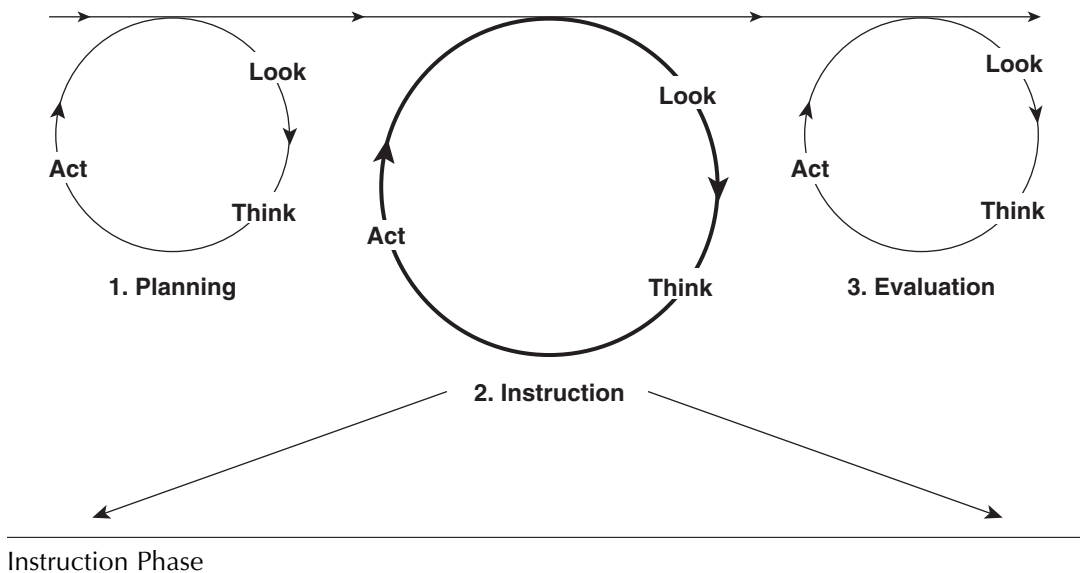


# CHAPTER 4

## Instruction

### Facilitating Student Learning



This chapter uses an action research routine to assist teachers to keep track of the complex processes of instruction. It first describes three central issues that need to be taken into account as teachers instruct their students:

- **Student engagement:** Suggesting how to move students from an attitude of *resistance and apathy* to one of *interest and excitement*
- **Prior knowledge:** Identifying what students know and can do, derived from their *natural capacities* and their *socially learned knowledge*
- **Domains of knowledge:** Describing the *cognitive, affective, and psychomotor* objectives to be incorporated into lessons

It then shows how the Look–Think–Act action research routine can assist teachers to enhance their instruction:

- *Observing* student activities and performance—observing and talking (Look)
- *Checking* student activities and performance—analyzing and assessing (Think)
- *Affirming* or *remediating* student learning through reinforcing comments, repeating instructions and demonstrations, and celebrating success (Act)

## ACCOMPLISHING EFFECTIVE INSTRUCTION

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Previous chapters described how an action research framework can assist teachers to plan more effective instruction and learning that take into account the diverse characteristics and qualities of their students (Chapter 1), and the multidimensional nature of learning processes (see Chapter 2). Action research, we suggested, provides the means by which teachers can systematically engage these issues and assist their students to attain the standards on which the lesson focuses.

The following sections extend our exploration of these issues, examining some of the basic conditions needed to achieve effective student learning: *student engagement*—finding ways to capture the interest and attention of our students, and *prior learning*—starting with what students already know or can do. We also investigate the *types or domains of knowledge and skill* that students need to acquire as part of their education. Learning, we discover, is much more than memorizing a fixed body of information, but the dynamic acquisition of a wide range of different types of knowledge and skills. Finally, we describe how action research processes assist teachers to take these issues into account as they engage in the demanding but rewarding act of teaching.

### CONDITIONS OF LEARNING (1): STUDENT ENGAGEMENT

It is a joy to be in a classroom where students excitedly and enthusiastically engage their work and express clear satisfaction in their accomplishments. The energy and fulfillment evident in this type of context is gratifying to teachers and students alike. The reverse is also sometimes true in contexts where teachers experience groups of students that are sullen, disrespectful, and argumentative, and classroom work

becomes a daily grind for all concerned. One of the principal tasks in teaching is to generate a positive orientation in students that enables them to invest themselves in classroom activities and find satisfaction in the outcomes of their endeavors.

As they work through each lesson, therefore, teachers need to be constantly aware of the demeanor of their students and to gauge the extent to which they are actively involved in classroom activities. They will be able to do so by assessing the degree of interest and involvement students express through their actions, behaviors, and responses, and to plan and modify their lessons accordingly.

### EXPERIENCING STUDENT ENGAGEMENT

The levels of student engagement are clearly illustrated by my experience with a particular social studies lesson. On one occasion, following a discussion about people in poverty being always on “the take,” I had my students fill out the forms to apply for food stamps. Coming from privileged backgrounds, they had no experience in these matters.

They worked busily, some *excited* by the activity, and most were at least *interested* in the project. Soon, however, their busyness turned to arguing and almost every group was in turmoil. Although they were willing to work on the task at hand, I had not planned well enough for them to accomplish it, and the situation became unpleasant to say the least, with some children becoming quite *resistant* to the activity. We worked it out and muddled through, but many of the children became *apathetic*, and refused to engage in discussions about the issue.

The next year, I was determined to try the lesson once again with a new group of students. This time when teaching the lesson, I assigned class members to a “family” group, and though they became more interested, they were still a bit guarded. All of the important documentation necessary to complete the forms was provided. The student groups just had to locate the information and place it in the correct lines in order to qualify for food stamps. They were motivated to prove me wrong in suggesting that it was difficult to get food stamps. The lesson went off without a hitch, the students being *excited* and engaged for the entire 50-minute lesson, certain that their “family” would qualify for food stamps.

I turned the paperwork over to a local social worker who discovered only one out of the five “family” groups had filled out the forms correctly. It was a great lesson for them about how difficult it is to qualify for food stamps. Surprisingly, for me, the students became quite *apathetic* and resentful, and I was at a loss to understand their responses. Following another discussion, I suggested that maybe the social worker could visit our class, but that was a complete “bomb”!! They had no interest in having someone from the community coming in to “determine how incompetent they were in following directions on food stamp forms.” I never dreamed that I would meet such *resistance*. I finally was able to convince my class of the benefit of a session with the social worker, who visited them and answered their predeveloped questions about their failure to receive food stamps.

Upon reflection I saw the errors I had made. Although well-intended, my instruction was not well thought out, and the method of instruction, materials, planning, and implementation needed lots of tweaking to keep the 35 fifth-grade students interested or excited, rather than providing an experience that generated apathy and resistance.

—L.C.

A student's orientation to school is considerably affected by his or her history of experience. If students have experienced consistent failure, or have low expectations of themselves due to the influence of family and peers, then teachers need to find ways to provide them with positive experiences that tell them, "You are a clever and interesting person." In this way teachers can overcome messages from past experience and engage the interests and experiences of students. One of the purposes of engaging action research in our teaching is to enable us to acquire and accumulate a body of knowledge about our students that assists us to understand their world, and to therefore be in a position to provide appropriate learning activities and processes.

Through continuing processes of inquiry we can get to know our students—what "turns them on"—in a much more systematic and comprehensive fashion. When we do so, we are in a position to regularly engage our students at the highest levels of the engagement, at a minimum ensuring a level of interest that enables them to produce good learning outcomes, and to reach the highest level—Excitement—on a regular basis. It's the difference between one parent's comment, "Amanda can't wait to come to school, every day!" and another's, "It is just so hard to get James to school in the morning. I just about have to drag him out of the house."

The Index of Engagement (Figure 4.1) suggests the different ways that students are affected by the environment and activities of the classroom. The responses of children engaged at the highest level—Excitement—clearly show their orientation to their work. They animatedly volunteer information; speak enthusiastically; eagerly share their work with others; are smiling, cheerful, and positive; sustain active engagement in their work over extended periods; express great satisfaction; and produce high-quality work. Students at the next level—Interest—are still working well, volunteering information, and speaking about their work. They work cooperatively, are businesslike, are actively engaged, and express satisfaction with the quality of work they produce.

The degree of engagement of these students contrasts markedly to those at the next level—Apathy. When students are in this frame of mind, they are merely "going through a routine," their intent clearly being to "get through the day" or "give the

<b>EXCITEMENT</b>
<b>INTEREST</b>
<b>APATHY</b>
<b>RESISTANCE</b>

**Figure 4.1** Index of Engagement

teacher what she wants.” They provide limited responses to inquiries or suggestions, speak and act lethargically, are disinterested, engage learning tasks in limited fashion, and express little satisfaction in their work, which is often of marginal quality. In the worst case they may become “Resistant,” refusing to respond to teacher questions, suggestions, or directives; being challenging and disrespectful; engaging in uncooperative or disruptive behavior; being surly or angry; engaging their work in tokenistic fashion; expressing overt disinterest; and producing very poor quality work.<sup>1</sup>

One of the major purposes of the processes described in this book is to assist teachers to identify ways they can move their students “up the ladder” of this index. The following chapters suggest some ways in which teachers can provide students with learning activities that engage their interest, but the major way this happens is for us to figuratively get into the minds of the students, envisioning the types of events and activities that excite their attention and link with the world they know. Though there are clearly times when teachers need to direct misbehaving students to focus on their studies, a consistent default to threats or directives signals the need to rethink the lesson.

As the following section suggests, a fundamental strategy is to link the activities in the lesson to events and experiences grounded in the students’ life worlds. The lesson on the artwork of Jacob Lawrence, for instance (see Chapter 3, p. 000), used guest speakers, visits, and a variety of other activities to actively link the children to the subject matter. The Community Commercial Project lesson (see Appendix, pp. 000–000) likewise engages the students directly in explorations and activities related to their local community. Engagement is not something that is achieved separately, and though often an important feature of the first stages of a lesson, it is accomplished in an ongoing way throughout the activities and events comprising classroom life.

## **CONDITIONS OF LEARNING (2): PRIOR KNOWLEDGE— WHAT STUDENTS KNOW AND CAN DO**

The need to frame teaching within a process of inquiry also becomes evident when we consider the nature of the learning process. Two fundamental conditions provide the very foundations of the process of learning and instruction—what students know and what they can do. These fundamentals can be encapsulated in the simple statements:

*Start with what students KNOW.*  
*Work with what they can DO.*

What students have learned in school comprises but a small fraction of what students KNOW. What they KNOW comes from a long history of learning and experiences

in their family and community contexts, and from diverse other sources including the media and experiences in travel or visits to other towns, cities, communities, and sometimes countries. The extensive corpus of knowledge that “comes through the door” with every child provides a rich resource from which rich learning experiences can derive.

What a student can DO likewise encompasses a much wider range of capabilities than is measured or recorded in school tests and achievement records. It encompasses all the skills that students acquire in the first years of their lives and in consequent life in their family and community. This may cover a wide range of skills that may not be evident within a classroom environment, but that have the potential to greatly extend the possibilities open to the teacher.

### *Diversity in Student Capabilities and Capacities*

Any group will include students with widely divergent natural levels of ability and comprise individuals at quite different stages of development. If we ask them to engage in activities they have not the capacity to accomplish, we set them up for failure. Conversely, if we fail to provide opportunities for them to make full use of their skills and capacities, their learning will be stunted, and their potentials unrealized. A group is likely to include individuals with highly developed artistic skills and others who struggle to draw a straight line with a rule; some who are highly adept in the sports field and others who bumble and bungle their way through the simplest physical task; some who engage in highly mature modes of conversation and others who converse in a childlike manner. Some of this results from their history of experience, but their natural abilities also play an important role in what a student can and cannot do.

Gardner’s (1999) work on multiple intelligences alerts us to the many capacities and capabilities that can be used in learning. He suggests that different students have different strengths and learn in different ways, engaging linguistic, logical, spatial/visual, musical, kinesthetic, interpersonal, intrapersonal, and naturalistic intelligences in the process of learning. When we take advantage of these multiple intelligences, we increase the learning potentials of our students, and open up the possibilities and potentials that are in them all.

Student diversity is therefore a common artifact of everyday classroom life, but it is sometimes manifest in students whose capacities—physical, emotional, and intellectual—are so dramatically different from others that they are classified as special needs students. As indicated in all lesson plans, specific strategies may be needed to accommodate those whose capacities do not fit the norm. This is as true for those who are linguistically different—who have limited understanding of the standard classroom language—as for those with particular physical, emotional, or intellectual impairments, though the former may be chronic conditions.

*What a Child Knows and Can Do: Family and Community Experiences*

An extensive and powerful body of research on educational achievement stretching back more than 50 years (e.g., Coleman et al., 1966; Jencks et al., 1972) shows clearly that factors related to the family and community have a much greater effect on academic achievement. So clear is this connection that it is now accepted as a given in the educational research literature. What it suggests is that classroom activities that fail to take account of students' family and community environments are likely to have less chance of enabling them to successfully achieve the academic goals of the school. Only by starting with what the child knows and can do, not just in the limited sense of a pretest of discrete lesson content, but across all areas of intelligence, can a teacher provide the means by which students can connect with the activities and events in the classroom—to move from the known to the unknown.

A major purpose of the action research routines embedded in these pages is to provide the means to reveal the students' tacit knowledge—knowledge often unspoken and of which individuals may not be consciously aware—and to use that as an important feature of the lesson. Providing students with opportunities to reveal and further explore their own experience supplies a resource that enriches the learning experience and provides a basis for higher levels of engagement.

The need to start with “what the students know” is evident in all lessons, but is a particular focus of action learning/inquiry learning approaches to instruction (see, e.g., “The Artwork of Jacob Lawrence” in Chapter 3 on p. 000, and the Appendix). As the following narrative—“A Community Commercial”—suggests, teaching is much more than providing students with a fixed body of knowledge to memorize. It is a process of using the students' knowledge of their own locality to construct highly engaging and creative learning experiences that provide students with a richly rewarding education.

**A COMMUNITY COMMERCIAL**

The Appendix incorporates a lesson plan for a group of middle school students from Aston Point, an urban community in New Jersey. Needing to engage students in an oral history project, the teacher discovered through her initial investigation that the students were dissatisfied with the condition of their community and wished to do something about it. By assisting students to reflect on the possibilities open to them, the teacher enabled them to identify what was good about their community and what it had to offer. Through ongoing processes of inquiry, they not only identified these features of their community, but also decided to make a “commercial.” They engaged in a wide range of diverse learning activities in order to write a script, videotape appropriate material,

*(Continued)*

(Continued)

and produce a video. Their interest and enthusiasm enabled them to complete a video that was shown to an audience of students, teachers, parents, and community members, and was applauded by all. The wide range of learning objectives they accomplished in the process was testament to the educational potential that exists in every community.

—S.B.

### *Understanding and Using Student Knowledge and Experience*

Teachers therefore need to accumulate a body of knowledge and understanding of the multiple dimensions of their students. If they assume that their own “body of knowledge,” or understandings, can provide a sufficient basis for their students’ learning, if they fail to capitalize on the richly diverse knowledge that derives from their students’ history of experience, then they will fail to fulfill the learning potentials that are in every classroom. Teachers need, in other words, to engage in ongoing “research” to engage the body of understanding that enables them to successfully accomplish the rewarding task of facilitating their students’ learning.

If we are to ground their learning in “what is known,” then we have much to learn to ensure that our classrooms are interesting, engaging, and productive learning contexts for our students.

Fortunately, we have a range of resources that can assist us in this process of learning. While the students themselves provide a wonderful source of information, parents, community members, media, literature, and many other sources provide the means to engage the world of the students we serve. We also have a body of information in school records that provide indications—test results, past reports, and so on—that enable us to build a picture of the capabilities and past performance of each student.

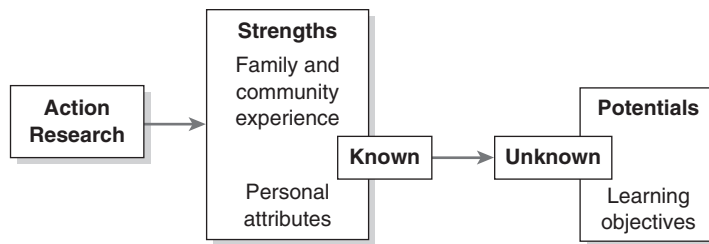
The following activities provide just a few of the ways in which teachers can start to build an understanding of their students. They involve activities that take them out of the classroom, and may require them to take extra time outside of the school schedule, but the rewards for doing so far exceed the relatively small investment required. Teachers may:

- Talk about the local community in class, ask questions about it, and provide opportunities for students to recount stories of family and community events.
- Ask some students to take them for a short tour of their neighborhood.
- Meet small groups of students for a soda in a local fast food establishment.



- Take small groups of students for short excursions to interesting places or events in the area—a concert in the park, an exhibition or display in a local venue.
- Visit students at home to meet parents and siblings.

Each of these types of activity not only enables teachers to gain a greater understanding of their students, but provides rich material to incorporate into classroom learning activities. As they enter family and community life worlds, teachers also learn to understand their students in a richly meaningful way, and in the process develop relationships that enable them to accomplish their work more effectively. Action research and action learning routines enable both teachers and students to reveal these rich potentials and to incorporate them into teaching/learning processes. As Figure 4.2 indicates, they provide the means for teachers to reveal the strengths within each student—what they know and can do, and to use them to move into the unknown—what they must learn.



**Figure 4.2** Using What Students Know and Can Do

### **CONTENT OF THE CURRICULUM: DOMAINS OF KNOWLEDGE**

Any curriculum includes a multitude of elements that signal the wide array of skills and knowledge teachers must assist their students to learn. This diversity, however, is not just a random array of information and behaviors, but a carefully organized body of knowledge that can be systematically developed as students move through their schooling. As described in Chapter 1, Bloom, Krathwohl, and their colleagues described a taxonomy containing three *domains* that provide us with the means to keep track of the distinct types of knowledge and skills our students need to acquire—the cognitive domain that focuses on intellectual skills, the affective

domain that relates to feelings or emotional orientations, and the psychomotor domain concerned with physical skills and attributes.

*Taxonomy of Educational Objectives:  
The Cognitive Domain*

Chapter 1 signaled the diverse array of knowledge and skills that comprises any school curriculum, indicating the diverse elements that need to be incorporated into any lesson. The diverse nature of student learning is signaled in the terminologies (verbs) used to describe learning outcomes and learning activities. Bloom and Krathwohl's taxonomy of educational objectives (1956) thus includes the following terms:

- **Knowledge:** Define, recall, recognize, remember, label, list, name, reproduce
- **Comprehension:** Grasp (the meaning), compare, contrast, rephrase, explain, restate, give examples
- **Application:** Apply, use, employ, utilize, implement, produce, report, show, write, solve, develop, predict, illustrate
- **Analysis:** Break down, categorize, arrange, compare, correlate, differentiate, distinguish, prioritize, infer, separate, subdivide, conclude, determine
- **Synthesis:** Adapt, combine, compose, create, devise, produce, design, develop, construct, incorporate, integrate plan, structure
- **Evaluation:** Judge, evaluate, appraise, compare, conclude, justify, assess, critique, decide (the merit)

A classroom lesson that requires students to remember discrete pieces of information—What is the capital of Illinois?—requires the student to *remember* that fact and to be able to reproduce it at a later time. The student then can be said to “know” that information merely by responding “Springfield” to that question. To demonstrate that she understands or *comprehends*, however, the student would need to explain what is meant by the word “capital,” providing evidence that she understood it in terms of a “seat of government” and thus demonstrated that she “knew” the significance of that statement. Further indications of the extent of the student’s level of comprehension would require a more extended set of learning activities that required the student to present evidence that she could differentiate a capital from other important centers (e.g., industrial, commercial)—*application, analysis*. Given the requirement to describe a hypothetical state, she would be able to incorporate a capital and its operation appropriately—*synthesis*—and assess the merits or adequacy of different capitals.

The teacher's task, in this process, is to provide a sufficiently diverse range of learning tasks to ensure that students accomplish all of the domains that are signaled in the state standards. The teacher would not only provide generative questions that would elicit the different forms of knowledge, but also provide activities that would enable students to learn and demonstrate that they had acquired the different forms of knowledge incorporated into the standards.

The lesson plans incorporated into the chapters and the Appendix provide many examples of the different questions and activities teachers use to accomplish these tasks. The persuasive speaking lesson at the end of this chapter (p. 000), for instance, provides examples of the questions used by the teacher:

How do your friends try to convince you about something?

What makes their argument effective?

What speeches have you heard recently to persuade you to take a particular point of view on an issue?

What did the speaker do that made his or her speech persuasive?

These not only require students to remember events, but to understand, analyze, synthesize, apply, and evaluate. Further activities within the lesson enable students to reinforce and extend the different forms of knowledge they acquire about the topic in question, and to demonstrate their levels of proficiency with regard to the state standards around which the lesson is centered. A good example of the relationship between objectives and standards is found on p. 000 of the Appendix, Case Example 1— the lesson on sea life.

Anderson and Krathwohl (2001) have recently suggested an enhanced taxonomy that distinguishes the different domains of knowledge from the cognitive processes required to attain them. Their schema envisages knowledge in four domains:

- **Factual knowledge:** Knowledge of terminology, specific details, and elements
- **Conceptual knowledge:** Knowledge of classifications and categories; of principals and generalizations; of theories, models, and structures
- **Procedural knowledge:** Knowledge of subject-specific skills and algorithms; of subject-specific techniques and methods; and of criteria for determining choice of procedures
- **Metacognitive knowledge:** Awareness and knowledge of one's own cognition—strategic knowledge, cognitive tasks, and self-knowledge

The cognitive processes required to acquire these forms of knowledge include the ability to:

- **Remember:** Recognizing, recalling
- **Understand:** Interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining
- **Apply:** Executing, implementing
- **Analyze:** Differentiating, organizing, attributing
- **Evaluate:** Checking, critiquing
- **Create:** Generating, planning, producing

Anderson and Krathwohl (2001) suggest that we can keep track of these different elements by placing them in a taxonomy table (see Table 4.1) that enables us to check that, over time, the educational objectives in our lessons will cover the full range of types of knowledge and cognitive processes:

<i>Knowledge dimension</i>	<i>Cognitive process dimension</i>					
	<i>Remember</i>	<i>Understand</i>	<i>Apply</i>	<i>Analyze</i>	<i>Evaluate</i>	<i>Create</i>
Factual knowledge		Obj 1.3				
Conceptual knowledge			Obj 1.3.1			
Procedural knowledge			Obj 1.3.2			
Metacognitive knowledge				Obj 1.4.1		

**Table 4.1** Taxonomy Table of Educational Objectives

According to this schema, lesson plans should incorporate learning processes that enable students to acquire the different forms of knowledge and cognitive skills required to attain the standards on which a lesson focuses. These more sophisticated processes of learning provide students with the means to acquire the comprehensive body of knowledge and skills that will enable them to navigate the increasingly complex social worlds they face in this 21st century.

*Taxonomy of Educational Objectives:  
The Affective Domain*

The affective domain is concerned about the *feelings* or *emotional orientation* an individual has toward people, events, activities, objects, or places. The affective dimension is a key determinant of behavior, the way people *feel* about issues and events largely determining the way they respond and behave. This contrasts with the cognitive domain that focuses on the way people *think* about issues. When students are learning, they are not only learning the content of a lesson, they are also acquiring attitudes, opinions, appreciations, values, and interests. The purpose of teaching is therefore not only to enable students to acquire information and skills, but also to ensure that the learner acquires appropriate attitudes and values. When students learn about cultural difference, for instance, we are not just teaching them the facts of cultural difference, but assisting them to learn that different lifestyles and ways of living are OK. When we teach them reading, we not only provide them with the skills, but also seek to give them a positive orientation toward literacy.

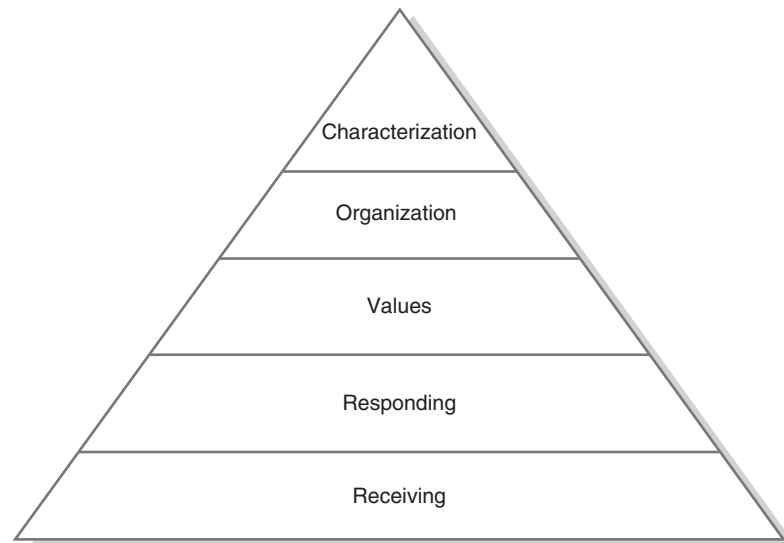
As teachers plan and implement their lessons, therefore, they need to incorporate activities and events that provide an appropriate emotional orientation toward the content of the lesson. Krathwohl and his colleagues (1964) have suggested a taxonomy that maps out the different types of emotional orientation that can be included in any set of educational objectives. These suggest that lessons should incorporate questions, activities, and interactions that enable students to develop the following capacities:

- **Receiving:** Being aware of or attending to something. A teacher would be aware of whether the student is focused on the learning activities being engaged. Behavioral terms associated with this domain include: looks, watches, listens, accepts, identifies, and so on.
- **Responding:** Actively participating, attending to events, and reacting appropriately to stimuli. Behavioral terms include: participates, responds, volunteers, obeys, answers, shows interest, enjoys, performs, presents, reports, and so on.
- **Valuing:** Attaching worth to particular ideas, objects, behaviors, or other phenomena, ranging from acceptance to commitment. Students demonstrate values through their actions and their words. Teachers present learning activities to assist students reveal and develop their values. Behavioral terms associated with this domain include: believes, values, supports, appreciates, shows concern, demonstrates, justifies, proposes, shares, and so on.
- **Organization (of value complex):** Building an internally consistent values system. Learners compare different values, resolve conflicts among them, and develop a personal philosophy. They recognize the need for balance, think

systematically in solving problems, and accept responsibility for their own behavior. Behavioral terms include: arranges, combines, compares, integrates, modifies, organizes, generalizes, commits, and so on.

- **Characterization (by a value or value complex):** Acting consistently according to a set of internalized values. Behavior is consistent and predictable. Behavioral terms include: displays self-reliance and appropriate personal, social, and emotional adjustment; works independently; maintains good habits; and so on.

This taxonomy is hierarchical (Figure 4.4), so that the early years of schooling will be on attributes within the lower levels of the taxonomy—receiving, responding, and valuing, with increasing emphasis being placed on organization and characterization in the higher grades.



**Figure 4.3** Taxonomy of Educational Objectives: The Affective Domain

*Taxonomy of Educational Objectives:  
The Psychomotor Domain*

A school curriculum is concerned not only with development of intellectual and emotional capacities, but also with the physical attributes a person needs to acquire or enhance in the course of their education. Psychomotor attributes are therefore important in areas such as speech development, reading, writing, physical education, artistic

performances, and so on. The psychomotor domain presented by Harrow (1972) describes the development of physical attributes and capacities:

- **Reflex movement:** Reactions that are not learned, for example, response to pain
- **Fundamental movements:** Basic movements such as walking, grasping, nodding, sitting, standing, and so on
- **Perception:** Response to stimuli, for example, visual, auditory, kinesthetic, tactile discrimination
- **Physical abilities:** Strength, agility, flexibility, endurance, and so on
- **Skilled movements:** Advanced abilities and complex movements required for sports, dance, acting, and so on
- **Nondiscursive communication:** Expressive and interpretive movements, including those incorporated into dancing and gymnastics, as well as body language in normal communication

General objectives associated with this domain include writing legibly, reproducing a picture or map, operating a machine or musical instrument, demonstrating correct posture, performing a dance routine, and so on. Behavioral terms include grips, makes, manipulates, builds, constructs, paints, hears, observes, draws, and so on. All suggest the types of objectives related to psychomotor functioning to be included in a lesson plan.

Lessons therefore need to incorporate activities that enable students to achieve standards related to the development or enhancement of physical attributes, and the accomplishing of tasks and performances requiring human movement, listening or observing, or sensing. In the Commercial Project, for instance (Appendix, p. 000), students practice the acting and presentation skills outlined in the Procedures column in order to achieve standards in speaking described in the Objectives/Outcomes and Standards columns.

### **USING ACTION LEARNING TO ACCOMPLISH DIVERSE LEARNING OUTCOMES**

The use of action learning assists teachers to incorporate a broad range of learning activities that enable students to acquire the diverse forms of knowledge inherent in any set of standards. By characterizing the processes of learning in terms of systematic inquiry, teachers will move students past the rather limited

routines of memorization and recall to actively engage the more exciting possibilities involved in processes of systematic inquiry. The diverse forms of knowledge and array of skills they learn will provide tools of investigation, analysis, and application that will stay with them for life.

We might envisage the Look–Think–Act sequence as encompassing the following domains of knowledge:

**Look:** Acquiring knowledge

**Think:** Acquiring and using skills of comprehension, application, analysis, and evaluation

**Act:** Acquiring capacities related to application, synthesis, creation, and performance

As teachers implement lessons, therefore, action research frameworks assist students to engage a variety of learning and assessment strategies to ensure comprehensive and effective learning that extends their capabilities and enables them to reach high levels of attainment.

## USING ACTION RESEARCH TO ENHANCE INSTRUCTION

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The beginning of the lesson is a time of anticipation, where teachers gain students' attention by informing them of the purposes and activities to come, and linking those to their past experiences and their interests. Often teachers will focus students' attention and put them in a receptive frame of mind by providing an "advance organizer"—an organizing framework of ideas or information—or asking questions that stimulate the students' imagination. In this initial phase of the lesson, the teacher will therefore:

- **Look:** Review the lesson plan and observe students to ensure their attention is focused
- **Think:** Select appropriate information and elicit questions
- **Act:** Use a variety of means to focus student attention—present information, demonstrate an activity, display a picture or video clip, ask eliciting questions, and so on

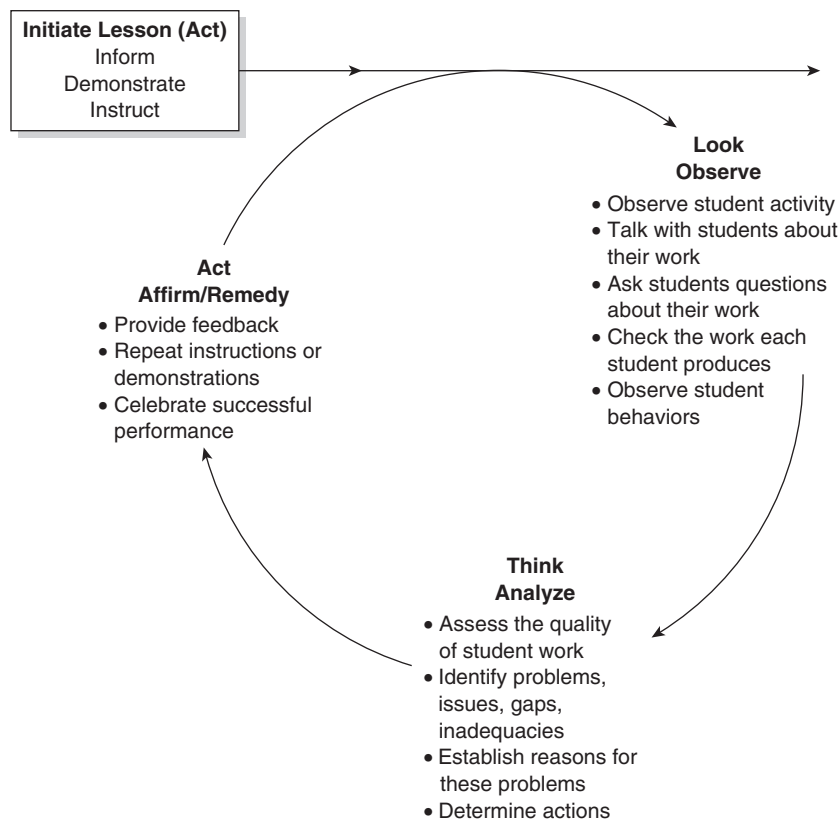
As the lesson proceeds, the teacher informs students about learning activities in which they will engage and tasks they must perform. Teachers use the Look–Think–Act routine to review the progress of the lesson, observe and assess student performance, and plan continuing steps to extend or remediate student learning.



## INSTRUCTION: OBSERVING AND ASSESSING STUDENT LEARNING

As students engage in learning activities, teachers need to keep track of the multiple activities in which the class is engaged and the progress of each child. They must carefully observe students' work and evaluate their performance, identifying children who are not engaged, who are performing poorly, or who appear to misunderstand what they are supposed to be doing (LOOK). As they observe these events, they will consider the nature of problems students are experiencing (THINK) and what they need to do to take remedial action (ACT). This cyclical activity is repeated throughout a lesson till students accomplish desired outcomes and the objectives of the lesson are achieved.

An action research cycle assists teachers to systematically monitor student activity and progress (see Figure 4.5). Teachers will:



**Figure 4.4** Instruction: Observing and Assessing Student Learning

- **Look:** Observe student activities, behavior, and performance
- **Think:** Identify the cause of inadequate performances or inappropriate behaviors or actions
- **Act:** Take action to affirm student learning, and remedy gaps or inadequacies in student performance

### **LOOK: OBSERVING STUDENT ACTIVITY, PERFORMANCE, AND BEHAVIOR**

With so many students engaged in activity, teachers must constantly be alert to the nuances of action and behavior. They need to constantly be aware of what is happening, what the students are doing, and how well they are accomplishing their assigned activities. Even if the whole class is listening to a presentation or watching a video, the teacher must be aware of the ways in which students are engaging the activity—whether they are focusing on it, whether they understand it, whether they find it interesting, or whether they struggle to maintain their attention.

Observation is therefore one of the key tools of the teacher, enabling him or her to see what is happening and to roughly assess the progress of each student, or the quality of the student’s work. Teachers need to be aware of the direct signals of poor behavior, but also to read the subtleties of nonverbal communication—body language—that signals “where students are at.”

But observation is often insufficient, and teachers need to engage in conversations and discussions with students to ascertain the degree of understanding they have attained, or to understand why students are unable to perform adequately or appropriately.

Teachers will monitor student progress throughout a lesson, therefore, by:

#### *Observing*

Teachers will watch students perform assigned activities. They will note:

- The children who are “on task”
- The quality of student performance
- Students who are having difficulty
- The nature of the difficulties they experience in understanding information or performing tasks
- The degree of student interest
- The general behavior of students—engaged, disengaged, bored, restless, and so on

*Asking Questions*

Teachers ask questions to clarify the nature of student activities. They will:

- Ask questions that enable students to comment on their work
- Ask questions to assess student level of understanding of content or process
- Elicit and listen to student comments about their work
- Ask questions to push students' thinking boundaries

**CHECKING STUDENT PROGRESS**

In the first days of my practice teaching, I stood at the front of the class and observed the students engaged in activity. From time to time I would stop their activity and provide comment or clarifying instructions, based on my observations of what I could see of their work. When they had completed the work, I would give a short test or have them display their work so that I could assess their progress.

My mentor teacher suggested I note the way he monitored student activity. As they worked, he walked around the room, looking at their work as they sat at their desks, asking questions, and providing assessments or clarifying comments about the activity in which students were engaged. Sometimes he would have students stop their work and speak to the class, giving instructions or making comments that would clarify the activity in which they were engaged, or encouraging them to improve the quality of their work. The children usually were very responsive to his instruction as he spoke directly to issues or problems that were common to many of the children in the class. They appreciated the personal attention, and their work generally proceeded without the disruptions that were much more common in my early lessons.

The busy and productive hum of his classes was in marked contrast to the ragged questioning and comments that consistently disrupted student activities during my sessions. This provided me with a model of a more effective way of checking student progress and providing more effective feedback.

—E.S.

**THINK: ASSESSING STUDENT PERFORMANCE OR BEHAVIOR**

In a general sense teachers constantly monitor the progress of a lesson, asking “How are things going in this lesson?” As they observe student activities and behavior and talk with students about their work, therefore, they gain an understanding of how well the students understand the information or perform the required activities. Teachers also need to interpret the information gained, to assess each

student's performance. They therefore engage in a process of reflection and analysis to understand the nature of the problems they are observing. As teachers observe students' activities, therefore, they will:

### *Analyze*

- Identify problems, issues, gaps, or inadequacies in student work
- Establish reasons for these problems, for example, lack of understanding, carelessness, and so on.
- Identify key issues requiring an instructional process

### *Assess*

- Evaluate the quality of each student's work
- Assess whether students understand the content of the work
- Assess whether students are clear about the activities they need to engage

### **PEDAGOGICAL WATCHFULNESS**

In a recent class one of my students commented on the way I monitored my students. "I notice the way you watch us as we work. You really seem to keep an eye on us; to notice what we are doing. You always seem to have a comment to make at the right time. I really like the way you do that. You seem to understand what is happening to us as we work!"

It reminds me of the wonderful words of Ted Aoki, who suggests the need for us to be more properly oriented to what teaching is: an attitude of pedagogical watchfulness and pedagogical thoughtfulness. "A watchfulness that is filled with the hope that wherever they may be the students do well and be well, and no harm will befall them," "hope for the well-being of the departing student..." (Pinar & Reynolds, 1992, p. 26).

—E.S.

### **ACT: AFFIRMING AND REMEDIATING**

Teachers affirm student learning by providing positive feedback for good performance, and presenting advice that assists students to improve or extend their work. When teachers are clear on the nature of problems, their students experience they can succeed.

*Reinforce Appropriate Performances or Behaviors*

Let students know what they are doing right. Use that as a starting place to move to issues with which they are having difficulty. Provide comments that reinforce the positive aspects of their performance. Ask students what they think about their work.

*Repeat Instructions*

In some circumstances it is clear that students do not understand clearly the nature or steps in the activity in which they are engaged. Teachers may repeat their instructions, clarifying issues that seem problematic and sometimes providing more detailed guidance. Sometimes peers can assist here.

*Demonstrate*

Show students what to do. You can demonstrate a procedure, a process, or an activity so they know how it is done. This is especially important where skill development is required. Students should copy the process, but insert their own content. Merely copying a teacher-produced activity is a poor basis for learning.

*Celebrate Success*

Find ways of celebrating students' successful performance. Positive comments or some form of recognition encourages students. Children sharing their work to the class is another way to celebrate successful work.

### **CASE EXAMPLE 4.1: PUBLIC SPEAKING (II)— A DIRECT INSTRUCTION LESSON**

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The description of this lesson provides an example of the ways that the Look–Think–Act action research framework assisted the teacher to organize and monitor the ongoing teaching/learning activities in her classroom.

The description enables the reader to see how the teacher used the Look–Think–Act process to extend the lesson on persuasive speaking presented in the previous chapter.

As with previous examples, the Look–Think–Act elements are not always sequential. Teachers may cycle between Look and Think a number of times, for instance, before an “Act” is engaged. The important issue is to keep track of the different processes involved—whether students or teacher are acquiring information (Look), analyzing or sorting and selecting (Think), or engaging some activity (Act).

<p><b>Subject:</b> Language Arts</p> <p><b>Grade:</b> 7</p> <p><b>Unit:</b> Public Speaking</p> <p><b>Topic:</b> Persuasive Speech</p> <p><b>Duration:</b> Four 90-Minute Class Periods</p>
<p><b>New Jersey State Standards</b></p> <p>3.2 <i>Writing:</i> D. Writing Forms, Audiences, and Purposes</p> <p>3.3 <i>Speaking:</i> A. Discussion. B. Questioning and Contributing. C. Word Choice. D. Oral Presentation</p>
<p><b>Materials:</b> Papers, pencils, pens, direction sheet (guidelines for delivering a persuasive speech), pocket dictionary, topics for a persuasive speech, video of speeches, speech handout</p> <p><b>Accommodations/Modifications:</b> One-on-one instruction if necessary, peer tutors, provide step-by-step instructions, have appropriate reading materials, check on progress regularly, have an aide and assistive technology if possible, work with a special educator to modify instruction</p> <p><b>English Language Learner Strategies:</b> Peer tutors; labels in student(s) language; word walls in native tongue and English; adapted texts; instructions and directions in representative/native language if possible; utilization of visuals such as pictorial schematics, graphic organizers, charts to illustrate concepts, directions, and so on</p>

## PHASE 1: PRESENTATION—Anticipatory Set

<i>Objectives/ outcomes</i>	<i>Teacher instruction</i>	<i>Student learning</i>	<i>Assessment</i>
<p><b>Students will:</b></p> <p>Recall the elements of persuasion.</p> <p>Demonstrate understanding of persuasion by preparing a persuasive speech.</p>	<p><b>Look</b></p> <p>Teacher asks students to recall the effective elements of persuasion they learned in the previous class.</p> <p><b>Think</b></p> <p>Teacher asks students to identify elements in their own speeches by putting a star next to each element.</p> <p><b>Look</b></p> <p>Teacher asks students how speakers hold their attention during a speech.</p> <p><b>Act</b></p> <p>Teacher lists student-identified elements on board.</p>	<p><b>Look</b></p> <p>Students respond with effective elements of persuasion they learned previously.</p> <p><b>Think</b></p> <p>Students identify each element they find in own speeches.</p> <p><b>Act</b></p> <p>Students mark each element with a star.</p>	<p>Teacher will note extent of student understanding of elements of persuasive speech.</p> <p>Students note understanding and clarity on a scoring guide.</p>

PHASE 2: PRESENTATION—Input/Modeling, Checking, Practicing

<i>Objectives/ outcomes</i>	<i>Teacher instruction</i>	<i>Student learning</i>	<i>Assessment</i>
<p><b>Students will:</b></p> <p>Define the elements of persuasive speaking.</p> <p>Identify the elements of good speaking.</p>	<p><b>TEACHER INPUT</b></p> <p><b>Act</b> Teacher identifies and defines additional key elements of effective persuasive speaking and lists them on chalkboard.</p> <p><b>Look</b> Teacher asks students to suggest a summary definition of each element. Teacher provides examples of key elements, utilizing video of persuasive presentations</p> <p><b>Think</b> Teacher asks students to discuss how speakers hold an audience’s attention—body language, articulation, pronunciation, pitch, speed, pauses and volume.</p> <p><b>MODELING</b></p> <p><b>Act</b> Teacher presents a speech, accentuating the elements of effective persuasive speaking.</p> <p><b>CHECK FOR UNDERSTANDING</b></p> <p><b>Think/Act</b> Teacher asks students questions about the elements of effective speaking, beginning with basic knowledge and advancing to critical thinking levels. Teacher reviews poorly understood concepts before engaging the class in a practice exercise.</p>	<p><b>Look</b> Students note elements of persuasive speaking.</p> <p><b>Think</b> Students suggest definitions for each element.</p> <p><b>Act</b> Students engage in discussion about what speakers do to hold an audience’s attention.</p> <p><b>Look</b> Students listen to speech.</p> <p><b>Think/Act</b> Students answer questions demonstrating their understanding of elements of effective speaking.</p>	<p>Teacher assesses levels of understanding of elements for each student.</p> <p>Responses to questions indicate level of</p>

(Continued)

## PHASE 2: (Continued)

<i>Objectives/ outcomes</i>	<i>Teacher instruction</i>	<i>Student learning</i>	<i>Assessment</i>
<p><b>Students will:</b> Demonstrate appropriate public speaking and listening skills—body language, articulation, pronunciation, pitch, speed, pauses, volume.</p>	<p><b>GUIDED PRACTICE</b> <b>Act</b> Teacher instructs students to work in pairs to read their prepared speech to each other to check for clarity and understanding.  Teacher circulates, listening and intervening when necessary to make comments and corrections.</p>	<p><b>Act</b> Students practice their speeches with student partners.</p>	<p>understanding and need for clarification.  Students check for clarity and understanding, using the scoring guide assigned previously.</p>

## PHASE 3: PRACTICE (Independent Practice): Review, Reflect, Construct/Perform

<i>Objectives/ outcomes</i>	<i>Teacher instruction</i>	<i>Student learning</i>	<i>Assessment</i>
<p><b>Students will:</b> Demonstrate appropriate public speaking and listening skills—body language, articulation, pronunciation, pitch, speed, pauses, volume.</p>	<p><b>INDEPENDENT PRACTICE</b> <b>Act</b> Teacher instructs students to practice their speeches at home. She provides a framework of activities for this purpose.</p>	<p><b>INDEPENDENT PRACTICE</b>  Students practice speech at home, to prepare them for delivery in class.  <b>Look</b> Review the speech script they have written.  <b>Think</b> Note gaps or errors and modify the script.</p>	



<i>Objectives/ outcomes</i>	<i>Teacher instruction</i>	<i>Student learning</i>	<i>Assessment</i>
	<p><b>PERFORMANCE</b> <b>Look/Think</b> Teacher observes and assesses student performances.</p>	<p><b>Act</b> Present speech to members of their family or friends.</p> <p><b>Look/Think</b> Discuss the effectiveness of the speech with their audience, taking particular note of the elements of good persuasive speech.</p> <p><b>Act</b> Repeat the performance until the speech is performed effectively.</p> <p><b>PERFORMANCE</b> <b>Act</b> Each student presents his/her speech to the class.</p>	<p>Teacher and students assess adequacy of graphic organizer, script, and speech, identifying strengths and weaknesses, errors, or deficiencies.</p> <p>Teacher provides a written assessment and commentary on each student's work.</p>

## CONCLUSION

The apparently simple task of instruction masks a more complex process of education that provides teachers with the challenging task of dealing with a multitude of issues in order to accomplish effective student learning. As this chapter suggests, the busy hum of a productive classroom can only be accomplished by taking into account all of the factors that come to bear on a student's progress through schooling. Teachers need to take into account the natural capacities of their children, the body of knowledge and skills they acquire in the course of their early family and

community experience, and the extensive body of knowledge that is incorporated into any school curriculum. Action research, as a process of inquiry, assists teachers to keep track of this array of issues so they are able to provide interesting and exciting lessons that engage their students and enable them to accomplish learning to the full extent of their capabilities. The following lesson provides an example of the way this happens, using continuing cycles of Look–Think–Act to monitor the progress of students through the activities and events comprising a persuasive teaching lesson.

## LEARNING RESOURCES

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### REFLECTION

1. **Look:** Review the conditions of learning in this chapter.  
**Think:** Identify the main issues that affect children's learning.  
**Act:** Discuss these issues with a partner or some partners, and list how this information influences lesson planning.
2. **Look:** Review the domains of knowledge presented in this chapter.  
**Think:** Identify the different types of activities required for students to learn knowledge or skills in each domain.  
**Act:** Discuss and record with a partner or some partners the way that this information should be included in lesson planning.
3. **Look:** Review the Look–Think–Act cycle for reviewing student learning.  
**Think:** Identify the main ways that teachers can monitor student learning.  
**Act:** Discuss and record with partners the actions needed to (a) assess student performances and (b) identify and remediate weaknesses.

### Web Sites

#### **Review on Effective Instructional Methods From Educational and Psychological Research:**

[http://findarticles.com/p/articles/mi\\_m0FCG/is\\_1\\_32/ai\\_n13670698](http://findarticles.com/p/articles/mi_m0FCG/is_1_32/ai_n13670698)

The site offers a review of effective instructional methods from educational and psychological research.

#### **Empowering New Teachers: Bank Street College of Education:**

[www.edutopia.org/bank-street-video](http://www.edutopia.org/bank-street-video)

The Bank Street College provides aspiring educators new and innovative practice, with a focus on experiential learning, classroom immersion, and mentoring.

#### **Monitoring Student Learning in the Classroom:**

[www.nwrel.org/scpd/sirs/2/cu4.html](http://www.nwrel.org/scpd/sirs/2/cu4.html)

This site identifies the practice of monitoring student learning as an essential component of high-quality education.

**Understanding Student Learning:**

[www.iml.uts.edu.au/learnteach/enhance/understand](http://www.iml.uts.edu.au/learnteach/enhance/understand)

This site explores the distinction between deep approaches and surface approaches to learning.

**Additional Reading**

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**NOTE**

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