2
CHAPTER

Planning for Instruction

Entry-Level and Advanced-Level Health Educator Competencies Addressed in This Chapter

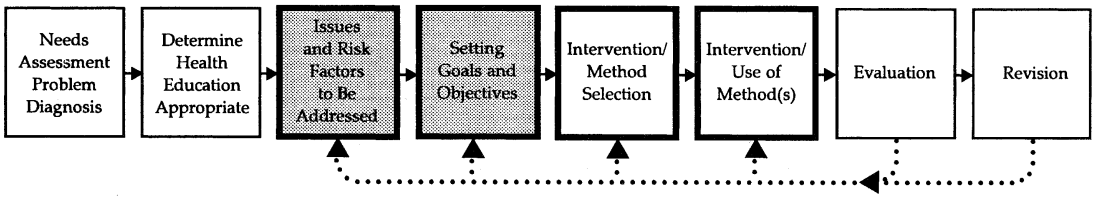
Responsibility I: Assess Needs, Assets, and Capacity for Health Education
- *Competency 1.2:* Access Existing Information and Data Related to Health
- *Competency 1.3:* Collect Quantitative and/or Qualitative Data Related to Health
- *Competency 1.7:* Infer Needs for Health Education Based on Assessment Findings

Responsibility II: Plan Health Education
- *Competency 2.1:* Involve Priority Populations and Other Stakeholders in the Planning Process
- *Competency 2.2:* Develop Goals and Objectives
- *Competency 2.3:* Select or Design Strategies and Interventions
- *Competency 2.4:* Develop a Scope and Sequence for the Delivery of Health Education
- *Competency 2.5:* Address Factors that Affect Implementation

Responsibility III: Implement Health Education
- *Competency 3.1:* Implement a Plan of Action
- *Competency 3.2:* Monitor Implementation of Health Education
- *Competency 3.3:* Train Individuals Involved in Implementation of Health Education

Note: The competencies listed above, which are addressed in this chapter, are considered to be both entry-level and advanced level competencies by the National Commission for Health Education Credentialing, Inc. *A Competency-Based Framework for Health Education Specialists-2010*. Whitehall, PA: National Commission for Health Education Credentialing, Inc. (NCHEC), Society for Public Health Education (SOPHE), American Association for Health Education (AAHE). These Responsibilities were verified through the 2010 Health Educator Job Analysis Project. Reprinted by permission of The National Commission for Health Education Credentialing, Inc., Society for Public Health Education (SOPHE), and American Association for Health Education (AAHE).

Method Selection in Health Education



Heavy-bordered boxes indicate subjects addressed in this text; shaded boxes indicate subject(s) of current chapter.

OBJECTIVES

After studying the chapter, the reader will

- Identify methods for analyzing needs of populations.
- Determine an appropriate needs assessment for a given community setting.
- List the major considerations that should be made before selecting an educational objective.
- Assess the role of goals and objectives in program planning and evaluation.
- Define process, impact, and outcome evaluation.
- Write behavioral objectives in the cognitive, affective, and psychomotor domains for a given concept or contact area.
- List the most common mistakes in objective selection.
- Discuss ethical considerations in planning.

KEY ISSUES

Program planning
Conducting a needs assessment
Relationship of objectives and evaluation
Selecting objectives
Objective domains
Process objectives
Performance indicators
ABCD&E objectives
Outcome objectives
Writing goals and objectives
Selecting verbs
Common mistakes
Ethics as part of planning

Program Planning

Program planning begins with the identification of a "problem" that impacts quality of life. A variety of planning models exist to help health educators systematically develop programs. Effective program development classically includes the following tasks:

1. Assessment of needs
2. Diagnosis of the problem(s)
3. Development of appropriate goals and objectives
4. Selection of methods to create an intervention
5. Implementation of the intervention
6. Evaluation of program effectiveness
7. Revision of program as needed

Method selection is only one element of program planning. Program planning has issues that are beyond the scope of this text and are, therefore, not addressed. Many other books are devoted to those issues. We begin with the assumption that the problem has been identified and health education has been determined to be part of the needed solution. This is, of course, a major assumption. It is usually valid for school settings, where the curriculum framework for health education is already in place, and for health educators working for a categorical agency that has decided to focus on one

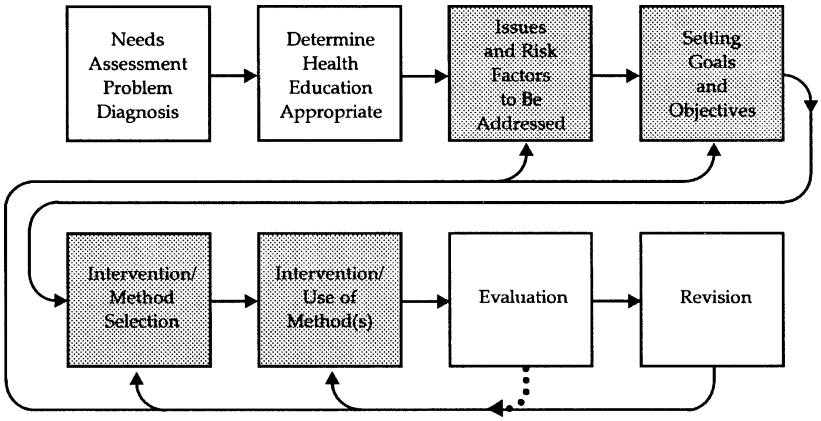


Figure 2-1
Method Selection in Health Education

or two elements of health education. If the decision for health education has not been made, then the reader should turn to planning models and conduct a thorough diagnosis of the problem before turning to health education and this text. **Figure 2-1** shows the full range of method selection, with shaded boxes indicating the subjects that are the focus of this text.

Although program goals and objectives are often set for the health educator by some other group, a needs assessment (step 1 of Figure 2-1) is always appropriate. The needs assessment may be informal or formal. An informal needs assessment may occur through frequent conversations and personal interactions with colleagues and clients. Formal approaches systematically assess the quality of life in an effort to identify differences between what currently exists and what may be a more desirable state (Bartholomew, Parcel, Kok, & Gottlieb, 2001).

Outside agencies often develop excellent objectives but may still fail to account for special characteristics found at the local level. The needs assessment, as the term implies, seeks to determine the needs of the targeted population. Before health educators set out to do something, it is important for them to know how this target population perceives its needs.[1] When assessing needs, the literature is always a good place to start. Conducting a *literature review* of current periodicals helps to establish a sound foundation for the proposed intervention while identifying common themes to be addressed as part of the goals and objectives of the program. When goals and objectives are established for health educators, it reduces the complexity of their needs assessment, but they should still play a significant role in objective establishment, by interpretation if not by setting the objectives directly.

Generally, the better we know the target population, the more we should be able to accomplish. The amount of time and resources we devote to the needs assessment depends on issues such as the duration, priority, and prior

[1]Green and Kreuter (1991) use the term "diagnosis" to describe this phase of health promotion planning in detail in their classic text, *Health Promotion and Planning: An Educational and Environmental Approach.* This phase is also sometimes referred to as "reconnaissance."

work experience with the group. If we have worked with the group recently, we may need to spend little time, but if this is a new group, it may require considerable time and effort.

Obtaining information about a target population's perceived need can come from multiple sources. *Social indicators*, found in public records like census or welfare reports, are useful for providing descriptive statistics that help to estimate population needs (Langmeyer, 1993). *Surveys and questionnaires* allow the health educator to collect information for a large sample of the target population. **Table 2-1** lists a few databases that are commonly used to obtain data or information about specific target populations.

Additionally, selected community leader and agency representatives are often considered a valuable source of information. These *key informants* are often surveyed to help identify specific needs that might go undetected when attempting to correlate statistical data. A simple needs assessment survey is depicted in **Figure 2-2**. *Community forums*, similar to open town meetings, seek input from community members, allowing the health educator to gain perspective on whether the community supports a given program (Langmeyer, 1993). *Focus groups* aid the health educator by providing opinions of the potential recipients of the intended intervention. Each of these techniques empowers the health educator to develop tailored interventions that meet the needs of the target population.

Table 2-1 Sample Databases

Source	Description	URL Address
U.S. Census Bureau	List a variety of interactive data tools.	http://www.census.gov/main/www/access.html
	Provides frequently requested Census Bureau information at the national, state, county, and city level.	http://quickfacts.census.gov/qfd/index.html
World Health Organization (WHO)	Gives epidemiological information about the United States.	http://www.who.int/countries/usa/en/
Centers for Disease Control and Prevention (CDC)	WISQARS™ (Web-based Injury Statistics Query and Reporting System) is an interactive database system that provides customized reports of injury-related data.	http://www.cdc.gov/injury/wisqars/index.html
	The Youth Risk Behavior Surveillance System includes a national school-based survey conducted by the CDC and state, territorial, tribal, and district surveys conducted by state, territorial, and local education and health agencies and tribal governments.	http://www.cdc.gov/HealthyYouth/yrbs/index.htm
Health.Data.Gov	A public resource containing searchable categories that is designed to culminate datasets, tools, and applications using data about health and health care.	http://www.data.gov/communities/health

WORKSHOP NEEDS ASSESSMENT

Please answer the following questions as completely and honestly as you can. The information collected will be used in determining the content of the health education workshop.

1. What do you hope to get from this workshop/class?

2. Why are you here?

3. What is one thing you hope will be covered?

4. What is one issue that has been covered too much and would be a waste of time for this workshop?

Other comments:

Figure 2-2
Simple Needs Assessment Survey

Objective: While reviewing the case study, the reader will evaluate the feasibility of the drug education program described in relationship to its ability to achieve the desired outcome.

Case Study: Pat

Pat has set the elimination of drug use by all adolescents in her community as her objective for a community-wide drug education program. She plans to work cooperatively with several local agencies, including the schools, and later to apply for federal funding to support the program. After 2 years of this approach, she gets a small local grant to evaluate her program. Preliminary reports show that drugs are used by about 15% of adolescents in the community. (See Case Studies Revisited later in the chapter.)

Questions to Consider

1. What are potential problems related to Pat's objective?
2. How might a needs assessment have better facilitated the plan for Pat's program?

Target Population

To develop an accurate picture of the target population, two types of information should be obtained by the health educator: demographics and statistics.

Demographics

Demographics include information about age, ethnicity, gender, and other characteristics that describe a population. Discovering the target audience's developmental characteristics, knowledge levels, attitudes, health skills, and interests will likely impact the program objectives and method selection. If we are working with young people, we may turn to information on the developmental characteristics of this age group. Surveys may exist that will tell us something about the knowledge or interests of this age group. If such surveys do not exist, we may be able to conduct such surveys. This data collection, sometimes referred to as baseline data, provides information that helps us determine how to conduct our program and serves as a basis of comparison. Any major program must include such baseline data, because there will always be interest in what benefits have been accrued for the dollars invested.

Statistics

Statistics, obtained from both qualitative and quantitative methods of data collection, render useful information. Qualitative methods allow the target population an opportunity to express their thoughts, feelings, ideals, and beliefs (U.S. Department of Health and Human Services, 2012a). Qualitative methods function to provide an overall picture of a phenomenon. These methods aid the health educator in identifying problems, barriers, or gaps that may not be recognized by an outsider. Quantitative methods render numerical representations of statistical information and provide a general perspective of an identified phenomenon. Quantitative research focuses on measuring social reality (Sukamolson, n.d.). In an attempt to quantify health outcomes, *Healthy People 2020* has implemented a new concept toward the Health Related Quality of Life (HRQoL) outcomes measured by Patient Reported Outcomes Measurement Information System (PROMIS), Well-Being Measures, and Participation Measures (U.S. Department of Health and Human Services, 2012a). **Table 2-2** categorizes a few of the methods commonly used to conduct a needs assessment.

Table 2-2 Assessment Tools by Category

Statistics	
Qualitative Methods	**Quantitative Methods**
• Public forums	• National or regional vital statistics
• Key informants	• National or regional health surveys
• Informal interviews	• Questionnaires
• Focus groups	• State reports on health status
	• School- or community-based surveys
	• Self-constructed surveys

We should consider what statistical data may be available. International, national, regional, or local reports can provide vital information on needs. Such reports can also be used to demonstrate the importance of a topic. When they do not, it may be important to conduct our own needs assessment specific to our target population. Collecting such information also demonstrates an interest in tailoring the program to the needs of the local target group and may serve as part of the intervention program by pointing out individual needs. Identification of personal needs often leads to some attempt at behavior change. People who know they are at higher than average risk for some loss of health will sometimes try to reduce that risk. How serious they perceive the risk to be will frequently determine how they respond. Such information is often very important in selling the program to funding agencies, gathering local support, and encouraging participants to cooperate in the program.

It is important that health educators assess this demographic and statistical information to minimize unneeded work while taking into account the desires of the target group. Conducting a needs assessment puts a group on notice that you recognize its importance and value its opinions. These are necessary ingredients for success.

Focus Groups

He who lives by bread alone needs sex education.
—Mohan Singh

There are a number of ways to design and use focus groups as a needs assessment and planning tool. Basically, a representative group of the target population (5 to 10 people) or a very similar group is assembled for a focused discussion. Sometimes incentives may be necessary to secure participation, and meetings are often taped for later transcription. Before the meeting, questions are

Focus groups are a useful needs assessment and planning tool. The organizer should concentrate on creating the right mix of people.

developed to gather the sought-after information, typically including demographics, beliefs, and health practices of the community, as well as the names of respected leaders. The focus group leader is responsible for ensuring that useful information is collected through both preassembled questions and careful follow-up of cues from the comments of the group. Often, unanticipated information is collected that can alter the methods selected for the intervention. A professional focus group facilitator can be employed, or a member of the planning team may become a good facilitator with practice.

The following are questions that encourage participants to respond by providing an opinion:

- What do you think about . . . ?
- How do you feel when . . . ?
- Think back to a time when you . . .
- What might influence you to . . . ?

Focus group sessions last about an hour and address only five to six preassembled questions. Participants are seated in a manner to easily facilitate discussion, allowing the health educator to fade away from the group as participants share their thoughts (Krueger, 2003). The health educator should act as a neutral guide, posing questions and prodding to get a full response. Most good community health educators do at least a very brief version of a focus group before starting any program in a community.

The Goal–Objectives–Performance Indicators Link for Evaluation

Alice asked, "Would you tell me please, which way I ought to walk from here?"

"That depends a good deal on where you want to get to," said the Cat.

"I don't much care where," said Alice.

"Then it doesn't matter which way you walk," said the Cat.

"—so long as I get somewhere," Alice added as an explanation.

"Oh, you're sure to do that," said the Cat, "if you only walk long enough!"
—Lewis Carroll, *Alice in Wonderland and Through the Looking Glass*

You may have heard the statement, "If you do not know where you want to go, it is usually impossible to get there." These words of wisdom apply well to all health education endeavors. We often see health educators trying to get somewhere without being clear about where that somewhere might be. Even more interesting, we often see them trying to evaluate what they have done while trying to get there. Obviously, this is not a prudent practice. Health educators must know clearly where they want to go.

Goals, objectives, and performance indicators function very much like the elements of an archer and his or her target in that they clarify the purpose of the health education intervention. Goals, like the target, are broad statements of direction used to specify the overall intent of a program. Goals reflect the desired outcome but do not clarify indicators to measure success. Objectives are derived from goals. Like the rings of the archer's target, objectives define areas to address in the accomplishment of the goal. An objective is a precise statement of intended outcome declared in measurable terms. Objectives are more accurate assessment tools because they tell what needs are specifically addressed (Palomba & Banta, 1999). Objectives have the inherent quality of exercising a directive influence. An objective, taken together with its performance indicator, is outcome oriented, stated in measurable terms, and focused on a single outcome (Palomba & Banta,

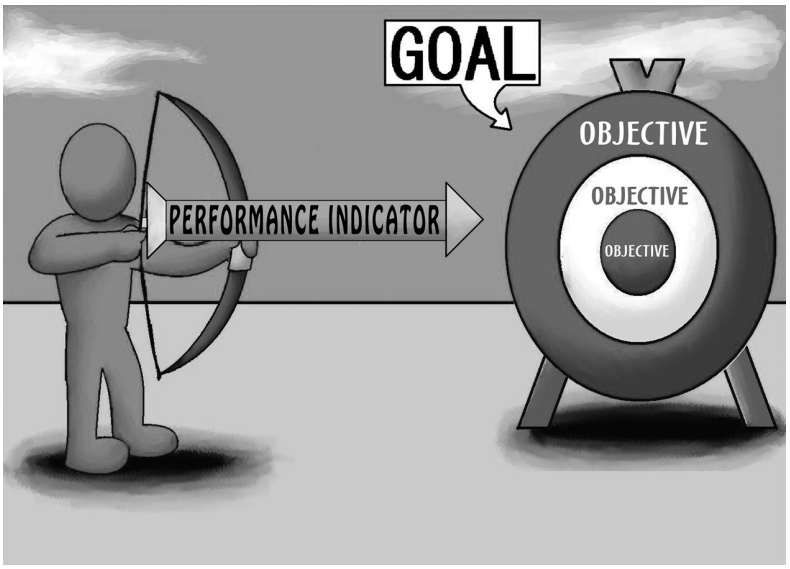


Figure 2-3
Relationships Among Goals, Objectives, and Performance Indicators
Courtesy of Thomas Hanna, School Health Educator.

1999). A **performance indicator** describes activities that provide information about acceptable progress toward the stated objective. A performance indicator acts as a quantifiable or qualitative measure of the accomplishment of the objective (Palomba & Banta, 1999). Performance indicators, like the archer's arrows, are used to "hit" the objectives, and the precision of their landing is an indication of success.

Figure 2-3 graphically depicts this relationship. Taken together, an objective and its performance indicator should allow all to evaluate what is being changed, by whom, and by how much. The relationship between goals, objectives, and performance indicators is hierarchical in structure. If the criteria of the performance indicator are not successfully met, the inability to meet the stated objectives results, which then leads to a failure to accomplish the goal. Thus, performance indicators support the accomplishment of the objectives that in turn support the realization of the goal.

Table 2-3 provides a simplified sample of a medical facility's goal, objectives, and performance indicators. These examples are part of a larger strategic plan to improve hospital services. Clearly, performance indicators support the objectives, which promote accomplishment of the hospital's stated goal. Establishing measurable goals and targets is not only vital for evaluation but also essential for good planning in selecting an intervention. Thus, there are clear links among goals, objectives, performance indicators, method/intervention selection, and evaluation.

Let us examine some examples (with discussion) of how inappropriate conclusions can be reached when we have no clear-cut targets.

1. "My program went well because we distributed 750 pamphlets on drug abuse." If the program objective was to distribute pamphlets, then the

Table 2-3 Examples of Goals, Objectives, and Performance Indicators

Goal Enhance Patient Education and Staff Training	
Objective 1: Provide ongoing staff development across all disciplines that respond to staff-identified training needs and requirements.	**Objective 2:** Develop and implement ongoing patient education program by 2030 according to identified opportunities for education, health promotion, and disease prevention.
Performance indicators: **a.** Plan and conduct Continuous Medical Education sessions offering at least 9 credit hours/year. **b.** Plan and conduct skills training seminars in Basic Life Support, CPR, and Advanced Cardiac Life Support at least twice/ year. **c.** Enhance staff development either by providing it onsite or sending candidates to outside training facilities.	**Performance indicators:** **a.** Increase distribution of printed materials at community health fairs by 20%. **b.** Increase the use of mass media (TV, newspapers) by 10% to promote hospital programs/ services. **c.** Host monthly and public health care lectures or seminars.

objective was met, but it was a very poor objective. Distribution numbers or numbers of people that visit a booth in a shopping mall are examples of very limited measures that tell us nothing about changes in knowledge, attitudes, or behaviors.

2. "My program went well because the 40 people attending the lecture on drug abuse seemed very interested and asked many questions." Looking interested tells us nothing about what is being learned. It does tell us something about the methods used (process evaluation). It may indicate that people find the topic or method of presentation interesting, but it tells us nothing about what has been learned.
3. "My program went well because, after the five antidrug television spots were aired, the state drug use numbers went down." Although this is a positive trend, it does not tell us if that trend is related to our program. It may have nothing to do with our activities, and it would be inappropriate for us to assume so without further information.
4. "My program went poorly because, after our intensive intervention with all county high school students, the state drug use numbers went up." Again, we do not know if this trend had any connection to our program. The number for our students might be much better due to our program, but without clear objectives we cannot adequately measure our outcomes.
5. "My STI [sexually transmitted infection] prevention program went poorly because, after our intensive intervention throughout the

> county, our STI statistics showed an increase." Again, we do not know if this trend had any connection to our program. The statistics for STIs commonly go up for a period of time after an intensive campaign because people seek treatment. If we set objectives to lower incidence rates in a short period of time, we would be setting up our program for failure.

It is difficult to evaluate these statements without knowing the objectives, but all suggest the evaluation measures have not been well thought out.

Establishing well-planned targets allows the evaluation process to occur as a natural byproduct of the implementation process. If performance indicators are met, this should naturally meet the objectives and in turn help to meet the goal. Because poorly defined targets result in the inability to appropriately evaluate program effectiveness, it is essential to be cognizant of evaluation methodology during the intervention design.

Evaluation is a systematic process to determine if intended outcomes were achieved by an intervention. The most common types of evaluation used in health education include process, impact, and outcome evaluation. Process evaluation attempts to "identify the key components of an intervention that are effective, to identify for whom the intervention is effective, and to identify under what conditions the intervention is effective" (Steckler & Linnan, 2002, p. 1). This type of evaluation is ongoing and occurs during the "process of" intervention delivery. Process evaluation also reveals the "extent to which a program is being implemented as planned" (Harris, 2010, p. 207). It functions to help improve quality and effectiveness of program delivery.

Impact evaluation is an assessment of the intervention's ability to yield behavior impact or change. It concentrates on "the immediate observable effects of a program, leading to the intended outcomes of a program; intermediate outcomes" (Green & Lewis, 1986, p. 363). Program impact is typically assessed upon conclusion of the intervention and indicates the extent to which the program objectives have been met. The ability to attribute success or failure of an intervention is directly correlated to the quality of its objectives. Objectives that provide specific measurable targets provide for a more credible evaluation data. Outcome evaluation is more long term in nature and has the purpose of examining evidence to determine if the intervention had the intended effect on the health status or quality of life. Green and Lewis (1986) define outcome evaluation as "an ultimate goal or product of a program or treatment, generally measured in the field by mortality or morbidity data in a population, vital measures, symptoms, signs, or physiological indicators on individuals" (p. 364). As indicated by the definition, outcome evaluation serves to assess how well the goal of the intervention was met. **Figure 2-4** graphically represents each of the three evaluation types.

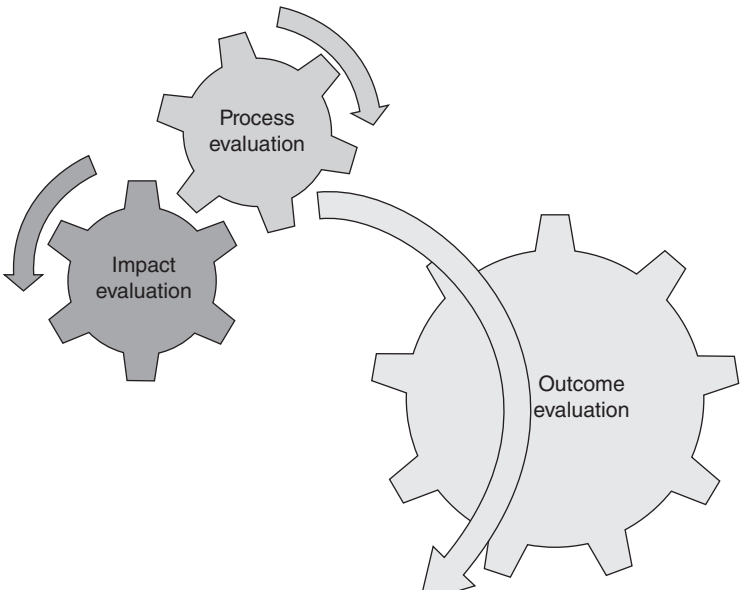


Figure 2-4
Three Types of Evaluation

Objective: While reviewing the case study, the reader will identify two fundamental errors Jerry committed in planning and will describe the impact of these errors on his ability to justify the program.

Case Study: Jerry

Jerry was extremely enthusiastic about beginning a sex education program in his high school. The principal had been skeptical about the potential controversy and had put Jerry off for 2 years. Finally, the principal gave Jerry the administrative and financial support to begin a program, provided he furnish the principal with a course outline and specific objectives. In his haste to consummate the agreement, Jerry quickly prepared an outline, including objectives that promised a substantial decrease in unintended pregnancy and sexually transmitted infection rates. One year later, with budget reductions looming, Jerry is asked to justify the continued support of his sex education program. Much to Jerry's chagrin, the principal points to a higher number of pregnancies than last year, and no available data whatsoever of any sexually transmitted infection rates. What fundamental errors did Jerry make? (See Case Studies Revisited later in the chapter.)

Questions to Consider

1. What fundamental errors did Jerry make?
2. How might his poor selection of objectives do irreparable damage to a program that is already under a watchful eye?

Writing General Goals

Goal: A broad statement of direction used to present the overall intent of a program or course.

Different authors and authorities use a variety of terms and definitions regarding goals and objectives. We use the term "goal" to mean a broad statement of direction used to present the overall intent of a program or course. As shown in **Figure 2-5**, a goal functions to direct the focus of the health intervention. A goal does not need to be stated in measurable terms, because it is a broad statement. Objectives should always be stated in measurable terms and should complement and more fully explain the intent of a goal. A goal gives us a general sense of the intent of the program or class.

Some goals might include the following:

1. Participants will recognize healthy meals.
2. Intervention will promote awareness of nonprescription drug use.
3. Participants will develop good parenting skills.
4. Outcome will be to know the risk factors associated with unwanted pregnancy.
5. Students will understand the digestion process.
6. Participants will show appreciation for the environment.

Goals for Healthy People

Healthy People 2020 defines four overarching goals for the nation:

Goal 1: Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
Goal 2: Achieve healthy equity, eliminate disparities, and improve the health of all groups.
Goal 3: Create social and physical environments that promote good health for all.

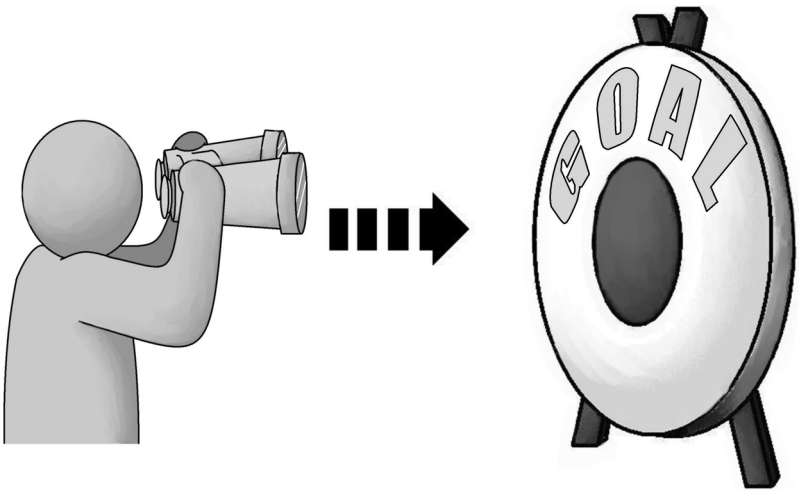


Figure 2-5
Targeting the Goal
Courtesy of Thomas Hanna, School Health Educator.

Goal 4: Promote quality of life, healthy development, and healthy behaviors across all life stages.

These four goals are targeted by 42 focus areas each containing measurable objectives to support the goals. A few examples are provided in **Table 2-4**.

Table 2-4 Samples of *Healthy People 2020* Goals and Objectives

Overarching Goals of *Healthy People 2020*	
Goal 1: Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death. Goal 2: Achieve healthy equity, eliminate disparities, and improve the health of all groups. Goal 3: Create social and physical environments that promote good health for all. Goal 4: Promote quality of life, healthy development, and healthy behaviors across all life stages.	
Example 1	
Focus Area: Maternal, Infant, and Child Health (MICH)	
Subtopic	**Objectives**
MICH-1: Morbidity and mortality	MICH 1.1: Reduce the number of fetal deaths at 20 or more weeks of gestation per 1,000 births and fetal deaths occurred in 2005 by from 6.2 to 5.6. MICH 1.2: Reduce fetal and infant deaths during prenatal period (28 weeks of gestation to 7 days or more after birth) from 6.6 to 5.9 per 1,000 live births plus fetal deaths.
MICH-10: Pregnancy health and behaviors	MICH 10.1: Increase the proportion of pregnant women who receive early and adequate prenatal care beginning in the first trimester from 70.8% to 77.9%. MICH 10.2: Increase the proportion of pregnant women who receive early and adequate prenatal care 70.5% to 77.6%.
Example 2	
Focus Area: Immunization and Infectious Disease (IID)	
Subtopic	**Objectives**
IID 17: Vaccination providers	IID 17.1: Increase the percentage of *public* health providers who have had vaccination coverage levels among children in their practice population measured within the past year from 40% to 50%. IID 17.2: Increase the percentage of *private* health providers who have had vaccination coverage levels among children in their practice population measured within the past year from 40% to 50%.
IID 25: Reduce hepatitis B	IID 25.1: Reduce new hepatitis B infections in adults aged 19 or older from 2.0 symptomatic cases of hepatitis B per 100,000 to 1.5 cases per 100,000. IID 25.2: Reduce new hepatitis B infections among high-risk populations—injection drug users from 285 symptomatic cases of hepatitis B to 215 cases. IID 25.3: Reduce new hepatitis B infections among high-risk populations—men who have sex with men from 62 symptomatic cases of hepatitis B to 45 cases.

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Notice how each of the objectives can be directly related to one or more of the four overarching goals. For example Objective IID 17.1 increasing the percentage of public health providers who have vaccination coverage supports at least two of the stated goals. It will reduce the loss of life from preventable disease (goal 1) and create a physical environment that promotes good health (goal 3).

Narrowing Goals to Measurable Objectives

Goals provide a sense of where we want to go but usually do not provide clear, precise statements of our destination. We must break these broad statements into measurable objectives. One method for doing this is to use a worksheet to guide us to our objectives. After examining our problem, we set general goals. Next, we break the problem down as far as we can go. We state our objectives as clearly and precisely as we can. See **Figure 2-6** for a sample program planning worksheet.

Why Use Objectives?

Objectives serve many useful functions. They provide the health educator with a clear notion of what is to be accomplished. Consequently, it becomes much easier to select methods and to focus all efforts. This focus is vital if

SAMPLE PROGRAM PLANNING WORKSHEET

1. What needs to be done? List issue(s) or program(s):

2. State the general goal:

3. State the objective(s) to be evaluated as clearly as you can:

4. Can these objectives be broken down further? Break them down to the smallest unit. It must be clear what specifically you hope to see documented or changed: knowledge, attitudes, or a behavior.

5. Can each objective be evaluated? If not, restate it.

Figure 2-6
Program Planning Worksheet for Narrowing Goals to Objectives

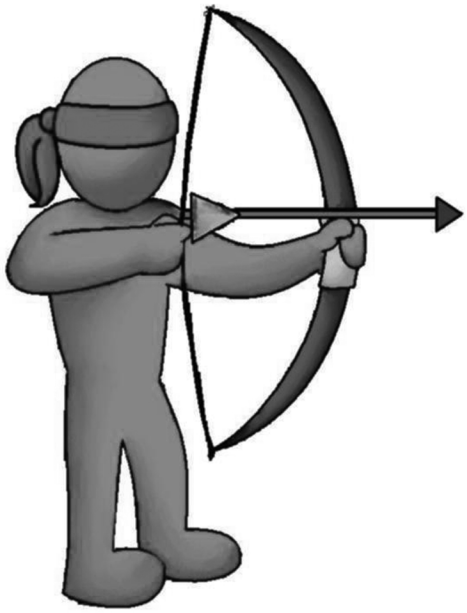

Figure 2-7
Finding the Target
Courtesy of Thomas Hanna, School Health Educator.

we are to develop comprehensive, coordinated approaches to influencing health behaviors. Behavior change is a function of the knowledge, skills, and attitudes of a target audience. Therefore, when writing objectives, it is important to begin with the question: What is the target? We must then define the target as specifically as we can (**Figure 2-7**).

Objectives make evaluation efforts possible. Without objectives, it is impossible to measure the achievement of change in knowledge, attitudes, or behavior. You cannot evaluate any type of change unless you first clearly and precisely state exactly what you intend to change.

Objectives, moreover, make it easier to convey our instructional intent to others. Community health educators frequently miss this important concept, believing objectives are for school settings. Learners, however, in any setting do better when it is clear what is to be learned. This is true of participants in workshops, as well as students in more formal educational settings. Plus, reviewing well-stated objectives allows learners to assess if a program is the correct program for them.

Issues in Setting Objectives and Selecting Interventions/Methods

Some issues to be considered in setting objectives and selecting interventions or methods are as follows:

1. Maturity level of the learner
2. Content to be covered

3. Environment
4. Materials and equipment available
5. Time allotment
6. Group size
7. Time of day

When we set our objectives, it is important to make them as realistic as possible given our resources. Of course, our objectives are often set by someone else, but the principles are the same. What can we accomplish in the time available with the resources at our disposal?

We must take into account the *maturity level of the learner*. Is the information pitched at the correct level for the learner? If it is too high, comprehension will be a problem; if it is too low, boredom and distraction will occur. Are the selected activities sufficiently varied to stimulate audience attention? This is an important concern when working with young people.

The success of your presentation depends on the correct environment and access to appropriate presentation tools.

What type of *content* do you intend to cover? Large amounts of complex, didactic information may need to be broken down into smaller, more understandable units, again depending on the level of the learner. Varying strategies might also alleviate the boredom factor and result in more effective learning.

What is the physical *environment* like? Can you, for example, lay out four "Annie" CPR mannequins on the floor of a very confined space to conduct important certification classes? Can you successfully perform group facilitation that might include sensitive issues in a space with little privacy? The available environment cannot be underestimated when considering objectives.

Can you obtain the *materials and equipment* you want to include in a program? For example, is a certain video or DVD you want to use available or affordable? Do you have access to media devices? Before you include activities in program outlines and strategy selection, check to make sure resources are available. How much *time* do you have with specific groups, and how often will you meet? Is it worth spending 20 minutes incorporating an icebreaker exercise with a group that will only meet one time for 2 hours? The answer to this question depends on the specific objectives you construct. Should you construct objectives that include behavior change when you will only meet with a group for a total of 2 hours? You must be realistic about which activities can be used and what objectives can be achieved within certain time constraints.

Group size will certainly drive your method selection. Presenting to a large group of 250 individuals definitely requires a different strategy than the group process for a small number of people. Consider what might be the most effective ways to communicate with individuals and groups when considering group size.

Anyone who has had early morning classes or dozed during an after-lunch or dinner speech will appreciate the importance of *time of day*. Will you need to wake up the group, quiet them down, or struggle to keep their interest? Early morning or post-lunch groups might require a wake-up activity, so always consider this issue when developing strategy selection.

Often, we must also determine if we can hope to achieve and perhaps measure outcome/impact objectives, or if we should focus on process objectives. Time and resources permitting, we should consider both.

Process Objectives

Remember that a process objective is concerned with what we hope to do along the path to our outcome objectives, including a look at how well we are implementing our methods. Are we maintaining interest, and are we providing high-quality information? Most curriculum packages are not implemented as designed. Often, when programs are evaluated, the outcome of the evaluation is based on the faulty assumption that all users implement the program in the same way. Whether we are totally successful, partially successful, or unsuccessful, we must have a clear picture of what was done and not just what we hoped would be done to evaluate our results. Programs are often deemed ineffective when in fact the program was not implemented or only a few activities or methods from that program were actually used. This refers to program fidelity. How faithful to the planned program were the health educators? A lack of fidelity points to the need for training and marketing the total program to the intended user. Some process objectives might address the following areas of concern:

- Getting people to participate
- Recognition of need
- Quality of workshop presentations
- Participant success in meeting performance indicators during each session
- Peer review
- Fidelity
- Self-assessment

The success of your presentation depends on the correct environment and access to appropriate presentation tools.

- Changes in policy statements
- Quality control standards
- Participant satisfaction

Writing Outcome/Impact Objectives

Beware, lest the fragile lotus of health education be trampled by the elephants of reality.
—Mohan Singh

Outcome/impact objectives are concerned with what we are seeking to change in knowledge, attitudes, skills, and, consequently, behaviors. How will the participants be different as a result of our educational intervention? These outcomes can be assessed after a short-duration program or a long-term program. Obviously, what we can expect must be based on the contact time, motivation, and intensity of our program. For a short-term program it may be realistic to expect gains in knowledge or skills but not attitude or behavior change. Some outcome/impact objectives might address the following areas of concern:

- Changes in knowledge
- Changes in attitudes
- Changes in skills
- Changes in behavior
- Cost-effectiveness

Writing Self-Contained Outcome/Impact Objectives

Objectives must be much more specific than goals. They must be measurable and clearly indicate what will be different after implementation of the health education program. There are many educational experts knowledgeable in the writing of educational objectives. Most health agencies and organizations have their own method for stating objectives. Most such methods will be far less specific than what is recommended here and therefore easier to write. We have taken the components from other systems and have constructed a system called *self-contained objectives.* That means, of course, that all elements are contained within the objective statement. The objective can "stand on its own" and make sense. Each objective makes clear what is expected, according to the source of information, and is stated in such a way that the achievement is measurable. The authors present this method first because it is a format that forces the user to examine important issues in the object process. Most agencies use some abbreviated version of this format. Objectives do not always need to be measured, but they must be measurable. In the real world there are not always sufficient funds, time, personnel, or the need to measure all objectives, but if measurement is not possible, then the objective is not clearly stated.

Correcting Errors

Self-contained objectives designate the specific behaviors the target audience must demonstrate to indicate learning has occurred. In the literature it is not uncommon to see self-contained objectives referred to as behavioral

objective or performance indicators. The interchangeable jargon sometimes causes confusion; however, both terms suggest the need to observe a behavior to determine if the objective has been met. Poorly written and, consequently, immeasurable objectives frequently suffer from a few basic errors. These common mistakes are listed here. Additionally, the authors have included an example that demonstrates the concept followed by clarifying commentary and a corrected alternative.

Error 1

The objective is too vast or complex, representing multiple objectives (Smaldino, Lowther, & Russell, 2007).

Example 1: The participant will summarize each of the seven topics covered in the weekend workshop, evaluate the effectiveness of each session, and offer recommendations for improvement for next year's session.

Three very complex ideas are represented in Example 1. If the participants are able to summarize the seven topics but cannot then offer recommendations for improvement, has the objective been met? This objective is attempting to measure too many complex behaviors at one time.

Example 1 Corrected: Following session 2 of the weekend workshop, the participant will list his or her top three concerns of the seven provided about environmental pollutants on the evaluation form.

Error 2

The behavior of concern in the objective is not measurable (Smaldino et al., 2007). This often occurs when the verb used to indicate behavior is not clearly defined; it is commonly referred to as a "fuzzy" verb.

Example 2: Following the demonstration, the learner will comprehend the sequence of events in developing a 10-step decision-making model.

When measuring this objective, how will the health educator be certain the learner "comprehends"? What does it mean to "comprehend" in this situation? Other examples of verbs that do not lend themselves to being measured include "appreciates," "understands," and "values." Although these verbs may be appropriate for setting goals, they lack the precision necessary to represent objectives.

Example 2 Corrected: Following the demonstration, the learner will list in order on the butcher paper provided the sequence of events to develop a 10-step decision-making model.

Error 3

The objective describes instruction in place of what is to be learned (Smaldino et al., 2007).

Example 3: The patient will use the diabetic supplies to assess his or her glucose level after a fatty meal.

The preceding objective describes the method to be implemented but does not clarify what the learner should know, feel, or be able to do. Is the health educator attempting to measure if the patient knows how to use the supplies, how the patient feels about the glucose level, or if the patient is aware of what type of information the diabetic supplies can provide?

Example 3 Corrected: Using the diabetic supplies provided, the patient will accurately assess his or her blood glucose level by performing the finger-prick method described in the pamphlet.

It is evident the health educator's intent is to ensure the patient's ability to perform the skill being taught.

Error 4

The objective has vague performance parameters. It does not clarify what constitutes evidence of success (Smaldino et al., 2007).

Example 4: The student will record warning signs of cancer in his or her journal after viewing the cancer video.

If the video discussed the seven warning signs of cancer using the CAUTION model, it seems apparent the objective intends to have the student list all seven. Without specifying the expectation, however, the student could list only two of the seven and, therefore, meet the requirements of the objective.

Example 4 Corrected: Using the CAUTION acronym described in the cancer video, the student will record the seven warning signs of cancer on a poster board.

The inability to measure the attainment of objectives, because of these common blunders, handicaps the health educator's ability to provide evidence of program success.

ABCD&E Formula for Writing Objectives

Avoiding the previously discussed errors is fairly simple by following the basic ABCD formula for writing objectives (Heinrich, Molenda, Russell, & Smaldino, 1996; Purdue University, 2002). This method prescribes a step-by-step procedure for writing self-contained objectives, with each letter in the model representing an aspect of the objective that should be included. The authors of this text take this a step further by using the ABCD&E formula; the additional E will be explained.

A = Audience

Identifies who or what will perform the identified behavior:

Learner
Participant

Patient
Parent
Student

B = Behavior

Uses an action verb describing what the audience is expected to do:

- The participant will **list** seven common depressant drugs.
- The student will **match** drugs with the appropriate classification.
- The participant will show a willingness to take personal action against drug use in the neighborhood by **volunteering**.
- The participant will **demonstrate** the mouth-to-mouth procedure.

The need for accountability has altered the protocol for writing objective statements. In the past it was common to see the phrase "be able to" included as part of the behavioral expectation. For example, "…the participant will 'be able to' demonstrate the mouth-to-mouth procedure…. This phrase suggests the learner has the ability to perform the stated behavior but is not expected to actually do so. If the learner does not perform the behavior, how will the evaluator be certain the indicator has been met? As seen in the fourth bulleted statement, the learner is expected to actually demonstrate the mouth-to-mouth procedure. Exclusion of the phrase "be able to" is recommended to communicate a clear expectation of performance and, therefore, measurability.

C = Condition

Describes the circumstances that enable the behavior to be performed. The condition indicates what the audience will need or how they have been enabled to perform the behavior:

- **Following the presentation,** the participant will list seven common depressant drugs.
- The student will match drugs with the appropriate classification **found in the course textbook**.
- **After participating in the discussion** on community advocacy, the participant will show a willingness to take personal action against drug use in the neighborhood by volunteering to be part of a neighborhood patrol.
- The participant will demonstrate the mouth-to-mouth procedure for rescue breathing **on the mannequin provided**.

D = Degree

Indicates the criteria that must be met to constitute success:

- Following the presentation, the participant will list **seven** common depressant drugs.

- The student will match drugs with the appropriate classification found in the course textbook with **80% accuracy**.
- After participating in the discussion on community advocacy, the participant will show a willingness to take personal action against drug use in the neighborhood by volunteering to be part of the neighborhood patrol **once a month**.
- The participant will demonstrate the mouth-to-mouth procedure for rescue breathing on the mannequin provided **according to the American Red Cross guidelines with no errors**.

Many educators, including the authors of this text, propose the addition of the letter *E* to the model.

E = Evidence

Indicates the source of proof that the objective was met:

- Following the presentation, the participant will list, **on the butcher paper**, seven common depressant drugs.
- The student will match drugs with the appropriate classification, found in the course textbook, with 80% accuracy and **record them on the worksheet**.
- After participating in the discussion on community advocacy, the participant will show a willingness to take personal action against drug use in the neighborhood by volunteering to be part of the neighborhood patrol with a partner once a month. (Note: Volunteer logs could be assessed as evidence.)
- The participant will demonstrate, **to the instructor**, the complete mouth-to-mouth procedure for rescue breathing on the mannequin provided according to the American Red Cross guidelines with no errors.

In each of the preceding objectives there is a clear indicator of a source the health educator could assess to see if the objective has been satisfied. Although the addition of the "E" element is not always necessary to have measurability, its presence ensures a mechanism for evaluation.

The following are examples of self-contained objectives written using the ABCD&E method. Notice that although all the components of the ABCD&E method are present, they are not necessarily written in sequential order. The order of the elements is not important, only that all the elements are represented.

Sample Behavioral Objectives or Performance Indicators

1. Participants will list and describe to their group members the four local agencies available to provide child abuse prevention support as presented during the workshop.
2. In their post-workshop evaluations, participants will report improved self-efficacy in communication with family members according to the guidelines presented during the workshop.

3. Students will show a willingness to take personal action to improve the environment by voluntarily participating in one of three community-organized cleanups or by voluntarily taking personal action to reduce waste in their community.

Table 2-5 outlines the ABCD&E components of the sample objectives. The italicized words highlight the component represented.

Educational Domains

An important consideration is the characteristics of the objectives we are seeking to achieve. Most health education programs work in more than one "domain" as defined in the classic, *Taxonomy of Educational Objectives* (Krathwol, Krathwol, Bloom, & Masia, 1964). The three major domains are cognitive, affective, and psychomotor. Cognitive refers to the recall and synthesis of information, typically what is considered knowledge. Affective refers to the change of an attitude. Psychomotor refers to the performance of a physical skill (**Figure 2-8**). Sometimes skills are also included as a domain of their own. Examples include refusal skills or the ability to analyze the unscientific nature of appeals used in health advertising.

There is disagreement as to the relationship of these domains and health behavior. Knowledge, attitudes, physical performance, and skills all have important relationships, but they act in different ways at different times and with different people. Knowledge can change behavior at times and at other times seems to have no relationship to behavior change. Most people who know their partner is HIV positive will take extra precautions or avoid sexual contact altogether. However, although most of us know the relationship of diet to heart disease and cancer, we still elect to eat high-fat, low-fiber foods on occasion. Several highly respected health educators, for example, are overweight. What motivates one person may not motivate another. A model or theory may never explain the behavior of some individuals. Therefore, it is probably wise to use a variety of methods to address as many domains as practical.

Table 2-5. Classification of Self-Contained Objectives Using the ABCD&E Method

	Audience	***Behavior***	***Condition***	***Degree***	***Evidence***
1	*Participants*	will *list* and *describe*	*as presented during the workshop*	the *four* local agencies available to provide child abuse prevention support	to their *group members*
2	*Parents*	will *report*	*according to the guidelines presented in the workshop*	*improved* self-efficacy in communication	in their post-workshop *evaluation*
3	*Students*	will *show* a willingness to take personal action to improve the environment by (1) *participating* in (2)	*community-organized clean-ups*	Note: two degrees 1. *voluntarily* 2. *one of three*	*Could be assessed by checking to see if student volunteers (evidence implied)*

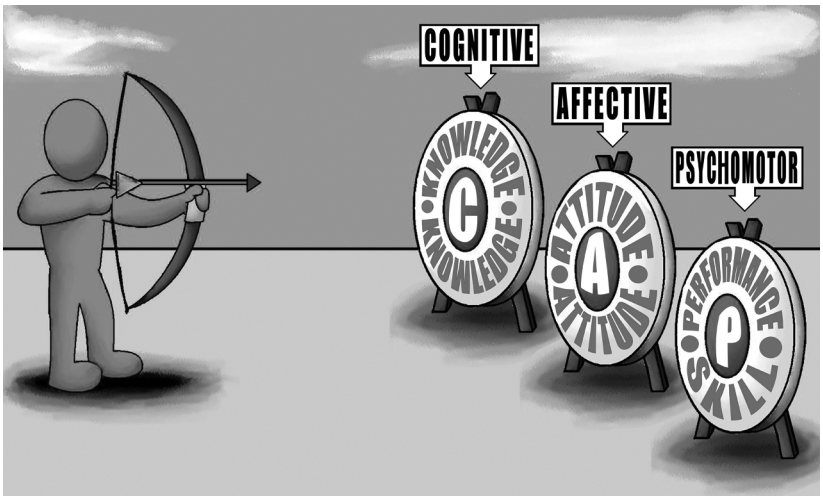

Figure 2-8
Targeting Educational Domains
Courtesy of Thomas Hanna, School Health Educator.

Other Objective-Writing Formats

There are many styles of writing objectives, and the health educator may be forced to adapt to the style adopted by the agency or school. Self-contained objectives are suitable for most purposes, and we recommend their use. Further, once you can author self-contained objectives, it becomes relatively easy to master other methods. However, there are advantages to other styles. Some formats make it easier to use objectives over and over again with little change and may be used for different content areas.

A general instructional objective will function much like a goal, as described previously in this chapter.

1. General instructional objectives (learning outcomes)
   a. Write each objective as an *intended learning outcome.*
   b. Use a verb that is general enough to encompass a domain of student performance. Omit the lead-in phrase, "The student will be able to. . . ." Use verbs such as *knows, understands, applies.*
   c. Include only one learning outcome for each general objective.
   d. Keep these objectives free of subject matter so they can be used with various units.
   e. State each general objective so it is definable by a set of specific learning outcomes. (For short units, two to four general objectives will usually suffice.)
2. Specific instructional objectives (learning outcomes)
   a. Place the specific instructional objectives under the general learning objectives. Be certain they are relevant to the general learning outcome under which they are placed.
   b. Use a verb to begin each specific learning outcome. This verb should specify definite, observable student performance. Avoid

using verbs such as *sees* and *realizes*, which are vague and not observable.

c. Under each general learning outcome, list a representative sample of specific learning outcomes to describe the performance of those students who have achieved the objective. (It is impossible to list all learning outcomes.)

3. Outline template for writing instructional objectives
   a. Content and population
      i. General instructional objective (learning goal)
         (1) Specific performance indicator (learning outcome)
         (2) Specific performance indicator (learning outcome)
         (3) Specific performance indicator (learning outcome)

Examples

1. Drugs (high school/college level)
   a. Knows systems of classification.
      (1) Lists various systems of classification.
      (2) Explains the advantages and disadvantages of each system.
      (3) Designs an original system.
2. Stress control (high school/college level)
   a. Understands breathing techniques.
      (1) Discusses uses of these.
      (2) Demonstrates them.
      (3) Expresses willingness to use technique.
3. First aid—choking (junior high/elementary level)
   a. Knows correct procedures.
      (1) Explains when and when not to use the techniques.
      (2) Recites the steps.
      (3) Performs the procedures.

The outline format gives the health educator the ability to reuse objectives and provides a strong foundation for writing more specific self-contained objectives if needed.

Suggested Recipe for Writing Health Education Outcome/Impact Objectives

1. Make a rough outline of what you hope to accomplish in the educational setting. Jot down key elements of what you hope to achieve.
2. Try to state each specific item of information, feeling, and skill as a behavior objective.
3. Check your verb to see that it is specific (**Table 2-6**).
4. Can you measure your objective? Remember that you do not have to follow through on measuring each objective, but it must be possible to do so, or it is not a true behavioral objective. Assessment of affective

Table 2-6 Suggested Verbs for Health Education Goals and Objectives (by Domain)

Goals	
Analyze	Contemplate
Appreciate	Comprehend
Conceptualize	Know
Enjoy	Be aware of
Perceive	Understand
Consider	Commit
Apply	Plan

Objectives by Domain		
Cognitive	**Affective**	**Psychomotor**
Arrange	Show a willingness	Construct
Design	Choose	Conduct
Itemize	Agree to	Demonstrate
Categorize	Promote	Act out
Classify	Accept responsibility for	Clean
Compute	Volunteer	Operate
Match	Initiate	Perform
Report	Share	Sort
Discuss	Defend	Disassemble
Identify	Justify	Install
List	Express	Repair

objectives is controversial because many people do not believe they can be measured. Generally, affective assessment is based on a measurable action that what a "reasonable person" would assume represents a held attitude or feeling.

5. Ask yourself if each objective is something the targeted population has gained or could gain from your instruction. If the answer is no, it is not a good objective.
6. Ask yourself the following: When participants finish with the lesson, workshop, or unit, how will they feel or act? What new knowledge or skills will they possess that were not present before this event? Have you selected objectives appropriate to the needs and domains? For example:
   a. Cognitive domain: What do I want the audience to *know*?
      - Cognitive/know… recall of information
      - Cognitive/know… synthesis of information
   b. Affective domain: What do I want the audience to *feel or believe*?
      - Responding… seeking willingness to take action
      - Believing… reporting attitude change

c. Psychomotor domain: What do I want the audience to be able *to do*?
   - Perform a physical skill
   - Perform an analytical skill, which requires physical action

7. When psychomotor objectives represent physical skills that can be performed (e.g., mouth-to-mouth resuscitation), the focus of evaluation must be the physical performance. Mouth-to-mouth resuscitation requires cognition, but focus is on the performance of the skill. It is possible to have psychomotor skill as part of the objective even though it is not the focus of learning. A participant may be asked to visit an agency to discover the services provided; however, merely visiting the agency is not the focus. Visiting the agency is a condition required to help achieve the objective. Conditional requirements are not truly classified as psychomotor skills because they function to describe what is necessary to achieve the objective. When determining which domain the objective should measure, one needs to determine if it is more important to be knowledgeable about the subject or to perform the necessary skills. In the case of CPR, it seems reasonable that a heart attack victim would be better served by someone who could correctly perform CPR than one who could only describe it.

After writing your objectives, double-check each one with the following questions:

1. Have you avoided "fuzzy" verbs? (See Table 2-6 for suggested verbs.)
2. Can you measure the outcome of your objective?
3. Is the standard by which achievement will be measured clearly stated?
4. Is each objective something that is really worth achieving?
5. Is there a sufficient number of objectives to cover your true intention of instruction?
6. Are the three educational domains appropriately represented in respect to achieving the desired outcomes?
7. Are you guilty of not stating your true intentions just because you find it difficult?

Objective-Writing Exercises

Read the following scenarios, take a few moments to consider appropriate outcomes for each situation, and then write down what you consider to be appropriate behavioral objectives. What are the most needed skills, beliefs, or knowledge? Obviously, you will have to give some consideration to the actual content you would potentially cover in each situation and how you would divide your time. Remember that you need to consider such basic principles as size of group, setting, time, number of objectives, domain of objectives, and so on.

1. You are a middle school health education teacher. You are about to teach your first lesson on heart health to a class of 20 seventh-grade

students of mixed academic ability. This particular unit consists of five class periods, and each period is 50 minutes long.

2. You are a community health educator facilitating a program on smoking cessation for 10 middle-aged adults. The program consists of 10 2-hour weekly workshops, and you are planning to conduct the first workshop.
3. Being the lead health educator in your community, you have been invited to a local high school to deliver a 1-hour informational presentation on AIDS to a special assembly consisting of 400 ninth-grade students.
4. You are teaching a 2-hour workshop on CPR to 15 grocery store employees in the employee lounge. Your goal is CPR certification of the group.
5. You are a middle school health education teacher beginning the third of five 50-minute class periods on the topic of alcohol. For this period you have decided the goals should focus on attitudes about the negative aspects of alcohol use. One strategy you have selected is the development of posters by the students depicting alcohol messages. There are 30 students in the class.
6. You are a community health educator who has been asked to facilitate a 90-minute workshop for approximately 25 Hispanic women on the importance of pelvic examinations. Levels of fluency in English are poor.
7. You are a college health educator who has been asked to conduct a 1-hour workshop on safer sex for approximately 20 students in a co-ed residence hall.
8. Two students in a campus residence hall have recently experienced date rape. As the campus health educator, you have been requested by that residence hall's resident assistant (RA) to conduct a 1-hour presentation on date rape. The RA expects about 50 students to attend the presentation scheduled to be held in the first-floor lounge.
9. You have been facilitating a weekly 6-week course on childbirth. The class meets for 90 minutes and consists of six couples in various stages of pregnancy, from 36 to 41 weeks. This is the last of the six sessions, and you are planning objectives that will allow you to wrap up the course.
10. You are a high school health educator teaching in a very progressive and enlightened school district. You are teaching human sexuality and are about to begin a 2-day, 50-minute-period unit on homosexuality. You are planning objectives for this first class.

Common Mistakes in Objective Selection

Beware of the following common mistakes in setting objectives:

1. Selecting an objective that is not achievable
2. Using verbs that are not specific
3. Selecting objectives that do not truly represent what you wish to achieve

4. Selecting objectives that are not realistic given the resources available
5. Stating an activity and not an objective
6. Combining two objectives in one sentence

National Health Objectives

When the 1990 Health Objectives were released, they received little attention outside the U.S. Public Health Service. These objectives, commonly known as *Healthy People*, soon became an important force, driving agendas and setting funding priorities for all sectors of government. Having clear, specific objectives has forever changed the U.S. Public Health Service. The process in setting the year 2000 objectives became much more politicized because public and private groups were aware of their influence. *Healthy People (HP)* objectives have become powerful tools in setting government and private policy. The 2010 objectives grew in number and complexity and were the subject of much debate. The U.S. Department of Health and Human Services released its framework for *Healthy People 2020* on December 2, 2010. Objectives for *HP 2020* included four foundational health measures and added 13 new topic areas (U.S. Department of Health and Human Services, 2012b). *HP* objectives are reviewed and revised every 10 years to determine how well we are accomplishing targets and to establish new targets for the next generation. The next iteration of *HP* will be in 2030.

The U.S. Public Health Service Office of Disease Prevention and Health Promotion was established as a coordinating and policy development unit of the Office of the Assistant Secretary of Health. The unit was charged with coordinating the development of the Surgeon General's reports and the health objectives for the nation. In 1979 the first Surgeon General's report on health promotion was released ("Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention") (United States, 1980), which reviewed the gains made in health promotion. In addition, the report established broad national goals according to life stages and focused on reduction of mortality.

During the same period, a process was put in place to develop national health objectives. This took over a year, with first drafts developed by 167 invited experts serving on panels centered on 15 subject areas held and sponsored by the Centers for Disease Control and Prevention (CDC) in Atlanta. Members were drawn from a variety of backgrounds. The purpose was to develop national, not federal, objectives. It was believed that by establishing clear targets, agencies would focus on meeting those objectives—a common practice for business for many years but a new concept for much of the government. Available research was used to determine appropriate targets, and the compilation of information pointed to the need for additional data (needs assessment). A major effort was made, but the task became even more complicated when the process was repeated for the year 2000 *HP* objectives. By this time people knew that influential people, including

virtually all federal funding sources, were paying careful attention to the objectives. As a result, major lobbying efforts became part of the process of setting the objectives.

Some of the original drafts for the 2000, 2010, and 2020 objectives differ significantly from the final product. The differences are a consequence of the multiyear process that is the collaboration of many organizations and individuals (U.S. Department of Health and Human Services, 2012c). The Office of Disease Prevention and Health Promotion and the CDC are to be commended for pulling together the various factions and completing the target objectives. This is an important example of what needs to be done for any health education program. Clear objectives must be established at the outset if the project is to be successful and to make measurement possible. The national health objectives have resulted in significant changes in the way the U.S. government, especially the U.S. Public Health Service, does business.

Ethical Considerations

Consideration of ethical issues when designing and delivering interventions that have the potential to have a conflict of values or have private interests at stake accentuate the need for high standards in fairness and honesty (American Planning Association, 1992). The following section highlights three areas to consider: ethics as part of planning, human subject reviews, and ethical obligations to employers.

Ethics as Part of Planning

Many ethical issues are involved in health education intervention. We are attempting to change people in some way. Will these changes and methods of change be ethical? To ensure the answer is yes, certain steps should be taken to protect people's rights. Until recently, the most widely adopted code of ethics was the Society for Public Health Education (SOPHE) code. A brief version of the SOPHE code is given in **Figure 2-9**. This code stated that a health educator should influence people without coercion and that changes of behavior should be voluntary. A more recent code of ethics has been developed by the Coalition of National Health Education Organizations and has superseded the SOPHE code (see Appendix).

Human Subjects Review

Institutional review boards use formal guidelines to monitor ongoing research projects that involve human subjects.

When we design programs and select intervention methods, it is important we keep ethical considerations in mind. For example, if we are conducting formal data collection, we must go through a formal review process to protect the rights of human subjects in research. These *institutional review boards* (IRBs) are a requirement for any programs that receive federal funding. They are established by government, colleges, universities, and other agencies to review ongoing research projects involving human subjects. They have formal guidelines to protect the rights of subjects, including the right to know what will happen, the right to privacy, and the right to be free from harm. IRBs are governed by three principles: *respect for persons*, *beneficence* (that is, the research must maximize the benefits, while minimizing the risks, to

To guide professional behaviors of its members toward highest standards, SOPHE adopted a Code of Ethics in 1976 and acknowledged the need for periodic review and improvement of the Code.

- I will accurately represent my capability, education, training, and experience, and will act within the boundaries of my professional competence.
- I will maintain my competence at the highest level through continuing study, training, and research.
- I will report research findings and practice activities honestly and without distortion.
- I will not discriminate because of race, color, national origin, religion, age, or socioeconomic status in rendering service, employing, training, or promoting others.
- I value the privacy, dignity, and worth of the individual, and will use skills consistent with these values.
- I will observe the principle of informed consent with respect to individuals and groups served.
- I will support change by choice, not by coercion.
- I will foster an educational environment that nurtures individual growth and development.
- If I become aware of unethical practices, I am accountable for taking appropriate action concerning these practices.

Figure 2-9
SOPHE's Code of Ethics (Brief Edition)
Courtesy of Society for Public Health Education, 2013.

the participants and society), and *justice* (which means the research does not exploit any group to benefit another) (Parvizi, Tarity, Conner, & Smith, 2007). When interventions (involving human subjects) are used as part of formal research, IRB approval is necessary and the ethically appropriate protocol to follow.

Ethical Obligations to Employer

We are responsible to our employer, which means we are obligated to give full effort to our job. If we have been hired to work a 40-hour week, we must ethically devote 40 hours to the work as defined by our employer. It is not ethical for us to define what our work is unless we are self-employed. If we believe our employer is asking us to do something that is unethical, it is our obligation to discuss it with him or her. If it is then clear we are being asked to do something improper, we should report it to the next-higher authority, resign, or do both. If we are asked to teach something we do not believe in due to religious or other conflicts, we are obligated to discuss this with our employer. Perhaps someone else can teach that topic or other accommodation can be made, but it is not ethical for us unilaterally to change the curriculum or lesson to fit our personal beliefs. We must work through channels to either get it changed, teach it, or allow someone else to teach it.

We also have the obligation to keep up to date and to use the best methods. We often hear of the shortcomings of health education programs. After reading this text, you will probably recognize that we do have the tools to be successful, but many practitioners are not applying what we know. This is an ethical issue. Quality health education is not easy, and it is not accidental—it takes hard, dedicated work.

Institutional review boards use formal guidelines to monitor ongoing research projects that involve human subjects.

Objective: While reviewing the case study, the reader will identify two or more examples of ethical compromises committed by Nathaniel.

Case Study: Nathaniel

Nathaniel has been assigned to teach a personal health course at a local community college. The outline calls for 2 days of coverage of HIV/AIDS issues. Nathaniel is not very conversant in these issues, so he substitutes 2 additional days in the nutrition area, which he enjoys. Several students and student reporters go to the dean to urge the dean to be certain AIDS is covered in personal health courses. The dean says that it is part of all personal health courses. Several students have just completed Nathaniel's course and state emphatically that it is not. The dean is very angry when she discovers Nathaniel has not covered the prescribed material. Can Nathaniel defend his position? (See Case Studies Revisited later in the chapter.)

Questions to Consider

1. What alternative methods could Nathaniel have selected to ensure the requirements of the syllabus were fulfilled?
2. Do you believe his actions are defendable? Explain.

For more information and tools related to this chapter, visit http://healtheducation.jbpub.com/strategies.

EXERCISES

1. You have been asked to develop a sexuality unit for ninth-grade high school students. What do you believe would be appropriate goals for such a unit? Also, write three sample objectives you believe would be reasonable, being sure

to include at least one from the *affective* domain.

2. Select a health topic and target population. Now, in thinking of how to justify the development of your program, list specific resources or agencies from which you could obtain supportive data. (These must be *real* sources.) You will need to conduct some research and then cite addresses or Internet information related to the agencies or other sources you would use to support your proposal.
3. What are the three major reasons for developing objectives?
4. Describe four important factors to consider when developing objectives or selecting methods.
5. What are the major differences between goals and objectives?
6. Describe how you could use national health objectives like *Healthy People 2010* or *2020* to develop your own local program objectives. Illustrate your answer by selecting any specific health topic.
7. Identify the ABCD&E components of the following objective samples.
   a. Following session 2 of the weekend workshop, the participant will list his or her top three concerns about environmental pollutants on the evaluation form.
   b. After the demonstration, the learner will list in order on the butcher paper provided the sequence of events to develop a 10-step decision-making model.
   c. Using the diabetic supplies provided, the patient will accurately assess his or her blood glucose level by performing the finger-prick method described in the pamphlet.
   d. Using the CAUTION acronym described in the cancer video, the student will record the seven warning signs of cancer on a poster board.

CASE STUDIES REVISITED

Case Study Revisited: Pat

Because Pat's only stated objective was to end drug use, she has failed by her own standards. Pat has a goal but has not set realistic objectives in measurable terms for her program, and because of this mistake the program was virtually certain to fail. Further, Pat has not determined through a needs assessment what the current status of the community is in terms of its needs and interests and the prevalence of drug use. If, for example, Pat had discovered that drugs were being used by 35% of adolescents in the community, she could structure her objectives to reflect a modest but realistic behavior or attitude change. Pat has failed to plan carefully for instruction.

Case Study Revisited: Jerry

Through his haste and poorly conceived, unrealistic objectives, Jerry has placed the entire sexuality program in jeopardy. He made the same two fundamental errors in planning as Pat did in the earlier case study. First, Jerry did not conduct a thorough needs assessment before designing program goals and objectives. If Jerry promises a reduction in sexually transmitted infections, he will need to obtain data as to their existing prevalence to make a subsequent comparison. The likelihood of even being allowed to collect such sensitive data in a public school is at best marginal. Second, in constructing his objectives, Jerry was extremely unrealistic as to what any single program

could accomplish. Constructing program *goals* related to reducing rates of unintended pregnancy and sexually transmitted infections are appropriate, but specific behavioral *objectives* that need to be measurable should be much more modest and reasonable in scope. Setting such unattainable objectives in a controversial area such as human sexuality can do irreparable and sometimes fatal damage to a program that may be constantly under scrutiny.

Case Study Revisited: Nathaniel

Nathaniel's actions were poorly thought out and based on selfish motives. If Nathaniel was supposed to teach to an already existing syllabus, then he should have prepared sufficiently to be able to cover all topics. Alternately, Nathaniel could have used a more knowledgeable guest speaker or colleague to cover a particular topic. Nathaniel has certainly not helped himself professionally by angering his dean, and his actions would be difficult to defend.

SUMMARY

Selecting or writing the appropriate educational goals and objectives is important for any health education program.

1. The selection of an objective should always consider the resources available to achieve that objective.
2. A needs assessment is an important step before selecting or writing objectives or selecting methods.
3. Goals may be general, but objectives must be specific and measurable.
4. In writing objectives, the educational purposes (process or outcome) must be considered.
5. All domains should be considered if adequate time and resources are available.
6. Methods should be selected with proper ethics in mind.

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