

Chapter 3. Long-term Goals, Short-term and Instructional (Lesson Plan) Objectives

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One student or many students in your class may be displaying a behavior that you think must be changed. For example, a student may be out of his seat so often that he fails to complete his work. In addition, his out-of-seat activities may distract his classmates, making it difficult for them to finish their assignments in a timely manner. Another student may not follow reasonable teacher directives. She always seems to be testing your authority. Two other students may get in fistfights frequently. Finally, many students in your class may fail to turn in homework that is accurate or on time. In all of these examples, the behaviors in need of change are clear. Having identified a behavior to change, you need to describe it in clear, unequivocal terms and make sure that it is “applied” or socially important. As discussed in Chapter I, a concise description helps students, parents, and other school personnel understand exactly what behavior or skill is being targeted. In addition, a concise description makes subsequent behavior changes easier to measure, which is a valuable tool when evaluating the effectiveness of an intervention program.

There are two purposes of this chapter. The first purpose is to help you write clear, precise objectives for behavior change programs. You may be familiar with writing objectives for academic areas; procedures for writing objectives for behavior change programs are similar. We will distinguish between Long-term goals, short-term objectives, and instructional objectives. We will identify essential features of instructional objectives and discuss them in detail. Several examples of objectives for increasing and decreasing classroom behaviors will be provided. The second purpose is to help you ensure that the goals you establish and the objectives you write have social importance--that is, social validity. We will discuss a rationale and several methods for selecting behaviors, standards, and procedures that make a difference in your students’ quality of life.

Long- Term Goals versus Short- Term Objectives versus Instructional Objectives

Basically, an objective is a goal to be achieved by your students. Objectives can vary according to their specificity and the amount of time required for mastery. Long- term goals are very broadly stated and generally require an academic year to master. Goal areas usually correspond to subject matter such as reading, mathematics, and written language. As you shall see, they should also include increasing appropriate behaviors and decreasing inappropriate behaviors. Short-term objectives (STOs) are derived from goals and are completed in a much shorter time span that can range from two weeks to three months. Instructional or lesson plan objectives (LPOs), in turn, are derived from short-term objectives and can be mastered within a single lesson. As illustrated in Figure 3.1, goals, short-term objectives, and instructional objectives are strongly related.

A small number of Long-term goals should generate several short-term objectives, which should suggest even more instructional objectives. For example, your Long-term goal may be that your

students will read at the third grade level. Short-term objectives based on this goal may include recognizing sight vocabulary; identifying unknown words through the use of phonics, structural analysis, and context clues; and comprehending written material at literal, inferential, and critical levels. Anyone of these short-term objectives should suggest several instructional objectives. Phonics, for example, can be broken down into the rules for single initial and final consonants, short and long vowels, vowel digraphs, and consonant blends. Tables 3.1 on page 35 and 3.2 on page 36 present additional examples of goals, STOs, and LPOs.

You can also have long-term goals, short-term objectives, and instructional objectives that target social behaviors. You may have as your long-term goal the development of appropriate social skills by your students. This goal can be broken down into short-term objectives that include initiating, maintaining, and terminating conversations; giving and receiving compliments and criticisms; and asking and answering questions. Instructional objectives can include complimenting peers or authority figures on their appearance, possessions, or unique skills.

For some students with more severe problems, you may find it necessary to decrease unacceptable behaviors. For example, you may have as your Long-term goal the complete elimination of tantruming behavior. Short-term objectives may be focused on decreasing the length, frequency, and severity of tantrums. Because it is important to teach socially appropriate alternatives for unacceptable behavior, you may have as your instructional objectives that the student will learn to count to ten before saying or doing anything, to respond to criticism in socially appropriate ways, to ignore people who are bothering him, or to ask for help from an authority figure. At first, you may devote a lesson or a series of lessons solely to the development of these skills. Subsequent lessons may have multiple objectives: those that focus on academic skills and those that focus on maintaining appropriate behavior.

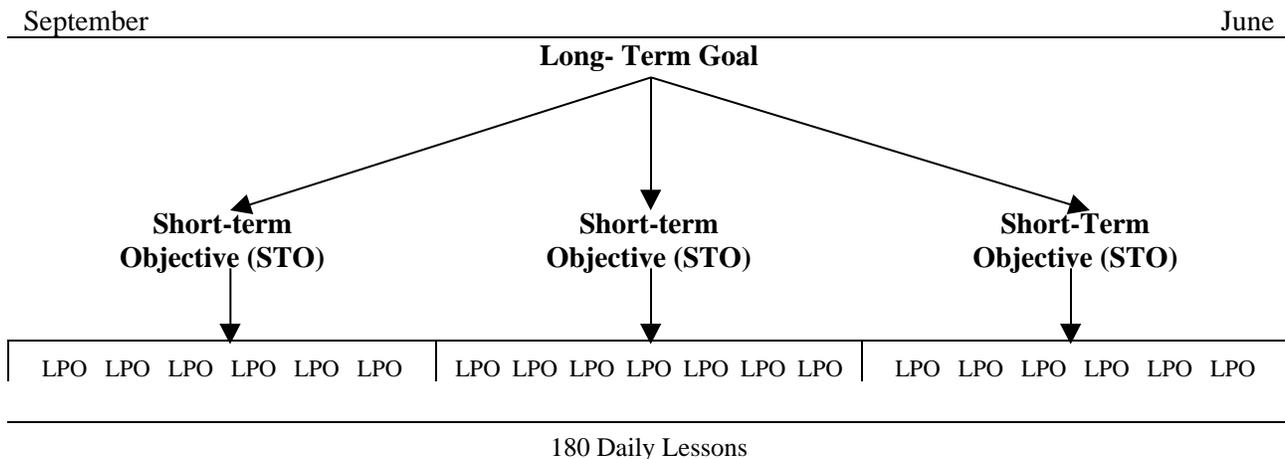


FIGURE 3.1 The Relationship between Goals, Short-term Objectives (STOs), and Lesson Plan (Instructional) Objectives (LPOs)

You may already be familiar with these concepts, particularly if you are preparing for a career in special education. The Individuals with Disabilities Education Act (IDEA) guarantees that each student enrolled in special education will receive a free and appropriate public education (FAPE). One way to ensure the appropriateness of an educational program is the Individual Education Plan (IEP). This document is a contract between a school district and the student and his or her parents that, among other things, identifies Long-term goals and short-term objectives. As you can see, identifying goals and objectives may not be just good teaching; it may be a legal necessity.

TABLE 3.1 Examples of the Relationship between Long-term Goals, Short-term Objectives (STOs), and Lesson Plan Objectives (LPOs) for Academic Content

Long-term goals drive short-term objectives that in turn drive lesson plan objectives. Examine the following example. See how specificity increases as the time to master them decreases.

Long- Term Goal	Short- Term Objective	Instructional Objective
Develop creative writing skills	Develop cursive writing skills	(a) Given a close point model, paper, and pencil, Jim will write I, i, e, and t in cursive with 100% legibility. (b) Given a close point model, paper, and pencil, Jim will write u, v, and w in cursive with 100% legibility. (c) etc.
	Use mechanics	(a) Given unpunctuated sentences, Jim will use a period, a question mark, and an exclamation point with 100% accuracy. (b) Given sentences without capital letters, Jim will capitalize the beginning of each sentence and all proper nouns with 100% accuracy. (c) etc.
	Improve content	(a) In a small-group setting and given a topic, Jim will identify orally two relevant ideas to write about. (b) In a small-group setting and given a list of ideas, Jim will organize a semantic map in writing. (c) Given a topic and a semantic map, Jim will write a paragraph that consists of a main sentence and two sentences containing supporting details. (d) etc.

TABLE 3.2 Examples of the Relationship between Long- Term Goals, Short- Term Objectives (STOs), and Lesson Plan Objectives (LPOs) for Behavior Management

Long- Term Goal	Short- Term Objective	Instructional Objective
Increase time on task	Increase time on task during Sustained Silent Reading	<p>(a) Given a reading task at her ability level, Cassandra will stay at her seat and read silently, keeping her eyes on the story for 10 minutes. She will orally summarize the main point correctly.</p> <p>(b) Given a reading task at her ability level, Cassandra will stay at her seat and read silently, keeping her eyes on the story for 15 minutes. She will orally answer two comprehension questions with 100% accuracy.</p> <p>(c) etc.</p>

Features of an Instructional Objective

An instructional objective can target an academic skill such as reading or mathematics, an affective skill such as establishing friendships or expressing opinions tactfully, or a psychomotor skill such as keyboarding skills or athletic development. An objective is written correctly if it includes four features: student orientation, behavioral terminology, a criterion, and a statement of condition. Each of these features will be discussed separately.

Student Orientation

The first important feature of an objective is that it identifies a skill that will be performed by your students, not you. We have seen many lesson plans written by education majors in which the goal was “to teach fire safety” or “to review long and short vowels in one-syllable words.” Such objectives are inappropriate because they are teacher-oriented, implying that the behavior could be more important to you than to your students. In keeping with the principles of applied behavior analysis, these objectives should be revised to clarify their importance and usefulness to students. “To teach fire safety” should be written “identify fire safety rules”; “to review long and short vowels” should be written “read aloud, correctly, words that contain long or short vowels”; “to teach homework completion” should be written “to turn in every homework assignment on time and completed with 90 percent accuracy.”

Behavioral Terminology

The revisions we just suggested illustrate the second feature of an objective: It should be behavioral, clearly identifying how students will perform in measurable and observable terms. In the first chapter, we emphasized the importance of precisely describing behaviors we wish to change, and we provided examples of measurable, observable classroom behaviors. We should point out that some curricular areas are more easily described than others. Bloom (1956)

recognized this difficulty when he developed the Taxonomy of Educational Objectives. Using the classification schemes for plants and animals as a model, he identified three domains of learning: cognitive, affective, and psychomotor (we alluded to these in the first paragraph in this section). Each domain included categories of objectives arranged in hierarchical order from simplest to most complex. For example, the cognitive domain emphasized intellectual outcomes and was broken up into knowledge, comprehension, application, analysis, synthesis, and evaluation. Finally, Bloom (1956) provided behavioral terms for each category of objectives.

Two points need to be made here. First, it is highly probable that objectives representing lower levels of cognitive ability are identified most easily by classroom teachers. For example, “reads aloud the first grade list of Dolch sight words” and “recites the multiplication tables” are objectives selected frequently for elementary students. We do not argue the importance of these skills; proficiency is essential if your students are to master more difficult material in subsequent lessons. It is because they are so easily identified and described that teachers may devote a majority of instructional time to knowledge-based skills and ignore those that require higher levels of cognition. Make sure you develop and implement lessons that enable your students to acquire competence at all levels of cognitive ability.

The second, related point is that even teachers who plan lessons to enhance all levels of cognition may neglect skills from the other two domains identified by Bloom (1956). Certainly appropriate lessons that incorporate relevant material will enhance your students' academic abilities and reduce the possibility that they will misbehave out of frustration or boredom. This is an antecedent control technique that we will discuss in detail in Chapter 4. Nonetheless, the psychomotor and affective domains include skills that are essential to your students' overall development. You should assume responsibility either for teaching these skills directly or for ensuring they are addressed by other school personnel. For example, the psychomotor domain includes gross and fine motor skills. The physical education teacher probably assumes most of the responsibility for this domain, although fine motor skills receive attention in penmanship and keyboarding lessons you develop or in drawing lessons planned by the art teacher. Similarly, the affective domain has been associated with the evaluation and appreciation of the fine arts. It also includes many of the skills emphasized in subsequent chapters of this text, such as social skills and self-management. By selecting and teaching skills that represent the full range of each domain, you increase your students' ability to participate successfully in home, school, work, and community settings.

As teachers, it is our responsibility to change cognitive, affective, and psychomotor skills to enhance the quality of our students' lives. For all students, “change” means “increase.” For example, we will increase their competency in traditional curricular areas such as language, reading, and math. Most of us will also increase our students' cognitive awareness of topics such as substance abuse and sexuality, and provide them with the affective education necessary to make fully informed decisions about these issues. Finally, we will increase students' motor abilities through activities such as athletic events, art lessons, and dance instruction.

For some students, however, “change” will also mean “decrease.” Behaviors students need to decrease are those that interfere with their development in other areas. For example, a student may overgeneralize the “i before e” rule and write “sceince” for “science” or “scienc” for “scene.” Another student may be holding a pencil improperly, resulting in dark, thick strokes that rip the paper. In both instances, cognitive and psychomotor skills will be analyzed and errors eliminated so that the students will spell correctly and write legibly.

TABLE 3.3 Appropriate Alternatives for Behaviors That Should Be Decreased

Part of your responsibility as a teacher is to decrease or eliminate behaviors that interfere with a student's progress and to increase appropriate alternatives. You should be proficient at describing both undesirable behaviors and their desirable alternatives in measurable, observable, and repeatable terms. Compare the inappropriate behaviors listed in the first column with the appropriate behaviors listed in the second column.

Inappropriate Behaviors	Appropriate Alternatives
Bill calls out answers.	Bill raises his hand.
Ann takes objects that do not belong to her.	Ann requests permission to borrow items by using the owner's name, making her request, and saying "please."
Peter counts to ten, and then asks a peer to discuss a problem.	Peter expresses his anger with peers by throwing breakable items.
Mary follows one-step directions given by her teacher.	Mary cries each time she is given a teacher directive.

We believe that insufficient or inappropriate affective behaviors can be major impediments to student progress. Managing these affective behaviors is our primary concern in this book. Although we will demonstrate how cognitive and psychomotor skills can enhance your efforts, we will focus much attention on increasing affective behaviors that enhance student development and decreasing those that interfere. At this point, we simply want you to be aware that some student behaviors will need to be decreased or eliminated and suitable alternatives developed in their place. Therefore, your repertoire of behavioral terminology should include words that allow you to discuss increasing and decreasing behavior. Table 3.3 is a list of target behaviors that should be decreased and appropriate alternatives that can be increased.

Finally, we think it may be useful in some instances to refine further the terminology used in an objective by providing lists of inclusionary and exclusionary behaviors. Inclusionary behaviors are examples of the target behavior. Exclusionary behaviors do not reflect the target behavior. For example, the list of inclusionary behaviors that represent "engaging in cooperative play," a behavior we want to increase, contains playing a board or computer game with one or more peers and a one-on-one basketball match. The list of exclusionary behaviors contains playing solitaire and reading a book silently. Table 3.4 contains samples of inclusionary and exclusionary behaviors for swearing, a behavior we want to decrease.

Criterion Level

The third feature of an objective is a criterion level, which specifically states how well a student must perform or behave. You should consider four factors when establishing a criterion. First, it can be stated in many different ways, depending on the exact nature of the skill being targeted. There are at least four types of criteria useful to teachers: percentages, steps or components, rate or frequency, and time. A percentage or level of accuracy is useful when developing academic skills. A series of steps or components that make up an acceptable answer is useful when learning an

TABLE 3.4 Objectives Containing Inclusionary and Exclusionary Behaviors

You can increase the precision of the terminology contained in instructional objectives by including samples of what does and does not exemplify the behavior you are changing. The following lists clarify what does and does not constitute swearing (White & Koorland, 1996).

Objective: During independent, small-group, or large-group activities in the classroom or on the school grounds, Andrew will not swear ever.

Swearing Includes	Swearing Excludes
1. Verbal assaults such as “F___ you,” and “Go to ___.”	1. Use of substitutes such as “dam,” “shoot,” “heck,” etc.
2. Profanity or religious contemptuousness such as “Jes__ Chr__t.”	
3. An obscenity or word not permitted legally in certain contexts.	
4. Epithets or outbursts of anger such as “D___ it!”	
5. Scatology or verbalizations that refer to human excrement.	
6. Use of hand or finger gestures to convey any of the above.	

academic strategy and identifying responses within social settings. The rate or frequency of a behavior is particularly important when using applied behavior analysis. Typically, we want to increase behaviors that do not occur often enough or decrease those that occur too often. Finally, a criterion may involve time, in that a student should initiate or complete an activity within a certain interval. You may find it convenient to combine types of criteria when developing an objective. For example, a student may need to read aloud 44 first grade sight words with 100 percent accuracy in two minutes or less. Table 3.5 contains examples of criterion levels suitable for the variety of skills students must master.

Second, the criterion must reflect the importance of the skill. Basic skills such as math facts or sight word vocabulary should be mastered with 100 percent accuracy because students need them in order to learn other, more complex skills. We can be more flexible in other academic areas. For example, computerized spell checkers have reduced the need for students to spell with 100 percent accuracy; perhaps a criterion of 80 percent is more realistic. Just as some academic skills vary in their importance, so do affective skills. For example, you may be annoyed by a student who tries to get your attention by calling out rather than raising her hand. However, establishing a criterion of zero call-outs may be unrealistic because it does not allow for informal discussions, the natural exuberance of youth, or emergency situations. A reasonable criterion for this student may be no more than four call-outs per day. Other behaviors with more serious repercussions require stricter standards. For example, most people would agree that the classroom is not the place for highly aggressive behavior and would set the frequency of occurrence at zero.

The third factor to consider is the student's age. Objectives and criterion levels that are appropriate for one segment of the student population may be inappropriate for another. For example, a young child who destroys a textbook may be expected to apologize, but an older child would be expected to apologize and repair or replace the book. It is easier to identify appropriate criterion levels if you observe other students of comparable ages perform the skill in the natural environment. Such observations prevent you from establishing criterion levels that are either too high and frustrating for your students or too low and boring.

A fourth factor in criterion selection is what significant others in your students' lives believe or do. The criterion you specify may reflect your background and values; however, other people who know and interact with your students may not share your opinions or adhere to your standards. For example, perhaps you are teaching students to respond to a compliment about a new article of clothing. You may think it is necessary both to say thank you and to extend the conversation by telling where and when the article was purchased. Colleagues and parents, however, may tell you they think this criterion is overkill. Further, you may notice that students whose behavior you think is appropriate respond to compliments simply by saying "thanks." Selecting a criterion that is too high or elaborate wastes valuable teacher and student time. We encourage you to verify your criterion selection by asking other people their opinions or watching what they do. We will elaborate on these ideas later in this chapter.

TABLE 3.5 Sample Criterion Levels

An instructional objective must identify a standard for students to meet so that you can be certain they have mastered the skill. Below are several examples of criterion statements. You can see how different types of criterion statements can be used to describe increases or decreases in student behavior across cognitive, affective, and psychomotor domains.

Percentage

After silently reading a passage from a fourth grade basal text, the student will orally answer comprehension questions with 90 percent accuracy.

Steps/Components

When requesting assistance, the student will

1. use an attention getter such as the person's name,
2. ask the question, and
3. use a social amenity such as "please."

Rate/Frequency

Given a computer, a word processing program, and a handwritten document, the student will type *with a minimum of 35 words per minute*.

During daily small- and large-group lessons, the student will decrease call-outs to *no more than three times a day*.

Time

During lunch and free play periods, the student will increase peer interaction time by one minute each.

After arrival at school, the student will hang up her coat, gather her materials, attend to personal needs, and be prepared to begin the scheduled morning activity *within 10 minutes*.

Condition

The fourth feature of an objective is a statement of the conditions under which the behavior will be performed. The condition statement identifies any and all material or resources to which the student will have access or circumstances to which he or she will be exposed. Conditions can describe academic, affective, or psychomotor skills. For example, “Given a dictionary and a list of vocabulary words ...” is an appropriate condition statement for developing dictionary skills. “Given a paper, pencil, and a word followed by a sentence ...” is appropriate for a spelling test. Affective objectives targeting social skill development can begin with “When greeted by a peer ...” or “When an adult denies a request ...” A psychomotor objective for handwriting could begin “Given 3/4-inch lined paper, a standard writing instrument, and a list of ten dictated sentence ...”

A condition statement should reflect the age and ability level of a student. For example, we expect elementary students to master basic math facts with 100 percent accuracy. However, memorization may not be the most efficient use of the instructional time available to a secondary student in special education. In fact, he has probably tried and failed to memorize this information on several occasions. An objective for this student should begin with a condition such as “Given a calculator and a problem-solving activity ...”

Having presented the components of objectives and discussed them in detail, we want to make sure you can recognize objectives that are correctly written and locate errors. Table 3.6 lists nine objectives. Examine them carefully and see if you can identify those written properly. Can you pinpoint and correct the errors?

TABLE 3.6 Self-Check

Read each of the following instructional objectives. Decide if it is correctly written. If not, make any corrections you think are necessary.

1. At the end of the lesson, the student will write the spelling of 10 single-syllable words featuring the long a sound, with 80 percent accuracy.
___ The objective is written correctly.
___ The objective is written incorrectly and should be rewritten:

2. Given a calculator, a pencil, and a set of word problems, the teacher will explain and demonstrate a strategy for solving them, including all four steps each time.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

3. During lunch and snack times, the student will refrain from throwing food. She will eat, then properly dispose of leftovers, every day.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

4. When entering the classroom, the student will greet his teacher every morning.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

5. Given 3/4-inch lined paper, a pencil, and 10 dictated sentences, the student will reproduce each sentence in cursive with 100 percent legibility.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

6. After viewing a videotape on recycling, the students will identify and discuss its main points. Each student will contribute at least one relevant comment.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

7. Given a story written at the third grade level, the student will read silently with 90 percent comprehension.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

8. Given a story written at the third grade level, the student will read silently and answer five comprehension questions in writing with 80 percent accuracy.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

9. Given a list of instructional objectives, the student will judge the accuracy and completeness of each by identifying four essential features contained in each. Objectives written incorrectly will be rewritten in the appropriate format. The student will complete this task with 100 percent accuracy.

The objective is written correctly.

The objective is written incorrectly and should be rewritten:

Answers

1. *Incorrect.* You should have rewritten the condition statement to describe materials the student will have access to during the course of the lesson.
2. *Incorrect.* You should have rewritten the objective so that it has a student orientation.
3. *Correct.*
4. *Incorrect.* You should have rewritten the objective to clarify “greet.” There are many ways to acknowledge a teacher in the morning, but not all of them are appropriate and acceptable.
5. *Correct.*
6. *Correct.*
7. *Incorrect.* You should have rewritten the objective so that “silent reading” is measurable and observable, perhaps by adding something about responding to oral comprehension questions.
8. Technically, this objective is *correct* because it does include all the components. A student who can silently read and comprehend, however, may have difficulty with written expression. His comprehension may be evaluated as poor – not because he doesn't understand the passage but because he has limited written language skills. This objective could be rewritten so that the student answers five comprehension questions orally with 80 percent accuracy.
9. *Correct.* We hope you met the objective.

Selecting Relevant and Reasonable Long-term Goals, Short-term Objectives, Lesson Plan Objectives, and Procedures

We hope the information in the previous section made you aware of the intricacies of developing goals and expanding them into short-term objectives and lesson plan objectives that are comprehensive and stated clearly. As we mentioned in Chapter 2, developing goals and objectives is just the first step in creating an ABA program. Although you may be starting to feel

overwhelmed by this step, we need to offer one more point for your consideration. The four components for writing goals and objectives are not the only things you need to address. Equally important to the development of goals and objectives is the concept of social validity. *Social validity* was introduced by Wolf (1978), who defined it as the social significance of our goals, the social appropriateness of our procedures, and the social importance of their effects. In this section, we identify the components of social validity, and describe different techniques for ensuring that goals and objectives reflect this important concept.

Social Validity of Goals

The social validity of our goals is the most frequently assessed form of social validity. Basically, we are asking ourselves, “Are the goals of our educational program what society really wants?” Hawkins (1991) questioned the use of the term social validity because it suggests that society wants us to address and solve large-scale problems and solutions. Perhaps it does. As we noted in Chapter 1, state education departments have expanded the traditional curriculum to include topics such as drug use and sexuality in the hope that heightened knowledge and awareness will enable students to make informed decisions. But teachers must deal with society one child at a time and, as Van Houten (cited in Geller, 1991) pointed out, what benefits one child will probably benefit society at large. For example, a student who learns about the negative effects of drug use is more likely to avoid using drugs, saving tax-payers the money necessary for a rehabilitation program. Similarly, just as one student benefits when she is taught to locate and maintain employment, so too do other members of society benefit as fewer tax dollars will be needed to support her in the future.

The question now arises: “Whom do we ask?” Schwartz and Baer (1991) recommended asking “direct” and “indirect” consumers (p. 193). Direct consumers are those individuals who receive our services; in our case, the students. Indirect consumers are persons who, by virtue of interacting with direct consumers, are affected by the behavior changed during an educational program or an intervention technique. In our case, indirect consumers include our students' family members and peers. We can also ask the opinions of members of the immediate community in which our students live, including those who interact regularly with direct and indirect consumers, such as the school bus driver and the cafeteria worker. Finally, we can poll members of the extended community, which includes people who probably do not know direct or indirect consumers but who live or work in the same area. Examples include employers and store managers.

Suppose you want to develop a social skills program. You know what you think is important, but you need to make sure your goals and expectations are valued by other people. You have limited time and money available for this program so you do not want to waste either by teaching skills that are not important. In keeping with Schwartz and Baer's (1991) suggestion, you should ask your students what kinds of problems they have and what they would like to learn. (Later, we will deal with responding to students who indicate they have no problems and therefore do not need to learn anything.) Next, ask your students' parents for their opinion about the way their children interact with other people and for ideas about improving behavior. Then, seek input from other people who see your students frequently, such as other teachers, the librarian, the bus driver, and the cafeteria worker. Finally, talk with clerks in a convenience store or the manager of a movie theater. They may not know your students, but they can offer insights into behavior they expect from children in a particular age group.

A related factor in the social validation of your goals is the standard established for students to achieve. In an earlier example, we discussed setting the criterion for accepting a compliment. The

original idea was to teach students to say “thank you,” then extend the conversation. Social validity requires that we make sure this is a reasonable standard to achieve. One way to validate this standard is to observe how competent students respond to compliments. If their response is a simple “thank you,” the original criterion should be adjusted. Another way to ensure the social validity of the standards included in goals is to survey current or future environments in which students will participate. Perhaps you are preparing a student currently placed in a separate special education setting for an inclusive placement. In the special education class, you offer several verbal reminders regarding homework assignments. An observation in the general education setting indicates that the teacher merely makes notes of assignments in a corner of the blackboard. An objective targeting homework skills should reflect this difference in conditions.

We recognize that extensive measures such as observing people and other settings may be unnecessary in that the social importance of many skills is already widely recognized. No one disputes the importance of reading or managing money. However, these measures are warranted if the importance of goals and standards is less clear. Social validation of your goals and standards also reduces the amount of time and resources devoted either to teaching skills that are not important or to attaining an excessively high level of mastery. In addition, we suggested in Chapter 1 that you obtain permission to provide special or unique programming. Social validation of your goals and standards can make it easier for you to obtain that permission. Obviously, your students' parents or guardians can provide informed consent only after receiving a complete description of what your goals are, how they were established, and how their attainment will make a positive difference in their child's ability to function effectively in a community setting. Hawkins (1991) suggests asking parents to “imagine it is a year from now and this goal has been achieved. How much better is 's life, in terms of what she can do, how easy is life for her, how many pleasant things happen to her ...” (p. 208).

We caution you to use feedback you receive from students, family members, and members of the community wisely and to make necessary adjustments in your goals and standards. Otherwise, respondents will wonder why you ever bothered to ask and why they ever bothered to answer (Schwartz & Baer, 1991).

We have one final point to make about the social validity of goals. Some respondents may indicate there is no problem to solve or skill to learn. Unfortunately, some individuals are not always right and do not always know or do what is good for them. Many of us would prefer not to wear seat belts because they are at times uncomfortable. We occasionally drive faster than dedicated state troopers prefer, to get where we are going sooner. Our students are similar. They would rather continue behaving in certain ways and not accept the challenge of acquiring information or learning skills that ultimately make life better and easier. This does not entitle us to bully students and their parents into accepting goals and participating in programs simply because we know what is good for them. To the contrary, we are obligated to explain to students and their parents the immediate and extended benefits of learning new skills (Schreibman, in Geller, 1991).

Social Validity of Procedures

Having established socially valid goals and standards, you will need to select and implement ABA techniques for facilitating student mastery. We are not jumping the gun by discussing these techniques now; Chapters 4 through 10 will provide you with the information you need to choose from among the many options available. At this point, we only want to point out that, just as goals and standards must be socially valid, so too must the procedures we use to change behaviors.

Kazdin (1980) referred to this concept as treatment acceptability. In Chapter 1, we advised you to explain to students, parents, and other important individuals the exact nature of techniques to be used for increasing learning and changing behavior prior to their enactment. Despite your explanation, it is possible that students and parents still object to the educational program. Obviously, their response should concern you because students who do not like their educational program “may avoid it, or run away, or complain loudly” (Wolf, 1978, p. 206).

Social validity of procedures encourages you to go beyond mere explanations of the relationship between instructional procedures and subsequent changes in academic and affective behaviors. You must show how your instructional program will enable students to become more independent, mature, and self-confident; and demonstrate how your procedures will enhance the students' personal dignity and freedom (Bailey, in Geller, 1991).

Before your meeting with students and parents, make sure you have done your homework. Be familiar with the variety of techniques available, and make sure that you have selected those that have been proven effective either in the professional literature or through previous professional experience. During the meeting, discuss the advantages and limitations associated with any educational procedures you plan to use and identify how you will protect students from possible negative side effects. Include examples of how this technique worked in the past for other students with similar learning and behavior problems. Describe how you plan to evaluate the program and modify it in light of the results.

The concerns of students and parents are not the only ones you may need to address. School officials may express concern for an instructional program, either because of its nature or its expense. Of course, your choice of techniques should reflect district policies or you may face legal repercussions. Discussions with supervisors can include the points made in the meeting with students and parents.

Objections to the expense of an instructional program can be addressed by pointing out that money and effort invested now may prevent the need for additional, more costly programming in the future. We offer a final point. Just as people may believe a goal is irrelevant, so too they may object to an intervention program. You may feel inconvenienced by a daily regimen of moderate exercise and medication to lower your blood pressure, but that “inconvenience” will probably contribute to a longer, happier life. Students and parents may judge as poor a program that ultimately succeeds. Hawkins (1991) cautioned that a student's or parent's opinion is not a sufficient condition for social validation; it is merely a second opinion from another viewpoint. You are advised, however, to listen to students and parents, and to incorporate their suggestions for making a program more humane and acceptable.

Social Validity of Effects

Hopefully, socially acceptable procedures have enabled students to achieve socially valid goals and procedures. It is not sufficient to point out that academic skills have improved and that acceptable behavior increased while unacceptable behavior decreased. Social validity of effects requires a demonstration that the results of our educational program increased the quality of our students' lives. For example, you may have reduced the duration of a 10-year-old student's tantruming behavior from two hours to ten minutes per week. Everyone will agree that this is a step in the right direction, but someone may ask if it is ever appropriate for a student that age to throw a tantrum.

Wolf (1978) identified two strategies for evaluating the social validity of the effects of an educational program. One strategy is social comparison, in which you compare the academic and behavioral gains made by your students to the levels demonstrated by competent peers. Perhaps you are working on increasing fluency or the number of words your students use in their creative writing. Ask another teacher if you may borrow samples of the writing produced by students in her class. Count the number of words per sample, average them, and compare them to the number produced by your students. This comparison is a measure of the social validity of the effects of your writing program.

Subjective evaluation is the second strategy for measuring the social validity of the effects of an instructional program. Sometimes, the importance of your effects is a matter of judgment that members of the community are qualified to make. You may find it unusual to ask your students and their parents how they like a program or whether or not a skill was useful to them. You, like Wolf (1978), may assume “Of course they like it. After all, we are doing it to them for their own good, aren't we? And even if they don't like it, we know what is best for them” (p. 206). However, the feedback you receive may provide information that enables you to improve your instruction.

You can ask parents, peers, or other teachers to rate student behavior before and after an instructional program is implemented. You will have more confidence in your findings if you use a rating device such as a Likert scale that has clearly defined points. Make sure you provide instructions that are free from bias so that raters do not anticipate your expectations.

We caution you that subjective evaluation can be abused. It is difficult to tell if your respondents are providing honest opinions. However, just because we know the system can be manipulated does not excuse us from gathering this information. We advise you to ensure that individuals providing subjective evaluations are guaranteed confidentiality. Use your professional judgment to make appropriate modifications to your instructional program. Subjective measurements are a supplement to objective evaluation, not a substitute. Evaluation of a program cannot rest solely on opinion; rather, you must document effectiveness by gathering information from objective sources.

Issues in Writing Instructional Objectives

Although we believe that socially valid instructional objectives are essential to change academic and affective behaviors effectively and efficiently, we recognize that the process of selecting and writing them may be challenging. Several objections to writing instructional objectives have emerged in the professional literature. We will discuss each objection briefly and offer a response that highlights the benefits of continuing this practice.

Writing Instructional Objectives Is Time-Consuming

We agree that appropriate instructional objectives take time to identify and define, particularly for beginning teachers. But at the risk of sounding trite, the more instructional objectives you write, the more skilled you become and the easier the task. Of course, we all know that teachers never throw anything away; so, after writing a series of objectives, file them away for future use as your students' needs dictate. Even as you are struggling to produce and perfect instructional objectives, remember the benefits they offer you and your students. First, instructional objectives help everyone (including colleagues, parents, and your students themselves) understand clearly what

you want your students to do. Second, they identify clearly the standard your students must achieve to demonstrate mastery of the skill. Such specificity is extremely valuable when developing testing instruments. Third, instructional objectives that are carefully selected and well written assist with material selection (Mager, 1984). The condition statement included in your objective should suggest materials that should be available to students during the course of the lesson.

You may have access to computer programs that allow you to select from an extensive bank of objectives. Such programs are appealing because they include many curricular areas, and all the work appears to have been done for you. We advise you to use these programs with caution. Goals and objectives you select from these banks should reflect the standards we have discussed in this chapter. In addition, it is unlikely that even the most extensive program will provide objectives for all the cognitive, affective, and psychomotor behaviors you want to change. Such programs should allow you to modify existing objectives and develop new ones that meet your students' needs.

Not All Areas Are Easily Broken Down into Instructional Objectives

We admit that some curricular areas are more easily “operationalized” than others (a good example is written language). We described this situation earlier in our discussion of Bloom's taxonomy, where we noted that most teachers direct their efforts toward teaching skills that represent the lowest levels of the cognitive domain and frequently ignore higher-level cognitive skills or skills from the affective and psychomotor domains. Such a narrow focus on low-level skills is increasingly inappropriate as our ever-changing society demands more and more from its members. Similarly, deficits in the affective and psychomotor domains may pose major problems for some of our students. Ignoring these domains may undermine student progress and violate the concept of a free and appropriate education. We encourage you to expand the depth and breadth of the curricular areas you address during the school day. Continued practice makes you more skilled in writing instructional objectives suitable for all skill levels within each domain, particularly if you work cooperatively with colleagues.

Instructional Objectives Are Not Related to Teaching

Lovitt (1977) reported that one objection to writing instructional objectives was that they were not related to teaching. If you find that is still true, then you have not been reading very carefully! Each feature of a correctly written objective has direct bearing on the teaching process. The condition statement assists in the selection of appropriate instructional materials; the statement of behavior is student-focused and clearly identifies a socially relevant skill in measurable and observable terms; and finally, the criterion statement should suggest a method of evaluation. Surely, we can agree that materials, skills, and evaluation are directly related to teaching.

Instructional Objectives Impose Values

Lovitt (1977) also reported some concern that instructional objectives force the teacher's value system upon the students. Again, if you still believe this, then you need to reread the previous discussion of social validity. We emphasized the importance of making sure the goals and objectives you select are socially relevant and capable of making a difference in the lives of your students. We encouraged you both to discuss objectives with parents, your colleagues, and, when possible, your students; and to verify the appropriateness of the criterion by subjective evaluation or social comparison.

Some teachers may continue to argue that it is not appropriate to require a student to learn a skill or perform in a particular way simply because other members of the community do so. We are not advocating that all your students become replicas of each other. We are advising you to make sure that your students have the skills they need to function effectively in their community and that they are aware of the positive and negative ramifications of their choices. As discussed in Chapter 1, freedom of choice and human dignity are enjoyed by the student whose actions are the result of conscious decisions, rather than his or her inability to behave in any other way.

In this chapter, we discussed at length how to write instructional objectives correctly and have provided several examples. Despite our efforts, you will probably make some mistakes, particularly if you are writing objectives for the first time or if you are writing them for areas that are new to you. We have identified some common errors teachers make when writing instructional objectives. (We know because we have made them.) Keeping them in mind while you write may prevent you from making them.

Not Using Behavioral Terminology

It has been our experience that using non-behavioral terminology is the error made most frequently when writing instructional objectives. Mager (1984) noticed that some objectives “have the appearance of objectives but contain no performances” (p. 89). He provided an example of such an objective in which the students were to “demonstrate a comprehension of the short-story form” (p. 89). The language contained in this objective does not describe anything that is measurable, observable, or repeatable. Make sure that the instructional objectives you develop clearly specify what your students will do by the end of the lesson.

Omitting a Feature

Occasionally, when reviewing lesson plans written by teachers, we have noticed that one of the four essential features of an instructional objective is missing. For one reason or another, the feature most likely to be omitted is either the condition statement or the criterion. At the beginning, you may find it helpful to always write instructional objectives in the same format: that is, the condition statement, followed by the behavior, and finally the criterion. This idea may be helpful until writing complete instructional objectives becomes second nature.

Using a Teacher Orientation

Some teachers make the mistake of writing an objective that describes what they will do, not what their students will do. Remember, the goal of your lesson should not be that you have taught a specific skill, but rather that your students have learned it.

Using a Vague Condition

Mager (1984) refers to this problem as a “false given” and illustrates it with an objective that begins, “Given three days of instruction ...” (p. 90). Such a statement gives you no clue as to what materials the student will have access to or the conditions under which learning will occur. Make sure that the condition statements you write specify these important details.

Eliminating a Problem Behavior without Developing an Appropriate Alternative

Some of you will use the information presented in this text to address severe or long-standing behavior problems demonstrated by some of your students. While this is a commendable decision, we need to remind you about a point we made in Chapter 1. You cannot eliminate an inappropriate behavior without providing the student with the opportunity to develop appropriate alternatives. For example, we know a young man who used to bang his head against walls, desks, and other hard surfaces when school personnel would not comply with his wishes (e.g., a request for a soft drink in the middle of a reading lesson). Surprisingly enough, the individual did not appear to sustain any injuries during these episodes; however, this behavior was unacceptable and had to be eliminated. It occurred to us that head banging was the only way this young man could express his displeasure. Eliminating it without providing an appropriate substitute may have resulted in the development of other equally undesirable behaviors. We devised two sets of objectives: the first set dealt with the elimination of head banging and the second set focused on the development of social skills.

Not Writing Socially Valid Objectives

The instructional objectives you write could be absolutely perfect in the sense that they are written from your students' perspective and contain all the essential features. They could also be completely inappropriate in that they are focused on skills that do not reflect your students' ages, interests, or abilities. This problem is more likely to occur when you are working with older students. One of the authors of this text made that mistake early in her teaching career. She decided to work on multiplication and division of fractions with a 17-year-old student because the results of formal and informal math tests indicated deficits in these skills. She quickly realized that, with the exception of doubling a recipe, fractions were not as important to a student preparing to graduate as managing personal finances was. She then developed new instructional objectives that addressed handling bank accounts, using credit cards responsibly, and figuring out taxes. We again refer you to our earlier discussion of social validity, where we discussed the importance of developing skills that will make a qualitative difference in the lives of your students.

Writing Objectives That Lack Depth

We already discussed this problem when we noted that some teachers may write objectives only for lower-level skills such as knowledge and comprehension. Although we understand that it is easier to write objectives for such skills, we encourage you to consider skills that represent higher levels of functioning such as application, analysis, synthesis, and evaluation.

Writing Objectives That Lack Breadth

We also noted earlier that some teachers write objectives only for cognitive skills. Please remember that the affective and psychomotor domains contribute substantially to your students' overall development. Make sure their educational program balances skills from all three domains.

Writing Objectives with Mismatched Components

Item 8 in Table 3.6 illustrates a mismatch between the target behavior and the criterion. In this example, reading comprehension is assessed by performance on a writing task. This is an unfair assessment method because students who comprehend what they have read may be unable to express their knowledge in writing. A mismatch can also occur between the condition and the

criterion. For example, a student who is given five sentences is required to punctuate them using a period, a question mark, or an exclamation point with 90 percent accuracy. This criterion is unattainable because there are only five sentences. Just one mistake reduces the student's score to 80 percent. For the sake of clarity, we discussed the components of short-term objectives and lesson plan objectives separately. However, you must consider how all four components work together.

Summary

In this chapter, we have distinguished between Long-term goals, short-term objectives, and instructional objectives. We have presented the components you need to write objectives appropriately and have provided many examples. We also discussed in detail the concept of social validity and its implications for the selection of goals, objectives, standards, and procedures. Attention to the four components of writing objectives and to all facets of social validity will make goals and objectives comprehensive and appropriate. Finally, we have responded to several objections to instructional objectives and have identified ways to avoid the errors that occur when writing them. Armed with this information, you are ready to continue to the next step in developing a positive classroom environment. In the next chapter, we discuss antecedent control techniques that can enhance learning and can prevent many typical classroom problems from occurring.

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