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KWLs AND ANCHOR TASKS: ASSESSING THE DIMENSIONS OF STUDENT LEARNING THROUGH SERVICE

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Abstract:

The California Study Group first identifies three dimensions of student learning that occur during service-learning: content learning, learning about service, and learning about a social issue. They then explore two widely applicable strategies that can be used to assess these three kinds of learning — the student self-assessment of learning called *KWL* (what I **K**now; what I **W**ant or need to know; what I have **L**earned) and *Anchor Tasks* (teacher-generated assessment tasks to gauge actual student learning). The chapter provides many teacher-developed examples of what these kinds of assessment strategies look like in practice.

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State Context

California's service-learning effort is rooted in a statewide initiative that — by the year 2004 — seeks to have fifty percent of the state's 1000 school districts engage every student in at least one service-learning experience in each of the grade spans (K-5, 6-8, 9-12). Each year, through a grant from the Corporation for National Service, the California Department of Education funds up to forty school/community partnerships that focus K-12 school districts on institutionalizing service-learning. Each partnership is required to expend ten percent of its budget for evaluation, which includes assessing students' academic and civic development. Like educators in other states that have service-learning initiatives, Californians view service-learning as an effective teaching strategy that helps students better meet many of the state's educational standards.

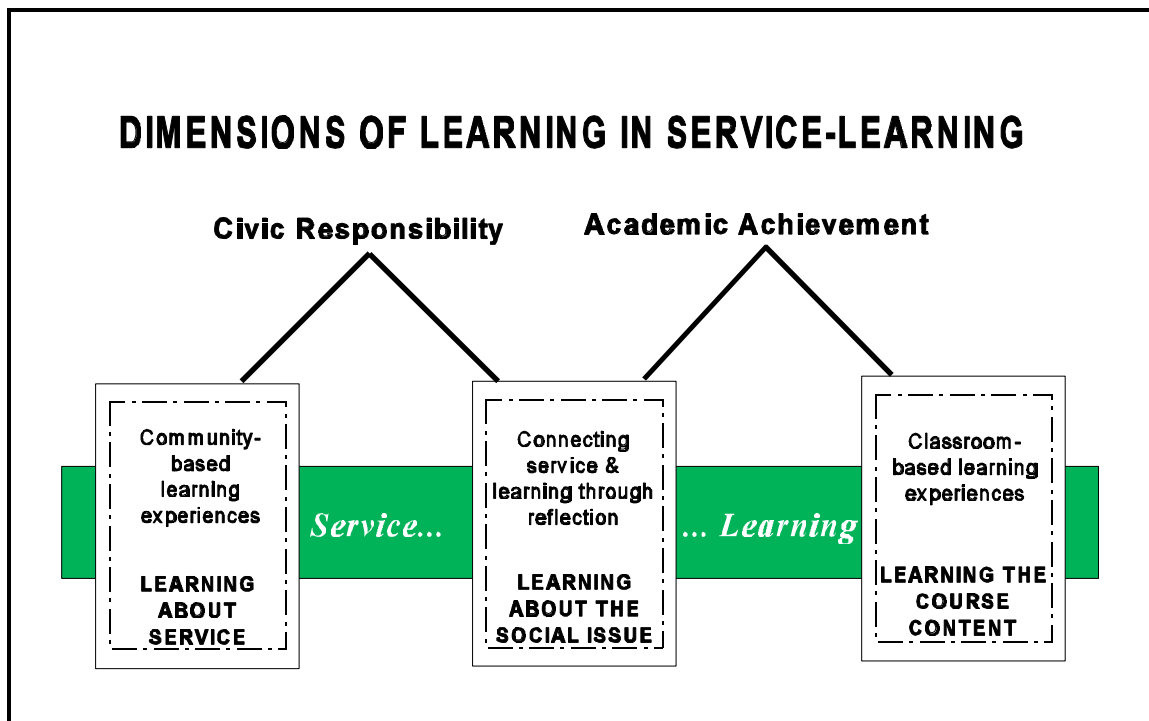


Figure 5-1: *The Three Dimensions of Learning in Service-Learning*

KWLS AND ANCHOR TASKS: ASSESSING THE DIMENSIONS OF STUDENT LEARNING THROUGH SERVICE

Introduction: The Conceptual Framework

Over a three year period, the California Study Group engaged in a critical dialogue and exploration of effective assessment strategies that could be applied to service-learning situations. As the study group's discussions about student assessment and service-learning unfolded, the members' attention focused increasingly on the complex nature of service-learning. In particular, the members, who consisted of practicing K-12 teachers and other educators, questioned whether or not "content learning" was the most critical element of service-learning. "If we can teach the content in the classroom without service-learning", stated one member, "we should employ service-learning to do other things, like develop students' leadership skills or civic responsibility." To which another member responded: "But the kids aren't learning the content through traditional teaching. That's the issue. I think service-learning contextualizes learning for the kids. It helps them learn the content."

Out of these discussions and debates rose the conceptual framework upon which the final work presented in this chapter is based. After much deliberation, it was determined that there are three learning dimensions of service-learning, which collectively foster the academic achievement and civic responsibility aspects of service-learning (**Figure 5-1**). Each of these learning dimensions is described below.

A primary goal of service-learning is to advance students' understanding of academic content. This is what distinguishes service-learning from community service. While teachers can use traditional assessment strategies (e.g., multiple choice tests) to measure the content learning of students who engage in service-learning, such assessment measures are often ill-suited to capture the full range of learning in service-learning. Aside from content learning, service-learning provides students an opportunity to learn how to perform a quality service that meets a local community need, and it promotes student understanding of a social issue. Collectively, these three dimensions of learning — content learning, learning about service, and learning about a social issue — form the academic and civic development aspects of service-learning. To be thorough in our efforts to assess the learning of students who are engaged in service-learning, we felt all three dimensions should be taken into account.

The California Study Group explored the use of two assessment strategies that can be used to assess the learning of students who engage in service-learning. The student self-assessment called the *KWL* measures student learning in all three dimensions of service-learning. The *KWL* lets students gauge their learning over time as they progress through the service-learning activity.

A second assessment strategy, called an *anchor task*, is a teacher-generated assessment that gauges the degree to which students have truly learned what they have reported to have learned on their KWL. When these two assessment strategies are coupled, a comprehensive and universally adaptable assessment package is formed. The KWL-anchor task combination provides an effective approach to assessing the three learning dimensions of service-learning.

The Three Learning Dimensions of Service-Learning

To provide some context, let us use the following service-learning project as an example.

The Fresno Fire Department determined that many senior citizens in the community, especially low-income seniors, did not have smoke detectors that worked properly. Students from a seventh grade Math class worked with a Retired Senior Volunteer Program to obtain the names and addresses of low-income seniors in their community. In their Math class, the students designed a survey to determine how many senior households had functional smoke detectors. The Fresno Fire Department trained the students in the operations and installation of smoke detectors and the overall importance of smoke detectors in saving lives during fires. Teams of students and firemen went to the identified homes to administer the smoke detector survey. Students helped the firemen install working smoke detectors in homes that did not have them and then provided important information to the residents of the household about the importance of having a functional smoke detector. The students used the statistics gathered from the survey to file a report with the local newspaper and other news media highlighting how many seniors in the community were at-risk for suffering from diseases and death related to fire and smoke inhalation.

The overarching learning objectives of this service-learning activity were to ensure that students understand

- the impact of fire on the human body and in animals;
- the process of treating burns;
- the responsibility of the local government to its citizens regarding fire safety;
- how to use data collected from a survey to determine who needs to get a smoke detector installed;
- how to install smoke detectors;
- how to develop press releases; and
- how to market one's message through various media.

The three learning dimensions of service-learning — learning the curricular content, learning about service, and learning about a social issue — each emphasize a different aspect of student learning. Consequently, there is a different assessment goal for each learning dimension. Using the fire safety for senior citizens service-learning project as an example, each of the three learning dimensions of service-learning is described below:

Learning the Content Service-learning uses service to the community as a means to contextualize academic content for students. Therefore, one of the primary focuses of service-learning assessment includes measuring the degree to which students gain an understanding of academic curriculum being taught.

Example: *In the fire safety project, the assessment of content learning can focus on a variety of content objectives. For Mathematics, assessment might focus on math skills students develop from the survey design and data analysis. If the service-learning activity were part of the Science curriculum, the assessment of content might focus on assessing students' understanding of the impact of smoke and fire on the human body and animals. In Language Arts, the assessment of content learning might focus on assessing students' ability to convey important information through one-on-one informational presentations, public service announcements, press releases, and letters to public officials.*

Learning about Service Along with learning the content, successful service-learning also involves the performance of quality service to a recipient with a need. Regardless of whether the service recipient is an individual or the greater community, is located off or on the school campus, is part of a specific community or society-at-large, the service that the students provide must be of quality and must be executed well. Meeting a community need requires understanding of and preparation for the tasks to be performed. Therefore, a second focus of the assessment process involves assessing the quality of the service students provide.

Example: *In the fire safety project, the assessment of how well students have performed the service would consider the quality of interactions with the senior citizens and the students' ability to convey important information about the proper installation and upkeep of a smoke detector. The quality of the service hinges on the students' ability to explain to seniors how a smoke detector works and why it is important to have one in the home.*

Learning about the Social Issue In successful service-learning experiences, students also gain a deeper understanding of the local social issue that undergirds the service activity. This is another important element that distinguishes service-learning from community service. Therefore, a third focus of the assessment process involves measuring the depth of students' understanding of the local social issue around which their service-learning activities are focused.

Example: *In the fire safety project, the assessment of students' learning about the social issue would consider the students' understanding of risk factors for low income senior citizens, why they do not own smoke detectors, or why the smoke detectors in senior citizens' homes often do not work.*

This three-pronged conceptual framework assumes that successful service-learning activities involve all three of these dimensions. To

conduct a full assessment of student learning in service-learning, assessment strategies that measure student learning all three dimensions must be in place.

With this conceptual framework in mind, the California study group analyzed and critiqued a variety of existing tools designed to measure the learning of students who engage in service-learning. The tools included rubrics, checklists, and multi-faceted assessment systems. The study group members soon realized that these tools were limited in their applicability to the full range of grade levels and content areas in which service-learning activities take place. In particular, many of the tools were developed with specific learning experiences, service activities, or student ability levels in mind. Consequently, the tools could not be adapted easily to a variety of service-learning contexts. The study group members eventually discovered that the KWL and the anchor task were two assessment strategies that could be applied universally to measure students' learning in each of the three learning dimensions of service-learning.

The impetus for studying the KWL and anchor task came from the California Department of Education, which was embarking on a statewide K-12 service-learning evaluation process that included the KWL and the anchor task for assessing student learning. The KWL–anchor task strategies had been selected by the Department specifically because they seemed to apply to all service-learning situations and can be used to assess the learning of all students, regardless of the students' age or ability. Consequently, the California group members saw an opportunity to contribute to the work of the Department of Education by studying KWLs and anchor tasks to determine how they can best be used to assess student learning in service-learning.

The KWL and Anchor Task

The KWL and the anchor task are two types of measures that allow for the assessment of student learning. While they are universally applicable strategies, they take on different forms that are specific to each teacher and classroom. The two measures differ but complement each other in that the KWL provides a reflective self-assessment by the student of his or her own understanding at different points, while the anchor task is designed by the teacher to assess students' understanding and learning. In other words, the KWL is a self-report of what students know and have learned, whereas the anchor task provides a way for students to demonstrate what they have learned.

Another difference between the two assessment strategies is that the KWL provides a broad overview of student learning, while the anchor task tests more specific concepts or skills taught through service-learning. To be most effective, the KWL and the anchor task are coupled; they each aim to assess students' achievement of the same learning objective(s). By using the two strategies in tandem, a more comprehensive assessment of student learning for a particular learning objective can be attained.

Typically, the KWL involves a three-step process that takes place over the course of the service-learning activity. At the beginning of the service-learning activity or unit, students are asked the K question: “What do you know” about a particular subject? This information can help the teacher get a sense of what students already know about a particular issue and then adjust what is being taught to ensure that the students’ learning needs are met. Later in the unit, the students are asked the W question: “What do you need or want to know” about the subject? The W gives students a voice in determining what content could be explored further or emphasized as the unit unfolds. And finally, at the end of the unit, students are asked the L question: “What have you learned” about the subject? The L encourages students to reflect on what they have learned. The KWL process allows each student to compare what he/she knew at the beginning of the unit with what they know at the end, thus self-assessing what they have learned.

The anchor task is any teacher-designed measure that asks students to demonstrate what they have learned. An anchor test can be a multiple choice test, an essay, an oral presentation by students, a portfolio, or a variety of other traditional or innovative assessment measures teachers already use. Anchor tasks can be formal assessments (multiple choice examinations or term papers) or informal assessments (student journal entries or class discussions). They can range from being simple tasks (a final examination) to more complex tasks (student portfolios that reveal student progress throughout the semester according to a standardized rubric developed by the teacher).

While the KWL asks students to share what they know and have learned about a particular issue or concept, the anchor task asks students to demonstrate that they have in fact learned it. The combination of the KWL and the anchor task can be used to measure each of the three learning dimensions of service-learning. In order for the KWL and the anchor task combination to be effective, each must assess students’ learning of the same learning objective(s).

Using the fire safety service-learning project as an example, let us explore how the KWL–anchor task combination might be used to assess students’ learning of the content. If one content learning objective for the service-learning activity was to have students learn about the effects of smoke inhalation on the human body, the KWL might ask students to respond to the following questions over the course of the activity:

- (K) What do you know about the effects of smoke inhalation on the human body?
- (W) What do you want to know about how smoke inhalation affects the human body?
- (L) What have you learned about how smoke inhalation affects the human body?

The anchor task would aim to measure students’ achievement of the same learning objective, but through a teacher-generated assessment tool. The anchor task might be a ten-question test about the respiratory system and the effects of smoke inhalation on the respiratory system, for example.

Or, in preparation for students to perform service in the community, the teacher might ask each student to practice explaining to each other the effects of smoke inhalation; the teacher would keep an account of how well each student has understood and is able to articulate accurately the effects of smoke inhalation on the body. For either of these anchor tasks, the measure of how well students perform is based on a set of pre-determined, teacher-established learning objectives for the curricular content.

The members of the California Study Group spent close to two years analyzing and critiquing the KWL–anchor task combination as a means to assess student learning in service-learning. In particular, each stipended member of the study group (eight practicing teachers) tried out the KWL and anchor tasks in their own classrooms. They investigated the utility, applicability, advantages, and disadvantages of the strategies. From these field tests and analyses, the study group members developed examples of how the KWL and anchor tasks might be applied to different service-learning situations. They also developed a set of suggestions for using KWLs and anchor tasks. These examples and suggestions are discussed in the next section.

The Essential Questions

The Product Outcome Guide (**Figure 5-2**) was developed to guide each study group member’s investigation of the KWL and the anchor task as strategies for assessing student learning in service-learning. This simple planning guide highlighted the issues and questions that the eight stipended members used as they tried out the KWL-anchor task combination in their classrooms. The Product Outcome Guide was developed with the intention of guiding the members’ field testing; it was not constructed to restrict the members’ approach or thinking in any way.

Although the investigation of the KWL and anchor task strategies was sporadic among the group’s membership (not all members field tested the KWL and anchor task with the same intensity), a number of valuable pieces of information emerged. As the work of the study group unfolded, the study group members addressed various issues regarding KWLs and anchor tasks and the utility of these strategies in assessing student learning in service-learning. This section highlights some of issues the study group members explored. Each issue sheds essential information for understanding how the KWL and the anchor task can be best used.

How should the KWL and the Anchor Task Be Designed? The designs of the KWL and the anchor task depend on the learning objectives established by the teacher. Similarly, how the data from the students’ responses are interpreted to make determinations about student learning is also dependant upon the pre-determined learning objectives for the activity.

Product Outcome Guide		
Context: _____		

Purpose: Learning Goals		
	KWL	Anchor Task
How and when collected		
Scoring		
Use of results		
Advantages		
Disadvantages		
Tips		
Other		

Figure 5-2: *The “Product Outcome Guide” helped guide teachers’ field testing.*

While planning the service-learning activity, the teacher should specify:

- 1) the learning objectives for the activity (content, service, and/or social issue);
- 2) the particular knowledge and skills that will be assessed;
- 3) what knowledge students might already have about the topic. (After students generate the K piece of the KWL, the teachers might, for example, give different roles to different students, based on individual student knowledge of particular aspects of the service-learning activity.)

How is the KWL administered? Portions of the KWL are administered at different points in the service-learning unit or activity:

- Typically, the K is administered to students at the start of a service-learning activity. The K provides teachers with a gauge of what students report to be their initial understanding of a particular issue.
- While the W is typically administered during the midpoint of a service-learning project, it can also be administered with the K at the start of the project (see Service-Learning Example 5-4 later in this chapter). The W asks students to identify what more they

want to know about an issue or topic and helps them identify the particular questions they would like to explore during the course of the service-learning project. The information provided by students in the W can also help teachers define which learning objectives need to be emphasized (or de-emphasized) during the remainder of the project.

- The L, which asks students to identify what they have learned about a particular issue or topic, is typically administered at the end of the project. Not only does the L allow students to reflect on what they have learned, but it reveals to the teacher which learning objectives students believe they have met.

To be effective, the questions or “prompts” asked in the K, W, and L must all focus on the same issue or topic. In this way, the answers provided by individual students at the beginning of the service-learning experience can be compared with the answers they provide in the middle and at the end.

Why does the KWL need to be accompanied by an

Anchor Task? KWLs alone do not provide enough evidence to draw firm conclusions about what students have learned, since they are students’ self-reports of what they have learned. By having the students demonstrate through an anchor task that they indeed know or have learned particular concepts or skills, the actual depth and scope of students’ understanding and knowledge can be ascertained. The five examples presented later in this chapter show how the KWL and the anchor task are used in tandem to measure various aspects of student learning.

How is the Anchor Task administered?

Anchor tasks should be thought of as a variety of assessment strategies that teachers already use in class to assess students’ learning of content and skills (multiple choice tests, essays, and other teacher generated performance measures). Because an anchor task can be any formal or informal teacher-designed assessment tool, the administration of the anchor task varies according to the task used. In some cases, the anchor task will need to be administered at the end of the service-learning activity or unit as a means to provide a cumulative report on student learning. In other cases, the anchor task may be administered at a particular juncture in the service-learning experience when the particular topic of the anchor task occurs. For example, in the fire safety project example, a teacher might want to assess students’ understanding of how smoke inhalation affects the body before students go into the community to talk with the senior citizens. Several different anchor tasks (which measure the same or different learning objectives) can be used throughout a service-learning activity to ensure that a comprehensive assessment of student learning is conducted.

How is the information that students provide on the KWL and the Anchor Task used for assessing student learning?

Rather than actually grading or numerically scoring students’ responses on the K, W, and L, the teacher uses the information students provide on the KWL and the anchor task to shape

the content and activities of the class. By asking the students about what they know about a particular topic, teachers can determine whether they need to go more deeply into a topic or provide the students with particular background information. If it is determined that the students are already knowledgeable about a topic, the teacher can move ahead to the next activity or unit. The KWL and the anchor task should be used to help identify gaps in students' knowledge. In this way, the service-learning activity can be planned appropriately to help fill those gaps.

The W of the KWL, for example, is an opportunity for students to identify important information they think they might need to perform a quality service. It is also an opportunity for students to share which aspects of the service-learning experience they would like to explore further. The teachers might use this information to reshape the unit in order that students' learning needs are met. In addition, individual students' responses to the K, W, and L can be compared to help paint a picture of what students knew about the particular topic at the beginning of the service-learning activity and what they know at the end. Some teachers have the students analyze their own KWL responses, which helps students realize the amount of progress they have made over the course of the service-learning experience. Because the KWL and the anchor task are designed to measure the same learning objective, a teacher should match a student's performance on the anchor task with the student's self-reported responses on the KWL. This matching helps the teacher determine to what degree students' performances on the anchor task match the data on their KWLs. Collectively, the information from the KWL and the anchor task can create a fairly comprehensive assessment profile that highlights the learning progress and achievement of each student.

It is not possible in this chapter to review all the possible ways that the information students provide on KWLs and anchor tasks can be analyzed to make determinations about student learning. Since each KWL and anchor task is idiosyncratic to the specific goals and tasks of each classroom's service-learning activity, how the students' data are actually used for assessing student learning needs to be determined by the individual teacher. An extremely effective strategy for using KWL and anchor tasks in one service-learning situation may be an entirely inappropriate strategy for another classroom. The members of California's study group members recommend that teachers experiment with a variety of "scoring" strategies (numerical scoring, rubrics, "eyeballing" information, checklists, etc.) when using KWLs and anchor tasks.

Using the KWL and Anchor Tasks to Measure the Learning Dimensions of Service-Learning

The KWL and anchor tasks can be used to measure learning in any of the three learning dimensions of service-learning. To illustrate this, five examples are provided that show how the KWL–anchor task combination can be used to assess students' learning of the content, the service, and the social issue. Each example describes the activities of an actual class

in California that uses service-learning. The first three examples describe how the KWL–anchor task combination is used to assess student learning for one of the three dimensions. The last two address other issues raised by this form of assessment. To show the wide adaptability of KWLs and anchor tasks, the five examples are varied in terms of grade level, subject area, service activities, and learning objectives. In addition, wherever possible, the examples also show how the learning objectives of the service-learning activity are tied to the SCANS skills and California’s state-wide content standards.

Assessing the Learning of the Content Example 5-1 provides a further discussion of how the KWL and the anchor task can be used with fire safety example provided earlier. In this example, the KWL and the anchor task are used to assess students’ learning of the content, which is part of an interdisciplinary middle school curriculum.

EXAMPLE 5-1

Using the KWL and Anchor Task to measure Student Learning of Content

Fire Safety for Senior Citizens from West Fresno School District: An Interdisciplinary Approach

Grades: 6-8 **Subjects:** Science, History, Math, Social Science, Health

Identifying the Community Need: The Fresno Fire Department determined that many senior citizens are in danger from house fires because they did not have smoke detectors installed and working properly. Students worked with a Retired Senior Volunteer Program to get names and addresses of low income seniors in their community. Students designed a survey to determine the need for smoke detectors. The Fresno Fire Department trained the students in the use and the need for smoke detectors. Teams of students and firemen went to the identified homes to give the survey and install smoke detectors, if needed.

Learning Objectives to be Assessed: To ensure that students understand: the impact of fire on the human body and in animals; the process of treating burns; the responsibility of the local government to its citizens regarding fire safety; how to use data collected from a survey to determine who needs to get a smoke detector installed; how to develop press releases; and how to market one’s message through various media.

Curricular Content:

- Science: Impacts of smoke and fire on the human body and in animals (pets), the science associated with fire ignition and spreading. Students studied the dangers of fire and smoke from fires.
- History-Social Science: Responsibility of local government agencies to its citizens re: fire safety information.
- Math: Designing a survey to collect meaningful data, data collection and tabulation. Students developed a survey to be given to senior citizens to determine whether they had working smoke detectors and, if not, whether they would like the Fire Department to install some in they home at no cost. Students tabulated the results for the fire department.
- Language Arts: Writing public service announcements, press releases, and letters, and writing a report using data collected. Students developed public service announcements, press releases, letters, and a script for student interviewers. A TV reporter met with the class to guide them in writing a PSA and a press release. Students prepared a report for the fire chief.

- **Health:** Health impacts of smoke and fire, the process of treating burns. Students visited a burn treatment center at a local hospital where they learned about the treatment of burns.

Social Issue: Low income senior citizens may be at risk for home fires because they do not own smoke detectors or the smoke detectors they have are not working.

Service: Students working with community agencies identify senior citizens who need smoke detectors and provide the seniors with important information about the proper installation and upkeep of a smoke detector.

SCANS Skills: This service-learning activity can help students meet the following SCAN skills and competencies: creating community partnerships, especially RSVP and the fire department and the school, interview strategies and script writing, survey development and data processing, public relations, and problem solving—how to get essential resources to people who need them.

Multiple KWLs can be used during the course of a service-learning project. Each of the examples below can be used as a journal prompt that encourages student reflection on particular aspects of the academic content area. Depending on the length of the service-learning activity, the teacher can either assign some or all of these KWLs at appropriate times during the service-learning project. Which of these KWL questions are most appropriate will depend on the primary intended learning objectives for students and the subject area (e.g., Science, Health, Social Studies, etc.) that is the focus of the assessment.

Potential K's:

- K.1) What do you know about how fire impacts the human body?
- K.2) What do you know about how fire impacts animals?
- K.3) What do you know about the process of treating burns?
- K.4) What do you know about the responsibility of the local government to its citizens regarding fire safety?
- K.5) What do you know about surveys?
- K.6) What do you know about press releases?
- K.7) What do you know about using the media to market an important message?

Potential W's

- W.1) If you were to give advice to someone who was exposed to a great deal of smoke from a fire, what additional information would you need to look up before you gave them advice on what to do?
- W.2) What more do you need to know about how fire impacts animals?
- W.3) What additional information do you need to gather before you can tell someone how to treat a burn?
- W.4) In regards to the responsibility a local government has to its citizens regarding fire safety, which aspects of the responsibility are most confusing to you?
- W.5) What more do you want to know about designing an effective survey?
- W.6) You are given the task of developing a press release about the effects of fire on the human body. What more do you need to know about press releases in order for you to accomplish this task?
- W.7) What do more do you want to know about using the media to market an important message?

Potential L's

- L.1) What have you learned about how fire impacts the human body?
- L.2) What have you learned about how fire impacts animals?
- L.3) What have you learned about the process of treating burns?
- L.4) What have you learned about the responsibility of the local government to its citizens regarding fire safety?
- L.5) What have you learned about surveys?
- L.6) What have you learned about press releases?
- L.7) What have you learned about using the media to market an important message?

Anchor Tasks: The Anchor Tasks will vary depending on which KWLs are used. For example, if KWL #1 was administered to students in a Health or Science class, the Anchor Task might ask the students to demonstrate what they have learned about the impact of fire on the human body by developing a class presentation on how fire affects various types of individuals (children, the elderly, those with respiratory ailments, etc.). On the other hand, if KWL #4 was administered to students in a History or Social Studies class, the Anchor Task might be a multiple choice test on local government responsibilities and jurisdictions. If multiple KWLs are administered to the same group of students throughout the service-learning project, the Anchor Task could be a culminating event where students demonstrate a broad range of interdisciplinary knowledge they have gained from their service-learning experience. This event could be a simple written examination or a combination of written examination, oral presentations, portfolio displays, and media presentations. The primary intended learning objectives for students should drive which KWL questions are asked and which Anchor Tasks are used.

This example was developed by John Minkler, School of Education and Human Development, California State University Fresno, Fresno, California.

As the example shows, the prompts of the KWL can take many different forms. Ultimately, as mentioned earlier, the KWL questions that are asked and the anchor task(s) that is used should be rooted in the intended learning objectives of the service-learning activity.

Example 5-1 also reveals that multiple KWLs and anchor tasks can be administered during one service-learning project. For example, several K's can be given in a row on a set of different smaller topics (e.g., each focusing on a different branch of the local government), all of which culminate with one L (the role of the various branches of government in ensuring fire safety). Or, several KWLs can be given each day or each week on a different topic. For example, at the start of a class period discussion on the effects of fire on the respiratory system, the students might be asked, "What do you know about how fire affects the respiratory system?" In the middle of the class period students are asked, "What more do you want to know about how fire affects the respiratory system?" And at the end of the period, students are asked, "What have you learned about the how fire affects the respiratory system?" The next day, the KWL might focus on the how fire affects the body's temperature.

The study group members observed that there is no one best time frame to administer the KWL and/or the anchor task. While some teachers administer one KWL and one anchor task during the entire service-learning project (which could last an entire semester), other teachers administer several KWLs and several anchor tasks during the project. To be effective, the KWLs and anchor tasks must be adapted to fit best with the structure, learning objectives, and assessment needs of the service-learning project.

Assessing the Learning of the Service Skills Example 5-2 describes how the KWL and the anchor task can also be used to assess students' learning of the service skills. In this example, seventh grade students in a Language Arts/Reading class serve as Buddy Readers to elementary school students. The teacher in this example seeks to assess the degree to which each student is an effective Buddy Reader and understands the dimensions of tutoring reading to younger students.

EXAMPLE 5-2

Using the KWL and Anchor Task to Measure Student Learning of the Service Issue

Middle School Buddy Reading

Grade: 7 (in conjunction with an elementary school) **Subject:** Language Arts/Reading

Identifying the Community Need: Test scores indicate that students at a local elementary school are under achieving in their reading development.

Learning Objectives to be Assessed: To develop good Buddy Reading skills so that the effectiveness of the tutoring is maximized.

Curricular Content: Students reinforce what they are studying in their 7th grade Language Arts Curriculum by becoming a Buddy Reader with a younger student. As students prepare for their Buddy Reading assignments, they practice effective reading strategies using literature from the grade level that their Little Buddy is in. This practice allows the students to reinforce their understanding of Language Arts concepts with text that is not at their own grade level, and thus, less vocabulary dominated.

Social Issue: The students will discuss the ramifications of illiteracy and how important it is for all people to be able to read so that they can be successful in school and in life.

Service: Students will learn how to work with younger children, learn to adjust their reading to the needs of the elementary school students, and learn how to respond appropriately to the elementary school students' questions about reading.

Content Standard: This service-learning activity meets several of California's seventh grade language arts standards:

READING

Standard 1.1: Identify idioms, analogies, metaphors, and similes in prose and poetry.

Standard 1.3: Clarify word meanings through the use of definition, example, restatement, or contrast.

Standard 2.4: Identify and trace the development of an author's argument, point of view, or perspective in text.

NARRATIVE ANALYSIS OF GRADE-LEVEL-APPROPRIATE TEXT

Standard 3.2: Identify events that advance the plot and determine how each event explains past or present action(s) or foreshadows future action(s).

Standard 3.3: Analyze characterization as delineated through a character's thoughts, words, speech patterns, and actions; the narrator's description; and the thoughts, words, and actions of other characters.

Standard 3.4: Identify and analyze recurring themes across works (e.g., the value of bravery, loyalty, and friendship; the effects of loneliness).

The Listening and Speaking Standards listed below are the grade level skills that students are acquiring and reinforcing at Grade 7. The selected standards can be taught and reinforced through the Buddy Reading process.

LISTENING AND SPEAKING

Standard 1.0: Deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. Students evaluate the content of oral communication.

COMPREHENSION

Standard 1.1: Ask probing questions to elicit information, including evidence to support the speaker's claims and conclusions.

Standard 1.2: Determine the speaker's attitude toward the subject.

Standard 1.4: Organize information to achieve particular purposes and to appeal to the background and interests of the audience.

Standard 1.5: Arrange supporting details, reasons, descriptions, and examples effectively and persuasively in relation to the audience.

Standard 1.6: Use speaking techniques, including voice modulation, inflection, tempo, enunciation, and eye contact, for effective presentations.

Standard 1.7: Provide constructive feedback to speakers concerning the coherence and logic of a speech's content and delivery and its overall impact upon the listener.

The KWL examples provided here focus on the Listening and Speaking Standards. KWLs can be given holistically (covering all or some of the standards) or individually by particular standards.

Holistic Example

K: What do you know about being a good Big Buddy for Buddy Reading?

W: What do you think you need to learn in order to be a good Big Buddy? What qualities and skills will make you a good Big Buddy? What skills will you need to learn?

L: What have you learned about being a good Big Buddy? What are Big Buddy best practices?

K-W-L Example by Standard

Standard: 1.1 Ask probing questions to elicit information, including evidence to support the speaker's claims and conclusions.

K: What do you know about asking questions when you work with your "little buddy"?

W: What do you want to learn about asking questions that will make you a more effective Big Buddy?

L: What have you learned about asking questions that have made you a more effective Big Buddy?

Anchor Task: The Anchor Task is based on the teacher's observation of the Big Buddy during the Buddy Reading process. The Anchor Tasks can be given holistically or by particular standards.

Holistic Approach

Through a checklist developed by the teacher, the teacher assesses the number of standards each student (Big Buddy) demonstrates achievement in during a Buddy Reading session.

Anchor Task by Standard

Standard 1.1 Ask probing questions to elicit information, including evidence to support the speaker's claims and conclusions.

The teacher assesses whether the Big Buddy asks the Little Buddy probing questions concerning the text. For each student (Big Buddy), the teacher quantifies the number of probing questions, where they were used in the lesson, and their overall effectiveness.

Standard 1.2 Determine the speaker's attitude toward the subject.

For each student, the teacher determines (by a checklist or other means) whether the Big Buddy asks the Little Buddy about the Little Buddy's attitude towards the text and/or plot developments within the text.

Standard 1.4 Organize information to achieve particular purposes and to appeal to the background and interests of the audience.

The Big Buddy teaches a mini-lesson to a Younger Buddy regarding a grade appropriate reading concept. Through a rubric or checklist developed by the teacher, the teacher assesses how well the Big Buddy organizes the information being taught, the degree to which the Big Buddy uses developmentally appropriate examples as well as the degree to which the Little Buddy is engaged.

Standard 1.6 Use speaking techniques, including voice modulation, inflection, tempo, enunciation, and eye contact, for effective presentations.

The teacher assesses the speaking techniques of the Big Buddy, including voice modulation, inflection, tempo, enunciation, and eye contact.

Standard 1.7 Provide constructive feedback to speakers concerning the coherence and logic of a speech's content and delivery and its overall impact upon the listener.

Through a set of criteria determined by the teacher, the teacher assesses the coherence of the Big Buddy's reading lesson and its overall impact upon the Little Buddy.

Example provided by Evan Goldberg, Service-Learning Coordinator, Alameda County Office of Education, Hayward, CA.

Like the previous example, this example reveals that the KWLs and anchor tasks can be administered holistically (to assess learning of the entire learning objective) or more specifically (to assess learning of particular components of the learning objective). What is also interesting to note is that the “service” learning objectives of this service-learning effort are aligned with many of the state’s “content” standards in Language Arts. For example, to be effective Buddy Readers, the students need to have essential comprehension skills such as the ability to ask probing questions to elicit information (Standard 1.1) and the ability to arrange supporting details, reasons, descriptions, and examples effectively and persuasively in relation to the audience (Standard 1.5).

One of the challenges that the members of the study group confronted regarding using the three-dimension conceptual framework was that in some cases, it was difficult to distinguish among the content learning objectives, the service learning objectives, and the social issue learning objectives. In Example 5-2, is learning how to ask probing questions a content learning objective (improving Language Arts skills) or a service learning objective (becoming an effective Reading Buddy)? The members of the study group learned that the distinctions among the three learning dimensions become less clear as the service activity and the curriculum become more integrated. In addition, the study group members identified cases for which the service activity itself was used as the anchor task; by performing the service activity well, students demonstrated that they had met some of the learning objectives (Example 5-5 discussed later in this chapter demonstrates this point).

Assessing the Learning of the Social Issue Example 5-3 describes how the KWL and the anchor task are used to assess students’ learning of the social issue. In this example, high school students in a Peer Counseling course seek to gain a better understanding of why special education students, who are mainstreamed into regular classrooms, are often mistreated. The goal is to improve other students’ attitudes towards individuals with special needs. The example also shows how the KWL can be administered as both an individual activity and as a group activity. In addition, several examples for anchor tasks are provided.

EXAMPLE 5-3

Using KWLs and Anchor Tasks to Measure Student Learning of a Social Issue

Exploring the Inclusion of Special Education Students

Grade: 9-12

Subject: Peer Counseling

Identifying the Community Need: A school report indicates that some students with special needs are being treated poorly by other students at the school. The report describes how special education students who are being mainstreamed into regular education are the ones who are most at-risk for mistreatment. This class seeks to improve the attitudes of individuals towards students with special needs.

Learning Objectives to be Assessed:

- Understand inclusion of special education students into mainstream education
- Improve students’ attitudes towards individuals with special needs

Curricular Content: In Language Arts, this unit meets Los Angeles Unified School District standards #1,2,5,9:

Standard 1: Comprehend, interpret, and evaluate literal and implied meaning in a variety of listening situations, including lectures, speeches, debates, dramatic presentations, and readings from literature and poetry.

Standard 2: Speak to achieve intended effect using formal and informal conventions of the English language appropriate to varied purposes and audiences.

Standard 5: Write clearly — using the formal conventions of the English language, including grammar, spelling, punctuation, capitalization, sentence structure, word choice, paragraphing, and figurative language — in a variety of writing styles suitable to particular situations.

Standard 9: Evaluate and debate alternative points of view in situations involving conflicts in various literary selections and other sources.

Service: Students will provide peer counseling to students with special needs.

Social Issue: Students will learn about and develop an understanding for the needs of challenged students at the school.

KWLs

K: How do you know about the inclusion of challenged students at our school?

Individual activity: Students write a paragraph in response to this question. Students are given credit for writing the paragraph. The teacher assesses the level of student knowledge of inclusion and uses that assessment to shape the lesson on the inclusion program.

W: Do you think that inclusion is a good idea? Why or why not? What are some of the questions or concerns you have about the inclusion program.

Group activity: Students answer these questions in cooperative groups. Students are given credit for participating in the group discussion and developing meaningful questions.

L: What have you learned about the inclusion of challenged students into the mainstream of classes and activities at our school?

Individual activity: Each student keeps a reflective journal about her/his involvement with a challenged student and the nature of inclusion activities in which the challenged student is involved. Additionally, they include in their journal their reaction to the panel discussion provided by the parents of challenged students which focused on why parents want their children included in the mainstream of school.

Anchor task: Each student will prepare a report about the inclusion of challenged students in the mainstream classes and school activities. This report will be based on the personal experiences that occurred during the 5 hours in which the regular education student spent with an inclusion student. It will detail what the inclusion student gained by being part of the mainstream of the school as well as the contributions that the inclusion student made to the school. The report will also clearly define the term inclusion as it relates to a strategy for special education

Other possible anchor tasks:

Report of an interview with one of the inclusion student's teachers.

Observation of the inclusion student in school activity.

Students define the terms related to special education and inclusion.

Research the California and/or federal laws that deal with including special students in mainstream education and activities.

Visit an agency that services the special needs population and write a report about the agency and its services.

SCANS Skills:

Speaking clearly; asking clear questions; working independently

Example provided by Susan Ward-Roncalli, Teacher, Eagle Rock Jr.-Sr. High School, Los Angeles, CA

As all three examples reveal, the KWL -anchor task combination can be an effective way to measure the various aspects of student learning in service-learning. Each can be applied in different ways, depending on the structure of the service-learning activity, the learning objectives, and the assessment needs of the teacher. The flexibility and adaptability of the KWL–anchor task combination create an attractive and user-friendly assessment strategy for teacher who use service-learning.

Other Issues with the KWL–Anchor Task Strategy

As the study group explored the use of KWL and anchor tasks, several issues about their adaptability and utility were raised. Three issues in particular stand out. One issue had to do with the use of KWLs and anchor tasks with very young students. How does one use KWLs and anchor tasks with kindergartners, for example? A second issue had to do with the complexities of using KWLs and anchor tasks to assess simultaneously student learning in more than one learning dimension. For example, can one KWL and anchor task be used to measure both learning of the content and learning of the service? And a third issue had to do with whether KWLs and anchor tasks are only intended to assess individual students' learning, or if they can be used to assess the learning of a class as a whole.

Through their various explorations and discussions, the study group members discovered that it is possible to use KWLs and anchor tasks with young children. The study group members also discovered that it is possible to use one KWL and anchor task to assess student learning in two or all three learning dimensions of service-learning. In their exploration, the study group members learned that KWLs and anchor tasks are just as effective in assessing the learning of an entire class as they are in measuring the learning of individual students. The two examples that follow (Examples 5-4 and 5-5) provide a description of how these issues play out in actual classroom situations.

Assessing the Learning of Young Children Example 5-4 describes how the KWL and anchor task can be used with kindergarten students to assess their learning of the content. In this example, the students are engaged in an interdisciplinary service-learning project (Science, Language Arts, Social Studies, and Art) that is focused on producing a play that provides a message on the importance of trees to the environment. The content goal is to have the students learn about trees and their importance to a healthy environment. The example also shows how the KWL, in particular, can be used to assess the content learning of both the individual students and the kindergarten class as a whole.

EXAMPLE 5-4

Using the KWL and Anchor Task with Very Young Students to Measure Student Learning of Content

The Branches of Literacy

Grade: Kindergarten

Subject: Trees and the environment

Identifying the Community Need: Students identified the problem of too many trees being cut down or neglected. The students were asked essential questions after taking part in a series of background building experiences. During these discussions, the students raised several concerns. They were very concerned that too many trees were being cut down, that trees do many things for people and the climate, and that people should take care of trees. They were asked what can we do as community helpers to take care of the trees in this neighborhood. They decided it was their job to tell people to take care of trees and that they wanted to make posters and put on a play at a local park. The students were studying about the community and also wanted to invite the community, their parents, and friends to see the play.

Learning Objectives

Curricular Content:

- Science: Students will learn about trees and their importance to a healthy environment.
- Language Arts: Students will generate text utilizing the Language Experience Approach (LEA), retelling scientific information they learned.
- Social Studies: Students will learn about neighborhoods, families, and specific ways for making their community a better place.
- Art: Students will practice drawing trees as a way to learn about the various parts of a tree.

Social Issue: Students will learn about the importance of trees to the environment and why neglecting and cutting down trees is harmful to the environment.

Service: Students will learn how to write a play and learn performance techniques in order to deliver a message to others about the importance of trees and how to take care of the trees in the community.

Content Standards: This service-learning activity provides an opportunity for students to help meet content standards in reading comprehension, vocabulary, and visual literacy. In addition, students also have an opportunity to work on developing and applying reading strategies to construct meaning from a variety of literature and other quality materials.

SCANS Skills: This service-learning activity can foster development of a variety of the SCANS foundational competencies including the development of basic skills, reading, writing, science, thinking skills, creativity, problem solving, seeing things in the mind's eye, reasoning, and responsibility. The activity can also help foster development of the SCANS competencies including managing resources and interpersonal skills.

KWL to measure Content Learning Objectives (e.g., in Science, their knowledge about trees):

K: What do you know about the trees in our neighborhood/community?

Group activity: The students can respond to this K by brainstorming what they know about trees while the teacher or teacher's aide captures the ideas on poster paper.

OR

Individual activity: Each student can respond to this K by drawing a picture that shows what s/he knows about trees.

W: What do you want to know about the trees in our neighborhood/ community?

Group activity: The students can respond to this W by brainstorming what they want to know about trees while the teacher or teacher's aide captures the ideas on poster paper. In this example, it would be appropriate to administer the K and W at the same time. It would also be appropriate to alternate from an individual activity for the K to a group activity for the W.

L: What have you learned about the trees in our neighborhood/community?

Group activity: The students discuss what they have learned about trees while the teacher or teacher's aide captures the ideas on poster paper; and/or

Individual activity: Each student draws a second picture that shows what s/he has learned about trees. Each child then explains (orally) the difference between the original picture s/he drew and the final picture.

It would be appropriate to engage students in either or both the group activity and the individual activity.

Anchor task: Each student shows understanding of the vocabulary related to trees by identifying the various objects in a tree collection box, for example: bark, branches, roots, photosynthesis, chlorophyll, seeds, seed pods, sprouting, leaves. The answers will be recorded by the teacher or teacher's aide and each student's level of understanding about trees will be assessed according to the number of items s/he is able to identify.

Other possible anchor tasks: The teacher could assign students a project where they must complete some artwork that is focused on trees. The teacher then assesses students' conceptual understanding from the art work.

Students could explain how each of the following professionals work with trees: landscape architect, environmentalist, Project WILD Educator, Geology Professor (Soil Specialty), Health Educator, Representative of nonprofit affiliated with trees (Tree Foundation), Professor of Forestry. Students' explanations would be tied into their understanding of different issues regarding trees (their importance for building homes, their importance to the ecosystem, etc.). Students could also define various terms: overuse, recycling, clear-cutting, pruning, topping.

Example developed by Candace E. Klosowski, Teacher, Mt. Vernon Elementary School, Bakersfield, CA

As the example shows, KWLs and anchor tasks can be used with very young students to assess their learning. The example also reveals that students do not have to respond to their KWL prompts in writing. Verbal responses to each of the prompts work just as well. The same is true for the anchor task. Example 5-5 utilizes a similar non-writing-based approach for the KWL. In this case, the KWL and anchor task are used to assess student learning in more than one learning dimension.

Assessing Multiple Learning Dimensions Example 5-5 describes how KWLs and anchor tasks can be used to assess students' learning of both the content and the social issue. In addition, as was mentioned earlier, this example reveals how the service activity itself can be used as the anchor task. The service activity can be used as an anchor task to assess student learning not just for the service dimension, but for the content and social issue dimensions as well. In Example 5-5, a fifth grade class is exploring the fragile nature of the wetlands and the importance that wetlands have to the health and stability of the environment. The students are using art, through a display at a local visitors' center, to provide information to the general public about the importance of the local wetlands. The service-learning activity is integrated with the Science and Art curricula and the learning objectives are focused on having students understand the wetland ecosystem (social issue) and how to use art to convey important messages to people

(content). The KWL-anchor task combination is used to assess students' learning of both the social issue and the content.

EXAMPLE 5-5

Using the KWL and Anchor Task to Measure the Learning of a Group of Students or an Entire Class (Focus: Content Learning and Social Issue)

Protecting San Diego Wetlands

Grade: 5

Subject: Science and Art

Identifying the Community Need: Students have come to learn that the public has little awareness of the fragile nature of wetlands and the importance that wetlands have to the health and stability of the environment. Students will design and install an art/poetry exhibit for public view as a way to raise attention and awareness of the wetlands' importance in maintaining the stability of the environment.

Learning Objective to be Assessed:

- 1) Students will understand the interdependence of all living things within the wetland ecosystem (including the watershed) and the impact of humans on that system.
- 2) Students will understand how art can be used to convey important messages to people.

Service: Students develop a public art exhibit for a local visitors center. The exhibit relays information about the importance of the wetlands to the health of the local environment.

Curricular Content: Science, Language Arts, Fine Arts (with Artist-in-Residence)

This service-learning activity provides an opportunity for students to achieve a number California's state content standards for Science

- Life Sciences: Plant and animals have structure for respiration, digestion, waste disposal, and transport of materials (standards a, e, f, g).
- Earth Sciences: Water on earth moves between the oceans and land through the process of evaporation and condensation (a, b, c, d, e).
- Investigation and Experimentation: Scientific progress is made by asking meaningful questions and conducting careful investigations (a, b).

KWL

The K of the KWL is conducted as a "carousel" brainstorming (each student gets an opportunity to provide input) followed by a class discussion. Questions for the K are posted around the room for response:

- K:**
- What do you know about the wetlands (lagoons) in our community?
 - How have people impacted the quality of our water?
 - Describe a powerful experience you have had in nature.
 - What do you know about who eats who in the food chain?
 - How do plants and animals adapt to survive?
 - Describe ways that art can teach us about important issues.

W: Students form small discussion groups and develop a list of things that they want to know about the Learning Objectives. These are then shared with the whole class and are placed on a class list.

For the L, students are asked in a carousel brainstorming activity to revisit the questions that were posted on the wall during the K, and are asked to provide responses to the following:

- L:**
- What did you learn about the wetlands (lagoons) in our community?
 - What have you learned about how people impact the quality of our water?
 - What have you learned about the power of nature?

- What have you learned about who eats who in the food chain?
- What have you learned about how plants and animals adapt to survive?
- What have you learned about the power of art and how it can teach us things about important issues?

While the teacher invites each student to contribute responses to questions of the KWL, the KWL approach is used in this example as a strategy for assessing the entire class' learning from the service-learning experience. (Other approaches are used to assess individual students' learning).

Anchor Task: In addition to the KWL, the teacher also employs an anchor task that allows the class to demonstrate that it (as a whole) has met the learning objectives of the class: 1) to learn about the interdependence of all living things within the wetland ecosystem and the impact of humans on that system; and (2) to learn how art can be used to convey important messages to people.

For this service-learning activity, the students' proper and appropriate installation of the public art exhibit at a local visitor's center (e.g., the displays are ordered correctly, the information on the displays is correct, etc.) as well as the depth of information students provide on the displays (e.g., simple transferring of information from a book versus thoughtful analysis of critical issues regarding the importance of the wetlands) demonstrates the degree to which the students (as a class) have met the learning objectives.

Example developed by Judy Leff, Teacher, Pacific View Elementary School, Encinitas Union Elementary School District, Encinitas, CA.

Overall, the five examples reveal how KWLs and anchor tasks take on many forms and are used in a variety of ways. Despite the differences in how the KWL–anchor task combination is used in different service-learning situations, a few things remain constant. In all cases, the KWLs and anchor tasks are based on the intended learning objectives of the class. And in all cases, the anchor tasks always seek to assess the same learning as the KWL with which it is coupled.

Despite the effective use of KWLs and anchor tasks in these examples, KWLs and anchor tasks are not always successful in capturing the more intricate details of student learning. For example, while the KWL–anchor task combination provides some indication of what students have learned about a specific set of issues or concepts, it does not explain why some students are learning the material and others are not. Additional investigation into the advantages and disadvantages of the KWL–anchor task combination needs to be conducted in order to obtain a more complete understanding of the strengths and weaknesses of this assessment approach.

Our Learning about Assessment

The study group's work shed light on a number of important issues regarding service-learning and assessment. Not only did it reveal the multi-dimensionality of student learning in service-learning, but it revealed how difficult it is to capture fully the learning in these various dimensions using traditional assessment strategies (multiple choice tests, etc.). The group's work also revealed how complex the concept of "learning" is. What does it mean when a student has "learned" something. And, if the assessment measure reveals that a student has not learned something, is it because the student did not apply himself/herself,

is it because the method of instruction was not effective, is it because the assessment tool was inadequate, or is it due to a combination of these issues?

Assessment is a complicated topic that requires more than a cursory investigation. The topic is further complicated by the fact that service-learning itself is a complex endeavor. This certainly made the work of the study group challenging. However, the individual and collective complexities of service-learning and assessment allowed the study group to delve deeply into a topic of great interest to the group. Although the study group vigorously investigated the topic of assessment and service-learning for a three year period, it barely scratched the surface of its complexities. And although the study group members gained significant knowledge about service-learning and assessment, they leave the group with additional questions about the topic.

Using the Study Group Process

The members of the California Study Group included eight teachers who utilized service-learning and six ad hoc members who were program evaluators, service-learning administrators, or other educational experts. While each of the teachers received a small stipend to cover the costs for substitute teachers, the ad hoc members volunteered their time to participate in the group. The first phase of the group's work focused on discussing the purpose of the study group, clarifying the group's goals as they related to the work of the National Study Group, and conducting broad discussions about student assessment, service-learning, and the nature of authentic assessments.

As the group entered into its second phase, it decided to split into two groups: a Northern California contingent and a Southern California contingent. Each subgroup's work would focus on the development of a rubric that could measure students' achievement of the state's five service-learning standards. However, as the work subgroups progressed, two things happened that would change the course of the study group process.

First, the focus on developing an assessment rubric for the state's service-learning standards was deemed fruitless by both subgroups. It became immediately apparent that the development of a separate set of rubrics for service-learning standards would send the message that service-learning is a separate rather than an integral part of the curriculum. The members' belief that service-learning is inextricably linked to the curriculum played an important role in the development of the three-pronged learning dimensions conceptual framework.

Second, the members of both the north and south study subgroups felt that the collegial nature of the first few study group meetings had been lost when the full study group was divided in two. A number of the members expressed that they no longer felt part of a "statewide" assessment group, but rather they now felt part of a "local" group. This was a less appealing prospect to most, and many members indicated that they missed the range of perspectives and collegiality that they were a

part of during the first meeting. The north and south subgroups were soon rejoined to reconvene as a statewide study group.

The reconfiguration of the study group as one working body proved to be a positive step on all fronts. The ultimate success of the study group rested on the fact that the group members felt they controlled the focus and destiny of the study group. While a member of the Service-Learning Research and Development Center UC Berkeley was the group's coordinator and facilitator, the study group members (both the stipended and ad hoc members) were the leaders of the group. As a neutral territory, the study group provided the members with opportunities to express their opinions without fear of having to endure long-term professional consequences or personal rebuke. As equal partners, the level of trust among the members was high. And while there were many disagreements among members regarding which assessment approaches should be pursued, the disagreements were healthy debates about critical issues regarding authentic assessment in service-learning.

The mutual respect the members developed for one another, the ability of the members to agree to disagree, and the high level of commitment each member brought to the group all served to bond the group members personally and professionally far beyond the scope of the assessment issues presented in the study group. The study group process did more than develop assessment tools for service-learning; it provided an enriching professional development opportunity for educators who are committed to improving the education of students. To this end, the development of tools for the assessment of students in service-learning was the context around which a collegial and collaborative forum was built, a forum that engaged educators in intellectual discourse and professional dialogue about critical issues related to the improvement of student learning and the advancement of teaching.

As a full group, the members of the study group engaged in a variety of in-depth philosophical and practical discussions about the purposes of education, the role of service-learning in K-12 schools, the aspects of student learning as they relate to service-learning, and various strategies for assessing student learning. Because almost all of the members worked in schools or school districts on a daily basis, they brought with them an enormous passion for the issues that were discussed. The depth and scope of the discussions were impressive, and in many instances paralleled a graduate school seminar in Education. The group's work did not necessarily focus on getting a product completed (e.g., this chapter), but rather it focused on engaging the members in an in-depth, thorough analysis of critical issues regarding authentic assessment in service-learning.

For most of the members, the study group process went beyond studying assessment in the context of service-learning. The process facilitated educators in the investigation of relevant issues through a comfortable, collegial forum. The bonding process among the members played an important role in the success of the group and the ultimate product it delivered. The members of the group appreciated the opportunity to reflect on critical issues and to express themselves freely. They enjoyed

the opportunity to test ideas, study them systematically, and receive feedback from their peers. These peers became “critical friends” whose opinions and perspectives were respected and whose advice was heeded.

As the work of the group draws to a close, the members have expressed an interest in continuing the work of the group beyond the grant period. Without exception, all the members of the group felt that their participation in the study group was a professionally valuable and personally rewarding experience. The members would like to keep the group intact to study other issues related to service-learning. The group generated a list of potential study topics that were equally as broad and complex as studying service-learning and student assessment. Efforts are underway to explore ways in which the same individuals can be reconvened to form a new study group on a particular topic of interest.

Conclusion

The study group process was an effective way to engage educators in a critical analysis of issues that are important to the work they do. The California Study Group’s focus on KWLs and anchor tasks revealed important information about the use of these strategies for assessing student learning in service-learning. In addition, through the work of the group, the three learning dimensions of service-learning were identified and placed in a conceptual framework. Many service-learning practitioners have found this conceptual framework to be very useful in providing a better understanding of the various facets of service-learning. Overall, the study group established a strong foundation for advancing our understanding of the use of KWLs and anchor tasks to assess student learning in service-learning.

The work of the study group revealed that KWLs and anchor tasks are universal assessment strategies that can be used in any classroom that uses service-learning. Because they are strategies and not actual instruments, the KWL and the anchor task are meant to be adapted to the particular context in which they are being used. Whether the service-learning projects are short-term or long-term, whether they involve kindergarten students or high school seniors, whether they are complex projects or more simple community-based activities, appropriate KWLs and anchor tasks can be designed to align with the learning objectives of the service-learning activity. When the two strategies are used jointly, an effective assessment strategy for assessing student learning in service-learning is developed. As the field of service-learning grows, our hope is that our experience will inspire others to further explore best practices for using KWLs and anchor tasks to assess students’ learning.