

# Introduction

## *The Purposes of the Parallel Curriculum Model*

**T**he Parallel Curriculum Model (PCM), like all other curriculum models, has been developed to meet a set of purposes. While these purposes share commonalities with other curriculum models, each curriculum model features specifics unique to it.

Curriculum models offer the educator a framework for professional decision making. They outline the intellectual territory educators can traverse for planning and implementing teaching and learning processes. Curricular models thus provide options that lead to goals.

PCM's framework defines learning experiences that reinforce each other and provide comprehensiveness of teaching and learning; the experiences thus complement each other in the attainment of a set of goals. PCM was also designed to meet many goals simultaneously. Each of the four parallel curriculum structures contributes to the attainment of a broad goal as well as the attainment of parallel-specific goals.

### **MULTIPLE APPLICATIONS AND THE PARALLEL CURRICULUM MODEL**

PCM was designed to be responsive to multiple populations and allows for different learning opportunities for diverse populations in varied contexts. The model originated as a way to challenge and provide academically rigorous curriculum experiences to gifted and high-ability learners. Although this set of learners provided the frame of reference for constructing the curriculum model, the opportunity then arose to consider the use of PCM for all types of learners. The multiple and versatile uses of PCM have been central to uncovering its specific applications to students of diversity in urban schools.

In his seminal work regarding curriculum construction, Tyler (1949) espoused the need for curriculum to be designed with three entities in mind: scholars, learners, and community. Based on this work, scholars include the body of educators and professionals who have outlined the important content and skills relevant to the current and future goals of a society. Learners embody the diversity of students within

the classroom, school, or program. An analysis of this group revealed the multiple possibilities for implementing PCM for learners who manifested potential in particular subject areas but were not formally recognized as gifted or high achievers, and learners excited by the “opportunity to experience” academic challenges otherwise not available to them. Community involves the various contexts or settings related to schools, from those located in an urban center to those housed in rural areas, and the distinctive values, needs, and interests affecting schools within these areas.

## **FLEXIBILITY OF THE PARALLEL CURRICULUM MODEL**

PCM is intended to coexist with other curriculum theories and models and can augment the implementation of other curriculum. The notion of curriculums vying for the attention of teachers and programs is artificial. No one curriculum addresses all the needs of any particular program, group of educators, students, or community. The flexibility of a curriculum is one of its most important attributes. PCM has been developed to meet the flexibility of use demanded of high-quality curriculum.

## **STRUCTURE OF THE PARALLEL CURRICULUM MODEL**

PCM is comprised of four distinctive types of curricular experiences; each of these curricular experiences relates to the composition of the entire model, and all are intended to be used if the model is to be implemented with fidelity. That the entire four parallel curriculums must be used to be compliant with the intent of PCM, it should be noted, is not supported by all of the authors. While determining the characteristics of PCM important to students in an urban center, it became evident how each of the parallels contributed to their diverse needs. The non-negotiable use of all four parallel curriculums is responsive to urban learners. It introduces them to academically rigorous areas of curriculum often withheld from them because it is thought that they do not have the prerequisite content and skill and/or developmental or experiential readiness. In truth, this perception is a misconception that often blocks urban students from the very experiences that could enhance their exposure and mastery of basic as well as more sophisticated content and skills. The open-ended or divergent nature of many of the PCM curricular practices enables students to venture into the experience with varied prior knowledge and promotes an academic comfort not afforded in other types of curricular structures. The non-negotiable use of all four of the parallel curriculums meets the needs of academically diverse urban students by providing them with a set of curriculum venues that widens the range of opportunities and manifests latent potential that otherwise could remain undetected.

The Parallel Curriculum: A Model for Curriculum Planning

<i>The Core or Basic Curriculum</i>	<i>The Curriculum of Connections</i>	<i>The Curriculum of Practice</i>	<i>The Curriculum of Identity</i>
<p>The Core Curriculum is the foundational curriculum that establishes a rich framework of knowledge, understanding, and skills most relevant to the discipline.</p> <p>It is inclusive of and extends state and district expectations. It is the starting point or root system for all of the parallels in this model.</p> <p>The Core or Basic Curriculum:</p> <ul style="list-style-type: none"> <li>• Is built on key facts, concepts, principles, and skills essential to a discipline</li> <li>• Is coherent in its organization</li> <li>• Is purposefully focused and organized to achieve essential outcomes</li> <li>• Promotes understanding rather than rote learning</li> <li>• Is taught in a meaningful context</li> <li>• Causes students to grapple with ideas and questions, using both critical and creative thinking</li> <li>• Is mentally and affectively engaging and satisfying to learners</li> <li>• Results in evidence of worthwhile student production</li> </ul>	<p>This curriculum is derived from and extends the Core Curriculum. It is designed to help students encounter and interact with the key concepts, principles, and skills in a variety of settings, times, and circumstances.</p> <p>The Curriculum of Connections is designed to help students think about and apply key concepts, principles, and skills:</p> <ul style="list-style-type: none"> <li>• In a range of instances throughout the discipline</li> <li>• Across disciplines</li> <li>• Across time and time periods</li> <li>• Across locations</li> <li>• Across cultures</li> <li>• Across times, locations, and cultures</li> <li>• Through varied perspectives</li> <li>• As impacted by various conditions (social, economic, technological political, etc.)</li> <li>• Through the eyes of various people who affected and are affected by the ideas</li> <li>• By examining links between concepts and development of the disciplines</li> </ul>	<p>This curriculum is derived from and extends the Core Curriculum. Its purpose is to help students function with increasing skill and confidence in a discipline as professionals would function. It exists for the purpose of promoting students' expertise as practitioners of the discipline.</p> <p>The Curriculum of Practice asks students to:</p> <ul style="list-style-type: none"> <li>• Understand the nature of the discipline in a real-world application manner</li> <li>• Define and assume a role as a means of studying the discipline</li> <li>• Understand the impact of this discipline on other disciplines and other disciplines on this discipline</li> <li>• Become a disciplinary problem solver rather than being a problem solver using the subject matter of the discipline</li> <li>• Understand and use the discipline as a means of looking at and making sense of the world</li> <li>• Develop a means of escaping the rut of certainty about knowledge</li> </ul>	<p>This curriculum is derived from and extends the Core Curriculum. It is designed to help students see themselves in relation to the discipline both now and with possibilities for the future; understand the discipline more fully by connecting it with their lives and experiences; increase awareness of their preferences, strengths, interests, and need for growth; and think about themselves as stewards of the discipline who may contribute to it and/or through it. The Curriculum of Identity uses curriculum as a catalyst for self-definition and self-understanding, with the belief that by looking outward to the discipline, students can find a means of looking inward.</p> <p>The Curriculum of Identity asks students to:</p> <ul style="list-style-type: none"> <li>• Reflect on their skills and interests as they relate to the discipline</li> <li>• Understand ways in which their interests might be useful to the discipline and ways in which the discipline might serve as a means for helping them develop their skills and interests</li> </ul>

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<i>The Core or Basic Curriculum</i>	<i>The Curriculum of Connections</i>	<i>The Curriculum of Practice</i>	<i>The Curriculum of Identity</i>
		<ul style="list-style-type: none"> <li>• Comprehend the daily lives of workers or professionals in the discipline: working conditions, hierarchical structures, fiscal aspects of the work, peer or collegial dynamics</li> <li>• Define and understand the implications of internal and external politics that impact the discipline</li> <li>• Value and engage in the intellectual struggle of the discipline</li> <li>• Function as a producer in the discipline</li> <li>• Function as a scholar in the discipline</li> </ul>	<ul style="list-style-type: none"> <li>• Develop awareness of their modes of working as they relate to the modes of operation characteristic of the discipline</li> <li>• Reflect on the impact of the discipline in the world, and self in the discipline</li> <li>• Think about the impact of the discipline on the lives of others in the wider world</li> <li>• Take intellectual samplings of the discipline for the purpose of experiencing self in relation to the discipline</li> <li>• Examine the ethics and philosophy characteristic of the discipline and their implications</li> <li>• Project themselves into the discipline</li> <li>• Develop self in the context of the discipline and through interaction with the subject matter</li> <li>• Develop a sense of both pride and humility related to both self and the discipline</li> </ul>

Source: C. A. Tomlinson et al., *The Parallel Curriculum: A Design to Develop Learner Potential and Challenge Advanced Learners*, 2nd edition. Thousand Oaks, CA: Corwin, 2009.

### Parallel Curriculum Model: Relationship to Academic Diversity in Urban Schools

<i>Parallel Curriculum</i>	<i>Major Curriculum Emphasis</i>	<i>Relationship to Students in Urban Schools</i>
Core Curriculum	Emphasizes the elements of content and skills of the basic curriculum at a more rigorous level.	The underperformance of students in inner city schools can be a consequence of lack of access to curriculum that has structural characteristics that challenge learning.
Curriculum of Connections	Emphasizes the associations within, between, and across disciplines, cultures, times, and places.	The ability to make connections allows students to build new learning (schemas) with existing learning as a means of making learning accessible, relevant, self-directed, and personalized.
Curriculum of Practice	Emphasizes the content and methodologies of the disciplines and the professionals or disciplinarians in various fields.	The appropriateness of curriculum that is culturally responsive addresses the contributions of groups to self and society. (Banks & McGee Banks, 2003)
Curriculum of Identity	Emphasizes developing one's own strength, preferences, and values.	The opportunities to learn about self and others and to understand how individuals manage multiple impressions of themselves is related to establishing self-identity.

## RESPONDING TO STUDENT DIVERSITY WITH CURRICULUM DIVERSITY

The introduction of PCM to classrooms in urban schools brought into focus three factors that became the impetus for this text. First, the urban schools' classrooms reflected academic, cultural, economic, and linguistic diversity that often inhibited the selection and implementation of accelerated and/or enriched curriculums. Within a classroom setting, a population of twenty students can represent forty-four languages and a range of abilities, from students with a readiness to learn any subject beyond grade-level expectations to students learning formally for the first time in their educational careers. The range of experiences the students bring to the teaching and learning events is also varied by the boundaries of the neighborhood. Finally, students' experiences may be circumscribed by the encounters they have had as they migrated from one country to another before they settled. The cultural, linguistic, economic, and academic diversity of the students' needs requires diversity in the curriculum and pedagogy provided to them. The students' confrontation with curriculum and pedagogy that is not aligned with diverse learning needs representative of the class composition has resulted in the underachievement of students, in denial

of the abilities of students, and in the misconceptions of teachers about the students' potential. Regardless of the students' perceived or verified level of academic performance, lack of curricular diversity can hamper academic success. PCM offers a collection of diverse learning experiences that reinforce basic content and skills, connect previously and newly acquired content to form new understanding, study the structure of the discipline, and relate learning to self as a scholar. Educators, parents, and teachers have recognized that it is essential to mediate the academic, cultural, economic, and linguistic differences among learners by matching their diversity to a diverse curriculum.

Second, the encounter with an academically rigorous curriculum such as PCM identified certain characteristics and learning needs of urban students. The emphasis on creating meaning rather than on restating what is already understood is integral to PCM. Students were being asked to establish links and associate ideas in the curriculum of connections, but learning experiences demanding provocative intellectual responses were outside the students' expected norms. Students initially blamed the curriculum, their teacher, and their peers for the intellectual struggles they were encountering. The absence of some of these skills and dispositions were not due to any one source; however, it is imperative to note that the needed skills had not always been appropriately activated in the school context because of the current curriculum's inability to help and/or demand that students access those skills (Moll & Greenberg, 1990). The initial resistance teachers observed to PCM by students appeared to be more often because of disinterest rather than an inability to participate actively. In his classic work, Tannenbaum (1983) refers to the nonintellectual factors that either release or inhibit a student's ability. Knowing the "rules of the game of cognition" is indispensable to success, according to Tannenbaum. He labeled the academic skill set as nonintellectual factors and included within it achievement motivation, self-concept, value preferences for learning, independence versus dependent orientation, personality structures, and stereotyping. The four parallels in the PCM curriculum provide the academic and social settings for the development of these nonintellectual factors.

Third, implementing PCM with students in heterogeneous classrooms catalyzed students who were not formerly identified as gifted to demonstrate abilities not visible in the traditional or regular curriculum. These expressions consequently resulted in new and different perspectives of these students by their teachers, peers, and parents. The identification of the abilities of students from diverse backgrounds is a spill-over benefit of PCM in a regular classroom. The opportunity to experience challenging curriculum that activated dormant abilities gave each student a new sense of self as a learner.

## URBAN CLASSROOM DYNAMICS

In an urban classroom, a third grader scans the room, trying to locate a peer he can emulate. He notices a peer waving his hand high in the air and answering the questions before he is even acknowledged by the teacher. "That's not me," he thinks. He scans the room again; all the other students are waiting docilely for the lesson to move forward. "That must be what you are supposed to do." He folds his hands, and as he remarks later to the teacher, "I swallowed the answer."

She really felt pleased about the story she wrote. She loved long sentences. They had more than seven words. She wondered if her seatmate would like her story, so she asked her if she wanted to read it. "Why should I read your story?" said her classmate. She was so startled by the comment that she simply said, "Oh well, it is not that good of a story."

"Come work with us. You can be the scribe for our group," said the girl as she waved to her friend. "What does the scribe do?" inquired the classmate. After the task was explained, her friend announced that he didn't want to be the scribe because he could not write or spell well. Everyone in the group laughed. "You get A's in math, so we know you can be a scribe," they said in unison. But he knew he could not be a good scribe. "Why wouldn't they listen to me?" he thought. He felt that they disliked him!

The teacher had introduced a controversial idea about whether or not to sell candy for the community mission. Students were raising their hands to give their opinions. "Yes, I think selling candy would be fun, and we could make lots of money." "No, I think candy is unhealthy." The students have different ideas. "What do you believe?" the teacher asked me. "I don't know," I said. But I was afraid to state my idea.

The teacher came up to me again. "Are you trying to do your best work?" she asked. I nodded my head. "Well, I can't understand how someone as smart as you is not doing better work. What's wrong?" she asked. I shook my head and shrugged my shoulders. "What did she mean?" I thought, because I was working as hard as I could.

- Fear of failure
- Hesitancy to participate
- Misunderstanding one's abilities, potential, and/or talent
- Inability to voice an opinion
- Erroneous expectations about success

These vignettes represent some of the behaviors indicative of students of diversity who are attempting to become familiar with a school's culture without losing their affiliations with and identity to other cultures to which they belong. Good and Brophy (2008) outline the salient characteristics of effective urban classrooms: high expectations and performance requirements, rigorous curriculum composed of significant content and skills, and instruction that stresses connections to prior knowledge and access to interactions among the community of learners.

These vignettes portray the classroom dynamics that thwart equity and access to academically rigorous curriculum by students of diversity. Scrutiny of the classroom dynamics reveals that all students do not comprehend how to attend and respond as learners in a community.

## DEVELOPING AN ACADEMIC SKILL SET

Learning how to identify themselves as learners and to participate in the classroom as a "scholar" is often expected of students but not necessarily a part of traditionally



taught, school-based skills. It is erroneous to assume that perceiving oneself as a student and performing actively in various teaching and learning events are natural consequences of attending school. It is also erroneous to believe that the caregiver unit is responsible for teaching this academic skill set. The consequences of not having a well-developed sense of self as a learner are severe and have led to articulating these skills and deliberately integrating them into a well-defined curricular structure. PCM provides the opportunity to teach these skills and dispositions through the different contexts of its parallel structures, thus affording students opportunities to implement these skills while achieving varied outcomes.

The academic skill set for PCM has been divided into sections. Each section is defined by a set of subskills related to specific objectives that allow students to (1) become aware of the nature and dimensions of each of the skills, (2) value them as part of the students' repertoire, and (3) acquire the responsibility to activate these skills appropriately. These academic skills, which relate to learning how to become a student, need to be consistently reintroduced and reinforced. While students do improve in implementing these skills, they need continual practice to become "life-long learners."

The following skills are included in the academic skill set:

- Scholarly Dispositions
- Participation Skills
- Self-Advocacy Skills
- Presentation Skills

**Scholarly Dispositions** identify the attitude scholars need to be productive learners. The potential of a learner is contingent on recognizing how to initiate and monitor behaviors that underscore the concept of self as a student, creator, researcher, and worker. Scholarly Dispositions specify the goals students must accept and respect for realizing their attributes as successful learners.

The following specific subskills are included within Scholarly Dispositions:

- Developing an Interest
- Developing Tenacity
- Confronting Failure
- Recognizing Intellectual Strengths

**Participation Skills** represent the category of academic skills related to teaching students how to become engaged and maintain involvement in the teaching and learning process. The seeming disinterest students portray to teachers and peers may not be what appearances indicate. In some situations, students do not know how to initiate their engagement in classroom activity because of various cultural values, exposure to different educational systems prior to entering their current school, and insufficient language development to decode the entry points for participation. It is interesting to note that the same type of perplexity that consumes adult learners and stops them from becoming participants also affects younger learners; this fact should help educators become more aware of the skills required in learning how to participate.

The following specific subskills are included within Participation Skills:

- Questioning
- Asking for Clarification



- Restating
- Acknowledging Peers

**Self-Advocacy Skills** include subskills for gaining techniques needed for students to become visible, active, and forceful individuals in a lesson or the classroom. Among students in an urban school setting, the ability to define oneself as a learner is obscured by several factors: (1) pacing charts that require certain standards or information and skills to be taught within a particular time frame; (2) the demand to meet grade-level proficiency, which becomes more dominant than the request to practice behaviors that are not measured on a test but, rather, in the process of learning; and (3) the philosophical belief held by some educators and parents that neither the school nor society are concerned about developing one's presence as a scholar. Acquiring a presence as a student is the end goal of Self-Advocacy Skills.

The following specific subskills are included within Self-Advocacy Skills:

- Establishing a Voice
- Building Confidence
- Establishing an Identity
- Multiple Group Membership

**Presentation Skills** comprise a fourth category of the academic skills set and are aimed at promoting students' abilities to participate effectively with their peers and to overcome elements that manifest themselves as insecurities that inhibit sharing and discussion. The Presentation Skills are presented as charts and worksheets for teachers to use.

- Talking Steps
- Ways to Say It
- Engaging the Audience
- Staying on Target

## INTRODUCTION TO THE PCM FOCUS LESSONS

The PCM Focus Lessons adhere to specific learning theories.

- Dependency on the social interactions inherent in sociocultural learning.
  - Basically, the learning that takes place among a group of students is a form of enculturation as members share the knowledge and skills of the classroom culture. A goal of these lessons is to establish the classroom culture as one wherein students assume the role of scholars. The concept of situated learning—learning applied in a particular setting to attain specific purposes—is vital to students of academic diversity. The lesson plans help establish a classroom culture wherein the students can align themselves with the values and behaviors of this culture.
- Relevancy to a constructivist approach to teaching and learning that emphasizes the student's ability to construct meaning as a result of the teaching/learning experiences.
  - The expectations are that students will be active participants, working collaboratively with peers to seek understanding, and that they will use the resources and tools teachers provide to mediate or scaffold their learning.

- Emphasis on shifting responsibility for learning from the teacher to the student.
  - Although the teacher follows the learning experiences and provides the described structured assistance needed for student performance, strategies such as asking questions, stimulating discussions, modeling, and rendering cues for self-motivation help students share responsibilities for learning.
- Stress on the concept of challenge in learning experiences, which stimulates curiosity and outlines the path to deeper and broader content and skill areas for students to explore.
  - Teachers need to arouse students to recognize and appreciate the goals and values of “difficult” learning experiences, defined as a way to further rather than annihilate their abilities.

## LESSON PLAN FORMAT

A specific lesson plan format was selected to present the curriculum and guide instruction for many reasons. The lesson plan design outlines the stages and sequence by which students can assimilate the content and practice the skills fundamental to the objective of the lesson. The organized presentation of activities within the context of a lesson reduces opportunities for what the literature on curriculums labels “disjointed incremental learning” or the presentation of isolated activities. The lesson plan format provides continuity and comprehensiveness to a set of learning experiences directed at attaining a specific outcome or objective. Each lesson plan could be considered a mini unit of study and is not intended to be implemented within a single day or allocated to a particular time frame. It is anticipated that each lesson plan will take more than one day to teach and will necessitate scheduling multiple encounters over a designated period of time. The determination of time for each lesson should also be responsive to factors such as the juxtaposition of the lesson plan’s objective to the standards-based curriculum. The developmental appropriateness of the objectives to the age and/or grade level, any readiness needs that must be provided to students to achieve lesson outcomes, and teacher preparation to affect appropriate implementation with the greatest fidelity to the lesson plan are factors ultimately determining the amount of time to be allocated to a lesson.

The lesson plans in this book are arranged in the following format:

### PCM Focus

The focus statement identifies the specific content and/or skill(s) to be taught. An area of focus defines the content or subject matter and applies it within the context or environments and situations in which its purposes and effects are explained and practiced. The skill is presented as a behavior to be operationalized by the students and to be incorporated as part of the students’ repertoire as they assume responsibility for themselves and their learning.

### Objective

The objective or intended outcome describes the underlying cognitive and affective goal that relates to and underscores the PCM Focus.

## Motivate

This section evokes students' interest in a learning experience that has meaning and value to them. The lessons are not aimed at being "fun," nor do they use extrinsic reward features often included to arouse and sustain student involvement. The motivation section of the lesson is based on self-determination and interest theory reported by Good and Brophy (2008). Self-determination theory stresses the importance of the social environment as a means to help students gain autonomy in exercising skills and assimilating content. Interest theory reinforces the importance of activities that emphasize intriguing experiences. All PCM Focus content areas and skills stress the development of student autonomy to learn the content and skills and foster experiences that strive to arouse the student's worth and enjoyment in learning.

## Activate Prior Knowledge

This section of the lesson plan enables students to connect new to existing content and skills and thus forge new learning. Basically, students are acknowledged for the competencies and understandings they bring into the learning experience. The activation of prior knowledge is mediated by instructional strategies addressing creative and critical thinking in the problem-solving process. The divergent nature of the learning experiences allows students to exercise options that encourage them to define themselves as students.

## Relationship to PCM

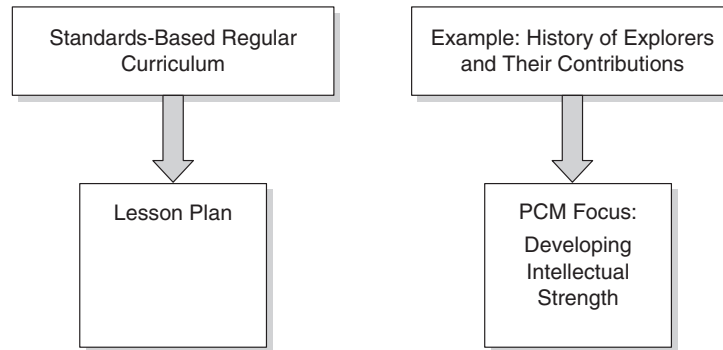
Every PCM Focus relates to each of the four parallel curriculums. This application process has several purposes:

- To note the effectiveness of the content and/or skill in the varied curriculums defined by the Core, Practice, Connections, and Identity sections
- To recognize how the variations in curricular applications introduce nuances in the use and meaning of the content and skills
- To reinforce the realization that open-ended or divergent thinking creates responses that add rather than diminish a student's contribution to self and the group

## IMPLEMENTING THE LESSON PLAN

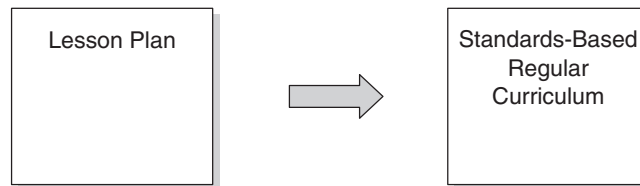
The importance of the lesson plans lay in what they are designed to achieve and not in the means by which they are implemented. The lessons can be taught to a class in whole-group or small-group settings using these criteria to make curricular decisions:

1. Determine if the lesson will be taught as a corollary to the standards-based or regular curriculum.



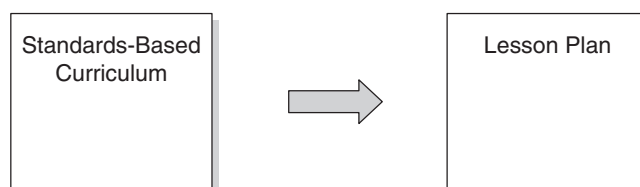
Central to this decision is to establish where the lesson plan will appropriately intersect the regular curriculum. The most effective intersection will readily accommodate the PCM Focus without distorting either the regular or lesson plan curricular objectives.

2. Determine if the lesson plan should be the means to initiate the standards-based curriculum.



With this decision, the lesson plan prefaces any experiences that follow and establishes the rationale for connecting other learnings to ensure curriculum continuity and comprehensibility. Basically, the Core Curriculum Parallel is the easiest or most expedient entry point for connecting the regular curriculum and the PCM Focus lesson plan.

3. Decide if the lesson plan should be a follow-up or an extension to the standards-based curriculum. When placing the lesson plan as a follow-up or extension, one concern is to ensure it is not relegated to the position of an addendum rather than as an integral feature of the curriculum.



## LESSON PLAN SCHEDULING

The decision to teach a single lesson plan over a specific period of time or to teach the lesson in segments over time is dependent on several factors. Regardless of the decision on how to proceed, the lessons demand preparation from the teacher and receptivity to the PCM Focus from the students. Preparation by the teacher should include the following:

- Reviewing the lesson’s purpose and how the sections reinforce the attainment of the lesson’s objective.
- Gathering and organizing the materials, such as pictures and charts, so they are readily available for the lesson. It should be noted that stopping the lesson in process to gather or construct needed materials detracts from its impact on the students.
- Selecting a natural break in the lesson where ending that section will not inhibit learning the concept or skill or give the students premature closure concerning the attainment of the lesson’s objective. The following are some statements used by a teacher to clearly indicate that the lesson is ended but not completed:
  - Let’s summarize in our own words what we have learned thus far.
  - Let’s identify what we need to remember for using this skill later in this lesson.
  - Let’s list the questions the lesson has stimulated us to ask so we can answer them when we continue with this lesson.
  - Let’s store in our “Intellectual Bank” the information we have found to be most important thus far in the lesson.

The lesson plans have been developed to introduce and reinforce particular areas identified under the academic skill sets. The collection of lessons for each academic skill (Scholarly Dispositions, Participation Skills, Self-Advocacy Skills, and Presentation Skills) can be used in two distinctly different ways:

1. The lessons can be used independently as determined by student and/or teacher assessment of need and appropriate alignment to the standards-based or regular curriculum.
2. The lessons can be used as a unit of study to reinforce specific academic skills and can be implemented in sequence over time.

While there is no one way to implement the lessons, using the lessons as a unit of study does allow for the continuity and comprehensiveness that units of study afford the learner. In other words, the collection of five lessons that all relate to Participation Skills forms a unit of study that can be taught over a predetermined period of time. Implementing the lessons as single entities requires that the teacher make sure that the lessons have a relevant connection to the standard, topic, or unit of study defined in the regular or basic curriculum.

The lessons have been designed to teach across grade levels with no specific relationship to any one grade or age level. Adjustments in pacing, vocabulary, resources, and amount of teacher and peer assistance make them age/grade-level specific.

## DEPTH AND COMPLEXITY

General discussions about responding to the needs of gifted and highly able students often address providing depth and complexity of learning. There are many definitions of depth and complexity. For some educators, depth and complexity refer to the difficulty of achieving the content and skills. Other educators equate depth and complexity with the quantity of elements within an assignment, which is usually reflected in the student's results. The ambiguity of the terms *depth* and *complexity* was the impetus to define the concepts by a group of educators convened by the California Department of Education and funded in part from a Jacob Javits Gifted and Talented Program, U.S. Department of Education (1994). The high expectations reflected by Advanced Placement free-response questions, conventional wisdom about what teachers and parents target as successful scholarship for gifted and high-ability students, and the academic competencies required for college were used to determine the scope of depth and complexity.

The use of prompts to stimulate understanding or serve as catalysts for inquiry has been addressed in several theories of learning. The definition of depth and complexity applied in this book references both a publication by the California Department of Education (1994) and the work from a Jacob Javits Department of Education grant awarded to the University of Southern California (Project T.W.O., 1997). Depth and complexity are indicated by both narrative and iconic representations throughout the lesson plans (see the following table). These prompts are also incorporated within the California Department of Education GATE standards (2001, 2005) and are used to define the elements that make up the principles of differentiation for gifted and high-ability students.