teaching and assessment, but not limit the flexibility of the teacher to modify the lesson as needed. According to Gunter, Estes, and Schwab (1995), “One must not take statements of objectives to such extreme specificity as to lose sight of the learners. Many times the opportunity to teach an important lesson is unexpected and unintended.” Consider a teacher who has worked hard to create a lesson about the bird’s nest outside the classroom window, for example, only to have the children express great interest in the shape and size of the bird’s beak and how the bird is feeding its young. The teacher may try to refocus their attention to the nest and how the bird might have made it when the children’s focus is clearly elsewhere.

Stating outcomes for learning allows teachers and children to focus on what is important in a learning experience. In addition, it helps the teacher to identify clearly the type of instruction, materials, and facilitation that are needed to achieve the stated objective(s) and to evaluate the success of the instruction.

During lunch in a Pre-K classroom, a conversation emerged about different kinds of bread. The teacher decided to use this interest in food as an opportunity to explore culture: pita, tortilla, naan, and Italian bread. After making several kinds of bread and sampling them over several weeks, the children met the following learning objectives:

- Demonstrate awareness and appreciation for different cultures.
- Explore simple chemical reactions with teacher assistance (e.g. baking soda and water, yeast bread rising).
- Describe some of the foods related to his or her own culture.

These outcomes are SMART because the learning outcomes are stated in terms that are specific, measurable, action-oriented, realistic, and time-bound. The teacher could ask the children around the lunch table which kinds of bread they have eaten as a simple way to assess whether or not the learning goals had been met.

Using Bloom’s Taxonomy to Develop Outcomes

Bloom’s Taxonomy offers a helpful framework for generating a list of verbs that can used to create learning outcomes. In 1956, Dr. Benjamin Bloom led a team of experts in educational evaluation. They created what was coined Bloom’s Taxonomy in order to promote higher forms of thinking in education, such as analyzing and evaluating concepts rather than having students merely remember and recite facts (rote learning). Bloom and his colleagues developed a taxonomy, or classification system, of educational objectives. Used here, an objective is a clear and unambiguous description of your educational intentions for your students.

Bloom’s objectives were divided into three domains: cognitive (knowledge), affective (growth in feelings or emotional areas), and psychomotor (physical skills usually assessed with a checklist). In real life, of course, behaviors from these three domains occur simultaneously. While students are writing (psychomotor), they are also remembering or reasoning (cognitive), and they are likely to have some emotional response to the task as well (affective) (Woolfolk, 2010). Bloom’s Taxonomy has guided educators for more than 50 years.

Here we will focus on the cognitive domain. The cognitive domain involves knowledge and the development of intellectual skills (Bloom, 1956). According to Woolfolk (2010), there are six basic objectives listed in revised Bloom’s Taxonomy of the thinking or cognitive domain:

- **Remembering** (Knowledge): Recognizing something with or without understanding it
- **Understanding** (Comprehension): Grasping material without relating it to anything
- **Applying**: Using a general concept to solve a particular problem
- **Analyzing**: Breaking something down into its parts
- **Evaluating**: Judging the value of methods as they might be applied in a particular situation
- **Synthesis**: Creating something new by combining different ideas

It is common in education to consider these objectives as a hierarchy, with each skill building on those below it. The lower level objectives (remembering, understanding, and applying) and the higher level objectives (analyzing, evaluating and synthesizing) help us to think about the objectives and are helpful in planning assessments as different procedures that are appropriate for objectives in various levels (Woolfolk, 2010).

When working with young children we often find comfort in using only the lower levels of Bloom’s Taxonomy. During group time we often have children recite colors and numbers. These are lower level knowledge and comprehension activities. Activities that
allow children to analyze, synthesize, and evaluate are higher-level objectives that expand their cognitive knowledge. Instead of asking children to recite information by rote, like letters, to show that they remember them (knowledge), we can have them compare and contrast the characteristics of different buttons, for instance (analyzing). Buttons can be sorted by shape, size, color, or number of thread holes.

Bloom’s Taxonomy offers action verbs in each of the six domains. This list of verbs is used to create objectives that explain what learners will know or be able to do in specific measurable terms. Besides being used as a teaching tool to help create meaningful objectives, Bloom’s Taxonomy can be used to balance assessment and evaluative questions in the early childhood classroom, which ensures that all orders of thinking are exercised by children in their learning.

The adjacent chart matches learning outcomes to different learning standards.

### Applying Outcome Statements to Activities

In daily activities we can observe children based on specific learning outcomes: Can the children use the new vocabulary during play? Are they able to rhyme as you sing songs and read rhyming books? How high can they stack the blocks as they build habitats for the birds they observed at the aviary?

Lesson planning grids may help remind you to add plastic birds to the water table and blue paint at the easel, but they are very limiting for projects. Instead of grids, consider moving to a format that expands children’s opportunities for learning. Revisit outcomes over time as children grow and develop, rather than starting a new planning grid on Monday and ending on Friday, only to begin again with a new topic the following Monday. The question isn’t what will be in the sand table today, but what will the children be learning at the sand table today?

Learning outcomes are a valuable component of early childhood curriculum planning. Accurate and meaningful assessment begins with establishing appropriate learning outcomes. How else would you know what to teach and what to assess? Establishing SMART learning outcomes are essential for improved assessment and optimal student learning. The next time you develop an idea for your classroom of children, try to focus on what the students will learn rather than what you would like to teach.

### Table 1

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<thead>
<tr>
<th>Learning Outcomes</th>
<th>Learning Standards</th>
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<tbody>
<tr>
<td>As a result of their field trip to the aviary, the children will be able to name two characteristics of birds.</td>
<td>Observes and describes characteristics of living things: a) Observes and discusses similarities, differences, and categories of plants and animals (NYS Foundation for the Prekindergarten Common Core, Science: Living Things, p. 29). Scientific Knowledge: • Children observe and describe characteristics of living things: Notices similarities, differences, and categories of plants and animals, NYS Early Learning Guidelines, p. 80).</td>
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<tr>
<td>As a result of their field trip to the aviary, the children will be able to describe the living environments of two birds.</td>
<td>Observes and describes characteristics of living things: j) Observes, describes, and compares the habitats of plants and animals (NYS Foundations of the Prekindergarten Common Core Science: Living Things, p. 29). Scientific Knowledge: • Children observe and describe characteristics of living things (NYS Early Learning Guidelines, p. 80). • Demonstrates understanding of changes in the appearance, behavior, and habitats of living things (NYS Early Learning Guidelines, p. 80).</td>
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### References


