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***Professional Assessment and Comprehensive Evaluation System PACES***

# The Teacher Guide to PACES

***PACES 2001***



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**DOMAIN I:  
PLANNING FOR TEACHING AND LEARNING**

Thorough and thoughtful reflection when planning is an important component of effective teaching and learning. The PLAN includes objectives and corresponding methods and tasks written specifically to accommodate individual differences among learners, and accurately reflects specific content to be learned. Multicultural concerns are addressed in the PLAN to reflect learner characteristics and lesson content as needed. Attention is given to the content to be covered, the selection and use of resources for learning, and the inclusion of home learning as a logical extension of learning in school. Formal assessment or evaluation of learner performance is planned, is directly linked to objectives, and guides future planning for learning.

**TEACHING AND LEARNING COMPONENTS**

I.A Goals and/or Objectives

I.B Teaching Methods and Learning Tasks

I.C Time Allocation

I.D Resources for Learning

I.E Home Learning

I.F Assessment and Evaluation

**TEACHING AND LEARNING COMPONENT**  
**I.A Goals and/or Objectives**

Effective planning begins with the development of learning goals and objectives that accommodate individual differences among learners and that reflect learning outcomes. Learning objectives included in the PLAN should reflect unit goals, accommodate the range of learner characteristics in the class, and be sequenced logically.

**Sample Professional Growth Activity 1**

Comprehension	1. Refer to the <b>PACES Teaching and Learning Professional Growth Manual</b> for the definitions of Goals and Objectives in planning.
Practical Application	2. Prepare a sample PLAN that satisfies objectives and goals from the Sunshine State Standards and Competency-Based Curriculum. Sequence the objectives and goals as described in Component I.A in the <b>PACES</b> manual.
Assessment	3. Review the plan with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1. List the objectives from the Sunshine State Standards and/or the Competency-Based Curriculum that satisfy the attainment of a goal in your subject area.
Practical Application	2. Collaborate with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team to develop a list of methods and activities to accommodate individual differences among learners in your class to meet the objectives of the lesson. 3. Develop a plan that incorporates the methods and activities from the previous step. The plan should provide for a mid-week assessment and modification as necessary. This plan may be used for discussion with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.
Assessment	4. At the end of the planning process, reflect upon the effectiveness of collaborating with a colleague and using assessment information to develop learning objectives and strategies. Write those reflections for review with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="92 180 159 207"><b>I.A.1</b></p> <hr/> <p data-bbox="92 282 558 480"><b>Learning goals and/or objectives are consistent with state (Sunshine State Standards), district (Competency Based Curriculum), and school curriculum initiatives.</b></p> <hr/>	<p data-bbox="583 180 806 207"><b>Learning goals:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 250 1226 315">' are broad statements of long-range learning outcomes</li> <li data-bbox="583 350 1226 415">' reflect outcomes of the PLAN rather than a specific lesson</li> <li data-bbox="583 451 1226 516">' should be reasonably attainable within the timeframe of the PLAN</li> </ul> <p data-bbox="583 558 877 586"><b>Learning objectives:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 628 1226 693">' should be clear statements of specific and observable learner outcomes</li> <li data-bbox="583 729 1226 794">' are mastered by learners so as to accomplish broader goals</li> </ul>	<p data-bbox="1253 180 1415 207"><b>Elementary</b></p> <p data-bbox="1253 217 2007 282">The PLAN from a fifth-grade geography class includes the following:</p> <p data-bbox="1253 318 2007 516"><b>Goal - Students will develop an understanding of the relationship between physical geography (map locations), the settlement of the original thirteen colonies of North America, and the establishment of major exploration routes and trails in the expansion of North America and the settling of the American West.</b></p> <p data-bbox="1253 558 2007 821">The above goal is consistent with the Competency Based Curriculum: Competency 5.1.A-<b>After studying the importance of geography to the early exploration and settlement of North America, students will create a mini-atlas to include a world map showing major New World exploration routes, a map of the original thirteen colonies, and a map showing major trails and routes to settle the American West.</b></p> <p data-bbox="1253 863 2007 928"><b>Objective</b> - <i>Learners will be able to locate and name the original thirteen colonies.</i></p> <p data-bbox="1253 964 2007 1094">(CBC-Social Studies-United States History-Grade 5-I.5A; Sunshine State Standards. SS.A.1.2.2; SS.A.4.2.1; SS.A.4.2.2; SS.B.1.2.1; SS.B.1.2.2; SS.B.1.2.3; SS.B.2.2.2)</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
I.A.1 continued		<p><b>Secondary</b>            In an eleventh-grade literature unit, the PLAN includes the following:  <b>Goal - Given several universal themes from American literature that have been studied during the year, the student will select one and write a multi-paragraph essay of sufficient depth and length that makes connections between the theme selected, American literature studied or read independently, and the student's own values. The theme should be supported with examples taken from literature that:</b></p> <ul style="list-style-type: none"> <li>' reflect a variety of American cultures and points of view;</li> <li>' span major periods in American history;</li> <li>' represent at least three different genres, including formal essay. <b>Objective - Learners will be able to identify elements of Puritan influence in the poetry of Anne Bradstreet.</b></li> </ul> <p>(CBC-Language Arts-English II-Grade 11- I.2.A; Sunshine State Standards: LA.D.1.4.1; LA.D.2.4.1; LA.E.1.4.5)</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="92 180 155 207"><b>I.A.2</b></p> <hr/> <hr/> <p data-bbox="92 282 558 412"><b>Performance of(students)learners on standardized measures and/or other indicators of learning are used to develop the PLAN.</b></p> <hr/> <hr/>	<p data-bbox="583 180 806 207"><b>Learning goals:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 250 1142 310">' are broad statements of long-range learning outcomes</li> <li data-bbox="583 352 1213 412">' reflect outcomes of the PLAN rather than a specific lesson</li> <li data-bbox="583 454 1178 514">' should be reasonably attainable within the length of the PLAN</li> </ul> <p data-bbox="583 557 873 584"><b>Learning objectives:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 626 1171 686">' should be clear statements of specific and observable learner outcomes</li> <li data-bbox="583 729 1119 789">' are mastered by learners so as to accomplish broader goals</li> <li data-bbox="583 831 1213 891">' should be referenced to the goal(s) in the PLAN</li> <li data-bbox="583 933 1171 1024">' should be logically sequenced in a prioritized or hierarchical order, within and across lessons</li> </ul>	<p data-bbox="1253 180 1413 207"><b>Elementary</b></p> <p data-bbox="1253 250 2011 716">Learners in a second grade class have wide ranging experiences and abilities. During the first week of school, the teacher is planning an initial nine week unit of teaching and learning. The unit includes objectives related to the development of work recognition, spelling, and reading comprehension skills. Because of the range of individual differences among learners, the teacher examines scores from a reading skills inventory administered to each learner at the end of the first grade. Scores of learners are grouped by ranges reflecting high, middle, and low levels of reading mastery. Subsequently, teaching and learning activities for the unit are developed for each of the three groupings to accommodate the range of individual differences among learners in the class.</p> <p data-bbox="1253 758 1407 786"><b>Secondary</b></p> <p data-bbox="1253 828 2011 1222">At the end of the first semester, learners in a middle school band class have different levels of mastery of reading sheet music and playing their instruments. As the second semester begins, the teacher is developing general learning goals and objectives for the band as a whole, and for each individual band member. The teacher selects appropriate pieces for each instrument from a standard musical score (the end-of-spring semester concert) and individually rates each learner's performance level during the first week of the semester using a performance rating sheet. This information is subsequently used to assign different levels of music difficulty (i.e., first, second, third chair parts) to learners.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.A.3</b> Learning objectives are referenced to goals and are in a logical sequence.</p>	<p><b>Learning goals:</b></p> <ul style="list-style-type: none"> <li>' are broad statements of long-range learning outcomes</li> <li>' reflect outcomes of the PLAN rather than a specific lesson</li> <li>' should be reasonably attainable within the length of the PLAN</li> </ul> <p><b>Learning objectives:</b></p> <ul style="list-style-type: none"> <li>' should be clear statements of specific and observable learner outcomes</li> <li>' are mastered by learners so as to accomplish broader goals</li> <li>' should be referenced to the goal(s) in the PLAN</li> <li>' should be logically sequenced in a prioritized or hierarchical order, within and across lessons</li> </ul>	<p><b>Elementary</b> In order to prepare for the school's science fair, a third-grade teacher develops the following PLAN goal: <b>Learners will understand the scientific method.</b> The teacher's daily objectives state that learners will be able to:</p> <ul style="list-style-type: none"> <li>A. <i>formulate a problem statement</i></li> <li>B. <i>develop a hypothesis</i></li> <li>C. <i>establish a procedure</i></li> <li>D. <i>collect and analyze data</i></li> <li>E. <i>draw conclusions</i></li> </ul> <p><b>Secondary</b> The PLAN goal stated in a seventh-grade civics class is as follows: <b>Learners will understand the system of checks and balances inherent in the United States Federal Government.</b> The teacher develops, among others, the following logical sequence of learner objectives stating that learners will be able to:</p> <ul style="list-style-type: none"> <li>A. <i>name each of the three branches of the Federal Government.</i></li> <li>B. <i>identify and explain the term of office, responsibilities, and powers of the President</i></li> <li>C. <i>identify and explain the composition, terms of office, responsibilities, and powers of each of the houses of Congress</i></li> <li>D. <i>identify the composition, terms of office, responsibilities, and powers of the Supreme Court</i></li> </ul>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.A.4</b> Learning objectives accommodate the range of individual differences among learners.</p>	<p><b>Individual Differences Among Learners:</b></p> <ul style="list-style-type: none"> <li>' All classes are heterogeneous in terms of learner characteristics.</li> <li>' A sufficient variety of learning objectives should be included in the PLAN to accommodate individual differences.</li> <li>' Individual differences among learners include learning styles, multicultural concerns, interests/attitudes, response preferences, physical and intellectual capabilities, and levels of learning efficacy.</li> </ul> <p><b>Learning Objectives</b></p> <ul style="list-style-type: none"> <li>' should be clear statements of specific and observable learner outcomes</li> <li>' are steps through which learners accomplish broader goals</li> </ul>	<p><b>Elementary</b> Learners in fourth-grade class vary greatly in their learning styles. To accommodate these differences, the geometry PLAN incorporates the following learning objectives:</p> <ul style="list-style-type: none"> <li>A. <i>Working in groups, learners will be able to model shapes using their bodies.</i></li> <li>B. <i>Learners will be able to write a list of five objects from their personal experience that represent each of the shapes being studied.</i></li> <li>C. <i>Working in groups, learners will be able to draw shapes according to verbal specifications provided by the teacher.</i></li> <li>D. <i>Using a computer graphics program, learners will be able to draw five predetermined shapes and present drawings to class with a brief explanation detailing characteristics, area, and perimeter.</i></li> </ul> <p><b>Secondary</b> In a tenth-grade English class, the teacher assigns small groups of learners the learning task of analyzing a mythological story. Within groups, the teacher assigns different roles to each learner based on ability level: One learner will identify the characters involved in the story. Using the Internet, another learner will research the region where the story takes place and draw a map of the setting. A third learner examines what meaning the story has in the modern world.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.A.5</b> Assessment information is used to develop and/or modify learning objectives as needed.</p>	<p><b>Assessment Information:</b></p> <ul style="list-style-type: none"> <li>' must be used to plan learning objectives in the PLAN</li> <li>' can be used to develop lesson objectives that accommodate individual differences among learners</li> <li>' may be obtained through the following methods: <ul style="list-style-type: none"> <li>&lt; standardized tests</li> <li>&lt; teacher-made tests</li> <li>&lt; performance checklists</li> <li>&lt; authentic assessments</li> <li>&lt; measures of learning environment perception</li> <li>&lt; non-standardized and informal assessment, including teacher interviews and observations</li> </ul> </li> </ul> <p><b>Learning objectives:</b></p> <ul style="list-style-type: none"> <li>' should be clear statements of specific and observable learner outcomes</li> <li>' are mastered by learners so as to accomplish broader goals</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>2. An interest inventory, given by a second-grade classroom teacher during the first week of school, reveals that a majority of learners choose science as their favorite subject, while mathematics is determined to be these learners' least favorite subject. Therefore, objectives in the PLAN include multiple opportunities to integrate the learning of science with mathematics.</li> <li>3. A fourth-grade teacher gives a beginning of the year writing assignment to assess the range in learners' writing skills, before developing the first PLAN for writing.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. A seventh-grade language arts teacher listens as learners discuss their belief that significantly more males than females have had a great impact on society throughout history. Subsequently, a PLAN is developed which includes a variety of biographies, autobiographies, and other genres in literature featuring women who have made substantial contributions and discoveries.</li> <li>2. Before planning a unit on algebraic graphing of equations, a tenth-grade mathematics teacher administers a pretest from the text in order to assess differences among learners in their levels of understanding.</li> </ol>

**TEACHING AND LEARNING COMPONENT  
I.B Teaching Methods and Learning Tasks**

Activity refers to all that **teachers and learners do in the classroom**. A **method** is a technique or procedure planned for use by a teacher to enhance learning. A **learning task** is an objectives-related activity planned for learners. Teaching and learning activities encompass both teaching methods and learning tasks. Activities planned should be consistent with learning objectives, should be sequenced logically, should accommodate the range of individual differences among learners, and should enhance learning.

**Sample Professional Growth Activity 1**

Comprehension	1.	Identify a learning goal and corresponding objectives consistent with the Sunshine State Standards and the Competency-Based Curriculum for your grade/subject area.
Practical Application	2.	Develop a series of lesson plans designed to meet the objectives and goal(s), making certain that the teaching methods and learning tasks planned are consistent with the indicators in this Teaching and Learning Component.
	3.	Review your ideas with the Colleague Teacher or other member of the <b>PACES</b> Professional Growth Team and modify the plan as necessary.
Assessment	4.	Summarize in writing the reasons for your choice of activities and then discuss these with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1.	Choose any Benchmark(s) in your subject area from the Sunshine State Standards.
	2.	Perform an Internet search (ask colleagues for possible web sites, or use the M-DCPS web site or a list of <b>PACES</b> recommended web sites) for teaching and learning activities that would facilitate meeting the objective for the chosen Benchmark(s).
Practical Application	3.	Identify a set of activities and collaborate with a colleague in developing a short series of lessons that would support the Benchmark(s) and meet the indicators for this Teaching and Learning Component.
Assessment	4.	Meet with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team for assessment and modification.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.B.1</b></p> <hr/> <p><b>Teaching and learning activities are referenced to goals and/or objectives, sequenced logically, and separated into components as needed.</b></p> <hr/> <hr/>	<p><b>Planned activities:</b></p> <ul style="list-style-type: none"> <li>' should include a combination of both teacher-directed and teacher-assisted activities</li> <li>' should provide learners with multiple opportunities to engage in activities that reflect lesson objectives</li> <li>' include a variety of teaching methods and learning tasks such as lecture/discussion, review, drill, skill application, small group discussion, independent learning, cooperative learning, problems-solving, discovery, etc.</li> <li>' should reflect a logical order of teaching and learning</li> </ul> <p><b>Learning goals:</b></p> <ul style="list-style-type: none"> <li>' are broad statements of long-range learning outcomes</li> <li>' reflect outcomes of the PLAN rather than a specific lesson</li> <li>' should be reasonably attainable within the timeframe of the PLAN</li> </ul> <p><b>Learning objectives:</b></p> <ul style="list-style-type: none"> <li>' should be clear statements of specific and observable learner outcomes</li> <li>' are mastered by learners so as to accomplish broader goals</li> </ul> <p><b>Components:</b></p> <ul style="list-style-type: none"> <li>' are parts, steps, or elements of an activity</li> </ul>	<p><b>Elementary</b></p> <p>In a planned unit on voice, a third-grade music teacher includes the following objective on a daily lesson plan: <i>Learners will be able to demonstrate the use of the five basic singing vowels when performing vocal music.</i> As part of the lesson, the following activities are planned:</p> <ol style="list-style-type: none"> <li>A. Teacher explains and demonstrates the five singing vowel sounds.</li> <li>B. Learners practice, individually and in chorus, the five singing vowel sounds.</li> <li>C. Working in groups, learners identify and count the occurrences of the singing vowels in a selected piece of sheet music.</li> <li>D. Learners perform songs that incorporate the five basic singing vowels.</li> </ol> <p><b>Secondary</b></p> <p>In a high school biology lab, the PLAN includes the following objective: <i>Learners will be able to demonstrate how to use a microscope correctly.</i> To accomplish this, the following sequence of activities is planned:</p> <ol style="list-style-type: none"> <li>A. The teacher uses an overhead projector to identify the parts of a microscope.</li> <li>B. The whole class engages in a Q &amp; A about the parts and functions of a microscope.</li> <li>C. The whole class discusses safety and care concerns.</li> <li>D. In small groups, learners practice correct placement of slides and focusing while the teacher monitors.</li> <li>E. The teacher demonstrates and directs discussion on identifying stained substances.</li> <li>F. Working in pairs, learners practice identifying stained substances.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.B.2</b> Activities accommodate the range of individual differences among learners.</p>	<p><b>Planned activities:</b></p> <ul style="list-style-type: none"> <li>' should include a combination of both teacher-directed and teacher-assisted activities</li> <li>' should provide learners with multiple opportunities to engage in activities that reflect lesson objectives</li> <li>' include a variety of teaching methods and learning tasks such as lecture/discussion, review, drill, skill application, small group discussion, independent learning, cooperative learning, problems-solving, discovery, etc.</li> <li>' should reflect a logical order of teaching and learning</li> </ul> <p><b>Individual Differences Among Learners:</b></p> <ul style="list-style-type: none"> <li>' All classes are heterogeneous in terms of learner characteristics.</li> <li>' A sufficient variety of learning objectives should be included in the PLAN to accommodate individual differences.</li> <li>' Individual differences among learners include learning styles, multi-cultural concerns, interests/attitudes, response preferences, physical and intellectual capabilities, and levels of learning efficacy.</li> </ul>	<p><b>Elementary</b> In a fourth-grade Florida history unit, the PLAN includes a range of culminating projects from which learners are allowed to choose. These include:</p> <ul style="list-style-type: none"> <li>' A poster map highlighting places and dates of significant events covered in unit</li> <li>' An Internet search producing a directory of relevant web sites</li> <li>' A group dramatic presentation of a significant event</li> <li>' A written report, utilizing multiple sources, of a significant event</li> </ul> <p><b>Secondary</b> In an eighth-grade language arts unit on poetry, the PLAN includes a variety of questioning activities. Learners are provided a variety of questions: literal, interpretive, analytical about the poems covered. Working in groups, learners are allowed to choose a predetermined number of questions from the range provided and develop a project/presentation of their choosing. Activities leading up to the project/presentation include:</p> <ul style="list-style-type: none"> <li>A. Teacher directs a whole class Q &amp; A and discussion.</li> <li>B. Learners, working in small groups, select, modify, and/or develop questions to guide project/presentation.</li> <li>C. Working within their groups, learners prepare a presentation that may include among other methods the use of: visual aids, recitation, computer presentation software, and music.</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="90 180 155 207"><b>I.B.3</b></p> <hr data-bbox="90 240 554 245"/> <hr data-bbox="90 272 554 277"/> <p data-bbox="90 285 554 378"><b>Activities are planned that enable the development of thinking abilities among learners.</b></p> <hr data-bbox="90 410 554 415"/> <hr data-bbox="90 443 554 448"/>	<p data-bbox="581 180 951 207"><b>Planned activities should:</b></p> <ul style="list-style-type: none"> <li data-bbox="581 248 1226 313">' include both teacher-directed and teacher-assisted activities</li> <li data-bbox="581 354 1226 451">' provide learners with multiple opportunities to engage in activities that reflect lesson objectives</li> <li data-bbox="581 492 1226 686">' include a variety of teaching methods and learning tasks such as: lecture/discussion, review, drill, skill application, small group discussion, independent learning, cooperative learning, problem-solving, discovery, etc.</li> <li data-bbox="581 727 1226 792">' reflect a logical order of teaching and learning</li> </ul> <p data-bbox="581 824 911 852"><b>Thinking skills include:</b></p> <ul style="list-style-type: none"> <li data-bbox="581 893 1226 990">' generating, structuring, restructuring, transferring, and transforming knowledge.</li> <li data-bbox="581 998 1226 1063">' matching, transferring, and analyzing information</li> </ul> <p data-bbox="581 1096 764 1123"><b>Please note:</b></p> <p data-bbox="581 1131 1226 1261">Learning is enhanced when the teacher deliberately plans teaching and learning activities that involve learners in the development of thinking skills.</p>	<p data-bbox="1251 180 1415 207"><b>Elementary</b></p> <p data-bbox="1251 215 2013 516">In a fifth-grade geometry unit, the PLAN includes activities designed to extend and apply previous learning to new contexts. One activity is planned in which the learners are assembled into small groups and directed to find a number of square and rectangular items in the classroom, and to calculate the area of each item. The learners, synthesizing knowledge gathered from previous lessons, select the standard units appropriate for each item to be measured.</p> <p data-bbox="1251 557 1409 584"><b>Secondary</b></p> <p data-bbox="1251 592 2013 690">In an English unit on figurative language in literature , the PLAN includes the following activities designed to increase learners' knowledge of the use of metaphor:</p> <ul style="list-style-type: none"> <li data-bbox="1251 722 2013 787">A. The teacher directs a discussion of the metaphor in literature.</li> <li data-bbox="1251 795 2013 885">B. Working in small groups, learners identify and discuss the meaning of metaphors in two short stories.</li> <li data-bbox="1251 893 2013 958">C. The class, as a whole group, engages in discussion.</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.B.4</b> Supplemental activities are planned as needed.</p>	<p><b>Supplemental Activities should:</b></p> <ul style="list-style-type: none"> <li>' arise from lesson objectives or unit goals</li> <li>' reinforce, enhance, and/or extend learning</li> <li>' be planned for learners who need extra help, who finish early, or are ready to advance</li> <li>' assist specific learners or learner groups to master lesson objectives or to enhance additional learning by maximizing time available for learning</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a second-grade language arts unit on possessive nouns, the PLAN includes supplemental activities, such as identifying possessive nouns from newspapers, cartoons and comic books, or student magazines for early finishers and learners needing additional practice for mastery.</li> <li>2. Learning centers are planned and developed to provide additional learning opportunities and to address the needs of early finishers.</li> </ol> <p><b>Secondary</b></p> <p>In an eleventh-grade journalism class, the PLAN includes the following goal: <b>Learners will create and publish original essays and editorials.</b> Publishing stations are created using classroom computers. Planned activities include allowances for early finishers to work on individual news articles or creative pieces which are then self selected for publication in the school newspaper, various district approved contests, and other such activities.</p>

**TEACHING AND LEARNING COMPONENT  
I.C Time Allocations**

Effective planning reflects a *reasonable match* between the time allocated for learning and each teaching method and learning task. The structure, ordering, and depth of coverage of content knowledge are important considerations in the efficient allocation of time for learning.

**Sample Professional Growth Activity 1**

Comprehension	1. Review Teaching and Learning Component I.C in the <b>PACES Teaching and Learning Professional Growth Manual</b> , and develop a list of points for discussion with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.
Practical Application	2. Develop a short series of lesson plans consistent with requirements for your grade/subject area, and the indicators for this Teaching and Learning Component. 3. Identify the allocated time for each activity and segment of learning contained in the lesson plans. 4. Provide reasons for the time allocated for each activity and the depth and breadth of content included in the lesson plans.
Assessment	5. Discuss these items with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1. Search the M-DCPS web site for a unit plan consistent with the Sunshine State Standards for your grade/subject area.
Practical Application	2. Modify the unit plan as needed to bring it into alignment with the indicators for this <b>PACES</b> Teaching and Learning Component.
Assessment	3. Assess the resulting plans with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.C.1</b> The amount of time to be allocated to each teaching and learning activity is specified.</p>	<p><b>Time allocation/allocated:</b></p> <ol style="list-style-type: none"> <li>1. In planning, consideration is given to the amount of time that is expected for each activity to be implemented.</li> <li>2. Estimating the time to be spent on teaching methods, learning tasks, and organizational activities is a key factor in effective and efficient planning.</li> <li>3. The PLAN should denote the time allocated for each teaching and learning activity and each major organizational activity.</li> </ol>	<p><b>Elementary</b> In a second-grade science unit on classification of animals, the PLAN allocates time as follows during one lesson:</p> <ol style="list-style-type: none"> <li>A. View a video about classifying animals (15 minutes).</li> <li>B. Teacher directs Q &amp; A and discussion identifying animal classes ( 15 minutes).</li> <li>C. Distribute worksheets and provide directions to learners (5 minutes).</li> <li>D. Learners identify animals by class on a worksheet ( 15 minutes).</li> </ol> <p><b>Secondary</b> In an algebra 1 class, the PLAN allocates time as follows during one lesson:</p> <ol style="list-style-type: none"> <li>A. Learners will solve and discuss the problem for the day (10 minutes).</li> <li>B. Teacher lectures and leads discussion (15 minutes).</li> <li>C. Learners work individually on problems as teacher monitors and assists (25 minutes)</li> <li>D. Teacher and learners discuss the home learning activity (10 minutes).</li> </ol> <p>In an eleventh-grade botany unit in science, the PLAN allocates time as follows during one lesson:</p> <ol style="list-style-type: none"> <li>A. View a video about plant classification (15 minutes).</li> <li>B. Teacher directs Q &amp; A and discussion identifying plant classes ( 15 minutes).</li> <li>C. Learners identify plants by class on a worksheet</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.C.2</b> A logical and hierarchical order in which knowledge is structured and will be learned is specified.</p>	<p>4. For each day of the PLAN, the knowledge to be learned should be meaningfully structured for learners.</p> <p>5. The logical order in which knowledge will be learned should be planned.</p> <p>6. When knowledge is structured and logical and when activities are logically sequenced, the efficiency of time management is enhanced.</p>	<p><b>Elementary</b> In a fourth-grade language arts unit on writing a persuasive essay, the PLAN includes the following knowledge structure/logical sequence:</p> <ul style="list-style-type: none"> <li>A. writing a position statement</li> <li>B. planning essays using main topic, sub-topic, and supporting details that support the position statement</li> <li>C. writing topic sentences</li> <li>D. writing introductory paragraphs</li> <li>E. using transitions</li> <li>F. writing supporting paragraphs</li> <li>G. writing concluding paragraphs</li> </ul> <p><b>Secondary</b> In a seventh-grade geometry unit, the PLAN includes the following knowledge structure/learning sequence for identifying and drawing shapes:</p> <ul style="list-style-type: none"> <li>A. points</li> <li>B. lines</li> <li>C. rays</li> <li>D. angles</li> <li>E. two-dimensional shapes</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.C.3</b> The amount of time allocated for each segment of learning is specified.</p>	<p><b>Segments of Learning</b> refers to components of knowledge or performance within a teaching and learning activity.</p>	<p><b>Elementary</b> In a fifth-grade language arts literature unit, the PLAN includes the following time allocation for segments within a lecture/discussion about the elements of literature:</p> <ul style="list-style-type: none"> <li>A. ten minutes for the concept of character</li> <li>B. fifteen minutes for the concept of plot</li> <li>C. five minutes for the concept of setting</li> </ul> <p><b>Secondary</b> In an intermediate, ninth-grade physical education class aerobics unit, the PLAN includes the following time allocation:</p> <ul style="list-style-type: none"> <li>A. five minutes stretching</li> <li>B. five minutes warming up</li> <li>C. forty minutes doing aerobics</li> <li>D. five minutes participating in cool-down exercises</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.C.4</b> Sufficient breadth and depth of content and of teaching and learning activities are included in the plan.</p>	<p><b>Adequacy:</b></p> <ul style="list-style-type: none"> <li>' refers to the amount of content coverage or number of skills necessary for learners to master each objective planned.</li> </ul> <p><b>Breadth of teaching and learning activities:</b></p> <ul style="list-style-type: none"> <li>' refers to the number of activities considered necessary to master a particular goal or objective.</li> </ul> <p><b>Depth of teaching and learning activities:</b></p> <ul style="list-style-type: none"> <li>' refers to the levels of knowledge and understanding that are necessary to master a particular goal or objective.</li> </ul>	<p><b>Elementary</b> Included in a unit plan for elementary learners in art history is a broad overview of artwork from the French Impressionist period. Activities will include a slide show, virtual visits to several art museums via Internet, and a learning center set up in the classroom. Learners follow-up with an in-depth presentation on a French Impressionist artist of their choosing.</p> <p><b>Secondary</b> In the PLAN for an honors world history class, objectives are written which include each of the five fundamental themes of geography ( absolute and relative location, place, human-environment interaction, movement, and regions). After becoming familiar with each of these five themes, learners create posters or songs depicting the influence of geography on a civilization.</p>

**TEACHING AND LEARNING COMPONENT**  
**I.D Resources for Learning**

Effective planning includes selecting resources for learning that accommodate individual differences among learners, increase involvement in learning tasks and engagement in learning, provide practice on learning objectives, and enable the development of thinking abilities. Planning for the use of supplemental and/or differentiated aids and materials further accommodates individual differences among learners. Aids and materials should be included for each day of the PLAN. Teaching methods and learning tasks planned (I.B) can be enhanced by the use of technology resources. **Resources for learning also include human resources.**

**Sample Professional Growth Activity 1**

Comprehension	1.	Select a learning goal consistent with the Sunshine State Standards or the Competency-Based Curriculum.
	2.	Match your textbook resources with updated information on your grade/subject area from the Internet (ask colleagues for possible web-sites, or use the M-DCPS web site or a list of <b>PACES</b> recommended web sites).
	3.	Discuss resource options with your Colleague Teacher or other member of the <b>PACES</b> Professional Growth Team.
Practical Application	4.	Using the indicators in this <b>PACES</b> Teaching and Learning Component as a guide, develop a series of plans incorporating varied resources to meet the learning goal selected in step 1.
Assessment	5.	Discuss and review the plan with your Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1.	Select a learning goal consistent with the Sunshine State Standards or the Competency-Based Curriculum.
	2.	Identify aids and materials suggested in your textbook’s teachers’ guide.
	3.	Consult with a colleague as to the availability of additional available resources.
Practical Application	4.	Develop a series of plans highlighting the utilization of the selected aids and materials in the classroom setting.
Assessment	5.	Self-assess the merits of the resources utilized.
	6.	Assess the resulting plans with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.D.1</b> The planned use of resources for learning is logically sequenced as needed.</p>	<p><b>Aids</b> are the things planned for <b>use by the teacher</b> in methods and procedures to enhance learning.</p> <p><b>Materials</b> are the things planned by the teacher for <b>use by learners</b> in learning tasks to enhance learning.</p> <p>The planned use of aids and materials should provide learners with practice on learning tasks that enhance efficacy for learning and mastery of objectives.</p> <p>Aids and materials should not provide unnecessary, repetitive practice, or more of the same.</p> <p>Individual learners or groups of learners might also be used as a resource for learning.</p>	<p><b>Elementary</b> In a second-grade science PLAN on classifying animals, the following logical sequence for the use of materials is planned by the teacher:</p> <ul style="list-style-type: none"> <li>A. Books, posters, and chalkboard are planned for use during the introduction.</li> <li>B. A video on animal classification is planned for viewing during the course of the unit.</li> <li>C. A learner or several learners are designated to access computer-generated pictures of animals for other learners to enhance.</li> <li>D. An arts supply table stocked with materials is planned for a concluding activity in which learners will create a collage depicting types of movement and body coverings of birds, fish, reptiles, mammals, and amphibians.</li> </ul> <p><b>Secondary</b> In a journalism class, the PLAN includes the following logical sequence of using materials:</p> <ul style="list-style-type: none"> <li>A. the chalkboard for displaying journal prompts</li> <li>B. learner folders for keeping the journals</li> <li>C. computers for publishing learner journal responses as editorials</li> <li>D. an LCD panel and overhead projector for learners to display samples of their writing during whole class revisions</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.D.2</b> Aids and materials accommodate the range of individual differences among learners.</p>	<p><b>Aids</b> are the things planned for <b>use by the teacher</b> in methods and procedures to enhance learning.</p> <p><b>Materials</b> are the things planned by the teacher for <b>use by learners</b> in learning tasks to enhance learning.</p> <p>The planned use of a variety of aids and materials should accommodate the range of individual differences among learners.</p> <p>Planning for a variety of aids and materials means including a sufficient quantity, given the number and complexity of learning objectives and activities.</p>	<p><b>Elementary</b> In a third-grade unit on Black history, the PLAN includes a visit to the media center. Use and selection of a vast array of related materials including picture books, trade books, novels, maps, CD-Rom, and artwork is planned with aid from the media specialist.</p> <p><b>Secondary</b> In a business systems technology class, the PLAN accommodates learner differences by including the use of a range of computer software for learners at all levels of computer literacy. Materials range from touch typing for beginners, to programming and web page designing for the more advanced learners. To aid learning, the teacher demonstrates the particulars of web page design.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.D.3</b> Resources for learning enable the development of thinking abilities among learners.</p>	<p><b>Resources for learning may be:</b></p> <ul style="list-style-type: none"> <li>' <b>Aids</b> are the things planned for <b>use by the teacher</b> in methods and procedures to enhance learning.</li> </ul> <p style="text-align: center;">and/or</p> <ul style="list-style-type: none"> <li>' <b>Materials</b> are the things planned by the teacher for <b>use by learners</b> in learning tasks to enhance learning.</li> </ul> <p>Resources for learning include human resources. Resources for learning should provide opportunities for learners to extend cognitive processes beyond simply receiving information and facts.</p> <p>The enabling of learner thinking is enhanced by planning for and using aids and materials that require learners to <b>analyze, synthesize, and evaluate information, develop critical questions, think creatively, and apply what has been learned to other contexts.</b></p>	<p><b>Elementary</b> In a first-grade unit on the story <i>Stone Soup</i>, the PLAN includes the use of: books, ingredients and cooking utensils as props, and a story map handout learners would use to log the sequence of ingredients. Learners would then use blank story maps and props to create new soups.</p> <p><b>Secondary</b> In a seventh-grade unit on mythology, the PLAN include the use by learners of books, posters, maps, time lines, and a Venn diagram to compare and contrast the myths, legends, values, and beliefs of three different cultures.</p>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.D.4</b> Supplemental <b>and/or</b> differentiated resources for learning are planned as needed.</p>	<p><b>Resources for learning may be:</b></p> <ul style="list-style-type: none"> <li>' <b>Aids</b> - the things planned for <b>use by the teacher</b> in methods and procedures to enhance learning.</li> </ul> <p style="text-align: center;">and/or</p> <ul style="list-style-type: none"> <li>' <b>Materials</b> - the things planned by the teacher for <b>use by learners</b> in learning tasks to enhance learning.</li> </ul> <p>Resources for learning include human resources.</p> <p>A standard aid or material is <b>differentiated</b> when individual learners have different learning expectations.</p> <p>The PLAN should include supplemental and/or differentiated aids and materials for each planned lesson.</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a second-grade class, the PLAN includes provisions to utilize peer tutoring.</li> <li>2. In a first grade language arts unit, the PLAN provides for using the newspaper in pre-reading for readiness as follows: <ul style="list-style-type: none"> <li>' one group finds and circles the letter "B"</li> <li>' another group of learners searches for words that contain the consonant blend "bl"</li> <li>' a third group scans to find and underline basic sight words</li> </ul> </li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a high school biology class, the PLAN includes inviting members of the medical community to meet on a monthly basis with learners to provide supplemental knowledge on biology and careers in medicine.</li> <li>2. In a ceramics class pre-Columbian art unit, the PLAN includes the following objective: <i>Learners will be able to create a ceramic vase.</i> As a supplemental resource, the teacher plans to display various reproductions and posters of pre-Columbian artifacts to use as models.</li> </ol>

**TEACHING AND LEARNING COMPONENT  
I.E Home Learning**

Home-learning tasks provide learners with **opportunities to practice and extend learning** and **to prepare** for the acquisition of new knowledge and skills. Learning is enhanced when teachers differentiate home learning tasks to accommodate individual differences among learners and when timely and diagnostic feedback is provided.

**Sample Professional Growth Activity 1**

Comprehension	1.	Review Teaching and Learning Component I.E in the <b><i>PACES Teaching and Learning Professional Growth Manual</i></b> .
	2.	In collaboration with your Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team, differentiate between home learning activities which provide more practice in a concept as opposed to home learning activities that extend learning of a concept. Develop examples of home-learning activities that accommodate the range of individual differences among your learners.
Practical Application	3.	For an upcoming learning goal, develop a series of home-learning assignments that are consistent with Teaching and Learning Component I.E in the <b>PACES Teaching and Learning Assessment Manual</b> .
Assessment	4.	Assess resulting home learning assignments with your Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1.	Research the effective development and monitoring of home learning, (utilize professional journals, the Internet, and respected colleagues).
	2.	Refer to the <b>PACES Teaching and Learning Assessment Manual</b> Domain I.E for additional information.
Practical Application	3.	Incorporate methods derived from steps 1 and 2 in designing a series of lesson plans for an upcoming learning goal.
Assessment	4.	In writing, describe your experiences in completing steps 1 through 3 and assess their effectiveness in improving the quality of teaching and learning in your classroom.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.E.1</b> A sufficient number of home learning opportunities that enhance learning are planned.</p>	<p><b>Home-Learning</b> tasks provide learners with opportunities to:</p> <p><b>Practice</b> – Learners are provided with opportunities to reinforce newly acquired learning.</p> <p><b>Preparation</b> – Learners obtain knowledge necessary to establish prerequisites for new learning.</p> <p><b>Extension/Application</b> – Learners go beyond completed learning tasks and extend newly acquired knowledge.</p> <p><b>Enhancing/Thinking Skills</b> – Learners enhance their abilities to think.</p> <p><b>Sufficiency</b> of opportunities includes consideration of the number and complexity of learning objectives and unit goals and learner characteristics, such as the range of developmental and ability levels and the acquisition of prior knowledge.</p> <p>Assignments should be relatively brief and provide practice across learning objectives.</p>	<p><b>Elementary</b> As part of a fourth-grade Florida geography unit on bodies of water, the PLAN includes, <b>among others</b>, the following home-learning assignments for week one of the two week unit:</p> <ol style="list-style-type: none"> <li>1. In preparation for the unit, learners read the chapter on Florida bodies of water and answer the questions at the end.</li> <li>2. In order to provide practice, after an introductory lesson, learners label and briefly describe five of the various bodies of water in and around Florida.</li> <li>3. In order to extend and apply knowledge after watching a film about Lake Okeechobee, learners write a short fictional story about a camping trip to the lake. Stories should accurately reflect the climate and the wildlife of Lake Okeechobee.</li> </ol> <p><b>Secondary</b> As part of an eighth-grade language arts unit on <u>The Diary of Anne Frank</u>, the PLAN includes, <b>among others</b>, the following home-learning assignments:</p> <ol style="list-style-type: none"> <li>A. In preparation for reading, learners write two ten item lists about Anne Frank and/or the Holocaust: <ul style="list-style-type: none"> <li>i Things I know</li> <li>ii Things I want to know</li> </ul> </li> <li>B. Throughout the unit, learners maintain an elements of literature chart describing characters and setting and listing important plot points.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
I.E.1 continued		C. In order to enhance the development of thinking skills, toward the end of the book, learners are asked to describe each character using two adjectives, and to provide an explanation for why these adjectives are appropriate.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.E.2</b> Home learning opportunities accommodate the range of individual differences among learners.</p>	<p><b>Home Learning</b> tasks provide learners with opportunities to:</p> <p><b>Practice</b> – Learners are provided with opportunities to reinforce newly acquired learning.</p> <p><b>Preparation</b> – Learners obtain knowledge necessary to establish prerequisites for new learning.</p> <p><b>Extension/Application</b> – Learners go beyond completed learning tasks and extend newly acquired knowledge.</p> <p><b>Enhancing/Thinking Skills</b> – Learners enhance their abilities to think.</p> <p>Because developmental levels, ability levels, and efficacy needs vary among learners in a class, home-learning opportunities should be differentiated and/or varied to accommodate individual differences among learners.</p> <p>When home learning requiring the use of home resources is assigned (e.g., special books, materials, and equipment), the teacher should make certain that these resources are reasonably accessible and available to learners.</p>	<p><b>Elementary</b> In a fourth-grade unit on American biographies, it is planned that learners will select one person covered in class as the focus for a home-learning project which may take any of the following forms as chosen by the learner:</p> <ul style="list-style-type: none"> <li>' a soliloquy in first person from the perspective of the chosen person</li> <li>' a diorama depicting a particular event in the chosen person's life</li> <li>' a short story detailing a particular event in the chosen person's life</li> <li>' a poem</li> </ul> <p><b>Secondary</b> During a seventh-grade science unit on insects, the PLAN includes the following options for a home-learning assignment:</p> <ul style="list-style-type: none"> <li>' the names and detailed descriptions of five insects found locally</li> <li>' a detailed drawing of a particular insect with labels indicating anatomical features</li> <li>' a behavioral study of an insect <i>in the wild</i></li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="90 183 153 212"><b>I.E.3</b></p> <hr data-bbox="90 240 552 243"/> <hr data-bbox="90 272 552 276"/> <p data-bbox="90 285 552 415"><b>Activities for monitoring home learning and for providing feedback about learning are planned.</b></p> <hr data-bbox="90 443 552 446"/> <hr data-bbox="90 479 552 482"/>	<p data-bbox="581 183 1230 383">Home-learning assignments can be used as an opportunity to provide feedback that reinforces learning, builds learning efficacy, informs learners and the teacher about progress in learning, and that encourages the acquisition of new knowledge.</p> <p data-bbox="581 418 1230 516">The PLAN should specify times and activities for providing feedback to students on their home learning.</p> <p data-bbox="581 552 1230 618">Planned feedback should be reasonably comprehensive, diagnostic, and timely.</p>	<p data-bbox="1251 183 1577 212"><b>Elementary/Secondary</b></p> <p data-bbox="1251 215 2011 282">A PLAN includes the following activities to monitor home learning:</p> <ul data-bbox="1251 318 2011 586" style="list-style-type: none"> <li data-bbox="1251 318 2011 480">' A weekly schedule of home learning assignments is kept by learners in notebooks. The notebooks are collected on Fridays. The teacher marks the notebooks and provides feedback to each learner.</li> <li data-bbox="1251 516 2011 586">' A home-learning review activity is planned for each day following a home learning assignment.</li> </ul>

**TEACHING AND LEARNING COMPONENT**  
**I.F Assessment and Evaluation**

Formal and informal assessment and evaluation procedures provide the teacher and learners with ongoing information for improvement and growth and evaluative judgments relative to standards. To accommodate learner differences and a variety of cognitive and/or performance levels, formal and informal assessment and evaluation procedures should contain a variety of procedures and items. The PLAN should specify times and activities for communicating performance expectations and for providing diagnostic feedback to learners.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Select one or more learning objective(s) consistent with the Sunshine State Standards or the Competency-Based Curriculum for your grade/subject area.</li> <li>2. Obtain and review samples of formal assessment instruments appropriate to your selected objective(s) from your department or grade-level chairperson.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Using the formal assessment instruments provided by your department or grade-level chairperson, resources provided by the text publishers, and the <b>PACES Teaching and Learning Professional Growth Manual</b> develop both formative and a summative assessment instruments to measure learner progress toward mastery of the learning objective(s).</li> <li>4. Develop a series of lesson plans for the chosen objective(s) that provide for communicating performance expectations and diagnostic feedback to learners and parents as appropriate.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. In collaboration with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team, assess the plans and assessment instruments.</li> </ol>

**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"> <li>1. Select one or more learning objective(s) consistent with the Sunshine State Standards or the Competency-Based Curriculum for your grade/subject area.</li> <li>2. Research assessment instruments and procedures as well as different cognitive and performance levels, (utilize professional journals, the Internet, and skilled colleagues).</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Develop both formative and a summative assessment instruments to measure learner progress toward mastery of the learning objective(s).</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>4. In collaboration with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team, assess the appropriateness of the assessment instruments.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="90 183 149 212">I.F.1</p> <hr data-bbox="90 240 554 243"/> <hr data-bbox="90 272 554 276"/> <p data-bbox="90 285 554 448"><b>Formal and/or informal assessment and evaluation procedures that measure learning goals and/or objective(s) are planned.</b></p> <hr data-bbox="90 480 554 483"/> <hr data-bbox="90 516 554 519"/>	<p data-bbox="581 183 1230 345"><b>Formal Assessment and Evaluation Procedures</b> refer to techniques deliberately planned for use by the teacher to determine whether or not learners are progressing toward mastery of learning goals and/or objectives.</p> <p data-bbox="581 386 1230 448"><b>Formal Assessment</b> and evaluation procedures are typically grade-related.</p> <p data-bbox="581 488 1230 651"><b>Informal assessment</b> procedures are methods used by the teacher and/or learners during the process of teaching and learning to see if learning is occurring and if teaching is promoting learning (VI.B).</p> <p data-bbox="581 691 1230 886"><b>Formal assessment and evaluation procedures include:</b> quizzes, graded worksheets, performance checks, tests, home-learning assignments, and portfolios. Learners might also be involved in assessing and evaluating their own learning.</p> <p data-bbox="581 927 810 956"><b>Learning goals:</b></p> <ul data-bbox="581 964 1230 1159" style="list-style-type: none"> <li>' are broad statements of long-range learning outcomes</li> <li>' reflect outcomes of the PLAN rather than a specific lesson</li> <li>' should be reasonably attainable within the timeframe of the PLAN</li> </ul> <p data-bbox="581 1200 879 1229"><b>Learning objectives:</b></p> <ul data-bbox="581 1237 1230 1365" style="list-style-type: none"> <li>' should be clear statements of specific and observable learner outcomes</li> <li>' are mastered by learners so as to accomplish broader goals</li> </ul>	<p data-bbox="1251 183 1577 212"><b>Elementary/Secondary</b></p> <p data-bbox="1251 253 2007 347">The PLAN includes weekly graded worksheets, biweekly quizzes, and tests and portfolio evaluations at the end of each unit.</p>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="90 180 153 207"><b>I.F.2</b></p> <hr data-bbox="90 240 552 243"/> <hr data-bbox="90 272 552 276"/> <p data-bbox="90 284 552 414"><b>Formal and/or informal assessments and evaluations reflect a variety of procedures and items.</b></p> <hr data-bbox="90 446 552 449"/> <hr data-bbox="90 482 552 485"/>	<p data-bbox="581 180 1079 207"><b>Formal Assessment and Evaluation</b></p> <p data-bbox="581 215 1157 381"><b>Procedures</b> refer to techniques deliberately planned for use by the teacher to determine whether or not learners are progressing toward mastery of learning goals and/or objectives.</p> <p data-bbox="581 418 1079 483"><b>Formal Assessment</b> and evaluation procedures are typically grade-related.</p> <p data-bbox="581 521 1226 686"><b>Informal assessment</b> procedures are methods used by the teacher and/or learners during the process of teaching and learning to see if learning is occurring and if teaching is promoting learning (VI.B).</p>	<p data-bbox="1251 180 1633 207"><b>Elementary and Secondary</b></p> <p data-bbox="1251 215 2011 280">During a unit of study on the Civil War, the PLAN includes:</p> <p data-bbox="1251 289 1524 316">two test procedures:</p> <ul style="list-style-type: none"> <li data-bbox="1251 354 2011 418">A. a weekly paper and pencil test consisting of multiple choice and fill-in-the-blank items</li> <li data-bbox="1251 456 2011 521">B. an end-of-unit test consisting of short answer questions.</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.F.3</b></p> <p>Formal and/or informal assessment and evaluation procedures accommodate the range of individual differences among learners.</p>	<p><b>Formal Assessment and Evaluation Procedures</b> refer to techniques deliberately planned for use by the teacher to determine whether or not learners are progressing toward mastery of learning goals and/or objectives.</p> <p><b>Formal Assessment</b> and evaluation procedures are typically grade-related.</p> <p><b>Informal assessment</b> procedures are methods used by the teacher and/or learners during the process of teaching and learning to see if learning is occurring and if teaching is promoting learning (VI.B).</p> <p><b>Formal assessment and evaluation procedures include:</b></p> <ul style="list-style-type: none"> <li>' quizzes</li> <li>' graded worksheets</li> <li>' performance checks</li> <li>' tests</li> <li>' home-learning assignments</li> <li>' portfolios</li> </ul> <p><b>Different types of test items include:</b></p> <ul style="list-style-type: none"> <li>' multiple choice</li> <li>' fill-in-the-blank</li> <li>' matching</li> </ul>	<p><b>Elementary/Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a third-grade mathematics class, the PLAN specifies that the teacher will read aloud the word problem section of a mathematics test as learners follow. This procedure enhances the understanding of learners with reading difficulties.</li> <li>2. To allow for individual differences among learners, a third-grade PLAN for a unit on plant growth cycles allows for the extension of time allotted for completing an exam.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.F.4</b>            Formal and/or informal assessment and/or evaluation procedures include a variety of cognitive <b>and/or</b> performance levels, as appropriate.</p>	<p><b>Formal Assessment and Evaluation Procedures</b> refer to techniques deliberately planned for use by the teacher to determine whether or not learners are progressing toward mastery of learning goals and/or objectives.</p> <p><b>Formal Assessment</b> and evaluation procedures are typically grade-related.</p> <p><b>Informal assessment</b> procedures are methods used by the teacher and/or learners during the process of teaching and learning to see if learning is occurring and if teaching is promoting learning (VI.B).</p> <p><b>Formal assessment and evaluation procedures include:</b></p> <ul style="list-style-type: none"> <li>' quizzes</li> <li>' graded worksheets</li> <li>' performance checks</li> <li>' tests</li> <li>' home-learning assignments</li> <li>' portfolios</li> </ul> <p>Although some learners may need alternative means to demonstrate progress toward and mastery of learning objectives, different formal assessment and evaluation procedures do not have to be planned for each learner.</p>	<p><b>Elementary</b>            In a second-grade science unit on weather, the PLAN includes a test containing items that address varied cognitive levels. These include: simple recall, definitions of terms, and essay. Bloom's Taxonomy is used to develop items at several levels.</p> <p><b>Secondary</b>            In an eighth-grade social studies unit on the American Revolution, the PLAN includes a series of quizzes containing assessment items addressing a variety of cognitive levels including:</p> <ul style="list-style-type: none"> <li>&lt; Knowledge - fill-in-the-blank with names, dates and locations</li> <li>&lt; Analysis - essay questions asking learners to arrange events so as to demonstrate a cause and effect relationship</li> <li>&lt; Evaluation - essay questions asking learners to evaluate the actions of a particular figure from the unit</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.F.5</b> Communication of performance standards for formal assessments and evaluations to learners is planned.</p>	<p><b>Formal Assessment and Evaluation Procedures</b> refer to techniques deliberately planned for use by the teacher to determine whether or not learners are progressing toward mastery of learning goals and/or objectives.</p> <p><b>Formal Assessment</b> and evaluation procedures are typically grade-related.</p> <p><b>Informal assessment</b> procedures are methods used by the teacher and/or learners during the process of teaching and learning to see if learning is occurring and if teaching is promoting learning (VI.B).</p> <p><b>Formal assessment and evaluation procedures include:</b></p> <ul style="list-style-type: none"> <li>' quizzes</li> <li>' graded worksheets</li> <li>' performance checks</li> <li>' tests</li> <li>' home-learning assignments</li> <li>' portfolios</li> </ul> <p><b>Cognitive and/or performance levels:</b></p> <ul style="list-style-type: none"> <li>' extend from simple to complex levels of thinking</li> <li>' include comprehension, analysis, synthesis, problem solving, application, and evaluation</li> <li>' reflect the range of learner characteristics and cognitive levels</li> </ul>	<p><b>Elementary</b> At the beginning of a third-grade unit on the environment, the PLAN includes a performance check list to be distributed to the learners at the beginning of the unit. The checklist specifies the required activities to be completed and how these will be graded.</p> <p><b>Secondary</b> Included in the PLAN for a twelfth-grade English unit on Puritan authors are specific time allocations to discuss the standards by which learners' performance will be evaluated. This discussion will include the types of assessment procedures and the number of assessment items included in each of these procedures.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>I.F.6</b> Feedback about formal assessment and evaluation results is provided to learners and to parents as appropriate.</p>	<p><b>Formal Assessment and Evaluation Procedures</b> refer to techniques deliberately planned for use by the teacher to determine whether or not learners are progressing toward mastery of learning goals and/or objectives.</p> <p><b>Formal Assessment</b> and evaluation procedures are typically grade-related.</p> <p><b>Informal assessment</b> procedures are methods used by the teacher and/or learners during the process of teaching and learning to see if learning is occurring and if teaching is promoting learning (VI.B).</p> <p><b>Formal assessment and evaluation procedures include:</b></p> <ul style="list-style-type: none"> <li>' quizzes</li> <li>' graded worksheets</li> <li>' performance checks</li> <li>' tests</li> <li>' home-learning assignments</li> <li>' portfolios</li> </ul> <p>Learners should always be aware of the standards and expectations by which their performance will be judged. This includes communication of types of assessment procedures and items to learners.</p>	<p><b>Elementary</b></p> <p>In a first-grade unit about the seasons, the PLAN includes time allocations for providing feedback about learners' performance on quizzes and an end-of-unit test on the day immediately following each quiz or test. A plan to develop individual progress reports, to be sent home at the end of the unit, is also included in the PLAN.</p> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a seventh-grade social studies unit, the PLAN includes the following activity: learners will research and role play a person deemed by the learner as important in history. A checklist is created by the teacher to be used at the conclusion of the learners' presentations to guide feedback to the student and to be sent home for signature by the parents.</li> <li>2. In a tenth-grade Spanish I class, the PLAN includes a time allocation for discussing unit test results with learners two days after the test.</li> </ol>

## **DOMAIN II: MANAGING THE LEARNING ENVIRONMENT**

Effective **classroom** and **behavior management** is a necessary element of effective teaching and learning. Clearly communicated and well-established **behavioral expectations** with fair and consistent **consequences** facilitate effective and efficient monitoring and maintenance of acceptable learner behavior. Learner active **engagement in learning tasks** is a strong correlate of learner achievement. Engagement is facilitated by variety in teaching and learning activities and is enhanced by redirecting and revisiting learners who are not engaged in learning. Appropriate learning activities can be provided for early finishers to maximize learning time and learner engagement in learning tasks. **Time for learning** is further maximized by initiating teaching and learning activities promptly, implementing transitions without delays, efficiently handling routines for learning, and avoiding undesirable digressions from topics and/or learning activities.

### **TEACHING AND LEARNING COMPONENTS**

- II.A Time Management
- II.B Learning Routines
- II.C Learner Engagement
- II.D Managing Engagement in Learning
- II.E Monitoring and Maintaining Learner Behavior

**TEACHING AND LEARNING COMPONENT  
II.A TIME MANAGEMENT**

<p>Teaching and learning activities reasonably reflect allocated time, begin promptly, proceed efficiently with smooth transitions and no undesirable digressions, and allow for maximum opportunities for learner engagement in learning. <b>Activity</b> refers to all things teachers and learners do in the classroom.</p>	
<p><b>Sample Professional Growth Activity 1</b></p>	
Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.A of the <i><b>PACES Teaching and Learning Professional Growth Manual</b></i> and this <i><b>Teacher Guide to PACES</b></i>.</li> <li>2. Identify (through colleague or administrator recommendation) and observe an experienced colleague who has effective time management strategies.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Based on review of <i><b>PACES</b></i> materials and observation of the colleague, develop a detailed one-day lesson plan incorporating effective time management strategies.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>4. Engage in written self-assessment of successful and unsuccessful time management strategies.</li> </ol>
<p><b>Sample Professional Growth Activity 2</b></p>	
Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.A of the <i><b>PACES Teaching and Learning Professional Growth Manual</b></i> and this <i><b>Teacher Guide to PACES</b></i>.</li> <li>2. Collaborating with your Colleague Teacher and/or other member(s) of the <i><b>PACES</b></i> Professional Growth Team, develop a detailed one-day lesson plan including a timeline estimating the amount of time it will take to implement and complete each activity.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Implement the plan and jot down the actual time it takes to complete each activity.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>4. Create a final timeline comparing it to the estimated timeline and analyze in writing any discrepancies. Determine the factors that allowed for more or less time than that which was estimated.</li> <li>5. Collaborating with your Colleague Teacher and/or other member(s) of the Professional Growth Team, interpret the timelines in writing.</li> </ol>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="109 180 193 207"><b>II. A. 1</b></p> <hr data-bbox="109 240 556 243"/> <hr data-bbox="109 272 556 276"/> <p data-bbox="109 284 478 311"><b>Learning begins promptly.</b></p> <hr data-bbox="109 344 556 347"/> <hr data-bbox="109 376 556 380"/>	<p data-bbox="583 180 863 207"><b>Learning Activities:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 248 1226 313">' refer to all things teachers and learners do in the classroom</li> <li data-bbox="583 354 1226 483">' include teaching methods (what the teacher does to enhance learning) and learning tasks (objectives-related activities learners do)</li> <li data-bbox="583 524 1226 654">' should begin with little time spent on organizational activities that have nothing to do with learning (i.e., passing out supplies, roll taking, etc.)</li> </ul>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <ol style="list-style-type: none"> <li data-bbox="1251 215 1990 378">1. In a third-grade classroom, learners returning from lunch quickly retrieve their reading material and engage in a brief independent reading activity for the purpose of identifying the main idea of the selected passage.</li> <li data-bbox="1251 418 1990 581">2. Learners in a fourth-grade classroom, at the beginning of a class, take a position at a computer station and follow preselected math programs that expand upon the current math content.</li> </ol> <p data-bbox="1251 621 1409 649"><b>Secondary</b></p> <p data-bbox="1251 657 1990 852">In a tenth-grade social studies class, learners entering the classroom immediately address in writing two starter questions written on the classroom board. The first question reviews content from the previous day's lesson while the second question leads into the lesson of the day.</p> <p data-bbox="1251 925 1318 953"><b>New</b></p> <p data-bbox="1251 993 1409 1021"><b>Secondary</b></p> <p data-bbox="1251 1029 1990 1192">Upon entering a sixth-grade mathematics class, learners move quickly to their seats, place home learning on their desks, and begin solving warm-up problems on the board. The teacher reviews the problems and the home learning.</p>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>II. A. 2</b> Expectations for maintaining and completing timelines for learning tasks are clearly understood by learners.</p>	<p><b>Timelines</b> refer to the time allotted for the completion of learning tasks</p> <p><b>Learning Tasks</b> are objectives-related activities learners do</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a second-grade classroom, learners review with the teacher the beginning and ending times which are allocated for the completion of their activity. In addition to noting and discussing the starting and stopping times which the teacher has displayed on the board, learners use their own small plastic clocks to model the timeline for the lesson as the teacher demonstrates using a larger visual aid of a clock.</li> <li>2. During a third-grade science quiz, learners periodically check the timer situated in the front of the classroom to ascertain the minutes remaining for the completion of their quiz.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a seventh-grade science class, during a cooperative learning assignment, a learner in each group keeps time and informs other learners of the time remaining for their assignment.</li> <li>2. In a tenth-grade algebra class, after explaining the allocated time for a problem-solving activity, a learner records the beginning time and ending time for the activity on the chalkboard. Learners consult the clock occasionally to determine the time remaining for the completion of their activity.</li> <li>3. In a twelfth-grade French class, learners restate the goals for an independent project. Learners develop personal timelines explaining how they intend to complete various activities to accomplish goals.</li> </ol>

<b>II.A.2. Continued</b>		<b><i>New</i></b> <b>Elementary and Secondary</b> Learners working on a science project follow the time allotment given by the teacher in order to pace the activities. In a whole group, the teacher discusses learner progress in developing the hypothesis, and elicits status of the activities in order to ensure the tasks and timelines are understood by the learners
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="107 180 195 207"><b>II. A. 3</b></p> <hr/> <p data-bbox="107 282 558 380"><b>There are no inefficient delays in organizational or teaching and learning activities.</b></p> <hr/>	<p data-bbox="581 180 1230 245"><b>Inefficient delays</b> are situations that waste time for learning and may result from the following:</p> <ul style="list-style-type: none"> <li data-bbox="581 282 1230 415">' Organizational activities - necessary routines that are not related to teaching and learning (collection of money, school announcements, etc.)</li> <li data-bbox="581 453 1230 618">' Undesirable digressions - significant, unplanned departures from teaching and learning topics or activities. Not all digressions are undesirable; some may be teachable moments.</li> <li data-bbox="581 656 1230 753">' Interruptions - breaks in the continuity of the lesson that are beyond the teacher's control</li> <li data-bbox="581 790 1230 888">' Lengthy clarifications - elaborate explanations for one or a few learners that do not benefit the group as a whole</li> <li data-bbox="581 925 1230 1023">' Inefficient transitions - changes from one teaching and learning activity to another that waste time</li> </ul>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <ol style="list-style-type: none"> <li data-bbox="1251 215 2011 415">1. During a lesson on dinosaurs, while discussing <i>Tyrannosaurus rex</i>, a learner identifies the word <i>Rex</i> with the family's pet dog that bears the same name. Before the class becomes distracted, the teacher acknowledges the comment and moves learners back to the lesson.</li> <li data-bbox="1251 453 2011 618">2. While learners are on -task, a parent arrives to the classroom without an appointment. Learners remain on-task while the teacher requests that the parent make an appointment to meet at a more convenient time.</li> <li data-bbox="1251 656 2011 786">3. After a math lecture/discussion on double digit addition, learners commence working independently while the teacher assists those who need further clarification.</li> <li data-bbox="1251 823 2011 920">4. Learners transition from reading to math efficiently by returning reading materials and, at the same time, retrieving math materials.</li> </ol>

<p><b>II.A.3</b>      <b>Continued</b></p>		<p><b>Secondary</b>  While learners are working, announcements from the intercom begin. Learners listen quietly and resume working at the end of the message.</p> <ol style="list-style-type: none"> <li>1.      During a foreign language vocabulary lesson, one of the words being discussed is <i>roller coaster</i>. A learner reflects at length about an experience in an amusement park, encouraging others to do the same. After acknowledging two or three comments, the teacher redirects the class back to the vocabulary lesson.</li> <li>2.      In a social studies lesson on longitude and latitude, some learners quickly grasp the concept while a few do not. As the class proceeds with a geography hunt, some learners who understand the concept volunteer to assist those who do not.</li> <li>3.      In a science class where the teacher is making a transition from lecture to cooperative learning group activities, learners quickly move to previously designated groups by the count of five.</li> </ol> <p><b>New  Elementary and Secondary</b>  Learners pick up workbooks from the front desk of each row and deposit home learning in a basket. They identify page assignments on the board and begin to work as the teacher takes attendance and collects home learning. They deposit the home-learning assignment in a basket next to the stack of workbooks.</p>
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>II. A. 4</b> Learners engage in supplemental learning tasks ** <b>OR</b>** none are needed to fill the time allocated for learning.</p>	<p><b>Supplemental learning tasks</b> are activities that learners do to extend and enhance learning and should not be “busy work” or more of the same.</p>	<p><b>Elementary</b> In a third-grade class, learners who finish assigned learning tasks early proceed to select activities related to current units of study such as writing a reflective piece, engaging in silent reading, or choosing to work in a learning center. The teacher monitors to ensure that all learners are engaged in relevant learning tasks.</p> <p><b>New</b></p> <p><b>Elementary</b> In a first-grade language arts class, learners work on a lesson to identify nouns. The teacher has two class assignments for learners to work on individually. Learners who finish ahead of time immediately move to a center where they use magazines to cut out pictures of nouns and paste them according to person, place, or thing. The teacher displays the completed papers as a review for the class.</p> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In an eighth-grade social studies class studying a unit on the Holocaust, learners write an essay on being a teenager at Auschwitz. Early finishers move to a reading center that includes poetry, photo books, and CD-ROMS on the Holocaust. Learners select one of the above to support the essay.</li> <li>2. In a tenth-grade algebra class, learners work on the assigned problems and then, upon completion, choose from a menu of other challenging algebra problems.</li> </ol>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>II. A. 5</b> Learning activities are implemented in a time efficient manner.</p>	<p><b>Learning Activities:</b></p> <ul style="list-style-type: none"> <li>' refer to all things teachers and learners do in the classroom</li> <li>' include teaching methods (what the teacher does to enhance learning) and learning tasks (objectives-related activities learners do)</li> </ul> <p><b>Time Efficient Manner</b> refers to the wise use of available time by learners and/or the teacher.</p>	<p><b>Elementary</b> In a second-grade class, during a two hour reading block, learners have ample time to be involved in all the planned learning activities: pre-reading (e.g., prior knowledge, predicting, etc.), working with words (e.g., vocabulary, grammar, etc.), guided reading (e.g. small groups, trade books), and writing activities (e.g., topic sentence, journals).</p> <p><b>New</b></p> <p><b>Elementary</b> In a kindergarten class, learners are engaged in the opening routine for approximately 15 minutes everyday. During this time, the learners orally review the calendar, numbers, alphabet letter sounds, and word families. They copy the date on their worksheets and hold up the sheets for the teacher to scan. Closure is brought by the teacher when reading a short story excerpt using the word families.</p> <p><b>Secondary</b> In a seventh-grade physical education class focusing on track events, learners have ample time to review rules of the relay race, do stretches, and run a lap as warm up activities. Sufficient time is allotted for every learner to participate in at least one race. Adequate time is allowed for learner review and reflection.</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>II.A.6</b> Learning activities continue until the end of the allocated time period.</p>	<p><b>Learning Activities:</b></p> <ul style="list-style-type: none"> <li>' refer to all things teachers and learners do in the classroom</li> <li>' include teaching methods (what the teacher does to enhance learning) and learning tasks (objectives-related activities learners do)</li> </ul>	<p><b>Elementary</b> After the lesson's planned activities have concluded, and with five minutes remaining, the teacher and learners in a fourth-grade language arts class participate in a class discussion reviewing the lesson's key concept of mood in relation to stories they had read previously.</p> <p><b>Secondary</b> At the end of a tenth-grade biology lesson, the teacher and the learners spend the final five minutes of the period sharing questions that might be found on an upcoming exam.</p> <p><b>New</b></p> <p><b>Elementary and Secondary</b> With 10 minutes remaining of class time, the teacher reviews the home-learning assignment. As a wrap-up activity, learners are solicited to share what they have learned from the previous lesson's activity.</p>

**TEACHING AND LEARNING COMPONENT  
II.B LEARNING ROUTINES**

<p><b>Learning routines</b> are organizational activities which are necessary for efficient and effective teaching and learning. These routines include procedural directions necessary to implement teaching and learning activities. Effective teachers maximize learning time by efficiently attending to learning routines. <b>All learning routines are organizational activities. However, not all organizational activities are learning routines.</b></p>	
<p><b>Sample Professional Growth Activity 1</b></p>	
Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.B in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. Observe several experienced colleagues in order to identify effective directions for learning routines, managing of availability of learning materials, and managing routines for learning tasks.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Develop a one-day lesson plan incorporating some of the skills learned.</li> <li>4. Implement the plan.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Discuss the results of the plan implementation with your Colleague Teacher and/or other member(s) of the <i>PACES</i> Professional Growth Team.</li> <li>6. Write a summative report of the experience.</li> </ol>
<p><b>Sample Professional Growth Activity 2</b></p>	
Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.B in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. In collaboration with your department or grade level chairperson, review your written plan for an upcoming lesson, and take notes regarding securing learners' attention, delivering instructions, arranging resources for learning, and managing learning routines.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Make agreed-upon modifications in plan and/or arrangement of resources and implement the selected plan.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>4. Share results of implementation with department or grade level chairperson for additional feedback.</li> <li>5. Throughout this process, engage in written self-assessment/reflection.</li> </ol>



Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.B.1</b> Learners are paying attention before directions for routines for learning are communicated.</p>	<p><b>Attending</b> refers to listening, ready to learn.</p> <p><b>Learning Routines</b> are classroom procedures for efficient and effective teaching and learning.</p>	<p><b>Elementary</b> During a transition between learning activities in a first-grade reading block, the teacher requests learners to focus eyes on the teacher and to avoid all distractions in order to concentrate on directions. All learners become attentive before the teacher gives directions.</p> <p><b>New</b></p> <p><b>Elementary</b> Learners in a third-grade mathematics lesson on geometric vocabulary sit with a learning buddy. They have geometric vocabulary words and a picture made of geometric figures. All learners look at the teacher as they await directions for the routine of that lesson.</p> <p><b>Secondary</b> Before moving to computer work stations in an eighth-grade journalism class, all learners stop working on the previous activity, and attend to the teacher's directions for the next activity.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p data-bbox="111 183 184 212"><b>II.B.2</b></p> <hr data-bbox="111 240 556 243"/> <hr data-bbox="111 272 556 276"/> <p data-bbox="111 284 556 345"><b>Directions for learning routines are clear to learners.</b></p> <hr data-bbox="111 378 556 381"/> <hr data-bbox="111 410 556 414"/>	<p data-bbox="583 183 1224 245"><b>Learning Routines</b> are classroom procedures for efficient and effective teaching and learning.</p> <p data-bbox="583 284 968 313"><b>Clarity may be achieved by:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 354 974 383">' restating the directions</li> <li data-bbox="583 386 1014 415">' using different vocabulary</li> <li data-bbox="583 418 1129 448">' breaking down directions into parts</li> <li data-bbox="583 451 1224 513">' listing specific learner activities on the chalkboard</li> <li data-bbox="583 516 1224 578">' asking learners to restate and/or clarify directions for other learners</li> </ul>	<p data-bbox="1251 151 1419 180"><b>Elementary</b></p> <p data-bbox="1251 183 2011 414">During a fifth-grade language arts class involving word processing, learners listen attentively as the teacher leads them through the required steps to turn on the computer, log in, and access the program. The teacher uses an overhead projector to display the directions. After the instructions have been given, selected learners then restate the directions for clarification.</p> <p data-bbox="1251 453 1419 514"><b>New Elementary</b></p> <p data-bbox="1251 518 2011 852">In a kindergarten class, the mathematics lesson emphasizes numbers eight and nine. Learning routines include counting unifix cubes, associating the numerical flash card with the cubes, then painting a picture that contains the exact number of items counted originally. To check understanding of directions, the teacher shows an index finger to which learners respond, "count." The teacher then shows two fingers to which learners respond, "card," then on three fingers, learners respond, "draw."</p> <p data-bbox="1251 891 1409 920"><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1251 927 2011 1193">1. At the beginning of a seventh-grade mathematics class, the teacher gives clear directions for an assignment involving two starter word problems written on the classroom board (one review question from the previous day's lesson and the one leading into the lesson of the day). Learners demonstrate an understanding of the directions by working on the problems.</li> <li data-bbox="1251 1232 2011 1395">2. At the beginning of a ninth-grade music class, the teacher clearly provides directions for the distribution of instruments. Volunteer learners restate the directions and proceed to distribute the instruments.</li> </ol>

Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.B.3</b> Resources for learning are available and ready for use.</p>	<p><b>Resources for Learning</b> include teaching aids, learning materials, and available human resources (e.g. learners helping one another, guest speakers, other teachers, volunteers from the community, etc.).</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a second-grade classroom, dictionaries for a language arts lesson are clearly visible, labeled, and easily accessible to learners.</li> <li>2. In a fifth-grade art class, appropriate and sufficient supplies are kept in baskets which are organized and labeled alphabetically so that learners have easy access to materials.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a ninth-grade technology class, computers are operational, loaded with appropriate programs, and readily used by learners.</li> <li>2. In a seventh-grade social studies class, a permanent, central location for all handouts (including home learning assignments), reference materials, and periodicals is established.</li> </ol> <p><b>New</b></p> <p><b>Elementary and Secondary</b> In a dance class, the teacher uses a video to illustrate the step arrangement of a dance for a performance. The teacher secures the video and reserves the video player and T.V. with the media center specialist well in advance of the lesson. The equipment is ready for use at the appointed time.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p data-bbox="107 180 184 207"><b>II.B.4</b></p> <hr data-bbox="107 240 558 243"/> <hr data-bbox="107 272 558 276"/> <p data-bbox="107 284 558 349"><b>Routines for learning tasks are managed effectively.</b></p> <hr data-bbox="107 381 558 384"/> <hr data-bbox="107 414 558 417"/>	<p data-bbox="583 180 1230 277"><b>Routines</b> are established classroom procedures for efficient and effective teaching and learning</p> <p data-bbox="583 318 806 345"><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 386 1230 516">' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</li> <li data-bbox="583 589 1230 751">' can vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <p data-bbox="1251 215 2011 410">At the end of a third-grade language arts lesson in which learners are creating a class book as a sequel to a previously read literature selection, learners from each table collectively organize supplies within their designated basket. One learner returns the basket to the shelf for later use.</p> <p data-bbox="1251 451 1318 479"><b>New</b></p> <p data-bbox="1251 519 1419 547"><b>Elementary</b></p> <p data-bbox="1251 555 2011 750">As soon as morning announcements are over, learners correct punctuation in sentences written on the board. These sentences are then written in a journal and expanded into paragraphs. When the teacher completes attendance he/she elicits corrections and sample paragraphs from students.</p> <p data-bbox="1251 790 1411 818"><b>Secondary</b></p> <p data-bbox="1251 826 2011 1021">In an eighth-grade science lab, learners work in pairs. One learner is designated to collect and record data while the other manipulates the materials. Halfway through the activity, the roles are reversed in each pair. These routines are managed with little or no confusion or lost time.</p>

**TEACHING AND LEARNING COMPONENT  
II.C LEARNER ENGAGEMENT**

This teaching and learning component is used to provide important information to teachers about the effectiveness of teaching and learning activities observed. **It is not used for evaluation decisions.**

Learners are engaged when they actively **participate in objectives-related learning activities**. **Engagement** in learning suggests more than simple on-task behavior. **Involvement** in learning suggests even deeper immersion in learning than engagement. Involvement in learning is usually enhanced when learners **interact** with each other in learning tasks. Learner engagement has been identified in numerous research studies as being positively related to learner achievement. The extent of learner engagement can be estimated for the entire class through systematic observation of **task-related behavior** during teaching and learning activities as these occur throughout the lesson.

It is desirable to maintain an engagement rate that is as high as possible. A reasonable target in typical teaching and learning contexts is 90% or greater. It should be recognized that the engagement rate for a class might be quite high even though one or more learner(s) is/are persistently off-task.

In assessing learner engagement in learning tasks, both the **quantity and the quality** of engagement are important concerns. For example, learners might be directly engaged in learning tasks with rather low quality (II.D.2). Learners might also be on-task but not highly engaged in new learning. Indices of the quantity of learner engagement in learning tasks are **important for providing feedback to teachers** to analyze the effectiveness of teaching and learning activities.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.C in the <b><i>PACES Teaching and Learning Professional Growth Manual</i></b> and this <b><i>Teacher Guide to PACES</i></b>.</li> <li>2. Identify in writing the distinctions between on-task, engaged, and involved as addressed in the manual.</li> <li>3. Have the Colleague Teacher or other member(s) of the Professional Growth Team sit in on one of your classes for observation of learner engagement. Colleague(s) should routinely scan classroom during observation noting how many learners are actively engaged in learning activities throughout the lesson.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>4. Using self-assessment and feedback provided by colleague observer(s), develop a one-day lesson plan to incorporate effective monitoring of learner engagement in the class.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. After implementing the plan, assess in writing its effectiveness.</li> </ol>

**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.C in the <i><b>PACES Teaching and Learning Professional Growth Manual</b></i> and this <i><b>Teacher Guide to PACES</b></i>.</li> <li>2. Using the <i><b>PACES</b></i> manual, define in writing the term learner engagement and what is meant by a high level of quality and quantity of learner engagement.</li> <li>3. Observe an experienced colleague to gain an understanding of effective methods used to scan and to promote high levels of learner engagement.</li> <li>4. While observing in your colleague's classroom, routinely scan and take notes as to colleague's teaching strategies and corresponding levels of learner engagement.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>5. Choose strategies observed in colleague's classroom and develop a one-day lesson plan.</li> <li>6. Implement plan.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>7. Engage in self-assessment/reflection and complete a log of experience to include successful and unsuccessful strategies for learner engagement.</li> </ol>

Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.C.1</b> High levels of the quantity <b>and</b> quality of learner engagement in learning tasks are evident throughout the lesson.</p>	<p><b>Learner Engagement:</b></p> <ul style="list-style-type: none"> <li>' is the level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul>	<p><b>Elementary</b> During a third-grade art ceramics project, the teacher observes that, at one table, some of the learners are engaged in the project while others are only passively manipulating the clay. Using a friendly tone and a series of probing questions, the teacher motivates the learners to more intense levels of engagement. Subsequent observation reveals that all learners are engaged throughout the lesson.</p> <p><b>Secondary</b> During a tenth-grade science lecture for review in preparation for a formal assessment, the teacher encourages heightened engagement by shifting from basic recall questions to a class discussion soliciting a variety of meaningful responses regarding the key concepts. Learners are highly engaged in the discussion.</p> <p><b>New</b></p> <p><b>Secondary</b> After reading the story <b>The Little Prince</b>, learners in a French class are asked to visualize and draw their interpretation of The Little Prince's planet as described in the story. The teacher periodically scans for learner engagement throughout the lesson. The class engagement rate computed is 98%.</p>

**TEACHING AND LEARNING COMPONENT II.D  
MANAGING ENGAGEMENT IN LEARNING**

Managing engagement in learning is an essential element of effective teaching. **Engagement in learning is more than simple on-task behavior.** Learners may be off-task during teaching and learning activities, during transitions, or during routines, and organizational activities. **Learner off-task behavior** (both momentary and persistent) should be systematically **monitored and/or redirected** by the teacher so that re-engagement in learning is encouraged. The **behavior of off-task learners should be redirected.** Even though the learner engagement rate for the class as a whole may be quite high and quality of engagement among learners may vary, off-task behavior of one or more learners may still be a concern. **Off-task behavior does not only denote unacceptable behavior. All unacceptable behavior however, is off-task behavior.**

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.D in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. Recognize the distinctions between on-task, engaged, and involved as addressed in the manual.</li> <li>3. Have your Colleague Teacher sit in on one of your classes for observation of effective learner engagement. The Colleague Teacher should routinely scan classroom during observation noting how many learners are actively engaged in learning activities throughout the lesson.</li> <li>4. Access chat rooms in a few education web sites recommended by colleagues, the District Office of Instructional Technology, or the listing in the <i>PACES</i> Web Site and engage colleagues in a discussion of monitoring and managing of learner engagement. Take notes on suggested strategies.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>5. Using self-assessment data, strategies gleaned from web site chats, and feedback provided by your Colleague Teacher, develop a one-day lesson plan to incorporate effective monitoring of learner engagement and redirection of off-task learners in the class.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>6. Reflect in writing upon the effectiveness of the developed plan.</li> </ol>



**Sample Professional Growth Activity 2**

<p>Comprehension</p>	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.D in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. Using the <i>PACES</i> manual, define in writing the term learner engagement and what is meant by a high level of quality and quantity of learner engagement.</li> <li>3. Observe an experienced colleague to gain an understanding of effective methods used to scan and to promote high levels of learner engagement.</li> <li>4. While observing in your colleague’s classroom, routinely scan and take notes as to colleague’s teaching strategies and corresponding levels of learner engagement.</li> </ol>
<p>Practical Application</p>	<ol style="list-style-type: none"> <li>5. Choose strategies observed in colleague’s classroom and develop a one-day lesson plan.</li> <li>6. Implement plan.</li> </ol>
<p>Assessment</p>	<ol style="list-style-type: none"> <li>7. Engage in self-assessment/reflection and complete a log of experience to include successful and unsuccessful strategies for learner engagement.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="111 183 180 212">II.D.1</p> <hr/> <p data-bbox="111 285 558 383"><b>Changes in teaching and learning activities are sufficient to engage learners.</b></p> <hr/>	<p data-bbox="583 183 894 212"><b>Changes may include:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 253 852 282">' varying voice</li> <li data-bbox="583 323 779 352">' moving</li> <li data-bbox="583 393 1226 451">' changing focus of attention in a lecture/discussion</li> <li data-bbox="583 492 1178 521">' changing group sizes or learning tasks</li> <li data-bbox="583 561 1226 620">' changing levels of questions in response to learners' interactions</li> </ul> <p data-bbox="583 660 863 690"><b>Learning Activities:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 730 1226 789">' refer to all things teachers and learners do in the classroom</li> <li data-bbox="583 829 1226 956">' include teaching methods (what the teacher does to enhance learning) and learning tasks (objectives-related activities learners do).</li> </ul> <p data-bbox="583 997 894 1026"><b>Learner engagement:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 1066 1226 1125">' is the level/quality of learner participation in learning activities</li> <li data-bbox="583 1166 1226 1224">' suggests more than simple on-task behavior</li> <li data-bbox="583 1265 1226 1323">' can be estimated by periodic scanning (systematic observation) of the class</li> </ul>	<p data-bbox="1253 183 1423 212"><b>Elementary:</b></p> <p data-bbox="1253 220 2011 483">During a first-grade geometry lesson, learners are read a story (e.g. <b>The Greedy Triangle</b>) related to the subject. A classroom discussion involving varied levels of questioning follows. Learners then work in small groups manipulating and identifying various shapes. The lesson concludes with learners making individual entries in math journals. Learners' engagement is evident throughout the lesson.</p> <p data-bbox="1253 524 1415 553"><b>Secondary:</b></p> <p data-bbox="1253 561 2011 854">In a tenth-grade African American history unit on slavery, learners define terms as a pre-film activity. After discussing the terms as a class, learners read a poem about slavery for further understanding. The film is viewed and the learners form cooperative discussion groups to complete the film response sheet which includes a short essay. Learners demonstrate attention, engagement and sustained motivation throughout the lesson.</p> <p data-bbox="1253 862 1318 891"><b>New</b></p> <p data-bbox="1253 932 1409 961"><b>Secondary</b></p> <p data-bbox="1253 969 2011 1261">In a reading class after giving a lecture on the topic of discussion, the teacher solicits questions from the class as a whole. Learners are then divided into groups to complete an assignment based on the reading. Learners are actively engaged. Each group reads a passage then shares with group members. One learner from the group gives a report to the class. Learners summarize the story based on the reports from each group.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.D.2</b></p> <p>Active involvement is sought from learners who are only passively engaged in learning <b>**OR**</b> no learners are only passively engaged.</p>	<p><b>Learner engagement:</b></p> <ul style="list-style-type: none"> <li>' is the level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Active Involvement:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity.</li> <li>' can be enhanced when learners: <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> </ul> </li> </ul> <p><b>Passive Engagement</b> is a minimum level of response to a learning task.</p>	<p><b>Elementary</b></p> <p>In a fourth-grade social studies lesson, learners brainstorm regarding what they know about Florida. Learners work individually on an outline of a Florida map and are then grouped to encourage active involvement. Learners are instructed to generate a variety of questions structured by who, what, when, where, why, and how. The teacher moves among groups asking questions and engaging in discussion with those learners who seem less than actively involved, and those learners respond by entering the discussion.</p> <p><b>Secondary</b></p> <p>During an eighth-grade language arts class, learners in small groups are engaged in developing predictions about upcoming events in a novel currently being read. Learners select roles within the group to encourage active involvement. The teacher notices that some learners are only passively engaged. The teacher circulates among the groups asking probing questions to stimulate discussion throughout the lesson, as learners demonstrate active involvement.</p> <p><b>New</b></p> <p><b>Elementary and Secondary</b></p> <p>As learners complete a group activity, the teacher notices a learner who is not participating. The teacher approaches the group and reminds the passive learner of each group member's role and responsibilities.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p data-bbox="109 180 184 207"><b>II.D.3</b></p> <hr data-bbox="109 240 558 243"/> <hr data-bbox="109 272 558 276"/> <p data-bbox="109 284 558 414"><b>Momentary off-task behavior and disengagement from learning is monitored throughout the lesson.</b></p> <hr data-bbox="109 446 558 449"/> <hr data-bbox="109 482 558 485"/>	<p data-bbox="583 180 1230 245"><b>Off - task behavior</b> is lack of engagement in learning activities.</p> <p data-bbox="583 284 1230 349"><b>Disengagement</b> is a complete lack of learner participation in learning activities.</p>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <p data-bbox="1251 215 2011 548">During a fifth-grade science experiment, the learners are working in small groups. The teacher surveys class as a whole and observes a group that is off-task. Refocusing occurs by teacher walking in close proximity to the group. The learners become aware of momentary off-task behavior and resume working immediately. Throughout the lesson, the teacher continues to move among learners, monitoring and redirecting as necessary. Learners continue to respond and work collaboratively.</p> <p data-bbox="1251 587 1409 615"><b>Secondary</b></p> <p data-bbox="1251 623 2011 956">During an eleventh-grade vocational technology class, the teacher moves among the learners at various work stations monitoring the progress of each group. The teacher asks learners observed as off-task to restate the directions for their assigned learning activity and inquires as to their off-task behavior. The learners return their attention to the learning activity as the teacher continues to monitor. The teacher also makes eye contact with one learner shuffling papers on his desk. The eye contact alone is sufficient to re-engage the learner.</p> <p data-bbox="1251 995 1318 1023"><b>New</b></p> <p data-bbox="1251 1062 1409 1089"><b>Secondary</b></p> <p data-bbox="1251 1097 2011 1333">In a social studies class, learners work in small groups to prepare a mock trial while the teacher circulates among the the groups. The teacher notices two learners talking together but not interacting with the group. The teacher walks up to their desk, they realize that they are off-task and re-focus on the learning task. The teacher continues to monitor the groups.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p data-bbox="109 180 184 207"><b>II.D.4</b></p> <hr data-bbox="109 240 558 243"/> <hr data-bbox="109 272 558 276"/> <p data-bbox="109 284 558 516"><b>Learners who are persistently off-task or lack sufficient engagement in learning are redirected <b>**OR**</b> there is no persistent off-task behavior or lack of sufficient engagement in learning.</b></p> <hr data-bbox="109 548 558 552"/> <hr data-bbox="109 581 558 584"/>	<p data-bbox="583 180 1226 280"><b>Persistently off-task</b> is a lack of engagement in learning activities that is frequently occurring, or ongoing.</p> <p data-bbox="583 318 1226 383"><b>Redirection</b> is encouraging re-engagement in learning activities.</p>	<p data-bbox="1251 180 1415 207"><b>Elementary</b></p> <p data-bbox="1251 215 2011 548">In a third-grade physical education class, learners are engaged in a variety of track and field competition activities. The teacher observes a small group of learners not participating in the activities and asks, “Do you understand the rules?” Learners participate momentarily and return to off- task behavior. Again, learners are redirected by the teacher’s continuous encouragement and movement among the groups. Learners respond to the redirection and are engaged until the activities end.</p> <p data-bbox="1251 586 1409 613"><b>Secondary</b></p> <p data-bbox="1251 621 2011 821">During a problem solving activity in an eighth-grade algebra class, some learners are persistently off task. The teacher monitors engagement by circulating throughout the room and redirects learners with probing questions and encouragement. Learners are responsive to the teacher’s redirection.</p> <p data-bbox="1251 859 1318 886"><b>New</b></p> <p data-bbox="1251 924 1409 951"><b>Secondary</b></p> <p data-bbox="1251 959 2011 1263">During a science class group activity where learners are given roles such as recorder, observer, and timekeeper, the teacher notices two learners who are writing notes to each other. The teacher moves over to their desks and reminds them of their roles in the group. They get back on-task; but a few moments later, the teacher realizes that they are back to being off- task. The teacher then assigns them new roles in the group; they remain on-task as the teacher maintains eye contact.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.D.5</b></p> <p>Techniques are used to maintain the engagement of learners who have been redirected <b>**OR**</b> there is no persistent off-task behavior or lack of sufficient engagement in learning.</p>	<p><b>Off - task behavior</b> is lack of engagement in learning activities.</p> <p><b>Redirection</b> is encouraging re-engagement in learning activities.</p> <p><b>Learner engagement:</b></p> <ul style="list-style-type: none"> <li>' is the level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul>	<p><b>Elementary</b></p> <p>In a fourth-grade social studies lesson, learners are engaged in geography activities examining Miami's position as a gateway to the Caribbean as well as Central and South America. During the lesson, the teacher redirects two groups of learners not participating in the activities. As the teacher circulates among the groups, he/she routinely asks each group questions pertaining to the activity. The teacher focuses particularly on the groups that were previously identified as being off-task.</p> <p><b>Secondary</b></p> <p>During a simulated, individual auditioning activity in a tenth-grade theater arts class, learners are engaged in developing contrasting monologs from two plays. A small group of learners is off-task. The teacher redirects learners with probing questions and encouragement. Learners are responsive to the teacher's redirection. As a second activity, the teacher groups learners and asks them to review each other's choices of monologs and to engage in discussion exploring their reasoning for these choices. The learners identified as off-task are each assigned to a different group. The teacher circulates among the groups asking questions and offering advice as necessary.</p>

<b>II.D.5</b> <b>Continued</b>		<p><b>New</b></p> <p><b>Secondary</b> During a calculus mathematics class, the teacher uses the overhead projector to review for a test. Several learners who are not engaged in learning are quickly redirected back to the lesson when the teacher momentarily lowers his/her voice while working on the overhead. The teacher makes eye contact several times with learners who are off-task.</p> <p><b>New</b></p> <p><b>Secondary</b> After listening to the explanation of the day's lesson, learners in a mathematics class solve problems individually before reporting the solutions. The teacher notices two learners who persistently communicate with each other. The teacher separates the two learners, reminds them what they are to individually accomplish, and maintains eye contact, periodically approaching their desks.</p>
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**TEACHING AND LEARNING COMPONENT  
II.E MONITORING AND MAINTAINING LEARNER BEHAVIOR**

This teaching and learning component refers to the **general classroom demeanor expected of learners. All misbehavior is also off-task behavior.** However, all off-task behavior is not necessarily unacceptable behavior. **Acceptable learner behavior is behavior that is consistent with classroom rules, social norms, and/or teacher expectations.** Maintaining acceptable behavior and managing unacceptable behavior are critical elements of effective teaching and learning. Clearly communicated and well-established **behavioral expectations** implemented with fair and consistent consequences enhance learning conditions and learning equity for all learners.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.E in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. Observe several experienced colleagues in order to identify effective strategies for monitoring and maintaining learner behavior.</li> <li>3. Identify in writing several strategies you will use in your classroom.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>4. Implement the strategies keeping a log of each strategy used and its effect.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Discuss the results with your Colleague Teacher and/or other member(s) of the <i>PACES</i> Professional Growth Team.</li> <li>6. Write a summative report of the experience.</li> </ol>



**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component II.E in the <i><b>PACES Teaching and Learning Professional Growth Manual</b></i> and this <i><b>Teacher Guide to PACES</b></i>.</li> <li>2. Access chat rooms in a few education web sites recommended by colleagues, the District Office of Instructional Technology, or the listing in the <i><b>PACES Web Site</b></i> and engage colleagues in a discussion of monitoring and managing of learner behavior. Take notes on suggested strategies.</li> <li>3. Discuss the web-site results with the Colleague Teacher or other member(s) of the <i><b>PACES</b></i> Professional Growth Team for feedback.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>4. Implement some of the agreed upon strategies taking notes on the strategies and the effects.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Throughout this process, engage in written self-assessment/reflection.</li> </ol>

Indicator	Definitions and/or Explanations	Classroom Examples
<p data-bbox="107 180 180 207"><b>II.E.1</b></p> <hr data-bbox="107 240 558 243"/> <hr data-bbox="107 272 558 276"/> <p data-bbox="107 284 558 414"><b>Expectations about acceptable behavior are clear to learners and are consistently maintained throughout the lesson.</b></p> <hr data-bbox="107 446 558 449"/> <hr data-bbox="107 482 558 485"/>	<p data-bbox="583 180 1230 310"><b>Acceptable behavior</b> refers to learners' attitudes and actions that are consistent with classroom rules, social norms, and/or teacher expectations.</p>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <p data-bbox="1251 215 2011 414">In a second-grade science class, most learners raise their hands and wait to be called upon without teacher directions. On the few occasions when a learner calls out, the teacher refers the learner to posted classroom rules, or gently reminds learners as a whole of the expectations. Learners respond appropriately.</p> <p data-bbox="1251 451 1409 479"><b>Secondary</b></p> <p data-bbox="1251 487 2011 748">During a twelfth-grade auto-mechanics class, two learners engage in inappropriate playing with equipment. The teacher reminds the two learners of the classroom rules and consequences established collectively at the beginning of the year and points out the visual display (poster) clearly listing these rules and consequences. The learners resume their work and the teacher continues to monitor.</p> <p data-bbox="1251 789 1318 816"><b><i>New</i></b></p> <p data-bbox="1251 857 1633 885"><b>Elementary and Secondary</b></p> <p data-bbox="1251 893 2011 1024">During the middle of a lesson, learners are working on a group activity when one learner in a team bursts out in laughter. The teacher calmly approaches quietly talks to the learner about appropriate classroom behavior.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p data-bbox="107 180 180 207"><b>II.E.2</b></p> <hr/> <p data-bbox="107 282 558 380"><b>Behavior of the entire class is effectively monitored throughout the lesson.</b></p> <hr/>	<p data-bbox="583 180 1224 212"><b>Effective monitoring can be accomplished by:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 248 1188 280">' focusing attention on individual learners</li> <li data-bbox="583 316 989 349">' moving among learners</li> <li data-bbox="583 384 993 417">' maintaining eye contact</li> </ul>	<p data-bbox="1251 180 1419 212"><b>Elementary</b></p> <p data-bbox="1251 215 2011 448">During a fourth-grade mathematics lesson, learners work in small groups to express the probability of events as ratios in fraction form. The teacher monitors learners by moving among them, observing progress and behavior and regularly establishing direct eye contact with individuals. Learners respond with appropriate behavior.</p> <p data-bbox="1251 483 1409 516"><b>Secondary</b></p> <p data-bbox="1251 519 2011 686">In a ninth-grade science class dealing with reproduction, as learners independently take notes about a video-disk presentation, the teacher monitors the entire class and provides discreet redirection as needed. Learners respond with appropriate behavior.</p> <p data-bbox="1251 722 1318 755"><b>New</b></p> <p data-bbox="1251 790 1633 823"><b>Elementary and Secondary</b></p> <p data-bbox="1251 826 2011 1058">During a physical education class, learners are involved in warm-up exercises prior to a game of basketball. A few learners are off-task, and are not doing the appropriate exercises. The teacher monitors by standing behind them. This action immediately deters the behavior. The teacher continues to monitor and circulate among the lesson.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.E.3</b> Learners are provided specific feedback (verbal <b>and/or</b> nonverbal) about acceptable and unacceptable behavior as needed.</p>	<p><b>Feedback</b> refers to information in response to learner for self regulating, improving performance, and encouraging subsequent effort.</p> <p><b>Acceptable behavior</b> refers to learners' attitudes and actions that are consistent with classroom rules, social norms, and/or teacher expectations.</p> <p><b>Unacceptable behavior</b> refers to demeanor that violates classroom rules, social norms, and/or teacher expectations.</p>	<p><b>Elementary</b> During a second-grade ESOL lesson, as learners work in cooperative groups identifying common and auxiliary verbs in supplemental reading material, the teacher provides individual groups specific verbal feedback (e.g. commenting on the positive interaction with one another, complimenting the productive manner in which the work is being completed, as well as providing appropriate redirection when necessary). Learners respond appropriately.</p> <p><b>New</b></p> <p><b>Elementary</b> During the two-hour language arts block, learners and teacher engage in an oral, teacher-directed activity. Using high order questions as a strategy, learners respond, and the teacher encourages acceptable behavior by saying " I like the way you waited your turn before answering..." The teacher also gives a thumbs-up signal as learners patiently wait for another learner who answers hesitantly.</p> <p><b>Secondary</b> On a class visit to the media center for the purpose of researching reports about the American Revolution, an eighth-grade social studies teacher moves among <u>all</u> learners and reminds a few learners about not interrupting others. Learners respond appropriately as the teacher continues to follow up on the learners who have been redirected.</p>

Indicator	Definitions and/or Explanations	Classroom Examples
<p><b>II.E.4</b> Techniques are used to stop unacceptable behavior *OR* there is no acceptable behavior.</p>	<p><b>Unacceptable behavior</b> refers to learners' attitudes and actions that violate classroom rules, social norms, and/or teacher expectations.</p>	<p><b>Elementary</b> During a class discussion in a fifth-grade lesson about geographical features of North America, one learner repeatedly calls out of turn. The teacher redirects this unacceptable behavior by reminding the learner of a previously established classroom rule regarding the unacceptability of calling out when the teacher is asking for raised hands. The learner acknowledges the reminder and abides by the classroom rules for the duration of the lesson.</p> <p><b>Secondary</b> During an Internet search activity in a tenth-grade business education classroom, one learner repeatedly leaves his station to interrupt other learners . The teacher begins by moving to the proximity of the disruptive learner and directs him to return to his station. As the behavior persists, the learner is discreetly reminded of the predetermined consequences for unacceptable behavior. The learner accepts the reminder and returns to his station to continue the activity.</p> <p><b>New</b></p> <p><b>Elementary and Secondary</b> At the end of an activity in a lesson, the teacher provides closure and asks learners to take out materials for the second activity in the lesson. A few learners are passing notes to each other and talking, the teacher approaches the off-task learners and taps on the desks with his/her fingers to redirect learners to the task. The learners desist talking and engage in the new activity.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="107 180 180 207"><b>II.E.5</b></p> <hr data-bbox="107 240 558 243"/> <hr data-bbox="107 272 558 276"/> <p data-bbox="107 284 558 414"><b>Unacceptable behavior is managed quickly and in a reasonable manner *OR* there is no unacceptable behavior.</b></p> <hr data-bbox="107 446 558 449"/> <hr data-bbox="107 479 558 482"/>	<p data-bbox="581 180 1230 277"><b>Unacceptable behavior</b> refers to learners' attitudes and actions that violate classroom rules, social norms, and/or teacher expectations</p>	<p data-bbox="1251 180 1415 207"><b>Elementary</b></p> <p data-bbox="1251 215 2011 414">In the middle of a two-hour, first-grade reading block, one learner is continuously displaying unacceptable behavior. The teacher addresses the issue, reminding the learner of established classroom rules and consequences. The learner responds with acceptable behavior.</p> <p data-bbox="1251 451 1318 479"><b>New</b></p> <p data-bbox="1251 521 1415 548"><b>Elementary</b></p> <p data-bbox="1251 557 2011 787">Learners returning from lunch are aware that they should begin solving a mathematics problem written on the board. A few learners, instead, are looking at photographs. The teacher walks over to the group and points to the board as well as to the other learners involved in solving the problem. The off-task learners then put away the photos, and begin solving the problem.</p> <p data-bbox="1251 857 1409 885"><b>Secondary</b></p> <ol data-bbox="1251 893 2011 1461" style="list-style-type: none"> <li data-bbox="1251 893 2011 1193">1. In an art class, while directions are being given, a learner is talking and distracting others. The teacher stands near the learner to encourage attention to the directions. The learner persists, prompting the teacher to move the learner to another seat. This intervention is not effective and the learner is advised that parent contact will follow. Upon advisement of parent contact, the learner's behavior improves immediately.</li> <li data-bbox="1251 1230 2011 1461">2. As the teacher moves around the room during a language arts lesson, one learner passes notes and whispers to another learner. The behavior persists even after the teacher gives nonverbal signals to cease the unacceptable behavior. Both learners are reminded of the classroom rules and expectations. The disruptive behavior</li> </ol>

### **DOMAIN III: TEACHER/LEARNER RELATIONSHIPS**

Creating an environment conducive to learning is an important dimension of building a classroom culture that enhances learning. The total classroom learning environment encompasses psychological, interpersonal, and physical elements. Elements of the learning environment include individual and collective perspectives of the teacher and learners. Thus, each learner's perceptions of characteristics of the classroom learning environment are important concerns. In a supportive learning environment, learners and the teacher are treated fairly, with courtesy and respect and enjoy a relaxed and accepting atmosphere. The teacher is warm and friendly toward learners and models enthusiasm for teaching, learning and the subject being taught. Motivation for learning is evident throughout the lesson and praise is specific to learners and to learning tasks. Personalizing the lesson for learners and encouraging all learners to participate enhance learner involvement in, and self-efficacy for learning. A neat, safe and orderly classroom environment facilitates effective teaching and learning.

#### **TEACHING AND LEARNING COMPONENTS**

III.A Interpersonal Relations

III.B Learning Equity

**TEACHING AND LEARNING COMPONENT  
III.A INTERPERSONAL RELATIONS**

Learning is enhanced when positive interpersonal relationships are encouraged in a classroom environment where learners feel comfortable and accepted by the teacher and other learners. The teacher, through verbal and nonverbal behaviors, models enthusiasm and interest in learning, **includes all learners in learning activities**, and encourages active involvement.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component III.A in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. Observe several experienced colleagues in order to identify strategies for fostering courtesy, respect, warmth, friendliness, patience, and enthusiasm in the classroom. Take notes on suggested strategies and develop a list of several strategies you will implement in your classroom.</li> <li>3. Share the strategies with the Colleague Teacher for discussion and feedback.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>4. Use the list as a guide when implementing a daily plan and make a note of the strategies that were effective, those that were ineffective, and why.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Share and discuss a written entry of the reflection with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team.</li> </ol>



**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"><li>1. Review Teaching and Learning Component III.A in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li><li>2. Access chat rooms in a few education web sites recommended by colleagues, the District Office of Instructional Technology, or the listing in the <i>PACES Web Site</i> and engage colleagues in a discussion of strategies for encouraging positive interpersonal relationships in the classroom. Take notes on suggested strategies and develop a list of several strategies you will implement in your classroom.</li><li>3. Share the strategies with the Colleague Teacher for discussion and feedback.</li></ol>
Practical Application	<ol style="list-style-type: none"><li>4. Use the list as a guide when implementing a daily plan and make a note of the strategies that were effective, those that were ineffective, and why.</li></ol>
Assessment	<ol style="list-style-type: none"><li>5. Share and discuss a written entry of the reflection with the Colleague Teacher or other member(s) of the <i>PACES</i> Professional Growth Team.</li></ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="107 180 184 207"><b>III.A.1</b></p> <hr data-bbox="107 240 556 243"/> <p data-bbox="107 282 556 345"><b>A classroom climate of courtesy and respect is evident.</b></p> <hr data-bbox="107 378 556 381"/>	<p data-bbox="581 180 1230 277"><b>Classroom climate</b> is the social and psychological elements that encompass the classroom learning environment.</p> <p data-bbox="581 318 1230 415">‘ <b>Social elements</b> include an environment in which learners feel comfortable to respond and participate.</p> <p data-bbox="581 456 1230 553">‘ <b>Psychological elements</b> are the result of giving learners positive feedback and encouragement.</p> <p data-bbox="581 623 1230 753"><b>Courtesy and respect within the classroom environment are demonstrated through positive interpersonal interactions with and among learners.</b></p>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <ol data-bbox="1251 215 2011 1094" style="list-style-type: none"> <li data-bbox="1251 215 2011 378">1. During a first-grade spelling lesson, a learner's pencil box falls off the desk, and another learner helps to pick it up. The teacher acknowledges this random act of kindness by complimenting the learner for his/her actions.</li> <li data-bbox="1251 418 2011 824">2. After reading a story in a third-grade reading block, learners work in groups of four to create a quadrarama (four triangles stapled together). Each learner writes his or her favorite part of the story on one triangle in order to complete the project. Each group shares their quadrarama with the class and gives reasons for each selection. The teacher points out to learners that there is no right and wrong when selecting favorites, because a favorite is a personal preference. The teacher reminds learners that everyone's contributions are worthwhile.</li> <li data-bbox="1251 857 2011 1094">3. In a fourth-grade social studies lesson, learners work on a map project and need materials from the middle of each table. A few learners demand materials be passed. The teacher directs the learners to display courtesy and also to say, "Please" and "Thank you" when materials are passed.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p>III.A.1</p> <p>Continued</p>		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. During a seventh-grade class discussion regarding mathematics in every-day life, one learner continuously criticizes the remarks of another learner. The teacher asks learners to consider how it feels to be criticized and the chilling effect criticism can have in a discussion.</li> <li>2. At the passing bell, a ninth-grade science teacher and learners exchange friendly greetings as learners enter the room.</li> <li>3. An eleventh-grade English teacher makes it a point to consistently use “Thank you,” “You’re welcome,” and “Please” as appropriate with learners.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.A.2</b> Warmth and friendliness are evident throughout the lesson.</p>	<p><b>Warmth and friendliness are demonstrated among other ways through:</b></p> <ul style="list-style-type: none"> <li>' using learner names</li> <li>' maintaining eye contact while interacting with learners</li> <li>' speaking with a positive tone of voice</li> <li>' smiling, laughing, and joking appropriately</li> <li>' sitting or standing near learners</li> </ul> <p><b>Please note:</b> <b>Warmth and friendliness should not compromise the teacher's authority.</b></p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. During the reading a novel, learners in a fourth-grade classroom share their thoughts on the actions of the main character. While each learner speaks, the teacher smiles and makes appropriate eye contact to let the learner know that she/he is interested in what the learner is saying. As the teacher restates or reiterates each learner's points, she/he uses the learner's name and speaks in a positive tone of voice.</li> <li>2. In an art class, as learners are completing a drawing project, the teacher sits with each group in order to display an interest in what each student is accomplishing. The teacher acknowledges progress by smiling or providing other forms of positive encouragement.</li> </ol> <p><b>Secondary</b> During a ninth-grade social studies discussion of current events, the learners are encouraged by the teacher to acknowledge each others' comments using names, and to keep a friendly tone (e.g. "I agree/disagree with the statement made by Sally").</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="117 180 195 207"><b>III.A.3</b></p> <hr/> <p data-bbox="107 285 558 415"><b>Comments to or about or from learners are free of sarcasm, ridicule, and derogatory or humiliating references.</b></p> <hr/>	<p data-bbox="585 180 747 207"><b>Comments:</b></p> <ul style="list-style-type: none"> <li data-bbox="585 250 1184 277">' are not in any way offensive to learners</li> <li data-bbox="585 319 1226 380">' are sensitive to the needs and feeling of others</li> </ul> <p data-bbox="585 420 1226 513"><b>Please note: This indicator is required by the State of Florida's Code of Ethics.</b></p>	<p data-bbox="1253 180 1415 207"><b>Elementary</b></p> <p data-bbox="1253 217 2011 448">During a second-grade reading lesson, the teacher encourages learners to listen with an open mind to each other's ideas as they work in cooperative groups to answer the comprehension questions, and to keep a respectful attitude. As the learners engage in the activity, it is evident that they are, in fact, treating each other with respect.</p> <p data-bbox="1253 488 1409 516"><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1253 524 2011 686">1. During a review in a seventh-grade social studies class, a learner makes an obviously incorrect response. The teacher helps focus the learner's attention with a guiding clue and asks the learner to try again.</li> <li data-bbox="1253 727 2011 954">2. In a ninth-grade language arts class engaged in a creative writing activity, after a learner shares a written piece, the teacher asks another learner to <b>TAG</b> it. <ul style="list-style-type: none"> <li data-bbox="1444 862 1808 889"><b>T</b>ell something nice about it.</li> <li data-bbox="1444 894 1745 922"><b>A</b>sk a question about it.</li> <li data-bbox="1444 927 1772 954"><b>G</b>ive constructive advice.</li> </ul> </li> <li data-bbox="1253 995 2011 1092">3. During a portfolio critique in a twelfth-grade photography class, learners give each other tips and helpful advice to correct the problem.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.A.4</b> Enthusiasm for teaching, for the content taught, <b>and</b> for learning is evident.</p>	<p><b>Enthusiasm:</b></p> <ul style="list-style-type: none"> <li>' for teaching and content can be demonstrated through changes in voice inflection, positive gestures, movement about the classroom and facial expressions of interest and excitement</li> <li>' for learning can be demonstrated by direct communication levels of participation, class contributions, insights and understanding</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a second-grade music lesson, learners are using chopsticks to tap out rhythm patterns to a song playing on an audiotape. The teacher moves about the room assisting each learner with the chopsticks, and tells learners they are “doing great!” and that they are “really learning to play well!” After the song has ended, the teacher exclaims...“Gee that’s fun... When I learned to tap out rhythms to music, it was a lot more fun to listen to.”</li> <li>2. The teacher moves around the room noticing that a learner has difficulty with a problem. The teacher encourages the learner and says, “Let’s look at it from a different angle. I know you can do it!” The teacher relates an anecdote from her own past when she had difficulty understanding a particular concept and the satisfaction she felt when she at last grasped the concept.</li> </ol> <p><b>Secondary</b></p> <p>The teacher in an eleventh-grade American literature class begins a unit in Puritanism by showing digital pictures from a recent trip to Salem, Massachusetts on a classroom television set. The teacher begins the activity by saying, “Class, let me show you a few things I learned during my trip that I think are really neat!” The teacher then shows the pictures. As learners view the pictures, a copy of the book <i>Witches of Salem</i> that the teacher bought as a souvenir is passed around the classroom. Learners ask questions that reveal their increased enthusiasm for beginning the unit.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.A.5</b> Patience, empathy, <b>and/or</b> understanding for learners is evident throughout the lesson.</p>	<p><b>Patience, empathy, and/or understanding:</b></p> <ul style="list-style-type: none"> <li>' should be shown tactfully to engage the learner in the lesson</li> <li>' can be demonstrated through acceptance and encouragement</li> <li>' should be exhibited while learners are involved in learning tasks, non-learning tasks, and personal concerns</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a third-grade lesson on verbs, a learner eagerly volunteers but conjugates the verb "to sing" incorrectly. The teacher encourages the learner to try again. The teacher displays patience as the learner attempts another response.</li> <li>2. In a fourth-grade physical education class, the teacher adapts expectations of a learner who is not as physically fit as the others. For example, the learner is allowed to run once around the track instead of twice.</li> <li>3. During a fifth-grade science experiment, the teacher notices a learner with his head on the desk. The teacher asks the learner, "Are you O.K.?" The learner simply shrugs his shoulders and looks down. The teacher pulls a chair over next to the learner and asks the learner if he would like to share what is troubling him. As the learner speaks the teacher listens intently.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.A.5</b></p> <p><b>Continued</b></p>	<p><b>Patience, empathy, and/or understanding:</b></p> <ul style="list-style-type: none"> <li>' should be shown tactfully to engage the learner in the lesson</li> <li>' can be demonstrated through acceptance and encouragement</li> <li>' should be exhibited while learners are involved in learning tasks, non-learning tasks, and personal concerns</li> </ul>	<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a ninth-grade Algebra 1 lesson, learners are engaged in a group activity using algebra tiles to multiply binomials. The teacher walks around and notices that one learner in a group is not participating. The teacher asks the learner, "Do you understand?" When the learner responds that he does not, the teacher works with the group to solve a problem through the use of manipulatives and critical questioning techniques.</li> <li>2. During a tenth-grade television production class, learners video tape each other presenting school news presentations. When the learners view their work, some express great dissatisfaction with the quality of the work. The teacher displays empathy, reminds the learners that all professionals engage in rehearsals and multiple takes, and encourages the learners to note the weaknesses found in the presentations they wish to improve upon and try again.</li> </ol>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.A.6</b> Teaching and learning activities and content are personalized.</p>	<p><b>Activities and content are personalized:</b></p> <ul style="list-style-type: none"> <li>' using learner's personal experience</li> <li>' relating lesson content to previous learning</li> <li>' demonstrating/explaining the relevance of the lesson to real-life experiences</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a kindergarten class, the teacher begins a lesson on animals by having a class discussion. Learners are asked what type of pet they have or would like to own.</li> <li>2. In a third-grade math lesson on money, the teacher asks learners to write a few sentences on the topic "If you receive ten dollars for your birthday, how will you spend it?"</li> <li>3. After reading a story as part of a fourth-grade reading block, the learners rewrite and change the story placing themselves in the role of the main character.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. An eighth-grade language arts teacher introduces an expository writing lesson by having the learners discuss favorite places they have visited.</li> <li>2. As part of a school-to-work lesson, ninth-grade learners are asked, as a home learning assignment, to interview family members to learn about careers.</li> </ol>

**TEACHING AND LEARNING COMPONENT  
III.B LEARNING EQUITY**

Learning equity is an important understanding that **all** learners must be **provided opportunities to participate and engage in learning**. These opportunities should be provided for each learner in all contexts, activities, and group sizes. It is important to recognize that each learner needs access to learning opportunities and that diversity and individual differences among learners are considered and addressed (I.A.3, I.B.2, I.D.2, I.E.2, I.F.4).

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component III.B in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. Visit the classroom of the Colleague Teacher as well as other classrooms recommended by the Colleague Teacher in order to observe a variety of techniques that encourage opportunities for all learners to participate in classroom activities.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Select several techniques observed and incorporate into a week-long lesson plan.</li> <li>4. Implement the strategies in your classroom and observe the learners during this implementation.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Share and discuss a written entry of the reflection with the Colleague Teacher or other member(s) of the <i>PACES</i> Professional Growth Team a summative report of the experience.</li> </ol>

**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Teaching and Learning Component III.B in the <i>PACES Teaching and Learning Professional Growth Manual</i> and this <i>Teacher Guide to PACES</i>.</li> <li>2. In collaboration with the Colleague Teacher, prepare a one-day lesson plan in which you incorporate strategies that provide learners with ample opportunity to participate and engage in learning.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Implement the planned lesson.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>4. Share the results of implementation with the Colleague Teacher for discussion and feedback.</li> <li>5. Engage in written self-assessment/reflection.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="117 180 197 207"><b>III.B.1</b></p> <hr data-bbox="117 240 558 243"/> <p data-bbox="109 284 558 446"><b>Comments, questions, examples, demonstrations, and/or other contributions are sought from or by learners throughout the lesson.</b></p> <hr data-bbox="117 479 558 482"/> <hr data-bbox="117 514 558 518"/>	<p data-bbox="585 180 1161 245"><b>Contributions from or by learners may be solicited by:</b></p> <ul style="list-style-type: none"> <li data-bbox="585 318 1125 345">' Discussing and /or demonstrating</li> <li data-bbox="585 386 1104 451">' Structuring small group tasks for learner participation</li> <li data-bbox="585 492 1146 557">' Using wait time to allow learners to think</li> <li data-bbox="585 557 1136 621">' Questioning to draw upon personal learner experiences</li> </ul>	<p data-bbox="1255 180 1415 207"><b>Elementary</b></p> <p data-bbox="1255 215 2007 345">During a fourth-grade language arts lesson, the learners create higher level critical thinking questions related to the story being read. The learners share their questions to spark a class discussion.</p> <p data-bbox="1255 386 1409 414"><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1255 418 2007 621">1. In a twelfth-grade psychology class, while examining the positive and negative effects of peer pressure, the teacher elicits real-life examples from the learners. Small groups are formed and learners choose an example to role play.</li> <li data-bbox="1255 654 2007 889">2. In a journalism class, the learners are actively involved in a brainstorming session to generate new topics for the upcoming issue of the school newspaper. The learners contribute ideas for stories, comic strips, and interviews. A list is generated, and each learner selects a topic on which to work.</li> </ol> <p data-bbox="1255 930 1318 958"><b>New</b></p> <p data-bbox="1255 998 1633 1026"><b>Elementary and Secondary</b></p> <p data-bbox="1255 1034 2007 1196">When questioning, the teacher asks the learners to rephrase what was said. A learner answers part of the question and then chooses another learner to expand upon the answer. Responses are recorded on an overhead, a board, or a chart, by a third learner.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.B.2</b> Learner contributions are considered <b>and/or</b> recognized.</p>	<p><b>Learners' contributions are recognized by</b></p> <ul style="list-style-type: none"> <li>' commenting on learners' ideas and responses</li> <li>' acknowledging learners' participation in class activities</li> <li>' valuing learners' strengths and talents</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. During a second-grade directed reading lesson, the teacher elicits learners' personal experiences that relate to the main idea of a story. Each learner's response is written on the board next to the learner's name.</li> <li>2. During a critique of a watercolor project at the conclusion of a fourth-grade art class, the learners share their work with the class. As the presentations progress, the teacher makes certain to indicate at least one strong point in each piece of work.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a foreign language class, learners take turns creating real world scenarios that they can role play using the language (e.g. ordering in restaurant, mailing a package at the post office, completing a banking transaction, making a department store purchase, etc.). As the groups engage in role playing, the teacher comments on each learner's contribution, and encourages learners to do the same.</li> <li>2. As a drafting class project, learners collaboratively design their ultimate dream house incorporating an idea that is important to each learner and including it in the sketch of the layout.</li> </ol>

<b>III.B.2 Continued</b>		<b>New</b> <b>Elementary and Secondary</b> During a history lesson on the American Revolution, learners brainstorm to activate prior knowledge. Learners contribute what they know about the Revolution. As learners share this information, the teacher acknowledges the responses and thanks them by using their names. The information gathered is then used to initiate a class discussion.
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Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="117 180 197 207"><b>III.B.3</b></p> <hr data-bbox="111 240 556 243"/> <hr data-bbox="111 272 556 276"/> <p data-bbox="111 284 556 381"><b>Fairness and impartiality are evident in interactions with and among learners.</b></p> <hr data-bbox="111 414 556 417"/> <hr data-bbox="111 446 556 449"/>	<p data-bbox="590 180 877 207"><b>Fairness/impartiality:</b></p> <ul style="list-style-type: none"> <li data-bbox="590 251 1224 316">' providing equal access to teacher time, learning materials, and activities</li> <li data-bbox="590 349 1224 414">' providing ample opportunities for all learners to participate</li> <li data-bbox="590 446 1224 511">' encouraging participation from individual learners</li> </ul>	<p data-bbox="1262 180 1423 207"><b>Elementary</b></p> <ol style="list-style-type: none"> <li data-bbox="1262 219 2011 381">1. In a first-grade classroom, each learner is asked to rotate his/her name on the job chart upon the completion of a classroom responsibility. Everyone gets the opportunity to participate in each job.</li> <li data-bbox="1262 414 2011 576">2. In a second-grade classroom, each time learners are divided into groups, learners select a new card that defines their roles in the group. The learners are given opportunities to select a different role for each new assignment.</li> </ol> <p data-bbox="1262 657 1409 685"><b>Secondary</b></p> <p data-bbox="1262 690 2011 1015">In an eighth-grade American History class, as learners are engaged in preparing presentations about a historical figure of their own selection, the teacher ensures that each learner's understanding or need for assistance will be checked. Throughout the preparation time, all learners have access to the same resources, and are given the same amount of time. At presentation time, the order of presentation is determined by learners pulling numbers from a bowl. Each learner is given the same amount of time to present.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="107 180 191 207"><b>III.B.4</b></p> <hr data-bbox="107 240 558 243"/> <hr data-bbox="107 272 558 276"/> <p data-bbox="107 284 558 378"><b>Learners are given reasons for actions, decisions, and/or directives as needed.</b></p> <hr data-bbox="107 410 558 414"/> <hr data-bbox="107 443 558 446"/>	<p data-bbox="581 180 1073 207"><b>Actions, decisions, and directives:</b></p> <ul style="list-style-type: none"> <li data-bbox="581 248 877 276">' must be logical</li> <li data-bbox="581 316 1226 378">' must be consistent with established behavioral expectations</li> <li data-bbox="581 418 953 446">' must not be arbitrary</li> <li data-bbox="581 487 1129 514">' must be understood by all learners</li> </ul>	<p data-bbox="1251 180 1419 207"><b>Elementary</b></p> <p data-bbox="1251 215 2016 378">Before a third-grade field trip, the teacher and learners discuss safety issues as well as reasons requiring a variety of rules that must be followed (e.g. hands and head inside the bus, remain in seat throughout the ride, etc.).</p> <p data-bbox="1251 451 1409 479"><b>Secondary</b></p> <p data-bbox="1251 487 2016 649">When an eighth-grade learner is sent to the office for a repeated violation of the dress-code, the teacher reiterates the reasons behind the dress-code (e.g., safety concerns of strapless shoes, distractions caused by inappropriate dress, etc.).</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>III.B.5</b> Functional elements of the learning environment are arranged to enhance the equity of learning activities.</p>	<p><b>Functional elements:</b></p> <ul style="list-style-type: none"> <li>' refer to available space, furniture, work stations</li> <li>' refer to arrangement of aids, materials, and equipment</li> <li>' include accessibility of teacher, paraprofessional and even learners</li> <li>' enhance learning</li> </ul>	<p><b>Elementary</b> In a kindergarten class, two hearing-impaired students work with a paraprofessional who uses sign language to help them understand.</p> <p><b>Secondary</b> In an eleventh-grade drama classroom the seating arrangement is such that all learners have a clear view of the stage area.</p>



## **DOMAIN IV: ENHANCING AND ENABLING LEARNING**

An important dimension of the enhancement of learning is the **interactive process of teaching and learning**. Effective initiation of a lesson or of an activity within a lesson involves securing learner attention, clear communication of expectations, and providing an appropriate context for new learning. An effective lesson proceeds in a **logical sequence**, and continuity is ensured through such techniques as summarizing and reviewing. The lesson should end with appropriate **closure**. **Methods and tasks** and related resources for learning are appropriately used in ways that facilitate achievement of planned objectives. Information presented by the teacher should be accurate, up-to-date, and communicated clearly using appropriate vocabulary for the developmental and ability levels of the learners. During teaching and learning activities, essential elements are emphasized and effective questioning techniques are used to extend thinking skills. Areas of learner misunderstanding or difficulty are effectively and efficiently handled. **Adjustments** in teaching and learning are made where indicated by learner performance.

### **TEACHING AND LEARNING COMPONENTS**

- IV. A Initial Motivation to Learn
- IV. B Teaching Methods and Learning Tasks
- IV. C Resources for Learning
- IV. D Knowledge of Content and Pedagogy
- IV. E Clarification of Content/Learning Tasks

**TEACHING AND LEARNING COMPONENT**  
**IV.A Initial Motivation to Learn**

This teaching and learning component focuses only on the **beginning of a lesson and/or the beginning of activities within a lesson**. Capturing learner attention and clearly communicating the purpose and importance of learning content and activities so that learners understand, are important elements of the teaching and learning process. In addition, providing a framework or context for learning helps learners structure new learning and integrate past, present, and future learning. Effective initiation includes motivation to learn and sufficient task structure. Effective initiation also maximizes the efficiency of the time allocated for learning (II.A.1, II.A.3). In some teaching and learning contexts repeated attempts may be needed to enhance initial motivation to learn.

**Sample Professional Growth Activity 1**

Comprehension	1.	Working collaboratively with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team, identify five strategies which enable the teacher to gain the attention of a learner for the introduction of a new activity or lesson.
	2.	Identify ways in which expectations can be clearly communicated to the learners e.g., sample assignments, course outlines, performance checklists.
Practical Application	3.	Develop a one-day lesson plan which incorporates at least two strategies to gain learner attention, sets up the lesson contextually, as well as clearly communicating the unit expectations.
	4.	Implement the strategies in your classroom, and observe the learners.
Assessment	5.	Share and discuss a written entry of the reflection with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1.	Research current literature, either printed or via the Internet to create a bank of ideas for ensuring learner attention.
	2.	Devise a format for the cataloguing of such ideas for easy reference, e.g., a physical or computerized index of ideas.
Practical Application	3.	When developing unit plans, state at the beginning of each introductory lesson the planned method for gaining the learners' attention.
Assessment	4.	Keep a journal and rate each method in the idea bank, as it is used.
	5.	Share and discuss the journal with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.A.1</b> Learners are engaged and/or involved in initial reviews of past, relevant learning to ensure readiness for new learning as appropriate.</p>	<p><b>Engagement:</b></p> <ul style="list-style-type: none"> <li>' suggests more than simple on-task behavior</li> <li>' is active; implies more than passive involvement and responding minimally to the demands of a learning task</li> </ul> <p><b>Involvement:</b></p> <ul style="list-style-type: none"> <li>' suggests even deeper immersion in learning than engagement</li> <li>' is enhanced when learners interact with each other in learning tasks</li> </ul> <p><b>Reviews:</b></p> <ul style="list-style-type: none"> <li>' can consist of learners being reminded about an earlier lesson</li> <li>' can be conducted by asking a few structured, probing questions before beginning a new learning task</li> <li>' assess prerequisite skills to determine learners' readiness for learning</li> <li>' are conducted as appropriate</li> </ul>	<p><b>Elementary</b> In a second grade elementary physical education class, through demonstration learners review the previously learned skill of jumping in unison in preparation for a lesson on how to do jumping jacks in unison.</p> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. Before beginning a writing task, students in a tenth-grade English II class review the five steps involved in the writing process: prewriting, drafting, revising, editing, and publishing.</li> <li>2. In preparation for charting the socio-economic and political reasons for explorations, students in a ninth-grade world history class recount significant explorations and explorers.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.A.2</b> The attention of learners is ensured before directions and explanations for learning begin, <b>**OR**</b> learners are attending.</p>	<p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</li> <li>' vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. As learners enter their fifth-grade science class, their attention is immediately drawn to a table in the center of the room, on which sits a two-liter beaker containing a chemical reaction of baking soda and vinegar. Learners are mesmerized and directed by a message on the board, "Please record an observation in your learning log."</li> <li>2. Prior to attending to a social studies lesson, fifth-grade learners write a short response to a quotation, written on the chalkboard, that relates to the historical period being covered.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. As an introductory explanation to literary terms, learners in a seventh-grade language arts class listen to a popular song containing metaphors and similes while reading the corresponding lyrics.</li> <li>2. Prior to giving learners directions for the day's activity, the teacher scans the class, asks "are all eyes up front"?...and then proceeds with directions for learning activities.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="111 183 191 212"><b>IV.A.3</b></p> <hr data-bbox="111 240 556 243"/> <hr data-bbox="111 272 556 276"/> <p data-bbox="111 285 556 350"><b>Specific learning outcomes are clearly understood by learners.</b></p> <hr data-bbox="111 378 556 381"/> <hr data-bbox="111 410 556 414"/>	<p data-bbox="585 183 1228 280"><b>Learning outcomes</b> are what learners should know or be able to do as a result of their participation in learning activities</p>	<p data-bbox="1253 183 1417 212"><b>Elementary</b></p> <p data-bbox="1253 219 2011 553">In a fourth-grade class that has been practicing multiplication tables, learners are asked by the teacher, “What is skip counting?” After some discussion, the teacher assigns different starting numbers to different student groups and asks each group to use skip counting to develop a number series. Before students begin this activity, the teacher asks students “why” they are going to do the skip counting activity. Students explain multiples of odd and even numbers to show they understand and then the small group activity begins.</p> <p data-bbox="1253 589 1409 618"><b>Secondary</b></p> <p data-bbox="1253 625 2011 820">In a Spanish S-1 class role play activity, students will order food in a Spanish restaurant. The teacher asks learners why they are doing the activity. Students explain that the activity will help them learn to converse in Spanish by practicing conversations in an everyday life situation. The activity then begins.</p> <p data-bbox="1253 855 1318 885"><b>New</b></p> <p data-bbox="1253 891 1409 920"><b>Secondary</b></p> <p data-bbox="1253 927 2011 1122">Learners are given a detailed process delineating procedures for a research paper. The process indicates the steps involved and what each individual should be completing at each level of the research. Learners are asked to explain in their own words the steps involved, thus ensuring understanding of outcomes.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.A.4</b> Learners are interested and engaged in learning tasks as these begin.</p>	<p><b>Engagement:</b></p> <ul style="list-style-type: none"> <li>' suggests more than simple on-task behavior</li> <li>' is active; implies more than passive involvement and responding minimally to the demands of a learning task</li> </ul> <p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</li> <li>' vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In an elementary science class, the teacher begins a unit on weather activity by asking, "Why does it rain?" This type of questioning, which provokes class discussion, engages the learners at the beginning of a unit.</li> <li>2. When starting a unit on weather, learners are taken outdoors to observe types and shapes of clouds.</li> <li>3. At the introduction of a unit, each learner is guided outdoors to collect a leaf, place it in a clear plastic bag, and display it in the classroom. A discussion regarding patterns found in nature ensues.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. Learners are engaged and their attention is focused on World War II review through participation in a quiz-show-type game at the beginning of a unit.</li> <li>2. Prior to practicing specific dance steps, learners in a middle school modern dance class view a professional dance performance on a video.</li> </ol> <p><b>New Elementary and Secondary</b> When introducing a new unit, the teacher engages the learners in constructing a Know-Wants to know – Learned (K-W-L) chart. The learners contribute multiple items to each category on the chart. The teacher informs the learner that the answers will be provided throughout the course of study and that each learner is responsible for tracking progress on his/her individual chart.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="96 207 176 233"><b>IV.A.5</b></p> <hr data-bbox="96 264 548 267"/> <hr data-bbox="96 298 548 302"/> <p data-bbox="96 310 548 402"><b>The purpose or importance of learning tasks is clear to learners.</b></p> <hr data-bbox="96 433 548 436"/> <hr data-bbox="96 467 548 470"/>	<p data-bbox="579 207 1220 337">The <b>purpose and/or importance</b> of learning tasks are clear to learners when the rationale for what is to be learned is communicated to learners.</p>	<p data-bbox="1251 207 1409 233"><b>Elementary</b></p> <ol data-bbox="1251 245 2011 878" style="list-style-type: none"> <li data-bbox="1251 245 2011 472">1. Prior to baking brownies, the teacher asks learners in a first-grade class to explain why they need to measure ingredients accurately. The teacher then asks learners what can be learned about measuring ingredients after baking and then tasting the brownies. The brownie-making activity then begins.</li> <li data-bbox="1251 513 2011 740">2. In a physical education class, learners are asked to do a series of stretches before running a mile. As directions are given for the stretches, the teacher asks selected learners to explain why it is important to do stretches before running. These learners explain the benefits of stretches while the teacher monitors responses.</li> <li data-bbox="1251 781 2011 878">3. In a lesson focusing on adding and subtracting decimals, the teacher asks the learners, “Why is it important to keep the decimal points lined up?”</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p>IV.A.5      Continued</p>		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a tenth-grade math class, learners are asked to list two reasons why it is important to be able to correctly budget and balance a financial account for personal and/or business reasons. The teacher solicits learners' responses and briefly discusses them with learners. The activity worksheet task then begins.</li> <li>2. Learners in a Biology I class are asked to explain why they must read directions and practice using a scalpel before dissecting a specimen. Brief discussion of reasons (e.g. safety, precision cutting) ensues followed by the dissecting activity.</li> </ol> <p><b>New</b></p> <p><b>Secondary</b></p> <p>In a Spanish class, learners are given a passage in English to translate into the target language (Spanish). Learners are instructed to read the passage before beginning the translation. The teacher points out that in order to accurately translate, learners must begin by identifying the main idea and recognizing the idiomatic expressions.</p>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="100 203 189 235"><b>IV.A.6</b></p> <hr/> <p data-bbox="100 300 546 406"><b>Directions necessary to implement learning tasks are clear and complete.</b></p> <hr/>	<p data-bbox="577 203 798 235"><b>Learning tasks:</b></p> <p data-bbox="577 267 1218 406">' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</p> <p data-bbox="577 438 1218 576">' vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</p>	<p data-bbox="1249 203 1417 235"><b>Elementary</b></p> <ol data-bbox="1249 235 2005 706" style="list-style-type: none"> <li>1. Learners are asked to restate the steps necessary to paint a self portrait using paper and finger paint. The teacher monitors responses, clarifies as necessary, and directs learners to begin the activity.</li> <li>2. Learning materials are displayed on a table. Learners are asked to observe carefully as the teacher demonstrates how the materials are to be used in a sequence. The teacher then solicits demonstrations from selected learners, monitors their responses and the attention of other learners, and then gives directions to begin the activity.</li> </ol> <p data-bbox="1249 738 1312 771"><b>New</b></p> <p data-bbox="1249 803 1417 836"><b>Elementary</b></p> <p data-bbox="1249 836 2005 1079">In a fifth-grade science class the teacher uses over-sized flash cards to list the steps to follow in order to complete a lab activity. After giving these directions, the teacher scrambles the flash cards and asks for volunteers to place the flash cards in the correct order. Once the cards are placed in the correct order, they are posted on the wall for all to consult.</p>

Indicator		Classroom Examples
IV.A.6 Continued		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a French II class, the teacher asks learners if they understand their roles with a partner in an activity to write a short scenario in French about interpersonal communications between two strangers who might meet for the first time on a street in Paris. One learner is American and the other learner is French. The teacher solicits comments from high and low ability learners, checks for understanding, and then initiates the activity.</li> <li>2. In response to the teacher's directions, learners enrolled in Chorus I demonstrate appropriate poise for musical performances.</li> </ol> <p><b>New</b></p> <p><b>Elementary and Secondary</b> Learners are given directions to complete a task using several formats:</p> <ul style="list-style-type: none"> <li>' Directions are visible on the board.</li> <li>' Teacher verbally explains the steps for the task.</li> <li>' Several learners rephrase the task in sequence.</li> </ul>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.A.7</b> Expectations about engagement <b>and/or</b> involvement in learning tasks are clear to learners at the beginning of learning tasks.</p>	<p><b>Engagement:</b></p> <ul style="list-style-type: none"> <li>' suggests more than simple on-task behavior</li> <li>' is active; implies more than passive involvement and responding minimally to the demands of a learning task</li> </ul> <p><b>Involvement:</b></p> <ul style="list-style-type: none"> <li>' suggests even deeper immersion in learning than engagement</li> <li>' is usually enhanced when learners interact with each other in learning tasks</li> </ul> <p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills learners at the beginning of learning tasks</li> <li>' vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p><b>Elementary</b> In a primary music class, the teacher plays different beats on the cymbals, and learners respond by replicating the beats. This is demonstrated by the teacher and one learner at the beginning of the lesson in order to communicate clearly the expectations about the learning task.</p> <p><b>New Elementary</b> Learners in a fifth grade language arts class prepare for a writing activity. The teacher informs the learners, "Today we are all going to show how well we can write a descriptive paragraph." After reviewing the process, the teacher reminds the learners that they are expected to engage in planing and writing. He/she circulates among them to monitor and offer assistance. Then directs them to choose a topic related to their home life and begin writing.</p> <p><b>Secondary</b> Prior to showing a videotape depiction of a novelette learners have previously read, the teacher in a ninth-grade English I class reminds learners to watch the videotape intensely and to carefully note similarities and differences between the plot and characters as depicted in the video when compared to the novelette.</p>

Indicator		Classroom Examples
<p><b>IV.A.7</b></p> <p><b>Continued</b></p>		<p><b>New</b></p> <p><b>Elementary and Secondary</b></p> <p>The culminating activity in a middle school physical science unit is for the learners to create a machine that utilizes at least three ramps/levers. When introducing the unit, the teacher announces to the learners, “ It is important for each of you to understand how ramps and levers work so that you can apply your knowledge and produce the winning entry.” The teacher announces, “As I walk around the room, I expect you to be actively assembling this machine, or demonstrating the finished product”</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.A.8</b> As new ideas/concepts/activities begin, they are integrated with past and future learning.</p>	<p>Integrating new concepts with prior and future learning enhances continuity and transfer of learning.</p> <p>Linking past and future learning includes asking questions, using demonstrations, and soliciting learner examples.</p>	<p><b>Elementary</b> In a writing class on the format of letter writing, the use of headings has already been learned. The teacher next explains how to structure the body of a letter text and how the text body varies with formal and informal letter headings. Examples of informal (to friends) and formal (to the city mayor) text and headings are then shared with and discussed by learners. Learners then practice writing headings and text in small groups.</p> <p><b>New</b></p> <p><b>Elementary</b> In an elementary geography lesson on the Rockies, the teacher asks the learners to recall, from previous lessons, how location and altitude affect climate. After reviewing pertinent factors, the teacher directs all learners to describe the type of weather they would expect to find in Denver in September.</p> <p><b>Secondary</b> 1. In a tenth-grade US History class, the teacher introduces the concepts of the executive and judicial branches of government and asks how they compare to the legislative branch discussed the previous day. Learners are then asked to think about how understanding checks and balances in government is important to the principles of democracy to be discussed later in the unit.</p>

Indicator		Classroom Examples
IV.A.8 Continued		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1247 302 2011 597">1. In a tenth-grade US History class, the teacher introduces the concepts of the executive and judicial branches of government and asks how they compare to the legislative branch discussed the previous day. Learners are then asked to think about how understanding checks and balances in government is important to the principles of democracy to be discussed later in the unit.</li> <li data-bbox="1247 639 2011 935">2. The teacher begins an honors physics class with a demonstration of principles of transfer of motion through solid bodies using a series of suspended metal balls. After observation, learners are asked how their observations relate to the concept of force learned the prior day. The teacher then explains how the events observed relate to today's topics of transfer of motion, drag, force, and terminal velocity.</li> </ol> <p><b>New</b></p> <p><b>Secondary</b></p> <p>In a secondary social studies class, after a review of important concepts related to WW I, the teacher begins a unit about WWII by asking the learners to identify the issues left unresolved by the peace agreements of WW I.</p>

#### IV. ENHANCING AND ENABLING LEARNING PACES

<b>TEACHING AND LEARNING COMPONENT</b> <b>IV.B Teaching Methods and Learning Tasks</b>
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**Teaching methods** are procedures and techniques **used** by the teacher to enhance learning. **A learning task** is a goal-directed or objectives-related activity used by learners to enhance learning. To enhance learning, teachers employ methods that facilitate the achievement of planned objectives (I.A.1), encourage learner interest, engagement and involvement, and accommodate individual differences among learners (I.B.2).

##### Sample Professional Growth Activity 1

Comprehension	<ol style="list-style-type: none"> <li>1. Research effective teaching methods and valuable learning tasks by reading applicable professional journals and/or searching for ideas on the Internet.</li> <li>2. Collaborate with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team to develop a list of appropriate teaching methods and learning tasks for an upcoming unit.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Develop a unit plan that incorporates some of these teaching methods and learning tasks.</li> </ol>
Evaluation	<ol style="list-style-type: none"> <li>4. Select and videotape one lesson from the unit.</li> <li>5. Meet with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team to view the videotaped lesson and discuss the strengths and weaknesses of the implemented lesson. Assess the effectiveness of the chosen strategies in enhancing and enabling learning.</li> </ol>

##### Sample Professional Growth Activity 2

Comprehension	<ol style="list-style-type: none"> <li>1. Visit the classroom of a more experienced colleague to observe teaching methods and learning tasks.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>2. Incorporate one or more of the preferred teaching methods into a daily lesson plan.</li> </ol>
Evaluation	<ol style="list-style-type: none"> <li>3. Invite the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team to observe and assess the lesson and provide specific feedback on the teaching methods and learning tasks that best facilitate achievement for learners.</li> <li>4. Review the colleague's observations, and write a self reflection in your teaching log.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.B.1</b></p> <hr/> <p><b>Teaching and learning activities are appropriate for the complexity of the learning context.</b></p> <hr/>	<p><b>Learning activities</b> include both <b>teaching methods</b> and <b>learning tasks</b></p> <p><b>Methods:</b></p> <ul style="list-style-type: none"> <li>' are the procedures and techniques used by the teacher to enhance learning</li> <li>' include other elements of the teacher's role in enhancing learning such as monitoring and providing feedback to learners as they work in small groups, checking learners' works, etc.</li> </ul> <p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are involved that broaden their understandings of content, topics, ideas and/or the integration/coordination of skills</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. Learners in a fourth-grade language arts class work in a cooperative group setting to dramatize a short story covered in class.</li> <li>2. In order for learners to participate in a scientific investigation, the teacher divides the learners into small groups.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. Learners in a middle school ESOL I class follow simple oral directions to complete a task.</li> <li>2. In an honors English IV class, the learner reads and critiques classic and contemporary British literature.</li> </ol> <p><b>New Elementary/ Secondary</b></p> <p>In a physical education class learners engage in practice of skills required for playing basketball. Activities include dribbling, passing, moving and shooting.</p> <p><b>Secondary</b></p> <p>During a home economics family consumer's class, learners are involved in creating well balanced nutritious dinners. Working in small groups, they look at magazines and discuss personal favorites to compile one meal to present to the class. The teacher assists each group to check for nutritional value.</p>



Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="94 276 178 300"><b>IV.B.2</b></p> <hr data-bbox="94 332 535 341"/> <hr data-bbox="94 365 535 373"/> <p data-bbox="94 381 535 479"><b>Teaching methods and learning tasks are implemented in a logical sequence.</b></p> <hr data-bbox="94 511 535 519"/>	<p data-bbox="571 276 1218 341"><b>Methods</b> are the procedures and techniques used by the teacher to enhance learning</p> <p data-bbox="571 381 1218 511"><b>Learning tasks</b> are activities in which learners are engaged/involved that broaden their understandings of content, topics, ideas and/or the integration/coordination of skills</p> <p data-bbox="571 552 829 576"><b>Logical sequence:</b></p> <ul style="list-style-type: none"> <li data-bbox="571 617 1218 714">' includes a learning hierarchy or priority of activities in a logical order in which they occur</li> <li data-bbox="571 755 882 779">' avoids confusion</li> </ul>	<p data-bbox="1245 276 1407 300"><b>Elementary</b></p> <p data-bbox="1245 308 2016 438">After examining the purpose of taxes, learners in a fifth-grade social studies class construct a collage that identifies ways which tax dollars are used to provide needed services.</p> <p data-bbox="1245 479 1312 503"><b>New</b></p> <p data-bbox="1245 511 1396 535">Elementary</p> <p data-bbox="1245 544 2016 885">In a fourth-grade language arts class during a writing lesson, learners are learning how to develop a paragraph. They are already familiar with writing a topic sentence, and the teacher models on the overhead the steps needed to develop a complete paragraph such as two supportive details and the conclusion. To further clarify this idea, learners review several examples given by the teacher to the class. Working in cooperative groups, they develop pre-selected topic sentences into a complete paragraph.</p> <p data-bbox="1245 925 1396 950"><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1245 958 2016 1088">1. After learning how to read musical notes, learners in a middle school Keyboard I class are required to locate keys on the keyboard according to their letter names.</li> <li data-bbox="1245 1128 2016 1323">2. In a high school Physical Education class, the teacher first explains proper procedures for dribbling a basketball (e.g., knees bent, bouncing ball below the waist). Students are then asked to practice dribbling in pairs while the teacher monitors and provides feedback.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="88 277 172 305"><b>IV.B.3</b></p> <hr data-bbox="88 337 541 341"/> <hr data-bbox="88 370 541 373"/> <p data-bbox="88 380 541 477"><b>Teaching methods and learning tasks are implemented at an appropriate pace.</b></p> <hr data-bbox="88 509 541 513"/> <hr data-bbox="88 542 541 545"/>	<p data-bbox="569 277 1222 342"><b>Methods</b> are the procedures and techniques used by the teacher to enhance learning</p> <p data-bbox="569 380 1222 509"><b>Learning tasks</b> are activities in which learners are engaged/involved that broaden their understandings of content, topics, ideas and/or the integration/coordination of skills</p> <p data-bbox="569 547 1222 644"><b>Pace</b> refers to the rate of movement or progression during the lesson from one learning activity to the next or within learning activities</p>	<p data-bbox="1243 277 1411 305"><b>Elementary</b></p> <p data-bbox="1243 311 2016 612">In a third-grade language arts class, learners first work on pre-writing activities (e.g., clustering, webbing, brainstorming) while the teacher monitors. To accommodate individual differences, the teacher informs learners that they should begin to work on their writing drafts when they have completed the pre-writing activities. Thus, learners are allowed to proceed through activities at a pace that accommodates their own learning.</p> <p data-bbox="1243 649 1411 711"><b>New Elementary</b></p> <p data-bbox="1243 717 2016 1050">In a fourth-grade language arts class, learners are required to create a story map. While the learners read the story out loud, the teacher monitors the learners for engagement, understanding, and pacing of the activities. In order to check that all learners are “keeping up” the teacher conducts a review of the main ideas of the story. The teacher then directs the learners to create a story map by demonstrating and/or modeling the technique. Once the learners begin the activity, the teacher monitors the learners.</p> <p data-bbox="1243 1088 1400 1115"><b>Secondary</b></p> <p data-bbox="1243 1122 2016 1357">In a tenth-grade language arts class, the teacher and learners are providing examples and discussing parts of speech. After ten minutes and observing the quantity and quality of learner participation, the teacher asks learners if “we are going too fast or too slow?” The teacher adjusts the pace depending on the learners’ responses.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.B.4</b> Two or more methods are used that engage <b>and/or</b> involve learners in learning and that broaden learner understandings.</p>	<p><b>Engagement:</b></p> <ul style="list-style-type: none"> <li>' suggests more than simple on-task behavior</li> <li>' is active; implies more than passive involvement and responding minimally to the demands of a learning task</li> </ul> <p><b>Involvement:</b></p> <ul style="list-style-type: none"> <li>' suggests even deeper immersion in learning than engagement</li> <li>' is usually enhanced when learners interact with each other in learning tasks</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In an introductory unit about fractions, the teacher first utilizes manipulatives and diagrams to assist learners in identifying fractional names. Subsequently, learners are divided into pairs to work cooperatively in completing a worksheet designed to match objects counted with different fractions.</li> <li>2. In order to help learners remember the names and positions of the nine planets, the teacher displays a labeled three-dimensional model of the planets, teaches learners a song that incorporates the names of the planets, and presents a mnemonic device to assist learners.</li> </ol> <p><b>New Elementary</b></p> <p>As learners in an fifth-grade elementary science classroom classify animals into various groups (mammals, reptiles, birds, etc.), they use pictures and research related topics using the Internet. After listening to a teacher directed lesson, learners work in cooperative groups to discuss characteristics. They then view a National Geographic video and collectively work on composing a group oral and visual presentation.</p>

Indicator		Classroom Examples
IV.B.4 Continued		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1245 313 2007 548">1. After whole class discussion about the battle of Gettysburg, learners in an American History class work in small groups to design hypothetical strategies that might have helped the Confederate army win the battle. Subsequently, each small group reports its ideas to the class as a whole for critique and discussion.</li> <li data-bbox="1245 581 2007 751">2. Learners in an Italian II class demonstrate comprehension of unfamiliar vocabulary in context by working individually and in small groups to translate menus, songs, and poems written in Italian.</li> </ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.B.5</b> The teacher and learners interact in more than one group size as appropriate.</p>	<p>Group sizes include class groups, small groups (two or more learners), and individual learners.</p> <p>A change in group size requires a change in either teaching methods and/or learning tasks.</p> <p>Interaction requires more than occasional surveillance of learners.</p> <p>The teacher should continue to interact with learners to monitor and facilitate learning when group size changes.</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. As an introduction to a unit about adjectives, the teacher reads a story about a visit to the zoo to third-grade learners. Subsequently, as the teacher monitors their interactions, learners work in pairs to write down the characteristics of their favorite animals.</li> <li>2. In an elementary physical education class, learners practice dribbling, shooting, and passing a basketball. The teacher monitors the learners' individual practice. After learners have practiced these necessary skills, they play a game of basketball against another team.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. Learners in a middle school Orchestra I class work in pairs and later individually to identify the differences among a variety of musical styles and genres.</li> <li>2. Learners in a German II class formulate simple questions about a written passage. As the teacher monitors their progress, learners work in small groups to answer the questions about the passage.</li> </ol> <p><b>New</b> Elementary and Secondary While reading a novel in a language arts class, learners and teacher engage in daily small groups and whole class discussions for comprehension.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>IV.B.6</b> Learning activities are closed as appropriate.</p>	<p><b>Closure:</b></p> <ul style="list-style-type: none"> <li>' need not occur only in the final few minutes of the lesson</li> <li>' is appropriate as activities and/or topics within a lesson are concluded</li> <li>' might include a summary, review, recapitulation, or indication of how content is to be applied to future learning tasks or perhaps a perplexing question that stimulates learners' interest or curiosity</li> <li>' is always learner focused</li> <li>' does not have to be teacher directed</li> <li>' should be given sufficient time</li> <li>' needs to show evidence of learning</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. After reading a story in an elementary class, the teacher asks the learners a higher order question related to the story (e.g., "Why did the author portray the policeman as a bear instead of some other kind of animal such as a dog?") in order to provide closure to the lesson.</li> <li>2. At the conclusion of a learning activity, a second-grade learner completes the following statements regarding the lesson: I think ____; I know ____; I wonder ____ . The learners then work in pairs to share their responses about the lesson. The teacher utilizes the points generated during the brief discussion as a link to the following day's lesson.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a high school physics class, the teacher concludes a discussion of relativity by asking learners a thought-provoking question such as, "What happens to the length of a ruler in motion as it approaches the speed of light?"</li> <li>2. After discussing a piece of literature in a twelfth-grade English IV class, learners work in small groups to create questions about the reading material as the teacher monitors their involvement and provides feedback. As the period ends, the teacher provides whole class feedback about the quality of the questions created.</li> </ol>

<b>Indicator</b>  <b>IV.B.6</b> <b>Continued</b>		<b>New</b>  <b>Secondary</b> In a computer application class, learners individually complete a list of specific tasks to improve their typing skills. Prior to the end of the class period, they are reminded to bring closure to the lesson by writing an exit summary. The teacher reviews what they have learned, and learners share their exit summaries.
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**TEACHING AND LEARNING COMPONENT**  
**IV.C Resources for Learning**

**Aids** are *things* used by the teacher to enhance learning. **Materials** are *things* used by learners to enhance learning and broaden understanding. **Resources for learning include human resources.**

A computer, for example, can be either an aid and/or a material. During a lesson, an aid can become a material and conversely, a material can become an aid. The use of aids and materials should enhance mastery of planned objectives, accommodate individual differences among learners, be timely, and stimulate high levels of learner interest and involvement.

Differentiating resources for learning to accommodate individual differences among learners is a way to **enhance learning equity** for all learners (III.B).

Resources come in many forms. A major role and responsibility of a teacher is to connect one’s self and all learners with resources. Aids and materials, technological and human resources when used appropriately can motivate and enhance the learning process for teachers and all learners. Extending one’s classroom beyond the four walls of the classroom helps ensure that a community of learners becomes established for all.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Conduct an Internet search for using key words such as “resources for teachers” or “educational resources.”</li> <li>2. Complete an alphabetical list of learning resources appropriate to your subject/grade level. For example, A=audiovisuals, audiotapes, B=books, Big Books, C=community guest speakers, catalog of free stuff for teachers...</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>3. Develop a one-week lesson plan which contains a minimum of five aids/materials/resources. Attention should be paid to trying to include a minimum of one resource, beyond texts and worksheets, per lesson. Human resources should be included in the plan.</li> <li>4. A portfolio of resources is maintained in which useful technological, human, and other teaching and learning tools are recorded. Entries should specify ways in which each resource can be adapted to meet the range of learners’ diverse needs.</li> </ol>



Assessment	5. During the unit, the teacher is videotaped teaching a lesson. Invite the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team to watch with you and provide feedback as to the learner engagement to the resources.
<b>Sample Professional Growth Activity 2</b>	
Comprehension	<ol style="list-style-type: none"> <li>1. Identify a list of available teaching aids related to your subject/grade level. Consult with colleagues (via e-mail, in person, etc.) about additional resources.</li> <li>2. Identify learners who have individual needs (academic, social, emotional, etc). Discuss with the <b>PACES</b> Professional Growth Team which resources can be best used to meet the learners' individual differences. Additionally, discuss how resources can best be adapted to accommodate individual differences among learners.</li> <li>3. Plan a short series of lessons incorporating some of the resources identified in the previous steps.</li> </ol>
Practical Application	4. Implement the plans developed in the previous step.
Assessment	<ol style="list-style-type: none"> <li>5. During implementation of the plans, assess the effectiveness of each resource in meeting the needs of learners.</li> <li>6. Meet with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team to reflect on the effectiveness of the various teaching aids and materials in meeting the needs of learners.</li> </ol>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.C.1</b> The <b>use</b> of teaching aids <b>and/or</b> materials is appropriate for learning activities and enhances learning.</p>	<p><b>Teaching Aids</b></p> <ul style="list-style-type: none"> <li>' are used by the teacher to enhance the effectiveness of learning activities</li> <li>' include typical elements of the learning environment such as chalkboards, overhead transparencies, globes, maps, microscopes, and computers</li> <li>' include supplemental aids such as additional equipment, posters, extra books, newspapers, and videotapes</li> <li>' help accommodate individual differences among learners</li> <li>' motivate learners to engage in accompanying learning tasks, enhance learning, and broaden learners' understandings</li> </ul> <p><b>Learning materials:</b></p> <ul style="list-style-type: none"> <li>' enhance the effectiveness of learning activities</li> <li>' include, but are not limited to, textbooks, computers, microscopes, and items in the media center</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a fifth-grade mathematics class on measurement, the teacher demonstrates the use of a ruler and yarn to measure the distance between cities on a map and then to calculate the distance according to the scale. As different measurements are made, the teacher asks learners several questions to check for understanding. Subsequently, learners do a similar activity that shows they understand.</li> <li>2. Learners in a second-grade percussion/rhythm music class demonstrate appropriate placement of hands and movements using a variety of instruments.</li> </ol> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. The teacher demonstrates for learners how to use an appropriate Internet search engine to find information to be included in a report on a current event. As the search engine is demonstrated, the teacher asks several questions to check for understanding of procedural steps to be followed. Learners subsequently work in pairs and are successful in using the search engine to find information for their current event topics.</li> <li>2. In an Orchestra II class, learners show use of different and correct fingering for the various types of instruments which they play.</li> </ol>

<p><b>Indicator</b></p> <p><b>IV.C.1 Continued</b></p>		<p><b>New</b></p> <p><b>Secondary</b></p> <p>In an interdisciplinary unit on French cuisine, learners in a French class practice the vocabulary for the ingredients and utensils for making crepes displayed on the table. Learners watch as the teacher reviews the steps involved in making crepes. The teacher demonstrates the steps. The learners then use the appropriate utensils and ingredients, make the batter then lightly pan fry the crepes.</p>
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="92 266 180 293"><b>IV.C.2</b></p> <hr data-bbox="92 326 558 329"/> <p data-bbox="92 367 558 529"><b>Teaching aids and/or materials are used properly and accommodate the range of individual differences among learners.</b></p> <hr data-bbox="92 561 558 565"/> <hr data-bbox="92 597 558 600"/>	<p data-bbox="583 266 800 293"><b>Teaching Aids:</b></p> <ul data-bbox="583 334 1230 565" style="list-style-type: none"> <li>' are things used by the teacher to enhance learning</li> <li>' adapt equipment to meet learner needs</li> <li>' stimulate high levels of learner interest and involvement</li> </ul> <p data-bbox="583 605 863 633"><b>Learning materials:</b></p> <ul data-bbox="583 673 1230 836" style="list-style-type: none"> <li>' enhance the effectiveness of learning activities</li> <li>' include, but are not limited to, textbooks, computers, microscopes, and items in the media center</li> </ul>	<p data-bbox="1253 266 1415 293"><b>Elementary</b></p> <ol data-bbox="1253 302 2011 906" style="list-style-type: none"> <li>1. In a third-grade science lesson, the teacher uses two different kinds of slides in a projector to show learners examples of density in matter. One slide depicts the density of two different liquids (water and glue) and another slide depicts the density of solids (granite and wood). As the slides are shown, the teacher asks learners to compare and contrast the slide pictures and to give examples of liquids and solids from their own experiences. The slides are projected so that all learners can see and they remain projected until sufficient questioning and answering ends.</li> <li>2. In a second-grade language arts class, ESOL students listen to simple predictable stories with controlled vocabulary. Language-proficient learners listen to reading passages on or above grade level from many genres of various cultures and topics.</li> </ol> <p data-bbox="1253 946 1415 974"><b>Secondary</b></p> <ol data-bbox="1253 982 2011 1451" style="list-style-type: none"> <li>1. In a wood-shop class, the teacher demonstrates the proper and safe use of a table saw while learners observe with interest and take notes. Subsequently, the teacher points out different parts of the table saw and asks various learners to name the different parts and to describe their functions. While one learner responds, other learners are told to listen and to provide feedback about correct and incorrect responses.</li> <li>2. In an honors English I class, learners are allowed to individually select from a variety of literary pieces and to subsequently identify examples of figurative language (oxymoron, metaphor, simile, and personification).</li> </ol>

<p><b>Indicator</b></p> <p><b>IV.C.2</b>      <b>Continued</b></p>		<p><b>New</b></p> <p><b>Secondary</b> In a French class, before viewing a film on the Paris Metro, a hearing impaired learner is seated closer to the T.V. Learners then play the game Paris-Metro in groups.</p>
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.C.3</b> Teaching aids <b>and/or</b> materials are used at appropriate times during the lesson.</p>	<p><b>Teaching Aids</b></p> <ul style="list-style-type: none"> <li>' are used by the teacher to illustrate points of the lesson</li> <li>' provide examples</li> <li>' emphasize important points</li> <li>' review content</li> </ul> <p><b>Learning materials:</b></p> <p>enhance the effectiveness of learning activities</p> <p>include, but are not limited to, textbooks, computers, microscopes, and items in the media center</p> <p><b>Learning tasks:</b></p> <p>are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a fifth-grade art lesson, the teacher describes how different artists, living at different times, paint in different styles. To make dramatic contrasts during and after the discussion, the teacher shows an example of a 17<sup>th</sup> century landscape painting from “pilgrim times,” and then shows a Picasso self portrait from “more modern times.” Learners are asked to compare and to contrast the two paintings in their own words.</li> <li>2. After teacher explanation and discussion, learners in an elementary Spanish-S class use pictures to create dialogue for a story.</li> <li>3. In a first-grade mathematics lesson, learners are directed to use number cubes to show they can add and subtract objects after each example provided by the teacher and other learners.</li> </ol> <p><b>New</b></p> <p><b>Elementary and Secondary</b></p> <p>In a science class, learners practice dissecting a frog. The teacher demonstrates how to use a scalpel and a microscope. Learners then work in pairs, using the scalpel and microscope to dissect and examine a frog.</p>

<p style="text-align: center;"><b>Indicator</b></p> <p><b>IV.C.3      Continued</b></p>		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. When preparing learners to do a research project, a teacher uses a laptop computer and a projector to illustrate using an online card catalogue.</li> <li>2. In a ninth-grade Physical Education class, the teacher describes and demonstrates the proper technique for making a chest pass with a basketball. Learners are then paired, provided with a basketball and allowed to practice while the teacher monitors and provides corrective feedback.</li> </ol> <p><b>New</b></p> <p><b>Secondary</b></p> <p>In a geography class, the topic of discussion is lakes and rivers in North America. The teacher displays a map of the world, and calls upon learners to locate specific lakes and rivers in North America. Subsequently, some learners identify and draw specific lakes and rivers of North America on a blank map.</p>
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**TEACHING AND LEARNING COMPONENT  
IV.D Knowledge of Content and Pedagogy**

**Knowledge of content and pedagogy** implies that different teaching and learning contexts require different topics, teaching methods, and learning tasks. It is more than simply knowing the subject matter. Thus, activities appropriate for teaching and learning elementary mathematics are not the same as those for high school history or middle school music because the knowledge to be learned in these contexts is quite different. Pedagogy refers to a broad range of teaching and learning activities. The concern in this component is pedagogy as it links to the content taught and learned.

Whatever the context, learning is enhanced when **information** is timely, accurate, and current. Differentiating content at more than one cognitive level, structuring frameworks for knowledge, and emphasizing important elements of subject matter and learning tasks also enhance learning. The manner in which these teaching and learning elements occur varies from one assessment context to the next. *In some teaching and learning contexts more than one cognitive level may not be observed.*

**Sample Professional Growth Activity 1**

Comprehension	1.	Utilizing resources such as the Internet Site for the Florida Department of Education ( <a href="http://www.firn.edu/doe">http://www.firn.edu/doe</a> ), teachers will research the Sunshine State Standards for their particular subject area/grade level.
	2.	The teacher will review the Competency Based Curriculum for the development of learner expectations and the basis from which the content level will be developed.
	3.	After determining the level of subject area content knowledge required for the unit to be taught, the teacher will review additional printed resources to develop a personal level of comfort with knowledge of the subject area to be taught.
Practical Application	4.	The teacher will utilize the information gained from the research to support the unit plans with current, up-to-date content-area knowledge.
Assessment	5.	As the subject area content is presented, the teacher will engage in self-assessment/reflection.

**Sample Professional Growth Activity 2**

Comprehension	1.	To facilitate the learner's mastery of knowledge at more than one cognitive level, the teacher will research and become familiar with the cognitive levels set forth in Bloom's Taxonomy of Higher Order Thinking Skills.
	2.	The teacher will research the concept of cognitive levels using an Internet search engine and the key words "Higher Order Thinking Skills."
Practical Application	3.	The teacher will formulate questions related to the subject/content area which fall into the different levels of cognition. Sample questions will be included in the plan.



Assessment	4. During a period of reflection, following the lesson, the teacher will journal the learners' responses/reactions to the higher order leveled queries.	
Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="90 334 170 358"><b>IV.D.1</b></p> <hr/> <p data-bbox="90 435 558 597"><b>Learners have opportunities to learn at more than one cognitive and/or performance level or to integrate knowledge and understandings.</b></p> <hr/>	<p data-bbox="583 334 1115 358"><b>Cognitive and/or performance levels:</b></p> <ul style="list-style-type: none"> <li data-bbox="583 402 1226 464">' extend from simple to complex levels of thinking</li> <li data-bbox="583 505 1226 566">' include perceiving, attending, reasoning, and intuiting</li> <li data-bbox="583 607 1226 701">' reflect the range of developmental and ability characteristics of learners and the range of learning outcomes</li> </ul>	<p data-bbox="1253 334 1415 358"><b>Elementary</b></p> <p data-bbox="1253 370 1990 496">Learners in a fifth-grade literature class read a chapter from their literary piece, choose any seven vocabulary words, then write clues for a crossword puzzle or word search. All clues relate to the context of the text.</p> <p data-bbox="1253 537 1409 561"><b>Secondary</b></p> <p data-bbox="1253 573 1990 667">Learners in an Acting I class pantomime scenes while classmates guess and describe the scenes depicted. The mime responds to the accuracy of each guess.</p> <p data-bbox="1253 708 1318 732"><b>New</b></p> <p data-bbox="1253 773 1633 797"><b>Elementary and Secondary</b></p> <p data-bbox="1253 808 1990 967">Learners in a language arts class recite a poem. Working in cooperative groups, they compare and contrast the poem to other works by the same author. To conclude the activity, learners individually interpret the poem in their journal.</p> <p data-bbox="1253 1008 1633 1032"><b>Elementary and Secondary</b></p> <p data-bbox="1253 1044 1990 1203">In a math class, learners are given the opportunity to use color tiles to calculate the area of different objects before proceeding to more abstract calculation with paper and pencil. The teacher circulates among learners to assist as needed.</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.D.2</b> The value <b>and/or</b> importance of topics and/or learning activities are emphasized.</p>	<p><b>Emphasizing value and/or importance of topics and/or learning:</b></p> <ul style="list-style-type: none"> <li>' enhances learning and learner involvement</li> <li>' occurs throughout most lessons</li> <li>' is done by the teacher and/or by learners at appropriate times throughout the lesson</li> <li>' stimulates the attention of learners and motivates them to remain engaged in learning tasks</li> </ul>	<p><b>Elementary</b> In a second-grade music class, learners are to practice dance movements. Before movements are practiced, the teacher demonstrates the movements and points out the importance of correct foot position to maintaining balance when changing movements.</p> <p><b>New Elementary</b> In a third grade mathematics class, learners are listening to the story <b>The Greedy Triangle</b> by Mary Burns. The teacher emphasizes that, learners should take notes and focus on words such as hexagon, quadrilateral, pentagon etc. The teacher inform learners that this story is very helpful in understanding shapes.</p> <p><b>Secondary</b> In a tenth-grade Spanish class, the teacher asks learners to discuss why it is important to learn idiomatic expressions. As learners respond, the teacher provides feedback and gives humorous examples of communicating in Spanish with improper idioms in different contexts.</p>

<p><b>Indicator</b></p> <p><b>IV.D.2 Continued</b></p>		<p><b>New Secondary</b></p> <p>In an eleventh-grade mathematics class, learners are shown the relevance of fractions, decimals, absolute value, integers, and percentages to real world applications. After a class review of those areas in number concepts, learners write the longitude and latitude of two countries in three different mathematical ways (fractions, percentages, and decimals).</p>
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="86 240 170 269"><b>IV.D.3</b></p> <hr data-bbox="86 302 552 305"/> <hr data-bbox="86 337 552 341"/> <p data-bbox="86 342 552 407"><b>Content knowledge is accurate and is clear to learners.</b></p> <hr data-bbox="86 440 552 443"/> <hr data-bbox="86 475 552 479"/>	<p data-bbox="579 240 1230 342"><b>Accuracy</b> implies that content knowledge, with few exceptions, is correct and that no essential content is missing.</p> <p data-bbox="579 375 1230 477"><b>Accurate content</b> and knowledge structures reflect current and timely developments, facts, and/or examples.</p> <p data-bbox="579 509 1230 612">The <b>logic</b> of content knowledge for learners is enhanced when it is developed and sequenced in a structured and orderly manner.</p> <p data-bbox="579 644 1230 682"><b>Logical structuring</b> of content enhances clarity.</p> <p data-bbox="579 714 1230 816">The teacher and learners are co-participants in developing knowledge and moving towards learning goals.</p> <p data-bbox="579 849 1230 914">Pedagogy makes links to the content taught and learned.</p> <p data-bbox="579 946 1230 1016">Inductive and/or deductive processes might be used by the teacher and/or by learners.</p>	<p data-bbox="1251 240 1413 269"><b>Elementary</b></p> <p data-bbox="1251 272 2003 407">Learners in a kindergarten classroom draw and identify geometric shapes, cut out the shapes, then match and sort geometric shapes according to a variety of characteristics.</p> <p data-bbox="1251 440 1413 469"><b>Secondary</b></p> <p data-bbox="1251 472 2003 607">In a Biology I lesson, learners first understand the relationships among the number of eggs and the methods of fertilization before learning the relationship of new births for survival of species.</p> <p data-bbox="1251 639 1329 669"><b>NEW</b></p> <p data-bbox="1251 672 1413 701"><b>Secondary</b></p> <p data-bbox="1251 704 2003 979">In a world history class, learners use the text book as a resource to guide a timeline activity based on the evolution of the Industrial Revolution. The teacher and learners discuss the sequence of events for comprehension and accuracy. In whole group discussion, they deliberate as to what might have happened if one event of the Industrial Revolution had not occurred.</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.D.4</b> Directions for learning tasks and explanations of content <b>and/or</b> learning tasks are clearly understood by learners.</p>	<p>Understanding what is to be learned, what to do, and how to do it are important elements of learning.</p> <p>The teacher can provide explanations or directions, or learners can explain things to each other.</p> <p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</li> <li>' vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p><b>Elementary</b> After reviewing descriptive writing and the characteristics of the paragraph, the teacher in a fourth-grade writing class gives the directions for a writing assignment involving a descriptive paragraph about the learners' neighborhoods. The teacher calls upon a learner who accurately restates the assignment. Learners quickly engage in the assignment as the teacher moves around the room ensuring that all learners understood the task.</p> <p><b>New Elementary</b> Fifth-graders in an "algebraic thinking" mathematics class look at a pattern of planting rows and the rate of planting by one man in a week. The teacher guides the learners through the steps involved in creating on an x, y axis the data on planting and the time it took to complete planting the rows. Learners are teacher led to complete an example on the board. The teacher monitors engagement by each learner as they complete the assignment independently.</p> <p><b>Secondary</b> In a Biology I class, the teacher explains levels of organization within living systems (organelle, cell, tissue, organ, etc.). Learners are then given a worksheet task depicting different living systems that is explained by the teacher and subsequently label different levels of organization without needing any clarification.</p>

<p><b>Indicator</b></p> <p><b>IV.D.4</b>      Continued</p>		<p><b>New Secondary</b></p> <p>In an eighth-grade mathematics class, learners use information from a city bus schedule to complete graphs showing the arrival times for two bus routes. When learners are able to describe the assignment accurately, the teacher knows that the learners understand the directions and content for the task. Learners then proceed to complete the assignment.</p>
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.D.5</b> Essential elements of content knowledge <b>and/or</b> learning tasks are emphasized as needed.</p>	<p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</li> <li>' vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p><b>Elementary</b> In a writing lesson, the teacher stresses the basic components of an essay; introduction, body, and conclusion.</p> <p><b>New Elementary</b> Kindergartners in a technology lesson learn how to create a visual display. The teacher emphasizes to the learners the importance of finding and printing interesting, captivating pictures of farm animals. Learners work in groups to complete visual display boards for the classroom.</p> <p><b>Secondary</b> In a pre-algebra class, the teacher explains the importance of order of operations when solving mathematical expressions or equations. By allowing learners to use the correct and incorrect order of operations, learners clearly see that using the incorrect order yields a wrong answer. To help them remember the order of operations, the teacher provides learners with the following acronym: <b>Please excuse my dear Aunt Sally</b> (<b>p</b>arentheses, <b>e</b>xponents, <b>m</b>ultiplication, <b>d</b>ivision, <b>a</b>ddition, <b>s</b>ubtraction).</p> <p><b>New Secondary</b> In a technology class, tenth graders learn ways to apply technology in classroom activities. The teacher emphasizes two important uses of technology: Internet and desktop publishing. Learners will then depict the essential elements of both of these technological uses.</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.D.6</b></p> <hr/> <p><b>Potential areas or points of difficulty in content and in learning tasks are emphasized as needed.</b></p> <hr/>	<p><b>Clarity</b> is enhanced by any of the following effective methods:</p> <ul style="list-style-type: none"> <li>' outlining the subject matter</li> <li>' using advanced organizers</li> <li>' linking current tasks with learning yet to be accomplished</li> <li>' asking deliberate questions derived from current content and/or learning tasks</li> <li>' emphasizing responses to learner questions about context and tasks</li> </ul> <p><b>Learning tasks:</b></p> <ul style="list-style-type: none"> <li>' are activities in which learners are engaged/involved that broaden their understanding of content, topics, ideas, and/or integration/coordination of skills</li> <li>' can vary from simple drill and practice to more complex tasks such as constructing creative solutions to problems through the generation and discussion of ideas</li> </ul>	<p><b>Elementary</b> While engaging in a map reading lesson, learners in a fourth-grade social studies class are cautioned about confusing the words longitude and latitude.</p> <p><b>New Elementary</b> In a second-grade science class, the teacher uses a venn diagram as a strategy for learners to recognize the systems of matter and energy. This is followed by deliberate higher order thinking questions guided by the teacher to strengthen the concept.</p> <p><b>Secondary</b> Learners studying a unit on women's history explore and expound upon the difference between the words suffrage and suffering.</p>



**TEACHING AND LEARNING COMPONENT**  
**IV.E Clarification of Content/Learning Tasks**

Monitoring and addressing minor misunderstandings about content and learning tasks are important to prevent learner confusion. Clarification is necessary **after confusion occurs**. Before attempting to clarify, a teacher identifies areas of confusion and/or the need for assistance or alteration of a lesson by observing learners' verbal and nonverbal cues. Demonstrations and/or examples are used before learners ask questions. The teacher probes for the basis of misunderstanding and uses redefinitions and a variety of examples to clarify content and/or learning tasks for learners as needed. Learners might also clarify their own confusion or the confusion of other learners. If there is no misunderstanding or confusion, standards for all four indicators in Component IV.E have been met. In some teaching and learning contexts clarification may not be readily observed and confusion may persist.

**Sample Professional Growth Activity 1**

Comprehension	1. Reflect with the Colleague Teacher and/or other member(s) of the Professional Growth Team about effective techniques which may be used to reduce misunderstandings and confusion among learners. Discuss verbal and nonverbal cues you would use to ascertain misunderstandings or confusion among your learners.
Practical Application	2. Incorporate agreed-upon suggestions, as appropriate, in a series of lessons.
	3. Throughout the lesson, elicit feedback from learners as to their level of understanding.
Assessment	4. Assess in writing the effectiveness of the strategies used.

**Sample Professional Growth Activity 2**

Comprehension	1. Using professional journals and/or web sites recommended by the Colleague Teacher and/or other member(s) of the Professional Growth Team, research learner confusion and clarification strategies.
Practical Application	2. Invite the Colleague Teacher and/or other member(s) of the Professional Growth Team to observe as you implement various strategies in a series of learning activities.
Assessment	3. Meet with observer to discuss results of observation and obtain feedback.
	4. Record in writing your self-assessment of the experience.

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.E.1</b> Areas of minor misunderstanding are identified and addressed <b>**OR**</b> no minor misunderstanding occurs.</p>	<p>Both <b>verbal and/or nonverbal cues</b> from learners can be used by the teacher and/or learners as a means of identifying areas of misunderstanding.</p> <p><b>Monitoring, anticipating, and clarifying</b> minor misunderstandings may prevent subsequent confusion.</p>	<p><b>Elementary</b> While monitoring learners working individually on a task, the teacher answers questions learners pose about the assignment.</p> <p><b>Secondary</b> During a cooperative learning task, the teacher moves among, and monitors groups, and clarifies any misunderstandings the learners express.</p> <p><b>New Elementary and Secondary</b> The teacher circulates among learners working in cooperative groups to answer from the group questions. Elaboration and clarification is done in small groups as needed by the teacher.</p> <p>In a mathematics class, learners solve problems based on formulas reviewed by the teacher at the beginning of the class. The teacher assists a learner who asks a question. The learner then completes the problem, the teacher checks the problem, and gives a “thumbs up” signal.</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="58 277 142 305"><b>IV.E.2</b></p> <hr data-bbox="58 337 533 341"/> <hr data-bbox="58 370 533 373"/> <p data-bbox="58 380 533 475"><b>Different words or examples are used in clarification <b>**OR**</b> no clarification is needed.</b></p> <hr data-bbox="58 508 533 511"/> <hr data-bbox="58 540 533 544"/>	<p data-bbox="562 313 1213 443">Simple restatements of original facts, definitions, examples, demonstrations, and so on may not be sufficient to clarify misunderstanding and confusion.</p> <p data-bbox="562 483 1213 579">When the teacher and/or learners work through new and different examples, clarification is facilitated and learning is enhanced.</p> <p data-bbox="562 620 1213 716">Different examples may be accompanied by a change in aids and materials, methods and tasks, or group size.</p>	<p data-bbox="1241 277 1409 305"><b>Elementary</b></p> <ol data-bbox="1241 313 2011 849" style="list-style-type: none"> <li data-bbox="1241 313 2011 678">1. In a second-grade class, the teacher reviews the rules for making nouns plural. Learners then individually begin a worksheet task on plural nouns while the teacher monitors. Many learners are confused and have difficulty with the task. Subsequently, the teacher stops the worksheet task and provides additional examples, large group questioning and answering, and allows individual learners to go to the board to demonstrate the rules while other learners observe.</li> <li data-bbox="1241 686 2011 849">2. In an elementary ESOL III class, the teacher provides examples of antonym pairs using an overhead projector. Subsequently, examples of antonym pairs are solicited from individual learners and the examples are all correct.</li> </ol> <p data-bbox="1241 889 1304 917"><b>New</b></p> <p data-bbox="1241 925 2011 1088">In a second-grade mathematics class, learners are working on double-digit addition. The teacher directs them to begin adding the problems on the board. A few learners seem puzzled and the teacher uses tens and ones manipulatives to provide visual examples.</p>

<p style="text-align: center;"><b>Indicator</b></p> <p><b>IV.E.2</b></p>		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In an eleventh-grade literature class, after participating in a whole-class discussion on the use of figurative language and rhetoric in literature, the teacher asks learners to work in pairs to identify examples in written works. The teacher monitors learners' responses and notes that most learners have difficulty in correctly identifying figurative language. The teacher stops the activity and continues the whole-class discussion with additional examples of figurative languages from literary passages.</li> <li>2. In an American musical theater course, after taking notes from a brief lecture on the major styles of American musical theater. The Learners correctly use a multi-media encyclopedia to research examples of the different styles.</li> </ol> <p><b>New</b></p> <p><b>Secondary</b></p> <p>In a physical education class, learners at a basketball practice calculate the scores of the teams. A learner gives an incorrect score for the teams. The teacher reviews the point system for scoring and asks the learner to repeat the directions in a simple form. The Learner then gives the correct scores.</p>
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Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.E.3</b> Bases for learner difficulties or misunderstandings are sought <b>**OR**</b> no misunderstandings or difficulties occur.</p>	<p>Sources of difficulty, confusion, and misunderstanding can be obtained when probing questions are asked and other techniques are used.</p>	<p><b>Elementary</b> In a third-grade social studies class focusing on the importance of active citizenship, learners clearly understand, as indicated through the teacher’s probing, the steps necessary to identify a classroom or school problem.</p> <p><b>New Elementary</b> Learners in a first grade language arts class, are asked to compare <b>Snow White</b> to <b>Cinderella</b>. The Learners are confused as to whether Snow White is the Disney Character or the one described in <b>Grimm’s Fairy Tale</b>. The teacher explains that it is the Disney character. The teacher then asks the learners to identify the differences between the two Snow Whites by asking them to compare and contrast.</p> <p><b>Secondary</b> As learners begin an independent task involving functions in a pre-calculus class, they have obvious difficulty and are rather confused. The teacher halts the activity and asks a series of probing questions about functions, in an attempt to pinpoint major elements of misunderstanding. Once done, the teacher provides additional examples for further clarification. Learners then resume their independent work while the teacher again monitors.</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>IV.E.4</b></p> <hr/> <p><b>Mi</b>  <b>understandings or difficulties are successfully clarified as appropriate **OR** no misunderstanding or difficulties occur.</b></p> <hr/> <hr/>	<p>Attempts to clarify may not be the same for all learners.</p> <p>Successful clarification has occurred when learner verbal and/or nonverbal cues of misunderstanding and confusion are no longer evident and learners are again engaged in learning task(s).</p>	<p><b>Elementary</b>  Prior to forming small groups for the purpose of creating word problems, learners ask the teacher to review the components of a clearly written word problem. After the teacher successfully clarifies any misunderstandings, the learners proceed with the task.</p> <p><b>New Elementary</b>  Learners in a second-grade physical education class, role play basic first aid skills for medical emergencies. One learner falls in onto the carpet from a small rocking and cries, even though there is no evidence of injury. Another learner refers to this as an emergency and suggests calling 911. The teacher explains that an emergency requires prompt action. The learner concludes this situation is not an emergency. Once the misunderstanding is clarified, the initial activity continues through use of a storyboard.</p> <p><b>Elementary and Secondary</b>  Upon entering the classroom, the teacher displays the day's activities on the board. As a class, learners orally review the assignments from the chalkboard. Three learners are unable to proceed because of a misunderstanding. The teacher approaches the learners and quietly explains the assignment. As the teacher walks away the learners are engaged.</p> <p><b>Secondary</b>  In a drivers' education class, learners are asked to explain situations in which the emergency brake should be used. Examples provided and answers to the teacher's questions are 100% correct.</p>

<p style="text-align: center;"><b>Indicator</b></p> <p><b>IV.E.4</b>      Continued</p>		<p><b>New Secondary</b></p> <p>During a physical education class on responsible health behavior to reduce health risks, learners distinguish between health threatening and non health-threatening environments by explaining situations such as hurricane watch or warning. Learners create yellow and red weather watch flags. One learner does not understand the difference and places a yellow flag for a hurricane warning. The teacher clearly defines the terms explaining that a warning is a notification given in advance, whereas a watch means to be on the lookout for danger. The learner then comprehends and places a red flag for the hurricane watch indicating a health threat.</p>
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## DOMAIN V: ENABLING THINKING

These teaching and learning indicators are not independent teaching methods or learning tasks. They represent a complex set of interrelated possibilities to enhance learners' engagement and involvement in developing their abilities to think. On-task behavior may not be sufficient to engage and involve learners in thinking. Involvement in the development of thinking abilities suggests more in-depth cognitive activity than being at task. Involvement in thinking may be evident in group activities and in lengthy interactions among learners and/or the teacher and learners. Involvement in thinking and developing thinking abilities require prior knowledge. Thinking is enhanced when learners can process and construct new knowledge in ways that are meaningful to them and when essential elements of knowledge are given emphasis (IV.D.5).

In enabling thinking, the teacher uses methods that **actively engage and/or involve learners** in ample opportunities to generate, structure, restructure, integrate, transfer, and transform knowledge. Learners are encouraged to think actively by the teacher's use of **wait time**, questioning strategies, and extending responses and ideas. Home learning assignments that engage and/or involve learners in developing their abilities to think might also be planned (I.E.1). **Indicators in this domain are applicable to all contexts and may be addressed over time. All indicators may not, however, be evident in a single lesson.** In some teaching and learning activities learners may not be actively involved in the development of higher order thinking abilities.

### TEACHING AND LEARNING COMPONENTS

- V.A Higher Order Cognition
- V.B Questioning Strategies
- V.C Problem Solving and Creative Thinking



**TEACHING AND LEARNING COMPONENT  
V.A Higher Order Cognition**

Higher order cognitive skills include the development and use of associations and concepts varying from concrete to abstract, and principles, rules, and generalizations. Higher order thinking is enabled when learners are encouraged to generate and think about examples from their own experiences and to use metacognition and mental imagery as well. Learning and linking new associations and concepts help to structure knowledge in new ways, and facilitate the development of learners’ abilities to think.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Component V.A. of the <b>PACES Teaching and Learning Professional Growth Manual</b> and this <b>Teacher Guide to PACES</b>.</li> <li>2. Conduct an Internet search using “Bloom’s Taxonomy” as key words/query.</li> <li>3. Identify skills associated with the three higher levels of Bloom’s (analysis, synthesis, and evaluation) and meet with Professional Growth Team for examples of effective teaching strategies encouraging higher order cognitive engagement of learners in the content being taught.</li> </ol>
Practical Application	4. Develop a one-week lesson plan incorporating teaching methods and learning tasks that demonstrate the use of strategies identified during the meeting with the Professional Growth Team.
Assessment	<ol style="list-style-type: none"> <li>5. Throughout the week of implementation, engage in self-assessment/reflection and complete a log of experience to include successful and unsuccessful strategies.</li> <li>6. Share experience log with Professional Growth Team for feedback.</li> </ol>

**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"> <li>1. Meet with the <b>PACES</b> Professional Growth Team to review Component V.A. of the <b>PACES Teaching and Learning Professional Growth Manual</b> and this <b>Teacher Guide to PACES</b>.</li> <li>2. In conference with the <b>PACES</b> Professional Growth Team, identify skills that would meet the indicators for this Teaching and Learning Component and role play with an experienced colleague. Use feedback for further development.</li> </ol>
Practical Application	3. After feedback, transfer the role-playing scenario to a series of lessons in the classroom.
Assessment	4. Throughout the implementation, engage in self-assessment/reflection and complete a log of experience to include successful and unsuccessful strategies.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="58 253 128 280"><b>V.A.1</b></p> <hr data-bbox="58 315 506 318"/> <hr data-bbox="58 350 506 354"/> <p data-bbox="58 358 537 451"><b>Learners are actively engaged and/or involved in developing associations.</b></p> <hr data-bbox="58 483 506 487"/> <hr data-bbox="58 519 506 522"/>	<p data-bbox="562 253 821 280"><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li data-bbox="562 321 877 349">' involves learners</li> <li data-bbox="562 391 1220 451">' is a high level/quality of learner participation in learning activities</li> <li data-bbox="562 493 1220 553">' suggests more than simple on-task behavior</li> <li data-bbox="562 596 1220 656">' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p data-bbox="562 695 699 722"><b>Involved:</b></p> <ul style="list-style-type: none"> <li data-bbox="562 761 1161 789">' is deep immersion in a learning activity</li> <li data-bbox="562 831 1220 1133">' can be enhanced when learners: <ul style="list-style-type: none"> <li data-bbox="659 898 1058 925">&lt; interact with each other</li> <li data-bbox="659 932 1220 992">&lt; are asked for comments and assistance</li> <li data-bbox="659 998 1146 1026">&lt; roles are involved and detailed</li> <li data-bbox="659 1032 1062 1060">&lt; access prior knowledge</li> <li data-bbox="659 1066 1220 1127">&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p data-bbox="1245 253 1409 280"><b>Elementary</b></p> <p data-bbox="1245 287 2011 553">During a language arts class on similes, teacher develops examples for class such as, “She’s as pretty as a flower; he’s as quick as a rabbit.” Learner’s prior knowledge is explored by discussion with emphasis on the differences to make a point about the commonalities. In cooperative group learners are involved in transferring the knowledge by producing and illustrating a group display.</p> <p data-bbox="1245 592 1310 620"><b>New</b></p> <p data-bbox="1245 659 1409 686"><b>Elementary</b></p> <p data-bbox="1245 693 1944 893">In a kindergarten mathematics class, learners are working on recognizing different shapes. Learners working in small groups use pattern blocks to form shape patterns. The teacher assists the learners in developing associations between shapes and objects in the classroom such as a ball, clock, board, rug, etc.</p>

<p><b>V.A.1 cont.</b></p>	<p><b>Associations:</b></p> <ul style="list-style-type: none"> <li>' are connections between ideas, sensations, memories, etc.</li> <li>' are fundamental building blocks for learning</li> <li>' form networks, patterns, and arrangements of knowledge</li> <li>' are more meaningful to learners when the associative networks can be used to enhance learning</li> <li>' address the prior knowledge that learners have and is an important element in building associative networks</li> <li>' can vary from simple to more complex; concrete to abstract</li> </ul>	<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In a women's history lesson, learners are engaged in a brainstorming activity that is diagrammed on the board to activate prior knowledge. Learners are actively engaged in developing associations between great women in their families and/or communities, and women from history. These associations will be utilized for the lesson about to be studied.</li> <li>2. In a French class, while discussing culture, learners compare and contrast the attitudes about hobbies among American teenagers and French teenagers through Venn diagramming. Letters from French pen pals of individual learners, an ongoing project through the use of the Internet, are read aloud to provide more meaningful associations.</li> </ol>
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Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.A.2</b></p> <p>Learners are actively engaged <b>and/or</b> involved in developing concepts.</p>	<p><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involved:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners: <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul> <p><b>Concepts:</b></p> <ul style="list-style-type: none"> <li>' is structuring knowledge</li> <li>' include general ideas or understanding derived from specific instances or classes of objects</li> <li>' can vary from simple, concrete ideas to more abstract</li> </ul>	<p><b>Elementary</b></p> <p>In a science class, learners engage in a discussion on conservation of resources. Meaning is achieved by several activities on recycling such as learners bringing recyclables from home. Learners are involved sorting the items to determine which are more reusable.</p> <p><b>New</b></p> <p><b>Elementary</b></p> <p>In a first-grade language arts class, learners are developing the concept of sequencing; the learners are asked to list the steps involved in making a peanut butter and jelly sandwich. Each learner is asked to remember that the steps need to be in a logical order as any step missed will hinder completing the sandwich.</p> <p><b>Elementary</b></p> <p>In a first-grade mathematics class, the lesson is on the differences in measuring length. Learners develop the concept of measurement by using a variety of measuring tools such as: a ruler, and a measuring tape. Learners are divided into groups for hands-on activity; measuring objects around the classroom with rulers comparing length in inches and feet. They then discuss their findings with the class, and a question and answer session ensues.</p>

Indicator		
<p>V.A.2 Continued</p>		<p><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1241 253 2011 521">1. In a U.S. government class the concept of equality/democracy is begun by accessing prior knowledge. Learners are asked to share, “What instances of equality/inequality are you familiar with from personal experience?” Learners then look for the similarities and differences in equality among members of the class as opposed to government/ democracy.</li> <li data-bbox="1241 558 2011 857">2. In a business education class, learners participate in a small group activity in which they identify examples and non-examples of duties and responsibilities of various officers of a large corporation (e.g., president, vice-president, treasurer, secretary). Subsequently, each small group shares their list with the class as a whole, examples are discussed and critiqued, and a master list of characteristics is developed.</li> </ol> <p><b>New</b></p> <p><b>Secondary</b></p> <p>Learners in a social studies class read the book <b>Rainbow Fish</b> by Brenda Crow. During a class discussion on sharing, learners describe cause and effect of the story as the Rainbow Fish gives away his beautiful scales. Individually, learners further develop the concept of sharing with others by giving examples of what it means to share and what feelings are evoked by the act.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.A.3</b></p> <p>Learners are actively engaged <b>and/or</b> involved in developing principles, rules, and/or generalizations.</p>	<p><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involved:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners: <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p><b>Elementary</b></p> <p>During a science lesson on animals, learners gain insight through the use of slides, puzzles, and magazine pictures to compare and contrast different types of animals. Learners then focus on mammals bearing live young and engage in teacher-directed class discussion for deeper understanding. Through examples and non-examples of which animals are mammals, learners are able to make generalizations.</p> <p><b>New Elementary</b></p> <p>In a creative writing class, learners discuss why rules are necessary in order to have a peaceful and harmonious co-existence among everyone in the classroom. A discussion ensues concerning the consequences of the absence of rules.</p> <p><b>Secondary</b></p> <p>In a family and consumer sciences (home economics) class, learners work on an interdisciplinary unit relating prior knowledge on the mathematical concepts of multiplication, addition, and subtraction to a shopping budget. Learners are given various responsibilities in a mock household with a limited budget and will brainstorm and subsequently arrive at the principle that bankruptcy is the general outcome of poor money management.</p>

<p style="text-align: center;"><b>Indicator</b></p> <p><b>V.A.3      Continued</b></p>	<p><b>Principles, rules, and/or generalizations:</b></p> <ul style="list-style-type: none"> <li>'      are statements or understandings of relationships between two or more concepts</li> <li>'      can be a law, a fundamental truth or doctrine, or an essential element that produces an effect</li> </ul>	<p><b>New</b></p> <p><b>Elementary and Secondary</b>  In a music class, learners study the rules of creating a rhyme pattern. Learners work in groups of four to find popular songs which they know well. They listen to the songs and record the rhyme pattern. Learners then share rhyme patterns on the board. Learners make generalizations and identify any rules for rhyming.</p>
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Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.A.4</b></p> <hr/> <p><b>Learners are actively engaged and/or involved and encouraged to generate and think about examples from their own experiences.</b></p> <hr/>	<p><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involved:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners: <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p><b>Elementary</b></p> <p>During a social studies lesson on families, concepts such as customs and traditions are developed by encouraging learners to generate thoughts about individual family members. Posing questions such as, “How are holidays celebrated in your family?” and “What foods are eaten on these occasions?” Learners share personal experiences in a class discussion. For home learning each individual is asked to interview a relative, write about it, and share the experience with the class the following day.</p> <p><b>New</b></p> <p><b>Elementary</b></p> <p>During a lesson on food and nutrition, the teacher asks the learners to identify their favorite foods in Mac Donald’s, Burger King, or Wendy’s. The learners list the foods and define each as it compares to the food groups listed on the chart.</p> <p><b>Elementary</b></p> <p>In a fourth-grade language arts class, learners are reading a story which takes place in Miami Beach. The teacher develops prior knowledge by asking learners to discuss what they already know about Miami Beach based on what they have seen, read, or personally have experienced. After the discussion, the learners partner-read the story. As a culminating project, they create a brochure persuading others to visit Miami Beach based on information obtained through the story reading.</p>



Indicator		
<p><b>V.A.4</b> Continued</p>		<p><b>Secondary</b>            In a health class on HIV/AIDS prevention, the learners brainstorm to activate prior knowledge. Learners are then encouraged to share any experiences they have had with anyone who has contracted AIDS. The teacher guides discussion for appropriateness and confidentiality before, during, and after learners engage in generating examples. This personalizes the learning environment and establishes learner equity.</p> <p><b>New</b></p> <p><b>Secondary</b>            As an introduction to a unit of literature on <b>Animal Farm</b>, learners in a Language Arts class are asked to think about a situation when someone persuades others to do what he wants. Learners are asked to share their feelings with the class as to whether that persuasion lead to good things or bad things.</p> <p><b>Secondary</b>            For a civics assignment, learners working in cooperative groups are asked to brainstorm and list existing rules at home, school, and in the community. First the teacher encourages the learners to list some rules they have to follow at home and at school. This is followed by a class discussion on the various points of view. Learners generate group posters for a class presentation.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.A.5</b></p> <p>Learners are actively engaged <b>and/or</b> involved in and encouraged to use mental imagery.</p>	<p><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involved:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul> <p><b>Mental imagery:</b></p> <ul style="list-style-type: none"> <li>' is creating a picture in the mind by activating the imagination</li> <li>' is bounded by learners past experiences and past learning</li> <li>' is more difficult for some learners and</li> </ul>	<p><b>Elementary</b></p> <p>While covering a unit about oceans in a fourth-grade science class, the teacher encourages learners to construct mental images about living at the bottom of the sea. Learners will transform knowledge and understanding by imagining a walk on the ocean floor as they feel the various life forms brushing on the bottom of the feet. Learners will then express thoughts in a writing activity.</p> <p><b>New Elementary and Secondary</b></p> <p>In an art class, learners listen to Aaron Copeland's "Grand Canyon Suite". They are asked to visualize the image the music creates in their mind. Each learner then sketches a pictorial representation of the mental image created by the melody of the music.</p> <p><b>Secondary</b></p> <p>In a geography lesson, learners are asked to consider the following example: "Imagine you are walking in a rain forest. Explain what you see, hear, feel, smell, and touch. What type of birds, animals, and insect life do you see? What type of plants and trees are in the forest? Is it raining? What is the temperature, etc." Learners will volunteer their images and will then draw the image and write an essay. A subsequent lesson will entail geographic locations of the world's rain forests.</p>

**TEACHING AND LEARNING COMPONENT  
V.B QUESTIONING STRATEGIES**

Questions that enable the development of thinking skills are the focus of this teaching and learning component. Questions can be asked by the teacher or by learners. Enabling of thinking is enhanced by the use of **wait time** as appropriate. **Questioning strategies** implies the deliberate structuring and use of questions that actively engage and/or involve learners in the development of their abilities to think.

**Sample Professional Growth Activity 1**

Comprehension	1.	Review Component V.B of the <b>PACES Teaching and Learning Professional Growth Manual</b> and this <b>Teacher Guide to PACES</b> .
	2.	Using “Bloom’s Taxonomy” as key words/query, conduct an Internet search of education web sites recommended by colleagues.
Practical Application	3.	Practice writing questions at the various levels of “Bloom’s Taxonomy” from a list of verbs that cue the questions and apply the information to your lesson/unit. Develop and write a one-week lesson plan incorporating questions.
	4.	Teach using prepared questions and develop new questions as the discussion evolves in class.
Assessment	5.	Throughout the week of implementation, reflect on the questions, the learner responses to questions, and further potential for developing higher order questions.
	6.	Share and discuss a written entry of the reflection with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1.	Review Component V.B of the <b>PACES Teaching and Learning Professional Growth Manual</b> and this <b>Teacher Guide to PACES</b> .
	2.	Observe an experienced teacher identified by colleagues as having excellent questioning strategies and the effective use of wait time.
Practical Application	3.	Develop and implement a series of lessons that demonstrate strategies from the previous step.
Assessment	4.	Throughout the process of practice, engage in self-assessment/reflection and take notes on successful and unsuccessful strategies.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.B.1</b></p> <hr/> <p><b>A variety of questions that enable thinking are asked and/or solicited.</b></p> <hr/>	<p><b>Variety of questions:</b></p> <p>refers to several purposes for which questioning techniques can be used to enhance the development of thinking skills. Questions asked of this type stimulate higher order thinking abilities by requiring learners and the teacher to</p> <ul style="list-style-type: none"> <li>' compare</li> <li>' contrast</li> <li>' classify</li> <li>' justify</li> <li>' speculate</li> <li>' predict</li> <li>' synthesize</li> <li>' evaluate</li> <li>' move from simple to complex</li> <li>' move from general to specific, etc.</li> </ul> <p>Questioning methods require that knowledge be</p> <ul style="list-style-type: none"> <li>' generated</li> <li>' structured</li> <li>' restructured</li> <li>' integrated</li> <li>' transferred</li> <li>' transformed</li> </ul>	<p><b>Elementary</b></p> <p>After a guided reading lesson on <b>Charlotte's Web</b>, learners work in small groups as the teacher guides learning by using a variety of questions such as "What other story read has a similar message?" "What was the author's intention in creating this story?" and "How would you do things differently if you were the author to impact the resolution or solution of the plot?" With what main character traits do you most identify? This is followed by each group creating a different ending to the story and sharing with the class.</p> <p><b>New</b></p> <p><b>Elementary and Secondary</b></p> <p>In a social studies class, learners work in small groups to generate a variety of questions based on materials referenced in classroom discussion such as charts, graphs and maps. After this lesson, the teacher selects questions at a variety of cognitive levels and compiles the questions for learners to use as a review prior to a formal assessment.</p> <p><b>Elementary</b></p> <p>In a Physical Education class for second-graders, the teacher directs a class discussion on safety by asking:</p> <ul style="list-style-type: none"> <li>' When do you use a seatbelt?</li> <li>' Why is a seat belt important?</li> <li>' How are seatbelts and bike helmets alike?</li> <li>' What are three reasons for using seatbelts?</li> <li>' Can you list three reasons for using helmets?</li> </ul>

<p><b>V.B.I</b>            continued</p>		<p><b>Secondary</b>  In a world history class, while discussing population explosion, learners are asked basic recall questions about the present problems. To move to higher order thinking, learners will speculate about the issues in the future. What will happen when there is no more room on Earth?,What could be an alternative living space other than earth? What problems will exist regarding housing, nutrition, hygiene, etc.? Through class discussion, learners will select one prediction as a debate topic.</p> <p><b>New</b></p> <p><b>Secondary</b></p> <ol style="list-style-type: none"> <li>1. In an advanced Spanish class, learners are asked to answer the following in order to compare and contrast similarities and differences between customs in Spain and those in the United States: <ul style="list-style-type: none"> <li>' Why do you think customs are different?</li> <li>' How are they different?</li> <li>' How are they similar?</li> <li>' Are there comparable holidays that are more important in one country than in the other?</li> <li>' What are some foods from one country that might seem unusual to people from the other?</li> </ul> </li> </ol>
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<p><b>Indicator</b></p> <p><b>V.B.1</b> continued</p>		<p>2. Delaying the onset of potential health problems in adulthood is the unit of study in an eleventh grade Physical Education class. To help learners understand changing nutritional needs, lifestyle changes, and exercise requirements throughout life cycle, learners answer the following questions in a Wellness Plan Journal:</p> <ul style="list-style-type: none"> <li>' What two factors are most important when addressing changing nutritional needs of active and sedentary seventeen year old?</li> <li>' Which lifestyle change would/could affect your health most significantly? How? Why?</li> <li>' How does food affect your health?</li> </ul>
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Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.B.2</b></p> <hr/> <p><b>Wait time is used as appropriate to enhance the development of thinking abilities.</b></p> <hr/>	<p><b>Wait time:</b></p> <p>is the duration of the pause separating speakers (3-5 seconds at least). There are four types of pauses</p> <ul style="list-style-type: none"> <li>' teacher - learner</li> <li>' learner - teacher</li> <li>' learner - learner</li> <li>' teacher - teacher</li> </ul> <p>When asking questions of a group of learners, it is generally preferable to</p> <ul style="list-style-type: none"> <li>&lt; pose a question to the group</li> <li>&lt; allow learners sufficient wait time to ponder answers to the questions</li> <li>&lt; ask individual learners to then respond</li> </ul>	<p><b>Elementary and Secondary</b></p> <p>In a math class, while introducing the concept of multiplying fractions, the teacher allows a student wait time to formulate thoughts before answering a question, even though several students are anxious to answer. A learner then asks the teacher a question. The teacher models wait time, repeats the question so that everyone gets the chance to think, then proceeds to answer. The teacher reminds the learners about the concept of wait time, its benefits and rewards, which was discussed at the beginning of the year.</p> <p><b>New</b></p> <p><b>Elementary</b></p> <p>In a reading class, learners are asked the following question after completing the study of the Grasshopper and the Ant: How do the characters in this story relate to people you know? The teacher then asks them to take time in formulating their answers, and to be sure to phrase their answers in complete sentences. The teacher then waits 10 seconds before taking any answers.</p> <p><b>Secondary</b></p> <p>In an economics class the teacher asks learners to think of 3 items that increase in value as they get older. She then waits 10 seconds before taking any answers.</p> <p><b>Secondary</b></p> <p>In a math class, after answering a problem on the board, the teacher asks learners to consider what each of the numbers signify. The teacher waits 10 seconds before taking any answers.</p>

**TEACHING AND LEARNING COMPONENT  
V.C PROBLEM SOLVING AND CREATIVE THINKING**

When learners are involved in identifying critical features of, articulating, and solving problems, the development and use of higher order thinking skills are enhanced. Elaborating responses and extending responses and ideas to different contexts facilitate the development of the ability to think. Creative thinking challenges learners to use their ideas in new and original ways that can enhance their personal learning and strengthen their beliefs in their capabilities as learners (self-efficacy).

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Review Component V.C of the <b>PACES Teaching and Learning Professional Growth Manual</b> and this <b>Teacher Guide to PACES</b>, for a written explanation of the component.</li> <li>2. Define and restate in your own words the following: critical analysis and/or problem solving, elaborating, extending or discussing learners’ responses, creative thinking, extending learning to different contexts and the relationship of all the aforementioned skills to learners’ responsibilities as thinkers.</li> <li>3. Meet with the <b>PACES</b> Professional Growth Team for discussion and clarification of <b>PACES</b> Component V.C.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>4. Write and implement a one-week lesson plan including the above thinking strategies and share with the Colleague or other member(s) of the <b>PACES</b> Professional Growth Team for feedback.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Throughout the week of implementation, engage in self-assessment/reflection and complete a log of experiences to include successful and unsuccessful strategies.</li> </ol>



**Sample Professional Growth Activity 2**

Comprehension	<ol style="list-style-type: none"><li>1. Review Component V.C of the <b><i>PACES Teaching and Learning Professional Growth Manual</i></b> and this <b><i>Teacher Guide to PACES</i></b>.</li><li>2. Conduct an Internet search using “problem solving” and/or “creative thinking” as key words/query for potential project ideas.</li></ol>
Practical Application	<ol style="list-style-type: none"><li>3. Working collaboratively with an experienced colleague, write a lesson plan with a project encompassing problem solving and creative thinking for learners.</li><li>4. Videotape the implementation of the project for analysis.</li></ol>
Assessment	<ol style="list-style-type: none"><li>5. Conclude with viewing the videotape for feedback with the experienced colleague. Write a summary on problem solving and creative thinking strategies.</li></ol>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="86 277 159 305"><b>V.C.1</b></p> <hr data-bbox="86 337 533 341"/> <hr data-bbox="86 373 533 376"/> <p data-bbox="86 414 543 511"><b>Learners are actively engaged and/or involved in critical analysis and/or problem solving.</b></p> <hr data-bbox="86 544 533 547"/> <hr data-bbox="86 579 533 583"/>	<p data-bbox="571 277 856 305"><b>Active Engagement:</b></p> <ul style="list-style-type: none"> <li data-bbox="571 345 888 373">' involves learners</li> <li data-bbox="571 414 1224 479">' is a high level/quality of learner participation in learning activities</li> <li data-bbox="571 516 1224 581">' suggests more than simple on-task behavior</li> <li data-bbox="571 618 1224 683">' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p data-bbox="571 721 709 748"><b>Involved:</b></p> <ul style="list-style-type: none"> <li data-bbox="571 786 1167 813">' is deep immersion in a learning activity</li> <li data-bbox="571 850 1224 1122">' can be enhanced when learners <ul style="list-style-type: none"> <li data-bbox="667 888 1066 915">&lt; interact with each other</li> <li data-bbox="667 920 1224 985">&lt; are asked for comments and assistance</li> <li data-bbox="667 990 1152 1018">&lt; roles are involved and detailed</li> <li data-bbox="667 1023 1073 1050">&lt; access prior knowledge</li> <li data-bbox="667 1055 1224 1122">&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p data-bbox="1253 277 1419 305"><b>Elementary</b></p> <p data-bbox="1253 310 2011 581">During a class activity on conflict resolution, the teacher uses various questioning strategies to discuss the main idea of solving conflicts peacefully. Learners are encouraged to analyze the cause and effect relationships of conflict and come to a consensus to develop alternative strategies. Learners are actively involved in using thinking skills as a way of solving conflicts.</p> <p data-bbox="1253 618 1409 646"><b>Secondary</b></p> <p data-bbox="1253 651 2011 954">In an American history Civil War unit a class discussion speculating on the causes and effects of the war leads to work in pairs. Learners then create charts and make presentations. The lesson is summarized with a review and speculation as to what would have happened if the outcome of the war had been different. What would it have been like to live in the north and/or south? Learners will predict what the USA would be like if it was divided and why.</p> <p data-bbox="1253 992 1318 1019"><b>New</b></p> <p data-bbox="1253 1057 1633 1084"><b>Elementary and Secondary</b></p> <p data-bbox="1253 1089 2011 1391">In a science class the learners discuss living environments and the physical characteristics of living things in these environments. The teacher asks learners to create a fictitious animal who lives both on land and under water by asking: What physical characteristics does this animal have that enables it to survive in the dual habitat? The teacher further probes by asking; how would your animal survive differently from existing animals?</p>

<p><b>V.C.1 cont.</b></p>	<p><b>Critical analysis and/or problem solving</b> is a deliberate teaching and learning activity that stimulates the development of thinking skills. Critical analysis and problem solving can be encouraged by:</p> <ul style="list-style-type: none"> <li>' discussing or negotiating learning outcomes with learners</li> <li>' learning strategies</li> <li>' solutions to problems</li> <li>' making predictions</li> <li>' linking causes to effects</li> <li>' breaking complex problems into smaller problems (thinking backwards)</li> <li>' identifying relationships, patterns, pros and cons, strengths and weaknesses, assumptions and limitations, logical fallacies and ambiguities, and main ideas</li> <li>' monitoring/evaluating procedures and steps toward accomplishing learning outcomes/goals</li> <li>' discussing means and ends relationships</li> <li>' consensus building</li> <li>' distinguishing facts from value claims and relevant from irrelevant information</li> <li>' determining credibility of source</li> </ul>	<p><b>New</b></p> <p><b>Elementary</b>  First-graders learn in their science class that life occurs on the surface of the earth on land, in the air, and in water. Learners are asked to make a list of things that one creature from each environment needs to survive in that habitat. Learners are also asked to predict what would happen to the animals if changes were made to each habitat.</p> <p><b>Secondary</b>  Learners in a high school science class watch a video to familiarize themselves with fish found in the Caribbean coral reefs. Afterwards, they investigate the condition of coral reefs in the Caribbean on the Internet. Working in small groups, they analyze the data to determine what can be done to protect the coral reefs.</p> <p><b>Secondary</b>  In a twelfth-grade science lesson on processes that shape the Earth, learners question the shrinking of coastlines in the Gulf coast and eastern borderlines of North America. Learners assume the role of geologists by researching and studying the transfer of heat energy where the atmosphere interfaces with erosion of the Gulf of Mexico on land. Learners construct a diagram to prove that the continent has altered over time.</p>
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**V.C.1 cont.**

**New**

**Elementary and Secondary**

In a drama class, learners select a modern play and find a published critique of the play. After viewing the play, learners discuss their own perceptions of the production and contrast the critique's view with their own.

**Elementary and Secondary**

In a tenth-grade music class the learners listen to 3 music selections. The learners describe the mood each selection elicits, and analyze why. As an extension of this activity, the learners are asked to give suggestions as to what music should be played in the cafeteria, hallways, buses, etc.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.C.2</b></p> <p>Learners are actively engaged <b>and/or</b> involved in elaborating, extending, or discussing their own or other learner responses.</p>	<p><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involved:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p><b>Elementary and Secondary</b></p> <p>In preparation for a science project on plant life, learners are asked to generate an individual hypothesis. The teacher encourages learner to learner questioning by writing prompts on the board for reference. As each learner states the hypothesis, others are encouraged to ask probing questions and/or to provide suggestions for clarification. Throughout this process, the teacher encourages learners to extend and elaborate on their own as well as other responses.</p> <p><b>New</b></p> <p><b>Elementary and Secondary</b></p> <p>The teacher uses the strategy predict, observe, and explain to illustrate to the class how change affects a process. In a group learning activity for a given situation, the teacher asks learners to predict what will happen if a specific change is made. Learners give supportive details as their answers and extend their answers with details from another point-of-view or through discussions of the pros and cons of the particular change.</p> <p><b>Secondary</b></p> <p>Learners are actively engaged and/or discussing their own or other learner responses. In a music class, learners reflect on how they would choreograph a short movement piece. They work in cooperative learning groups to discuss their ideas. As each learner shares ideas with the class, other learners add suggestions, add questions, and expand on ideas each other's ideas by giving their personal opinion.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.C.3</b></p> <p>Learners are actively engaged <b>and/or</b> involved in creative thinking.</p>	<p><b>Actively Engaged:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involved:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p><b>Elementary</b></p> <p>In a media class, learners complete a unit on consumers and advertising. Various components of effective advertising are discussed. Learners brainstorm to develop new and original products that could impact positively on consumers. Learners then predict the uses and explain the steps needed to complete a prototype.</p> <p><b>Secondary</b></p> <p>During a civil rights lesson, learners are actively engaged in a discussion about the philosophical differences between Dr. King and Malcolm X. Fluency in thinking is encouraged by analyzing the perspectives of Dr. King and Malcolm X, as well as other key figures from the civil rights movement. Learners are then requested to speculate verbally on how they would have felt if they had lived during the movement, and to write in essay form the philosophy they would have developed.</p> <p><b>New Elementary</b></p> <p>At the beginning of a first-grade ESOL language arts classroom, learners are given alphabet noodles. The teacher asks the learners, "For what activities could you use alphabet noodles?" In groups of threes, learners use noodles to build words, sentences, and create puzzles such as word searches and scrambled words.</p>

**V.C.3 cont.**

**Creative thinking** can be encouraged in a variety of ways to enhance the development of learners' thinking skills.

Cognitive processes that accompany the development of creative thinking skills are:

- ' fluency - reflects learners' abilities to develop understandings of ideas and phenomena from a variety of perspectives
- ' flexibility - refers to the ability to think adaptively in using knowledge and ideas
- ' originality - refers to the production of novel or new ideas
- ' elaboration-refers to the ability to express ideas and expand understanding in greater detail

**Creative thinking** can be enhanced in a variety of ways:

- ' asking divergent, open-ended questions
- ' allowing learners to design their own learning tasks
- ' using special teaching techniques that stimulate creative thinking
- ' asking for unfamiliar uses for familiar objects
- ' allowing learners to use their artistic/inventive abilities to carry out learning tasks
- ' asking learners to construct or add great

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>V.C.4</b></p> <p>Learners are actively engaged <b>and/or</b> involved in extending learning to different contexts.</p>	<p><b>Active Engagement:</b></p> <ul style="list-style-type: none"> <li>' involves learners</li> <li>' is a high level/quality of learner participation in learning activities</li> <li>' suggests more than simple on-task behavior</li> <li>' can be estimated by periodic scanning (systematic observation) of the class</li> </ul> <p><b>Involvement:</b></p> <ul style="list-style-type: none"> <li>' is deep immersion in a learning activity</li> <li>' can be enhanced when learners: <ul style="list-style-type: none"> <li>&lt; interact with each other</li> <li>&lt; are asked for comments and assistance</li> <li>&lt; roles are involved and detailed</li> <li>&lt; access prior knowledge</li> <li>&lt; can process and construct new knowledge in meaningful ways</li> </ul> </li> </ul>	<p><b>Elementary</b></p> <p>In a social studies class on values, learners are actively involved in discussing the fairy tale <i>Jack and the Beanstalk</i>. Individual elaboration occurs when learners reflect on personal values to determine similarities and differences. Thinking skills are developed as learners use their own value system to recreate scenarios taken from the text. As an extension, using parallel theme to the same story, learners create a fairy tale in small groups.</p> <p><b>Secondary</b></p> <p>In a language arts class, learners are completing a literature piece about the complexity of family relationships. Learners are asked to share past experiences of their families and to compare them to the story. Using the literature piece and past experiences, learners then write their own version of the ending of the literature piece and subsequently share them with the class.</p> <p><b>New Secondary</b></p> <p>In a social studies class, learners previously viewed the movie and are now reading the novel <b>Dragonwings</b> by Lawrence Yep. The teacher and the learners proceed to cluster topics introduced by the film version prior to group formation and research on the Internet. The research is used to provide background knowledge for the novel: basic aerodynamics and kite making instructions, earthquake destruction in San Francisco, and Chinese immigration.</p>



**V.C.4 cont.**

**Different contexts** include past experiences, new learning opportunities, other topics and/or subject matter, different learning tasks, imaginary settings, and personal reflections and introspection.

Techniques used to extend learning to different contexts are

- ' questioning
- ' group and/or individual tasks
- ' brainstorming and negotiating
- ' self-analysis
- ' constructing models and creating other objects

Indicator	Definition(s) and/or explanation(s)	Classroom Examples
<p><b>V.C.5</b></p> <p>Learners are encouraged to think about their roles and responsibilities as thinkers and learners.</p>	<p><b>Roles and responsibilities as thinkers and learners:</b></p> <p>are reflections enabling the development and co-participation in the learners thinking skills and beliefs in their capabilities to learn. (self-efficacy)</p> <p>Thinking is enabled when</p> <ul style="list-style-type: none"> <li>' learners are given opportunity and encouraged to think about their values as learners</li> <li>' learners understand <ul style="list-style-type: none"> <li>&lt; responsibility as a co-participant in the learning environment</li> <li>&lt; how past experiences can help construct new insights and knowledge</li> <li>&lt; being a member of a community is an important element of developing thinking skills</li> </ul> </li> </ul>	<p><b>Elementary</b></p> <p>At the beginning and at the end of the lesson, the teacher provides <i>silent time</i> for learners to think about what they need in order to learn the best that they can. Each student quickly shares one idea with other members of the class. The importance of each idea to school and home learning is briefly discussed by the teacher.</p> <p><b>Secondary</b></p> <p>After each daily lesson, learners take three to five minutes to write in a thinking journal. Students are encouraged to think about their thinking, examine their self-image as a thinker, and the desire to be great thinkers. Prompts on the board include the following</p> <ul style="list-style-type: none"> <li>&lt; How do you feel about your thinking?</li> <li>&lt; How do you feel about yourself as a learner?</li> <li>&lt; Are you contributing to your own/class thinking?</li> <li>&lt; When you have difficulty with a task or thought, do you shut down or persevere?</li> </ul> <p><b>New</b></p> <p><b>Elementary and Secondary</b></p> <p>While reading <b>The Diary of Anne Frank</b>, learners discuss in small groups how their own personal experiences can form their perceptions and reactions to the ideas expressed in the play. Learners then generate ideas for learning activities that could increase their appreciation of the play.</p>

**Domain VI.**  
**Classroom-Based Assessment of Learning**

Actively monitoring learner engagement and/or involvement in learning tasks throughout the lesson is an important element of effective teaching and learning. Teaching, learning, monitoring, assessment, and feedback are important dynamic, ongoing processes that assist learners in constructing knowledge, and that provide the teacher and learners with information about how learning is progressing. Monitoring, assessing, and providing feedback about learning can be done by the teacher and/or by learners. Informal assessment techniques provide the teacher and learners with information about learner understandings of content and learning tasks. Because learning proceeds throughout a lesson, **monitoring and informal assessment activities should be continuous**. Monitoring learning reflects a variety of methods and tasks including questioning, self-monitoring (meta cognition), and examining work. Feedback about learning typically follows monitoring and informal assessment. Learners receive **feedback** that is specific to the individual learner and/or group and the learning task and are afforded sufficient opportunities for learning that reflect concern for individual differences. If learners have difficulty understanding content and/or performing learning tasks, adjustments in teaching methods and learning tasks need to be made.

**Teaching and Learning Components**

- VI.A Monitoring Engagement and/or Involvement in Learning**
- VI.B Informal Assessment**
- VI.C Feedback**

**TEACHING AND LEARNING COMPONENT**  
**VI. A: MONITORING ENGAGEMENT AND/OR INVOLVEMENT IN LEARNING**

Monitoring engagement in and/or involvement in learning is more than simply managing on-task behavior (II.D). Monitoring and informal assessment can be done by the teacher and/or learners as learning proceeds. Listening carefully, paying close attention to learners as they proceed through learning activities, asking probing questions, and providing feed back about adequate and inadequate responses, all suggest more than monitoring on-task behavior. Actively monitoring learner engagement and/or involvement in learning tasks utilizing informal assessment strategies, and providing feedback **throughout the lesson** are important elements of enhancing learning. Monitoring, informal assessment, and providing feedback are dynamic, interrelated processes that can be done by the teacher and/or learners as learning proceeds.

**Sample Professional Growth Activity 1**

Comprehension	1.	Identify and highlight specific Indicators in Component VI.A of the <b>PACES Teaching and Learning Professional Growth Manual</b> , and this <b>Teacher Guide to PACES</b> .
	2.	Consult the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team for effective strategies used to monitor learners' engagement and/or involvement.
	3.	Based on the previous steps, develop a list of strategies that can be used for monitoring learners' engagement and/or involvement.
Practical Application	4.	Throughout the course of a week, implement at least three of the identified strategies.
Assessment	5.	Engage in written self-assessment of successful and unsuccessful strategies.
	6.	Share results of self-assessment with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team.

**Sample Professional Growth Activity 2**

Comprehension	1.	Conduct an Internet search and select several strategies to monitor engagement and/or involvement you feel might be effective in your particular classroom setting.
	2.	Review the selected strategies with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.
Practical Application	3.	Implement the strategies to monitor each stage of learners' involvement in learning tasks addressed in <b>PACES</b> Indicators VI.A.1 through VI.A.3.
Assessment	4.	Keep a written log of the experience and identify those strategies you plan to continue using .
	5.	Share the log with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team.

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>VI.A.1</b> Learner initial engagement <b>and/or</b> involvement in learning tasks is monitored.</p>	<p><b>Engagement:</b></p> <ul style="list-style-type: none"> <li>' suggests more than simple on-task behavior</li> <li>' is active, and implies more than passive involvement and responding minimally to the demands of a learning task</li> </ul> <p><b>Involvement:</b></p> <ul style="list-style-type: none"> <li>' suggests even deeper immersion in learning than engagement</li> <li>' is usually enhanced when learners interact with each other in learning tasks</li> </ul> <p><b>Monitoring strategies may include:</b></p> <ul style="list-style-type: none"> <li>' soliciting responses from a variety of learners in the class to ascertain that learners are “with” the lesson and are actively engaged in learning</li> <li>' scanning around the room at the beginning of a learning task</li> </ul>	<p><b>Elementary</b> At the beginning of a teacher directed, first-grade, mathematics activity in which learners will solve addition problems from the chalkboard, the teacher:</p> <ul style="list-style-type: none"> <li>' asks learners several questions about the mechanics of addition and listens carefully to learner responses</li> <li>' scans the entire class as the first learner begins to work on a problem on the chalkboard</li> <li>' asks the whole class whether the chalkboard problem is correct while scanning learners to ensure they are attending to the chalkboard</li> </ul> <p><b>Secondary</b> In a seventh-grade social studies class, learners begin an activity to revise a previously written report on a current event. As the learners begin the activity, the teacher moves throughout the room observing learner responses and answering any questions from learners about the activity.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>VI.A.2</b></p> <hr/> <p><b>Learner engagement and/or involvement during learning tasks is monitored.</b></p> <hr/>	<p><b>Engagement:</b></p> <ul style="list-style-type: none"> <li>' suggests more than simple on-task behavior</li> <li>' is active, and implies more than passive involvement and responding minimally to the demands of a learning task</li> </ul> <p><b>Involvement:</b></p> <ul style="list-style-type: none"> <li>' suggests even deeper immersion in learning than engagement</li> <li>' is usually enhanced when learners interact with each other in learning tasks</li> </ul> <p><b>Monitoring strategies may include:</b></p> <ul style="list-style-type: none"> <li>' soliciting responses from a variety of learners in the class to ascertain that learners are “with” the lesson and are actively engaged in learning</li> <li>' scanning around the room at the beginning of a learning task</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. Learners in a kindergarten class are engaged in sequencing flash-cards in the order of the first ten letters of the alphabet, while the teacher moves throughout the classroom and observes learners' responses. Two learners at one table appear confused about the nature of the task and the order of the alphabet. The teacher demonstrates how to order the flash cards and asks a few questions to check for learner understanding. The learners then work together to order the flash cards now that they have observed the teacher's demonstration.</li> <li>2. In a fifth-grade media lesson, learners are reviewing the various resources for a research paper. The media specialist scans the media center and notices a confused learner scrolling the computer screen arbitrarily. The media specialist asks about the learner's chosen topic, suggests a number of appropriate web sites and guides the learner through a series of steps to get appropriate information for the research paper.</li> </ol> <p><b>Secondary</b></p> <p>During a seventh-grade lesson on isosceles triangles, learners construct triangles using protractors. The teacher moves among the learners and observes that a few learners cannot decide about the appropriate steps to complete the activity. The teacher approaches these learners and asks a series of questions that clarify appropriate steps for the activity and that engage and involve learners in greater understanding.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>VI. A.3</b> Learner completion of learning tasks is monitored.</p>	<p><b>Learning Tasks</b></p> <ul style="list-style-type: none"> <li>' are objectives-related activities planned for learners</li> <li>' should be sequenced logically</li> <li>' should accommodate the range of individual differences among learners</li> <li>' should enhance learning</li> </ul> <p><b>Monitored:</b></p> <ul style="list-style-type: none"> <li>' soliciting responses from a variety of learners in the class to ascertain that the pace of learning is neither too fast nor too slow, towards the end of the learning task</li> <li>' scanning around the room near the end of the learning task</li> </ul>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a first-grade language arts lesson, learners pair-off to complete a learning task on developing tongue twisters. Towards the end of the lesson, the teacher monitors as learners recite their tongue twisters; and the teacher checks that the assignment's requirements have been met.</li> <li>2. At the end of a handwriting lesson on connecting letters, learners assess their own work by using a model. The learners draw a star on their best connecting letters in each line. As the learners assess their own work, the teacher moves throughout the room, monitoring and asking for learner feedback on their performance.</li> </ol> <p><b>Secondary</b></p> <p>At the end of a cooperative group discussion on mathematical properties (commutative, associative, and distributive), each group's reporter presents the group's definitions to the class. The teacher and the class critique for clarity and understanding.</p>

**TEACHING AND LEARNING COMPONENT  
VI. B: Informal Assessment**

Because learning proceeds throughout a lesson, monitoring and informal assessment activities should be continuous. If learners have difficulty understanding content and/or performing learning tasks, adjustments in teaching methods and learning tasks need to be made.

**Sample Professional Growth Activity 1**

Comprehension	<ol style="list-style-type: none"> <li>1. Identify and highlight specific Indicators in Component VI.B of the <i>PACES Teaching and Learning Professional Growth Manual</i>, and this <i>Teacher Guide to PACES</i>.</li> <li>2. Consult the Colleague Teacher and/or other member(s) of the <i>PACES</i> Professional Growth Team for effective strategies used to informally assess the pace of lessons, and learners' understanding and knowledge.</li> <li>3. Based on the previous steps, develop a list of strategies that can be used for assessing the pace of lessons, and learners' understanding and knowledge.</li> </ol>
Practical Application	<ol style="list-style-type: none"> <li>4. Over the course of a week, implement at least three of the identified strategies.</li> </ol>
Assessment	<ol style="list-style-type: none"> <li>5. Engage in written self-assessment of successful and unsuccessful strategies.</li> <li>6. Share results of self-assessment with the Colleague Teacher or other member(s) of the <i>PACES</i> Professional Growth Team.</li> </ol>



Sample Professional Growth Activity 2

Comprehension	<p>1 .Conduct an Internet search and select several strategies to informally assess the pace of lessons, and learners' understanding and knowledge you feel might be effective in your particular classroom setting.</p> <p>7. Review the selected strategies with the Colleague Teacher and/or other member(s) of the <b>PACES</b> Professional Growth Team.</p>
Practical Application	<p>8. Implement the strategies to informally assess the pace of lessons, and learners' understanding and knowledge addressed in <b>PACES</b> Teaching and Learning Component V.B.</p>
Assessment	<p>9. Keep a written log of the experience and identify those strategies you plan to continue using .</p> <p>10. Share the log with the Colleague Teacher or other member(s) of the <b>PACES</b> Professional Growth Team.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>VI.B.1</b></p> <hr/> <p><b>A range of learner responses is solicited as appropriate to assess various cognitive and/or performance tasks.</b></p> <hr/>	<p><b>Range of learner responses:</b></p> <ul style="list-style-type: none"> <li>' includes a variety (at least two) of task responses</li> <li>' demonstrates progress toward learning</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>' soliciting responses from a variety of learners in the class to ascertain that the pace of learning is neither too fast nor too slow</li> <li>' scanning around the room</li> </ul> <p><b>Breadth</b> of teaching and learning activities refers to the number of activities considered necessary to master a particular goal or objective</p> <p><b>Depth</b> of teaching and learning activities refers to the levels of knowledge and understanding that are necessary to master a particular learning goal or objective</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. During a third-grade social studies lesson on land forms, learners define examples such as continents, islands, and peninsulas. Then learners illustrate one example of their choice by identifying the land form on a world map.</li> <li>2. As learners create new colors in an art class, they explain the combination of colors involved in each new color. The learners then describe the colors, and relate items that exhibit them.</li> </ol> <p><b>Secondary</b></p> <p>In a tenth-grade business technology class, learners apply data base, word processing, and spread sheet programs to generate business reports. As the activity proceeds, the teacher calls on several learners to explain how they are using each application and why they have chosen to use each application in preparing their business reports.</p> <p><b>New Elementary and Secondary</b></p> <p>In a mathematics class, the teacher displays a clear glass jar filled with jelly beans. The learners are asked to estimate the number of jelly beans in the jar and to explain in writing the method they used to arrive at their conclusion.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p><b>VI.B.2</b> Summaries or reviews during teaching and learning activities are used to monitor/assess the pace of teaching and learning.</p>	<p><b>Summaries/reviews:</b></p> <ul style="list-style-type: none"> <li>' can consist of learners being reminded about an earlier lesson</li> <li>' can be conducted by asking a few structured, probing questions</li> <li>' should assess prerequisite skills to determine learners' readiness for learning</li> <li>' are conducted as appropriate</li> </ul> <p><b>Monitor/assess:</b></p> <ul style="list-style-type: none"> <li>' soliciting responses from a variety of learners in the class to ascertain that the pace of learning is neither too fast nor too slow</li> <li>' scanning around the room</li> </ul> <p><b>Pace</b> refers to how rapidly or slowly teaching and learning activities are being implemented to adequately enhance learning.</p>	<p><b>Elementary</b></p> <ol style="list-style-type: none"> <li>1. In a kindergarten physical education class, the teacher reviews the movements that correspond with the "Good Morning Song." Then the teacher monitors children's motions that correspond with the beat of the song. When the teacher notices learners not keeping up with the song and the movements, he/she turns the music off, asks, "Are we going too fast?" and reviews the motions again.</li> <li>2. During a third-grade science lesson, the teacher listens to learners paraphrase the parts of a plant. Since all learners demonstrate adequate understanding, the teacher decides to allow learners to proceed to planting seeds in trays and discussing the growing cycle.</li> </ol> <p><b>Secondary</b> After watching a film on driving safety, learners argue the issue of wearing seatbelts. Learners write down the pros and cons. However, one group writes only two responses. The teacher engages learners in a quick review by having volunteers explain some key points. Learners are then given a few more minutes to complete the assignment.</p>

Indicator	Definition(s) and/or Explanation(s)	Classroom Examples
<p data-bbox="86 277 170 305"><b>VI.B.3</b></p> <hr data-bbox="86 337 552 341"/> <p data-bbox="86 380 552 509"><b>Adjustments in teaching and learning activities are made as needed <b>**OR**</b> no adjustments are necessary.</b></p> <hr data-bbox="86 542 552 545"/>	<p data-bbox="581 277 1121 305"><b>Adjustments in teaching and learning :</b></p> <ul style="list-style-type: none"> <li data-bbox="581 380 1121 407">' changing difficulty level of content</li> <li data-bbox="581 448 1121 475">' changing aids and materials</li> <li data-bbox="581 516 1121 544">' providing additional resources</li> <li data-bbox="581 584 1121 612">' changing pace</li> </ul>	<p data-bbox="1249 277 1415 305"><b>Elementary</b></p> <ol style="list-style-type: none"> <li data-bbox="1249 315 2011 542">1. During a second-grade vocabulary lesson, the teacher notices that several learners do not grasp the pluralization rule that, if a word does not have a vowel before the y, drop the y and add ies to form the plural. The teacher does a mini lesson to help those learners gain understanding. Learners then fix their mistakes, and continue writing.</li> <li data-bbox="1249 552 2011 779">2. During a third-grade science lesson, learners demonstrate difficulty in understanding a reading and note-taking assignment. The teacher paraphrases the material and writes a summary on chart paper. The learners then read the material, thus demonstrating engagement in the reading and note-taking.</li> <li data-bbox="1249 789 2011 919">3. During a third-grade mathematics lesson, learners are unable to compute their multiplication tables. Therefore, the teacher provides egg cartons and beans to demonstrate the concept.</li> </ol> <p data-bbox="1249 959 1415 987"><b>Secondary</b></p> <ol style="list-style-type: none"> <li data-bbox="1249 997 2011 1192">1. Using a dissecting computer program in a tenth-grade biology class, learners review the digestive system of frogs. When the teacher notices some learners dissecting the wrong parts, he/she stops the lesson and leads a brief review, referring to the chart that labels the frog's digestive system.</li> <li data-bbox="1249 1201 2011 1359">2. In a twelfth-grade weight training class, the teacher notices learners using an improper stance while lifting the weights. The teacher helps learners on an individual basis to stand properly before attempting to lift the weights.</li> </ol>

## VI: CLASSROOM-BASED ASSESSMENT OF LEARNING PACES

### TEACHING AND LEARNING COMPONENT

#### VI.C: Feedback

A key element in guiding and enhancing learning is **providing specific feedback** to learners about their engagement in the process of learning, level(s) of performance(s), and mastery of learning outcomes during the process of teaching and learning. Feedback is more than providing information about correct and incorrect performances. Effective feedback includes suggestions for improving performance and encouragement of subsequent effort. During the process of learning, effective feedback helps shape learning of complex tasks and broadens learner understanding and mastery of content. Feedback can be provided by the teacher and/or learners. Self-assessment of learning is an important element of feedback. Through self-assessments of learning, learners can provide self-corrective feedback about their personal learning. For feedback from the teacher and/or learners to be effective during the process of learning, feedback should:

1. be specific to the individual learner or group of learners,
2. provide learner(s) with information as to whether or not responses are adequate or inadequate,
3. be reasonably balanced between adequate and inadequate responses, and
4. broaden understanding and mastery of content knowledge.

Feedback about home learning tasks might also be provided to one or more learners during the lesson. Formal feedback (e.g., on written assignments and on formal assessment and evaluation tasks) is addressed in I.F.6.

Learners might also provide feedback to each other while the teacher monitors. Feedback is an important element of building learner motivation and beliefs in their capabilities to accomplish learning tasks (self-efficacy for learning).

#### Sample Professional Growth Activity 1

Comprehension	<ol style="list-style-type: none"><li>1. Refer to and study the <i>PACES Teaching and Learning Professional Growth Manual</i>, Domain VI, Teaching and Learning Component C.</li><li>2. Research web sites recommended by colleagues, or professional journals for information about feedback. Note new trends that seem promising and effective.</li></ol>
Practical Application	<ol style="list-style-type: none"><li>3. Integrate strategies from your research into your teaching practice.</li></ol>
Assessment	<ol style="list-style-type: none"><li>4. Self-assess and identify in writing which techniques were effective and which ones were ineffective.</li></ol>

**Sample Professional Growth Activity 2**

Comprehension	1. Confer with the Colleague Teacher or other members(s) of the <b>PACES</b> Professional Growth Team about what information should be communicated to the learner(s) when offering specific feedback.
Practical Application	2. Integrate strategies from the meeting into your teaching practice.
Assessment	3. Determine the effectiveness of strategies used to improve learning, and write results in your Professional Growth Plan.

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>VI.C.1</b> Learners are provided specific feedback about adequate <b>and</b> inadequate responses.</p>	<p><b>Feedback:</b></p> <ul style="list-style-type: none"> <li>' is specific to the present learning task</li> <li>' can be verbal and/or nonverbal</li> <li>' should be timely</li> <li>' includes more information than whether responses are simply correct or incorrect</li> </ul> <p><b>Adequate responses</b> are those that are correct or that approximate expected learning outcomes.</p> <p><b>Inadequate responses</b> are those that are incorrect or that have little relationship to expected learning outcomes.</p>	<p><b>Elementary</b> In a social studies lesson, learners are asked to justify their answers to the teacher's questions. As learners respond, the teacher listens carefully and points out specific correct and incorrect elements of learners' responses. Other learners are also asked to listen and to make comments about correct and incorrect responses.</p> <p><b>Secondary</b> Following a learner's clear, concise explanation of capitalism, the teacher responds, "from your reading in a manner that is very, very clear, you included all the important parts!"</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="86 277 170 305"><b>VI.C.2</b></p> <hr data-bbox="86 337 554 341"/> <hr data-bbox="86 370 554 373"/> <p data-bbox="86 380 554 477"><b>Learners are provided with suggestions for improving learning **OR** none are needed.</b></p> <hr data-bbox="86 509 554 513"/> <hr data-bbox="86 542 554 545"/>	<p data-bbox="581 277 1094 305"><b>Suggestions for improving learning:</b></p> <ul style="list-style-type: none"> <li data-bbox="581 347 1234 412">' are specific to the learner (or group of learners) and the learning task</li> <li data-bbox="581 444 1234 542">' enhance learning when they are communicated in a way that encourages combined effort</li> <li data-bbox="581 574 1234 737">' may include requesting that learners develop their own criteria or procedures for assessing whether their understandings are adequate or inadequate</li> </ul>	<p data-bbox="1264 277 1430 305"><b>Elementary</b></p> <p data-bbox="1264 315 2011 444">Learners in a mathematics lesson on multiplication who scored 70% or less on a home learning assignment are provided with alternate strategies for problem solving with multiplication.</p> <p data-bbox="1264 477 1419 505"><b>Secondary</b></p> <p data-bbox="1264 514 2011 677">Following a taste test and a discussion with criteria sheets, learners in a food production class taste a cake they made as a class. The teacher also tastes the cake and all discuss the quantity and quality of ingredients to make the cake more palatable.</p>



Indicator	Definition(s) and/or Explanations	Classroom Examples
<p><b>VI.C.3</b> Learners who respond inadequately are revisited <b>**OR**</b> no learners respond inadequately.</p>	<p>Feedback about inadequate responses should be followed by subsequent monitoring.</p> <p>Where appropriate, informal assessment should also follow feedback about inadequate responses.</p>	<p><b>Elementary</b> In a fifth-grade class, learners are engaged in a large group question and discussion activity about the three branches of government. Two students offer consistently incorrect responses. During a subsequent seat work assignment, the teacher visits each of these students and spends time to clarify their misunderstandings.</p> <p><b>Secondary</b> During a sharing circle in a sixth-grade literature group, learners are asked to identify one main idea from a novel. When any learner is called on by the teacher but does not respond, the teacher remarks, "I'll come back to you in a few minutes."</p>

Indicator	Definition(s) and/or Explanations	Classroom Examples
<p data-bbox="86 277 170 305"><b>VI.C.4</b></p> <hr data-bbox="86 337 541 341"/> <hr data-bbox="86 370 541 373"/> <p data-bbox="86 381 541 511"><b>Learners receive specific feedback when learning tasks and/or learning outcomes are completed.</b></p> <hr data-bbox="86 544 541 547"/> <hr data-bbox="86 576 541 579"/>	<p data-bbox="571 277 842 305"><b>Specific Feedback:</b></p> <ul style="list-style-type: none"> <li data-bbox="571 345 1228 443">' provides information about the completion of learning tasks and the accomplishment of learning outcomes</li> <li data-bbox="571 483 1228 613">' provides specific criteria and procedures by which learners can judge their own completion of tasks and accomplishment of learning outcomes</li> </ul>	<p data-bbox="1255 277 1417 305"><b>Elementary</b></p> <p data-bbox="1255 313 2011 544">Learners in a fourth-grade music class volunteer to write the names of lines and spaces for a staff on the chalkboard. The teacher repeats the name of each note with the class and reinforces the accuracy of the learner's response. When the task is complete, the teacher points out strengths and weaknesses of learners' responses.</p> <p data-bbox="1255 581 1411 609"><b>Secondary</b></p> <p data-bbox="1255 617 2011 812">In a tenth-grade geometry class, learners are assigned individual problem sets to complete. The teacher monitors learners' responses, individually checks their answers for completeness and correctness, and provides individual learners with feedback. Early finishers work on the day's home learning assignment.</p>

The School Board of Miami-Dade County, Florida adheres to a policy of nondiscrimination in educational programs/activities and employment and strives affirmatively to provide equal opportunity for all as required by:

**Title VI of the Civil Rights Act of 1964** - prohibits discrimination on the basis of race, color, religion, or national origin.

**Title VII of the Civil Rights Act of 1964**, as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

**Title IX of the Education Amendments of 1972** - prohibits discrimination on the basis of gender.

**Age Discrimination in Employment Act of 1967 (ADEA)**, as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

**The Equal Pay Act of 1963**, as amended, prohibits sex discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

**Section 504 of the Rehabilitation Act of 1973** - prohibits discrimination against the disabled.

**Americans with Disabilities Act of 1990 (ADA)** - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

**The Family and Medical Leave Act of 1993 (FMLA)** - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to “eligible” employees for certain family and medical reasons.

**The Pregnancy Discrimination Act of 1978**, prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

**Florida Educational Equity Act** - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

**Florida Civil Rights Act of 1992** - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

**School Board Rules 6GX13-4A-1.01, 6GX13-4A-1.32, and 6Gx13-5D-1.10**, prohibits harassment and/or discrimination against a student or employee on the basis of gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual orientation, social and family background, linguistic preference or disability.

*Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.*

**PROFESSIONAL ASSESSMENT AND COMPREHENSIVE EVALUATION SYSTEM**

