UF UNIVERSITY *of* FLORIDA
IFAS Extension

Addressing Sunshine State Standards in Elementary School Teacher Professional Development Workshops[1]

Jennifer A. Seitz, Martha C. Monroe, and Kimberly O. Thurman[2]

Introduction

In public schools across the nation, teachers are faced with the challenge of ensuring all students in their classrooms end each school year with a certain level of knowledge in order to pass to the next grade. In the State of Florida this knowledge is presented in a set of standards called "Sunshine State Standards" (SSS), recently renamed The Next Generation Sunshine State Standards. Since 1996, the SSS have set expectations for student achievement in seven subjects. The Florida Comprehensive Assessment Test® (FCAT) is given to measure achievement in the SSS for students in grades 5, 8, and 10 in Writing, in grades 3–10 in Reading and Mathematics, and in grades 5, 8, and 11 in Science.

The standards set high expectations for student achievement, and teachers are expected to facilitate this goal (Florida Department of Education 2007). Classroom schedules revolve around FCAT tests and the SSS. In addition, student performance on the FCAT is tied to school funding by the Florida Department of Education. Principals are motivated to ensure strong student performance. Aligning classroom curricula with SSS can prepare students to perform well on the FCAT. After testing, principals receive reports on student performance by grade and by standard. Low scoring standards become target areas for increased attention in the following year. In this way, teachers are encouraged to incorporate new, innovative teaching techniques in designated target areas.

During the school year, administrators encourage teacher attendance at events targeting the SSS in need of improvement. For professional development programs aimed at classroom teachers, incorporating the SSS is imperative to encourage teacher attendance and subsequent use of program materials. Making this connection when marketing workshops helps to ensure that teachers will attend those workshops. Continuing to make this connection during the workshop helps teachers understand how to enhance their teaching, build student interest, and improve their repertoire of teaching materials. In this fact sheet, Project Learning Tree (PLT) workshops are used as an example of how anyone conducting professional development workshops can improve attendance and enhance program use by public school teachers.

Breaking the Code

The state standards are often identified using a shorthand code. The code gives the subject, grade level, strand or body of knowledge, standard or big idea, and benchmark. Each subject is abbreviated (i.e., Language Arts = LA, Science = SC, Social Studies = SS, Mathematics = MA). The strand (also called Body of Knowledge in Science and Mathematics) is the overarching topic being taught, such as reading process or algebra. The standard (also called Big Idea in Science and Mathematics) is one component of the overarching topic. Lastly, the benchmark is the specific content the teacher should teach at each grade level or grade cluster. The codes for the new Mathematics and Science standards are written a bit differently than the new Language Arts and Social Studies standards. Table 2 shows an example breakdown of two codes.

Workshop Objectives and Agenda

A good workshop should focus on enhancing both teaching methods and content knowledge. The first step to aligning a workshop to better meet teachers' needs is to address specific objectives or learning outcomes. Here are two examples:

- Teaching method: Participants will be able to lead five activities that support fourth grade Mathematics standards in the classroom.

- Content knowledge: Participants will be able to classify flowering and nonflowering plants into major groups according to their physical characteristics (SC.3.L.15.2).

You can use your objectives to emphasize that the workshop complements the teachers' classroom goals. Make sure to select workshop objectives that are tailored to the particular needs and interests of your audience.

Build your agenda around the activities that meet workshop objectives. Include the skills and background information that teachers will need to increase their comfort and familiarity with your program. For PLT, that often means helping teachers understand urban forest concepts, tree identification,

or multiple perspectives on an environmental issue. Table 1 is an example of including workshop objectives within the agenda designed for third grade. In this instance, all of the activities in this workshop will assist educators in meeting the listed Math Standard.

When planning a workshop, consider the grade level your audience works with and whether or not emphasizing a particular subject area (i.e., Science, Mathematics) is appropriate. If the workshop attendees are from a school focused on increasing students' Math test scores, then the workshop agenda may have more math-related activities. On the other hand the teachers attending may be interested in learning ways to incorporate outdoor activities into their overall lesson plans. In this case, a mixture of activities focused on a variety of subject areas may be the best option. Review the relevant SSS for target grade levels and subject areas. A good rule of thumb is to emphasize at least two subjects during the workshop. The Florida PLT Web site lists the pre-2007 SSS that can be addressed by each PLT activity. Revised correlations will be posted on the Florida PLT Web site as they are completed. Go to http://sfrc.ufl.edu/plt/correlations/index.html to download appropriate standards.

Now that you have the objectives, activities, agenda, and standards, it is time to determine how to incorporate them into your marketing materials and the workshop itself.

Ways to Incorporate

In PLT workshops, teachers need to be able to link the featured PLT activities to the SSS and their current curriculum. The following sections provide ideas for visually and experientially incorporating the standards into a workshop.

Visual

Flyers

When marketing the workshop, list the standards that will be covered on the flyer. If the workshop is entitled "Learning about Trees with Literature" include Science and Language Arts standards. Teachers often look for this information before registering for an event.

Agenda

On the agenda list the SSS codes (i.e., LA.K.1.1.1) associated with each activity you will be modeling. This is a quick reference sheet for the teacher to refer to when remembering how the workshop activities relate to SSS.

The Florida Department of Education has a SSS search feature to find standards by keyword in any subject area or grade level (http://www.floridastandards.org/index.aspx). Enter the "Go to Florida Standards" box and select the "Keyword Search" tab. If you are interested in finding Science standards for specific second grade energy activities, type "energy" into the keyword box and select "Science" and "grade level 2" in the search engine. Two standards and associated benchmarks are found. It is up to the facilitator to determine if these standards are appropriate for the activities. In this search, benchmarks related to how people use energy and how the sun's energy warms surfaces are given as options. These may not be the best match for your program.

State Standard Note Cards

Print out the specific standards and benchmarks identified for all the workshop activities you will be leading. Cut out each standard with associated benchmarks. Glue these onto 5- by 7-inch cards.

At the start of the workshop, hand a card to each participant. After each activity, ask the participants if the activity could help meet the standard and benchmarks on their card. The great thing is that there will always be more than one correct answer! Usually more than one benchmark can be addressed by an activity. Classroom teachers will often share ways benchmarks can connect to an activity based on their teaching experience. If someone hasn't spoken, they may be seeking for ways to meet a more challenging benchmark. For these more challenging benchmarks, ask all participants to brainstorm how the activity could be adapted to address that benchmark. Reviewing the benchmarks will help teachers realize how PLT activities can enhance their existing curricula.

If your group of teachers represents a variety of grade levels, you can make cards for each level and give the appropriate ones to each teacher. For example, a third-grade teacher would receive the third-grade benchmark cards.

Table Posters

Table posters can showcase an activity and the benchmarks for which it applies. It is wise to incorporate a visual aid to highlight and make teachers aware of any activities that may be useful to them but that are not actually demonstrated during the workshop. Each table poster should include the activity name, its objectives, the grade levels for which it is intended, and correlating benchmarks. Pictures or clipart can be used to make these more visually appealing. This information can be typed in a word processing program, printed, and glued to a sturdy file folder. Lamination is optional. Stand the open folders on each workshop table to display them. Examples of table folders can be viewed at http://sfrc.ufl.edu/plt/facilitators/ workshop_materials.html, select "Table Posters."

Printable Standards

Make sure teachers understand where to find the SSS correlations. Provide the information on your program materials, paper, and poster, as well as on your Web site. Make sure the PLT Guides have a sticker with our URL: http://sfrc.ufl.edu/plt/correlations/index.html and draw attention to the sticker as you distribute the books. If your workshop site has an Internet connection, consider showing teachers how to navigate to the proper site and find the standards for an activity they select.

Experiential

FCAT-like Prompts

Throughout the year, students practice taking their state standardized tests with sample booklets. The questions are in the same format as the real FCAT test. Most FCAT items are multiple choice with limited writing involved. The Science test includes few short answer essay questions; the "Florida Writes" test incorporates longer essay

prompts. Florida PLT created FCAT-like prompts that mimic the reading, writing, mathematics, and science questions on the test. This addition to an activity will enhance PLT's usability in the classroom.

During workshops, demonstrate how to incorporate FCAT-like prompts. After completing an activity, instead of using the provided assessment option, ask the participants to answer an FCAT-like writing prompt. The writing prompt could relate to the concepts covered in the activity and ask students to write a descriptive or persuasive letter. Similarly, the prompt could be a Mathematics problem, a short reading followed by questions, or a set of multiple choice questions.

Another way to include FCAT-like prompts in a workshop is to set up prompt stations. There may be four stations: Mathematics, Reading, Writing, and Science. After completing an activity, have each participant go to one of the four stations and follow the directions for that particular prompt. Examples of PLT FCAT-like prompts are found at http://sfrc.ufl.edu/plt/correlations/FCAT_like_prompts/index.html.

Skills and Concepts Connection

After leading each activity, discuss which skills participants practiced and which concepts they learned. Activities often develop skills to improve mental strategies (e.g., decision making) and specific cognitive operations (e.g., contrast and compare). Often these are the same skills and concepts students need to learn at that grade level. For example, PLT Activity #43, *Have Seeds, Will Travel* is designed for a first-grade class. Students gather seeds from the school grounds, then work in groups to classify the seeds and answer a series of questions.

To help demonstrate the connection to SSS and reinforce the premise that this PLT activity will help teachers meet SSS, use questions to prompt discussion after modeling the activity. A good question might be, "What skills were used during this activity?" or "What concepts did learners grasp?"

- Skills: SC.1.P.8.1: Sort objects by observable properties, such as size, shape and color.

- Concept: SC.1.P.8: The student understands that objects and substances can be classified by their physical and chemical properties.

Review how teachers will know if students understood the concepts. Point out the assessment options provided within the activity. For this example, students can create a display of local seeds that fit different categories of dispersal.

Worksheets

Often, teachers use worksheets to help students practice a variety of skills—from math problems to reading comprehension questions. You can create worksheets that mimic those found in text workbooks that teachers often use in the classroom. Your worksheets, however, should be based on PLT activities. Design worksheets that allow students to practice SSS skills and learn SSS concepts. A vocabulary worksheet that is based on the activity students just completed will probably interest them more than one with a list of unrelated words.

For example, many elementary schools use a reading curriculum with worksheets to accompany specific reading or trade books. In 2006, Florida PLT created reading worksheets for a few trade books that relate to PLT activities and illustrate how the activity can support the development of reading skills in the third and fourth grades. Examples of these worksheets can be found at http://sfrc.ufl.edu/plt/literacy_and_nature/index.html

Planning Time

During the workshop, set time aside for teachers to brainstorm ways to use the new materials to support concepts in their curriculum. If possible, contact participants ahead of time and encourage them to bring their lesson plan books and textbooks. During the designated time in the workshop, teachers can look through their lesson plans and add new PLT activities that they think will be relevant.

Another possibility is to supply teachers with a sample completed lesson plan sheet that uses a PLT activity and then have them complete one on their own. Some school districts require the use of a

particular form. If this is the case, obtain a copy of this lesson plan sheet ahead of time. The PLT Guide comes with a lesson plan sheet in the back and can be downloaded to use as an example from http://sfrc.ufl.edu/plt/resources/ educator_share_page.html

Conclusion

To increase attendance at your public school teacher workshops, identify the SSS the workshop will address and advertise them. Principals may have money to fund teacher attendance at professional development workshops (paying for substitute teachers or registration fees), but only if they are aligned with the SSS. **Remember** that communication with teachers about what your program provides to help them is the key! Consider scheduling workshops at convenient times for the teachers (i.e., holding them at a school site immediately after school and breaking the workshop into several shorter sessions over a couple of months). Your program will get attention only if you make it easier for teachers to address their state standards with your resources.
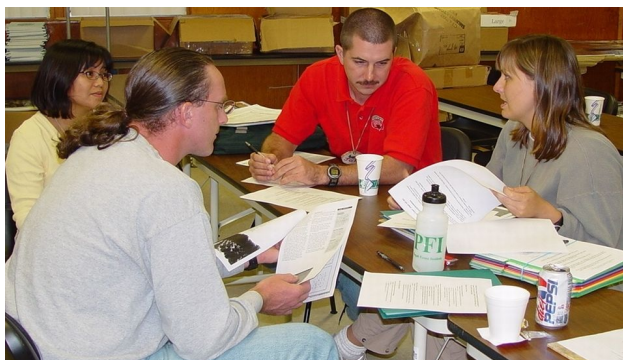
Teachers review the correlations between Florida's Sunshine State Standards and PLT activities.

Tips to Remember

• When targeting elementary teachers, it is helpful to select a variety of subjects to emphasize and to highlight at least one standard for each activity:

• Include the SSS codes you will address on all marketing pieces for the workshop at appropriate grade levels.

Educators search for PLT activities that meet the goals of their youth programs.

• Print the relevant benchmarks for activities you will be conducting and use them in your discussion to emphasize the connections between your program and the SSS.

• Tell and/or show teachers how to find the correlated standards posted on your Web site.

• Give teachers time to plan and work together.

• Use discussions to remind teachers that the activities cover concepts and skills in the curriculum.

Suggested Readings

Florida Department of Education. 2007. *Assessment and Accountability Briefing Book*. Tallahassee FL: Florida Department of Education. http://fcat.fldoe.org/pdf/BriefingBook07web.pdf (accessed January 5, 2009).

Monroe, M.C., J. Randall, and V. Crisp. 2001. Improving Student Achievement with Environmental Education (FOR 87). Gainesville FL: School of Forest Resources and Conservation, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida.

Monroe, M.C., J. Seitz, S. Agrawal, M. Aldridge, S. Morshed, E. Swiman, and V. Crisp. 2005. Improving Inservice Teacher Workshops in Florida (FOR 109). Gainesville FL: School of Forest Resources and Conservation, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida.

Table 1. Project Learning Tree Workshop Agenda Tied to Specific Activities for Third Grade Educators

Workshop Objective: Participants will be able to lead five activities that support third grade Mathematics standard (MA.3.S.7.1.) in the classroom	
MA.3.S.7.1: Construct and analyze frequency tables, bar graphs, pictographs, and line plots from data, including data collected through observations, surveys, and experiments	
8:30 AM	Welcome/ Introductions/ Agenda Overview/ Icebreaker: Birds and Worms #25*
	Emphasize the opportunity to use the class data and make a bar graph
9:30 AM	PLT Background
9:40 AM	Break
9:50 AM	Activity, Pass the Plants Please #16
	Note Part B, bar graph and spreadsheet opportunities
10:40AM	Activity, Every Tree for Itself #27
	Add – count the trees that survive and create a line graph
11:30 AM	Lunch
12:30 PM	Activity, Soil Stories #70
	Add – Part B, tally the results of the perk tests and describe them with frequencies
1:15 PM	Activity, Pollution Search #36
	Note Part A, bar graph of pollutants they find on their hike
1:50 PM	Break
2:00 PM	Hike through the Guide and Connecting PLT to the Classroom (Lesson Plan Worksheets)
	Group discussion about incorporating math objectives in PLT activities and using PLT in math lesson.
3:00 PM	Wrap-Up/Evaluations
3:30 PM	Safe Travel Home
*The title and number refer to activities found in the Project Learning Tree Prek-12 Guide.	

Table 2. Breakdown of a Language Arts and Science Benchmark Code.

Code	LA.K.1.1.1	SC.5.L.15.1
Subject	LA: Language Arts	SC: Science
Grade Level	K: Kindergarten	5: Fifth grade
Strand/Body of Knowledge	1: Reading Process	L: Life Science
Standard/Big Idea	1: The student demonstrates knowledge of the concept of print and how it is organized and read	15: Diversity and Evolution of Living Organisms.
Benchmark	1: Locate a printed word on a page.	1: Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.