Presented is a resource guide designed for use in program planning at the school district level. The course of study provides an overview of the goals and objectives for 19 curriculum areas from kindergarten through twelfth grade in California. Four of these areas are described both separately and as they are infused into other areas. An overview of commonalities among the goals of the 19 curriculum areas is presented. Each curriculum area is defined in terms of goals and objectives and other descriptive material. The descriptive material includes a point of view to provide background information, vignettes, goals, objectives, samples of learner behaviors, and professional associations and their publications. Instructional strategies are suggested in a limited way. Curriculum areas included are art, bilingual-cultural, business, career, consumer, drama/theatre, language arts, environmental, foreign language, health, home economics, industrial arts, mathematics, multicultural, music, physical education, science, social sciences, and traffic safety. (BT)
COURSE OF STUDY
FOR
GRADES KINDERGARTEN THROUGH TWELVE
1979-1981

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Published June 1979
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The Course of Study was developed as a project of the State Steering Committee for Curriculum and Instruction. The present edition is published jointly by the boards of education of the following counties:

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ACKNOWLEDGMENTS

The project manager and editor would like to express appreciation for the professional contributions of all those listed below; and for the thoughtful comments made by the hundreds of people who reviewed successive drafts of the chapters, whose names cannot be included here.

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INTRODUCTION

WHAT IS THE COURSE OF STUDY?

The Course of Study is a resource document that is designed to be used in program planning at the school district level. It gives an overview of the goals and objectives for 19 curriculum areas from kindergarten through twelfth grade. Four of these areas are described both separately and as they are infused into the other areas. The Course of Study also presents an overview of commonalities among the goals of the 19 curriculum areas. These commonalities or goal clusters can be used to define overarching goals and to coordinate program planning among different curriculum areas.

The Course of Study is neither a framework nor a curriculum guide. Frameworks generally contain a comprehensive description of an individual curriculum area. Curriculum guides usually contain a detailed description of the scope and sequence of learning in a subject area and often include suggestions for appropriate teaching strategies.

WHAT IS THE CONTENT OF THE COURSE OF STUDY?

The content of the Course of Study has been developed to provide program planners with two types of information. Each curriculum area is defined in terms of goals and objectives and other descriptive material. Additionally, the goals for all the curriculum areas have been sorted into goal clusters to highlight the commonalities among the areas.

The principal sources for the content were the California State Frameworks and the Education Code, supplemented by resource and instructional guides and specialized publications. In cases where new frameworks are being prepared but have not yet been officially adopted, the content reflects the views of people working on the new frameworks and related task forces, as well as teachers and curriculum specialists who are leaders in their fields. Generally, the goals statements in the Course of Study use the same wording or reflect the concepts of goal statements in the frameworks.

CURRICULUM AREAS

The content in all the curriculum areas has been organized according to a uniform format. The major body of information about each curriculum area is four: Statements of goals and objectives. Other types of descriptive material have been included to supplement and clarify the goals and objectives. Each curriculum area includes the following sections:

- The Point of View at the beginning of each curriculum section is a statement about the major characteristics of the area. It is intended to give the reader background information for understanding the directions for student development that are indicated in the goals and objectives.
- Vignettes at each of four levels of development describe learning activities that are based on one of the goals for the area. The vignettes have been included to help the reader translate the goals into teaching-learning experiences. The vignette levels correspond approximately to grade levels in the following order:

<table>
<thead>
<tr>
<th>Vignette Levels</th>
<th>Grade Levels</th>
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<td>1</td>
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<td>3</td>
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<td>4</td>
<td>10-12</td>
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</table>

- Goals, Objectives, and Samples of Learner Behaviors are the road signs within each curriculum area that point to the direction in which the student should be traveling. The goals are general statements about the major desired outcomes for students. The objectives are more specific statements about the skills, knowledge, and understandings that students are expected to develop within each of the goal areas. Samples of learner behaviors follow each objective. These samples clarify the objectives by describing student behaviors at four levels of development which correspond to the levels used for the vignettes.
- Professional Associations and Their Publications, which are of interest to kindergarten through twelfth grade teachers, are listed at the end of almost every section. Some curriculum areas, such as career education, are not represented by any professional associations.

GOAL CLUSTERS

The goals for all the curriculum areas have been sorted into nine clusters or categories. The purpose of this analysis is to highlight the commonalities among curriculum areas and to illustrate how various subject matter areas of the program contribute to the development of common learnings. The nine goal clusters are:

- Career Knowledge, Attitudes, and Skills
- Communication Skills
- Cultural Understandings, Skills, and Values
- Daily Living Skills
- Personal Values, Responsibilities, and Ethics
- Problem-Solving and Thinking Skills
- Self-Understanding and Self-Concept
- Social Values, Responsibilities, and Skills
- Understanding Natural and Social Environments
The nine goal clusters might be thought of as overarching goals of the total curriculum with various subject matter areas contributing to different aspects of students' growth and development. For example, a goal cluster is Problem-Solving and Thinking Skills. Goals or objectives in seven areas of the curriculum pertain specifically to problem-solving and thinking skills:

**Career Education (Goal 3.0)** To weigh significant factors in career-related decisions including personal interests, aptitudes, and abilities, and the implications of the decision alternatives for life roles as citizen, user of leisure, and family member.

**Drama/Theatre (Goal 5.0)** To develop skills for solving problems in both real and imagined situations using critical, evaluative, and creative methods of drama/theatre techniques.

**English Language Arts (Goal 6.0)** To use reading as a means of learning.

**Industrial Arts (Goal 1.0)** To develop basic educational skills of creative and practical nature.

**Mathematics (Goal 2.0)** To use logical thinking strategies in selecting and applying appropriate mathematical concepts, operations, and models for the analysis and solution of problems.

**Science (Objective 1.5)** To weigh alternative scientific, economic, psychological, and social factors when considering possible resolutions to problems.

**Social Sciences (Objective 2.2)** To develop and use valuing skills that are useful in the processes of recognizing and clarifying problems as well as managing and resolving them.

Another example of an overarching goal cluster is Communication Skills. Goals in six curricular areas focus on communication skills:

- Bilingual-Bicultural Education
- Business Education
- Drama/Theatre
- English Language Arts
- Foreign Language
- Science

Figure 1 displays the relationships between each of the nine goal clusters and each of the 19 curriculum areas. Program planning groups should note that this analysis is based only on the materials available in this document. The analysis is not meant to be definitive, but rather a point of departure. As with all content in the Course of Study, the chart has been developed to point out a direction in which program planning teams and teaching staffs can extend their thinking. Obviously, many of the curriculum areas could include goal clusters where they are not represented in this chart.

<table>
<thead>
<tr>
<th>GOAL CLUSTERS</th>
<th>CURRICULUM AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ART</td>
</tr>
<tr>
<td>Career Knowledge, Attitudes, and Skills</td>
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</tr>
<tr>
<td>Communication Skills</td>
<td>1.0</td>
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<tr>
<td>Cultural Understandings, Skills, and Values</td>
<td>2.0</td>
</tr>
<tr>
<td>Cultural Understandings, Skills, and Values</td>
<td>2.0</td>
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<td>Daily Living Skills</td>
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<tr>
<td>Personal Values, Responsibilities, and Skills</td>
<td>5.0</td>
</tr>
<tr>
<td>Problem-Solving and Thinking Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>Self-Understanding and Self-Concept</td>
<td>3.0</td>
</tr>
<tr>
<td>Social Values, Responsibilities, and Skills</td>
<td>4.0</td>
</tr>
<tr>
<td>Understanding Natural and Social Environments</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**FIGURE 1**

**RELATIONSHIP OF GOAL CLUSTERS TO CURRICULUM AREAS**

*Certain goals in science and social sciences are broad in definition and include objectives which can be sorted into several different categories. In these cases, the objectives were used in the sorting process.
WHAT ARE THE INFUSED AREAS?

The concepts and processes of career, consumer, environmental, and multicultural education are intended to be infused throughout the entire curriculum. In order to make this infusion process clear, each of the four areas is presented in two different ways: (1) as individual sections in the same format used for other subject matter areas, and (2) through the inclusion of appropriate goals, objectives, and learner behaviors within the other curriculum areas. This infused material is noted in the margins wherever it appears.

In some cases, these four areas can be infused into the other areas through the regular subject matter content. For example, science already has a career education objective. Home economics, industrial arts, and physical education have major components which focus on career awareness and training. Social sciences programs emphasize multicultural themes throughout. Environmental issues are part of programs in science, social sciences, mathematics, traffic safety, and others. Consumer education is represented by objectives in science, business education, and other areas in which students study about life-style choices and consumer action or develop understanding of the social/economic structures of our society.

Where the usual subject matter did not explicitly reflect one or more of the infused areas, additional goals or objectives were added as appropriate. They are meant to be illustrative; the curriculum planner might add many more.

THE ROLE OF THE COURSE OF STUDY IN CURRICULUM DEVELOPMENT

Curriculum development might be thought of as comprising three stages:
• Selecting and analyzing content
• Organizing content
• Selecting instructional strategies

Most of this Course of Study is concerned only with selection of content. The goal clusters and vignettes provide some directions and illustrations for organizing content, and the vignettes also suggest instructional strategies in a limited way.

By focusing on the selection of content and providing a document where the major content of all curricular areas can be summarized and their relationships noted, this Course of Study, it is hoped, will provide a sound basis for ongoing curriculum development, planning, and implementation.
HOW WAS THE COURSE OF STUDY DEVELOPED?

The Course of Study is a cooperative project sponsored by the boards of education of 55 counties in California. The project is under the general direction of the California State Steering Committee for Curriculum and Instruction and is administered through the Alameda County Office of Education.

The first edition of a cooperatively developed Course of Study based on goals drawn from subject matter frameworks (rather than on concepts from textbooks, as had been done for many years previously) was published in 1974 after a statewide survey of educators at county and district levels had established the general content and organization. A second edition was published in 1976 and a supplement highlighting the commonalities among the various curriculum areas was published in 1978. Both of these editions covered content for kindergarten through eighth grade.

This is the first edition in which there is a uniform format for all curriculum areas. It is also the first edition to extend from kindergarten through the twelfth grade.

Policy and decision making on substantive points were under the direction of a seven-member editorial board. Four members of this board were on the State Steering Committee for Curriculum and Instruction. The remaining members represented potential user groups. The project manager and editor worked closely with this group in periodic meetings and through other channels.

All content was originally drafted by contributors with special knowledge of their curriculum areas. They were selected by the editorial board, which also set the specifications for format; and they represented all geographical areas in the state, as well as different educational settings and types of positions. The project manager and editor worked with all contributors over a six-month period, which included a one-week intensive writing session for the whole group as well as many individual conferences.

Drafts of each curriculum area were sent for review to approximately 800 persons throughout the state. Each reviewer considered one curriculum area. The reviewers represented such potential user groups as classroom teachers, administrators, coordinators, college instructors, and representatives of professional organizations. The returns for each of the curriculum areas ranged from 19 to 50 percent, with a mean of 32 percent. The information from the reviews was a major source of input for the rewriting and editing of each section.

At the suggestion of the editorial board, Helen Wallace, a member of the board, worked with the editor to sort the goals in order to identify commonalities among the areas. The resulting nine goal clusters derived from this process were reviewed by the editorial board.
CURRICULUM AREAS

<table>
<thead>
<tr>
<th>Subject</th>
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<tbody>
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</tr>
<tr>
<td>Business Education</td>
<td>11</td>
</tr>
<tr>
<td>Career Education</td>
<td>20</td>
</tr>
<tr>
<td>Consumer Education</td>
<td>25</td>
</tr>
<tr>
<td>Drama/Theatre</td>
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<td>English Language Arts</td>
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<tr>
<td>Environmental Education</td>
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</tr>
<tr>
<td>Foreign Language</td>
<td>60</td>
</tr>
<tr>
<td>Health Education</td>
<td>65</td>
</tr>
<tr>
<td>Home Economics</td>
<td>74</td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>82</td>
</tr>
<tr>
<td>Mathematics</td>
<td>68</td>
</tr>
<tr>
<td>Multicultural Education</td>
<td>97</td>
</tr>
<tr>
<td>Music Education</td>
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<tr>
<td>Physical Education</td>
<td>109</td>
</tr>
<tr>
<td>Science Education</td>
<td>116</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>125</td>
</tr>
<tr>
<td>Traffic Safety Education</td>
<td>135</td>
</tr>
</tbody>
</table>
Art education deals with the cultivation of students' emotional, subjective, and intuitive responses to visual aesthetic forms as well as the development of an intellectual and rational understanding of art.

Art education's major value is providing that which is unique to art: developing abilities to comprehend, plan, produce, and evaluate visual aesthetic forms. The knowledge and skills which are needed to create and appreciate art forms are complex and require development through a sequentially ordered program.

Art activities allow for the expression of ideas through visual forms in many other areas of the curriculum. These activities provide an opportunity for students to develop knowledge through a medium that can be both complementary and stimulating to knowledge that is gained through other mediums such as reading, writing, and speaking.

Evaluation of learning in art focuses on individual growth in creative expression and in the quality of responses to aesthetic form.
GOAL 1: To develop skills for visual/tactile perception which increase sensitivity to the visual world

The teacher in a second grade class has been developing an art program. She has planned for specific times when students have experiences with visual arts through activities such as painting, drawing, looking at slides, observing the environment, and discussing impressions.

Today the group went on a walk around the neighborhood of the school. The teacher told them to look for shapes in anything they saw. One girl immediately pointed out the shapes of the sidewalk sections. A boy noticed the shapes of the windows in the buildings. The class identified squares, rectangles, and one oval-shaped window. Another student remarked that the front of a building is a larger shape. That led to a discussion of the many shapes within the outer shapes of buildings. One group counted five levels of shapes within shapes.

The group stopped in front of a garden and began to talk about what they saw there. The teacher suggested they look for shapes within shapes as they had done earlier. One student had already remarked on the similarity in the shapes of leaves on a tree. Another had noticed the similarity among flowers of the same species. Now students began comparing the patterns on the leaves. They began to notice how the same pattern was repeated on each leaf of a plant.

The teacher suggested they look for repetition in patterns. She noticed that they had talked about patterns in buildings. Sometimes the same pattern of windows was repeated on each level of a building. One student noticed the repetitive pattern on the columns in front of the building. Another noticed the same repetition in the fence around the garden. Several students identified patterns of color in the way buildings were decorated.

After the walk, the group continued to talk about the shapes and patterns which they saw in school. The teacher showed the class prints and slides of paintings which she selected for identifying shapes and patterns. They also talked about patterns in their clothing.

The students in a fifth grade class were experimenting with the use of different colors both in the forms they were creating and in what they saw in the environment. They were developing understanding about combinations of colors—which colors seemed to be complementary and aesthetically pleasing. The teacher had planned several activities in which the students would have experiences with the hue, value, and intensity of different colors. They had already developed a practical understanding of these concepts through mixing colors and discussing colors they saw in their clothing and in objects around the environment. Different groups of students were developing scrapbooks of different colors, and writing comments about each color sample. Following is one activity the teacher planned for the program.

At the same time, on a number of days, the teacher and students went outside the school building and observed the sky. They divided the sky into sections: near the horizon, around the sun, above their heads, and farthest away from the sun. They described the colors they saw in terms of hue, value, and intensity. Some students took paints outside with them and attempted to recreate the colors as they observed them. Other students made notes on a chart and compared observations on different days. Later, the samples of colors made by the students were attached to the charts. All of the students attempted to find examples of the colors in swatches of cloth or pieces of paper.

The teacher in a seventh grade class had planned a number of activities in which the students would explore the use of positive and negative (empty) space in visual art forms. In one activity, students used paper to cut out forms. Afterwards, they used the cutout portion to create designs. On a walk through the neighborhood, the teacher told students to find forms or shapes that are created in the space between objects such as trees and buildings. The entryway to buildings was one of the forms which was identified. Afterwards, students began discussing the shapes of hallways and other rooms in buildings as negative spaces. Various students found photographs and illustrations of buildings in different parts of the world. These were stimulating for discussions about the use of positive and negative spaces in architecture. In speculating about the reasoning underlying different architectural designs, the students began associating concepts they had learned in other curriculum areas such as science, industrial arts, and social science with the development of aesthetic preferences in building designs.

The teacher displayed photographs and slides of sculpture and the group discussed the use of positive and negative space in these forms. Following this, the group made a field trip to observe several pieces of sculpture in the community. Fortunately, several students were involved in a study of ancient Greek and Egyptian civilizations in a social science class. They made a
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop skills for visual/tactile perception which increase sensitivity to the visual world

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

1.1 To develop awareness of color, shapes, and textures in man-made and natural environments

- Level 1: Observes and discusses uses of natural and man-made objects to create visual forms in the community.

- Level 2: Creates visual forms which reflect natural and man-made forms in the environment.

- Level 3: Analyzes strengths and weaknesses in the quality of the visual environment.

- Level 4: Analyzes needs for aesthetic improvements in the community such as refurbishing public property, and developing public awareness of the needs.

1.2 To develop skills in the use of color, value, texture, and size

- Level 1: Demonstrates combinations of colors, shapes, and textures in both two and three dimensions.

- Level 2: Creates simple visual forms using various textures and colors.

- Level 3: Demonstrates ability to organize and compose a variety of complex visual forms using different textures and colors.

- Level 4: Increases skills for visual recall, including discrimination in the perception and use of colors, values, textures, and sizes.
ART EDUCATION

GOAL 2.0: To develop knowledge and appreciation of the nature of the visual arts in various cultures, both past and contemporary

SAMPLES OF LEARNER BEHAVIORS

<table>
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<tr>
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<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 To develop an awareness of major artistic movements, past and present</td>
<td>Discusses personal reactions to a variety of visual art forms.</td>
<td>Discusses similarities and differences in the work of two artists from the same historical period.</td>
<td>Visits art collections in museums, studios, and galleries, and describes similarities and differences in art produced in various times and places.</td>
<td>Discusses the influence of society on art and of art on society.</td>
</tr>
<tr>
<td>2.2 To develop the ability to use awareness of the history of art in visual expression</td>
<td>Recreates specific examples of artwork that have been used in celebrations in various cultures such as masks, statues, and costumes.</td>
<td>Demonstrates use of mood and feeling that reflects art forms past and present in own artwork.</td>
<td>Verbally or visually describes contributions of various ethnic groups to American art.</td>
<td>Uses artwork of different cultures and times as source of inspiration in the creation of visual forms.</td>
</tr>
</tbody>
</table>

GOAL 3.0: To cultivate respect for originality in visual expression

SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 To develop a personal style for visual expression</td>
<td>Uses a variety of subjects as a basis for individual work.</td>
<td>Translates moods and feelings into visual form.</td>
<td>Uses major artistic styles from specific periods and cultures in creating visual forms.</td>
<td>Explores one medium (e.g., painting, printmaking) in depth to develop personal style.</td>
</tr>
<tr>
<td>3.2 To develop skills for differentiating and analyzing forms of creative expression</td>
<td>Discusses differences and similarities in work by self and peers.</td>
<td>Uses various forms of creative expression such as music and poetry as a source of inspiration for creating visual forms.</td>
<td>Demonstrates skills in constructive criticism of the structure of visual forms.</td>
<td>Discusses the similarities and differences among the various arts (e.g., music, poetry, drama).</td>
</tr>
</tbody>
</table>
GOAL 4.0: To make aesthetic judgments in the visual arts

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

4.1 To examine works of art with respect to aesthetic meanings, sensory qualities, styles, materials, and the processes used to create them.

4.2 To continually expand the range of vocabulary used in relation to visual art forms.

4.3 To develop awareness of the historical development of visual art forms in relation to social, political, and commercial purposes.

4.4 To demonstrate skill in using creative expression as a means of bringing about constructive action to solve social and environmental problems.

Level 1

Describes visual qualities in natural and man-made forms and in works of art.

Uses appropriate new terms in discussing visual art forms.

Discusses the use of art and artists in the local community.

 Learns songs, reads stories, views plays, and studies pictures on environmental subjects. Identifies and expresses positive and negative feelings generated by each example.

Level 2

Interprets expressive qualities such as action, anger, and happiness in visual forms.

Demonstrates increasing ability to describe works of art in discussions with peers.

Describes uses of the visual arts in popular media such as advertising art, television, and film.

 Writes simple stories and poems, writes or participates in plays, performs music, and creates art forms to express personal feelings about the environment and its resources.

Level 3

Uses resource materials such as books, prints, periodicals, films, and slides as a basis for aesthetic judgments.

Writes about works of art, both contemporary and historical.

Visits collections of original works of art and discusses specific works in historical context.

Studies historical examples of how artistic expression influenced various social events (e.g., Uncle Tom's Cabin, slavery; "We Shall Overcome," civil rights; Grapes of Wrath, 1930's social conditions).

Level 4

Uses a rational argument to explain judgments of aesthetic quality.

Demonstrates adequate command of terminology to discuss and write about artworks.

Discusses art movements from specific periods (e.g., impressionists).

Identifies specific environmental problems in the community, state, nation, or world, and develops one or more forms of artistic expression to apply to specific environmental problems.

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

California Art Education Association
W. Dwayne Greer, President
4665 Lampson Ave.
Los Alamitos, CA 90720

The Painted Monkey
Barbara Herberholz, Editor
5730 Classic Pl.
Carmichael, CA 95608

National Art Education
Elliott Eisner, President
1916 Association Dr.
Reston, VA 22091

Publications:
Art Education
Art Teacher
BILINGUAL-BICULTURAL EDUCATION

POINT OF VIEW

The major purpose of bilingual-bicultural education is to provide students whose primary language is other than English with equitable access to the knowledge and skills which will enable them to participate actively and effectively in all aspects of society. It also affords the opportunity for other students to learn more than one language, and to relate to the peoples of other cultures.

Students' primary language and culture is maintained, further developed, and utilized as a means of instruction in the content areas. At the same time, students' capabilities to use English in the instructional process are developed in a systematic and sequential manner. As students acquire skills in their own language and in English, they will be able to participate in the educational program in both languages.

Within this framework the importance to the individual of maintaining ties with home and community is emphasized. Students are able to develop further awareness of and respect for the language and culture of their backgrounds. Additionally, unfamiliarity with the language of instruction is not a barrier to learning, and students are motivated to remain in school and pursue a post-secondary education.

Another purpose of bilingual-bicultural education is to develop students' awareness, understanding, and respect for members of other language, ethnic, and cultural groups. As all participating students develop the facility to communicate in more than one language and within the context of diverse cultures, they develop an understanding of the contributions which linguistic and cultural pluralism can make to the development of responsible citizens.

Bilingual-bicultural education offers the unique opportunity for students to experience a linguistically and culturally pluralistic society within a particular school setting.
GOAL 2: ENGLISH AS A SECOND LANGUAGE — To develop the ability to communicate in English by students whose primary language is other than English

LEVEL 1

Aural Comprehension of Prepositions
The students are given four items (e.g., chalk, pencil, crayon, eraser) and an empty box. The teacher then gives a series of commands to which the students respond with action.

"Put the chalk in the box."
"Put the pencil beside the box."
"Put the eraser behind the box."

Next, two sets of objects and two empty boxes are placed across the room from two students. The teacher gives a series of commands. The students complete the tasks and return to their starting positions. The first one finished is the winner. Repeat with other students.

LEVEL 2

Sound Discrimination
This is a short listening activity used for practice in sound discrimination. The sound difference should be difficult for the speakers. For example, dominant Spanish speakers commonly have difficulty distinguishing the /i/ sound as in ship and the /e/ sound as in sheep. Presenting these sounds in pairs helps the students distinguish the difference. Use several pairs of pictures for each word.

Example: ship - sheep  mitt - meat
       hit - beet   dip - deep

LEVEL 3

Patterns of Stress as Used in the English Language
The teacher reads a list of words and the students underline the part of the word with the loudest stress.

mother father visited
paper baseball piano

Next, the teacher reads sentences and the student underlines the word in the sentence which receives the most stress. Repeat stressing different words to imply different meanings.

He’s eating his dinner.
I’m studying English.
Let’s have lunch.

LEVEL 4

Listening and Making Inferences
The teacher reads sentences which relate one side of a telephone conversation. The students fill in conversation from the other end of the line.

Teacher
John isn’t home now.
may I take a message?

Students
— May I speak to John?
— Is John home?
— Let me speak to John.

DEFINITIONS

Bilingual-Bicultural Education
A program which uses two languages for instruction, one of which is English. The goal is to enable students to achieve competency in both languages. The program includes:

- Daily instruction in English language arts
- Development of language arts skills in the pupil's primary language
- Selected subjects taught in the pupil's primary language
- Experiences with the cultures associated with the languages

Full Bilingual Instruction
A program in which basic skills are developed in both languages. Instruction is provided in both languages in required content areas.

Partial Bilingual Instruction
A program in which language arts skills are developed in both languages, but the language in which the student functions best is used for instruction.
**GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING**

**GOAL 1.0: LANGUAGE MAINTENANCE — To maintain and develop the primary language skills of students whose primary language is other than English**

**SAMPLES OF LEARNER BEHAVIORS**

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>LEVEL 1</th>
<th>LEVEL 2</th>
<th>LEVEL 3</th>
<th>LEVEL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 To demonstrate competence in communicating through the use of description, dialog, explanation, and appropriate form</td>
<td>Responds to verbal directions.</td>
<td>Distinguishes between accurate and inaccurate statements.</td>
<td>Uses verbal information to relate an event.</td>
<td>Listens to and analyzes a formal speech.</td>
</tr>
<tr>
<td>1.2 To speak the language comprehensively</td>
<td>Describes the physical attributes and functions of objects.</td>
<td>Explains and demonstrates how products are made.</td>
<td>Describes a series of events that may have led up to a circumstance.</td>
<td>Discusses problems and solutions.</td>
</tr>
<tr>
<td>1.3 To comprehend the written language</td>
<td>Recalls the main idea of a story.</td>
<td>Selects the topic sentence of a paragraph.</td>
<td>Infers the cause of an event in a story.</td>
<td>Comprehends dialectal varieties used by characters in a reading selection.</td>
</tr>
<tr>
<td>1.4 To write the language comprehensively</td>
<td>Describes a personal feeling.</td>
<td>Describes similar events in different cultural settings.</td>
<td>Expresses one idea, using different writing styles.</td>
<td>Writes informal dialog for a skit.</td>
</tr>
<tr>
<td>1.5 To recognize and use modes of nonverbal communication</td>
<td>Demonstrates gestures used in different cultures.</td>
<td>Uses gestures in place of verbal expression.</td>
<td>Uses appropriate nonverbal communication.</td>
<td>Explains differences and similarities in the use of nonverbal communication in different cultures.</td>
</tr>
</tbody>
</table>

**GOAL 2.0: ENGLISH AS A SECOND LANGUAGE — To develop the ability to communicate in English by students whose primary language is other than English**

**SAMPLES OF LEARNER BEHAVIORS**

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<tr>
<td>2.1 To comprehend the spoken language</td>
<td>Aurally discriminates new sounds.</td>
<td>Discriminates pitch in statements that express commands, surprise, questions, etc.</td>
<td>Uses affixes and verb tenses correctly.</td>
<td>Explains meaning implied by intonation.</td>
</tr>
</tbody>
</table>
OBJECTIVES

2.2 To speak the language comprehensively

Level 1: Uses greetings appropriate to particular situations.

Level 2: Uses correct pronunciation.

Level 3: Demonstrates the use of pitch to signal simple statements that express commands, questions, surprise, etc.

Level 4: Uses intonational patterns appropriately.

2.3 To comprehend the written language

Level 1: Comprehends the sound-symbol relationship of the new language.

Level 2: Understands grammatical symbols used in English.

Level 3: Demonstrates how the meaning of a word can change in different contexts.

Level 4: Explains dialectal differences in reading selections.

2.4 To write the language comprehensively

Level 1: Demonstrates the ability to use English sound-symbol relationships in writing from dictation.

Level 2: Writes brief stories describing events (e.g., holidays) in the culture of the language being studied.

Level 3: Uses common idioms in writing.

Level 4: Uses technical vocabulary related to a content area.

2.5 To recognize and use modes of nonverbal communication

Level 1: Demonstrates gestures used in different cultures.

Level 2: Uses gestures in place of verbal expression.

Level 3: Uses appropriate nonverbal communication.

Level 4: Explains differences and similarities in the use of nonverbal communication in different cultures.

GOAL 3.0: MULTICULTURAL EVALUATION — To preserve and strengthen understanding and respect for one's own language and culture and to develop an appreciation of the language and culture of others

OBJECTIVES

3.1 To develop an awareness and appreciation of cultural pluralism in this society

Level 1: Compiles a list of words used in English which are borrowed from other languages.

Level 2: Lists expressions which are commonly used in two languages.

Level 3: Describes a similar event as it is celebrated in two cultures.

Level 4: Creates a skit which contrasts behavior patterns in two cultures.

3.2 To demonstrate respect for and acceptance of the heritage of self and others

Level 1: Describes characteristics of one’s own heritage and of others.

Level 2: Analyzes the diverse ways, manners, customs, and life-styles of people from different cultural groups in the United States.

Level 3: Analyzes the contribution that one cultural group has made to the broader culture in the United States.

Level 4: Analyzes the factors that cause own and other cultural groups to remain distinct in the United States and the factors that cause cultural groups to be absorbed in the broader culture.

BILINGUAL-BICULTURAL EDUCATION
GOAL 4.0: SECOND LANGUAGE LEARNING — To develop the ability of English-speaking students to use more than one language in a bilingual-bicultural setting

SAMPLES OF LEARNER BEHAVIORS

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</thead>
<tbody>
<tr>
<td>4.1 To comprehend the spoken language</td>
<td>Responds to verbal instructions.</td>
<td>Aurally discriminates new sounds.</td>
<td>Explains differences in the use of pitch between languages.</td>
<td>Explains differences in the use of intonation between languages.</td>
</tr>
<tr>
<td>4.2 To speak the language comprehensively</td>
<td>Translates greetings used in both languages into the other language.</td>
<td>Uses correct pronunciation in both languages.</td>
<td>Demonstrates the ability to use pitch appropriately in both languages.</td>
<td>Interprets material heard in one language into the other language.</td>
</tr>
<tr>
<td>4.3 To comprehend the written language</td>
<td>Reads in the visual direction of the language being learned (right-left, up-down).</td>
<td>Compares syntactical structures used in both languages.</td>
<td>Demonstrates how the meaning of a word can change in different contexts in both languages.</td>
<td>Translates reading from one language to the other.</td>
</tr>
<tr>
<td>4.4 To write the language comprehensively</td>
<td>Uses sound-symbol relationships correctly in writing from dictation.</td>
<td>Uses different writing styles to express an idea.</td>
<td>Writes a brief composition.</td>
<td>Translates technical terms in the content areas from one language to the other language.</td>
</tr>
<tr>
<td>4.5 To recognize and use modes of nonverbal communication</td>
<td>Demonstrates gestures used in different cultures.</td>
<td>Uses gestures in place of verbal expression.</td>
<td>Uses appropriate nonverbal communication.</td>
<td>Explains differences and similarities in the use of nonverbal communication in different cultures.</td>
</tr>
</tbody>
</table>

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

Modern Language Association (MLA)
62 West Fifth Ave.
New York, N.Y. 10011
Publication: Modern Language Journal

Teachers of English to Speakers of Other Languages (TESOL)
School of Languages and Linguistics
415 Nevils Building
Georgetown University
Washington, D.C. 20007
Publication: TESOL Journal
The business education program has two components: office education and distributive education. Office education prepares students for employment or advancement in occupations related to the facilitating function of an office. Specific office education programs include, but are not limited to, the following:

- Accounting and computing
- Business data processing systems
- Filing, office machines, and general office clerical functions
- Materials support
- Personnel and training
- Supervisory and administrative management
- Stenographic, secretarial, and related functions
- Typing
- Information communications

Distributive education includes study and activities related to the flow of goods and services from the producer to the consumer. Specific distributive education programs include, but are not limited to, the following:

- Advertising services
- Apparel and accessories
- Financial credit
- Food services and distribution
- Insurance
- Marketing and merchandising
- Real estate
- Recreation and tourism
- Transportation
- Hotel and lodging

A business education program at the high school level is designed to prepare students with the skills, attitudes, and understandings that are necessary to perform in entry-level positions. The program can be organized around the competencies required for a cluster of distributive and office occupations or around traditional courses.

Student performance in either program should be assessed in terms of minimal industrial requirements for entry-level positions. An evaluation design also should include a review and assessment of program content in terms of current business practices. New techniques and equipment in the business community sometimes create a need for changes in the business education curriculum.

The business education curriculum has a general education component that is interwoven through many business subjects. This component focuses on the development of personal business skills for the management of personal affairs and the selection of goods and services that are available from business, industry, and government. Through this component students also develop a general understanding of business in relation to the economic system of this country. Additional emphasis is placed on developing students' awareness of the world of work and knowledge about career opportunities and the preparation necessary for specific careers in business.

Business education programs operate at the grade levels which correspond to Levels 3 and 4 in this Course of Study. Vignettes and goal statements for Levels 1 and 2 have not been included.
GOAL 2: To understand and use appropriate forms, styles, and procedures in oral and written business communication

LEVEL 3

The instructor prepares students to type a simple manuscript by explaining, demonstrating, and furnishing examples of the use of formats, superior numbers, single space quoted materials, and the use and preparation of backing sheets. Transparencies and overlays are used to illustrate the sequential steps in instruction.

Students learn about format and placement through drill on setting up and typing the separate parts of a manuscript such as the title and first paragraph on the first page, quoted material, footnotes, and the heading and first paragraph on subsequent pages.

LEVEL 4

Students learn how to estimate letter length, and lengthen or shorten the appearance of a letter to achieve a balanced look on the page. The instructor assigns tasks that give students opportunities to make decisions in using these skills.

Practice materials are helpful in providing a wide range of experiences with letter forms. Students progress individually. Instructors give timings to the entire group on letters and letter parts at appropriate intervals. Students can use the results to assess the gains they have made in skill development.

Students can use a teacher's key for feedback about their placement decisions. Because a format is a visual display and should be treated as a totality, students should use the key after typing the letter when the format is completed.

At the beginning instructions are detailed and teachers work with individuals, explaining and demonstrating on a one-to-one basis. As students develop their skills, they work more independently. Eventually, students have the same responsibilities for their work in the classroom as they would have in a business situation.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop knowledge and skills necessary for entry-level employment or admission to advanced training in one or more of the following occupational areas: general clerical, marketing and distribution, secretarial, accounting, and management

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

1.1 To demonstrate competency for any business occupation with skills in the use of the adding machine; basic data processing concepts; making change; basic math computations; using references, manuals, directories, and catalogs; and sorting, checking, and verifying data

Uses the National Zip Code Directory to obtain the zip code for business addresses in various cities.

Accurately answers requests for information using an almanac.
OBJECTIVES

1.2 To demonstrate competency for an entry-level general clerical position with skills in duplicating materials, filing and retrieving documents, handling incoming and outgoing mail, managing petty cash, and typing rapidly and accurately.

1.3 To demonstrate competency for an entry-level position in marketing and distribution with skills in basic sales techniques, cashiering, customer services, sales promotion, stock keeping and inventory control, and knowledge of the basic principles of advertising, creative selling, and display.

1.4 To demonstrate competency for an entry-level secretarial position with skills in transcribing dictation taken from a machine or another person, typing rapidly and accurately, duplicating materials, filing and retrieving documents, handling incoming and outgoing mail, and managing petty cash.

1.5 To demonstrate competency for a position in accounting with skills in maintaining and interpreting financial reports, using appropriate accounting procedures and classifications for various forms of business ownership, and interpreting certificates of incorporation.

1.6 To demonstrate competency for a position in management with knowledge of the general functions of management, elements of business organizations, classification of management personnel, ways in which businesses establish policies, and ways in which management decisions are influenced by various formal reports.

GOAL 2.0: To understand and use appropriate forms, styles, and procedures in oral and written business communication

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

2.1 To demonstrate knowledge of technical skills which aid effective writing (e.g., ability to write legibly, organize materials and ideas; spelling, punctuation, and grammar skills; and proofreading, editing, and evaluation skills).

GOAL 2.0: To understand and use appropriate forms, styles, and procedures in oral and written business communication

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

2.1 To demonstrate knowledge of technical skills which aid effective writing (e.g., ability to write legibly, organize materials and ideas; spelling, punctuation, and grammar skills; and proofreading, editing, and evaluation skills).

BUSINESS EDUCATION

Level 3

Types for five minutes on material of average difficulty at a rate of 25 words per minute with no more than one error per minute.

Level 4

Types a transmittable copy and carbon copies, if indicated, of a handwritten draft with no errors.

Lists possible ways of reducing losses resulting from inventory shortages in stores.

Takes dictation at 90 words per minute and types a transmittable letter from notes, making the appropriate number of copies and typing a corresponding envelope.

Compiles a profit and loss statement for a business.

Level 4

Composes and types a routine letter to a customer, answering a request for information.
BUSINESS EDUCATION

OBJECTIVES

2.2 To demonstrate the ability to evaluate choice of language in written work (e.g., economy of expression, avoidance of irrelevancies, clarity of meaning, and a style that is appropriate to the purpose)

2.3 To demonstrate the ability to apply techniques of letter writing to business and personal use letters

2.4 To demonstrate knowledge of the accepted formats, elements, and placement of elements of business letters, manuscripts, and reports

2.5 To demonstrate knowledge of factors affecting the clarity and accuracy of interpersonal communications (e.g., articulation of words, choice of language, gestures, and intentions and expectations of speaker and listener)

2.6 To demonstrate knowledge of the purposes for listening in a variety of situations (e.g., to receive information or instructions)

2.7 To use appropriate strategies to clarify the meaning of what is heard (e.g., asking questions for specific information, locating, and using supplementary information)

Level 3

Uses dictated notes to compose simple memos that present content in a clear and efficient manner.

Types a simple manuscript using proper format and footnote placement.

Converses spontaneously with another student using standard pronunciation, diction, vocabulary, and grammar.

Given a set of oral instructions requiring the completion of an activity or action, completes the activity or action satisfactorily.

Asks the speaker to repeat the instructions when not sure how to proceed.

Level 4

Rewrites and types an unedited business letter so that the corrected letter is clear, concise, and courteous.

Composes and types a response to an incoming piece of correspondence that conveys the message in accepted style and format with no errors in punctuation, grammar, spelling, or word usage.

Types a two-page letter with no discernible corrections, using accepted style and including all necessary letter parts.

Prepares and presents an oral report based on articles in trade journals or business publications, and demonstrates the ability to speak clearly and in a businesslike manner.

Given role playing situations involving customer complaints, listens and handles the complaint courteously and to the customer's satisfaction.

Restates the instructions given and asks the speaker to verify that restatement is correct.
OBJECTIVES

2.8 To use appropriate business telephone techniques for placing calls and conducting conversations

GOAL 3.0: To develop work habits and values that contribute to successful performance in a business environment

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

3.1 To demonstrate effective work habits of punctuality, good attendance, completing assigned tasks on time, staying with a task until it is completed, and willingness to do assigned tasks

3.2 To demonstrate employable traits of honesty, integrity, loyalty, and sincerity

3.3 To work cooperatively with others, and maintain a pleasant and helpful attitude, respecting differences in the cultural background and personal characteristics of co-workers

GOAL 4.0: To evaluate opportunities for employment and training in business occupations in terms of personal interests and abilities

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

4.1 To learn about entry-level and advanced employment opportunities in each of the general categories of business occupations

BUSINESS EDUCATION

Level 3

Uses appropriate language and responds courteously and spontaneously with a pleasant voice in typical business telephone conversations.

Level 4

Operates a switchboard in typical situations to complete incoming-to-extension calls, extension-to-outside calls, extension-to-extension calls, switchboard-to-outside calls, calls to hold, and multiple calls.

Level 3

Works courteously with co-workers, and treats teachers and classmates with respect.

Level 4

Offers to help co-workers when completing assigned tasks.

Level 3

Cites examples of loyal behavior toward friends and co-workers.

Level 4

Cites examples of loyal behavior toward employer in given situations.

Level 3

Maintains a friendly, pleasant attitude with fellow classmates.

Level 4

Maintains a friendly, pleasant attitude while dealing with an irate customer in a simulation exercise.

Level 3

Lists five categories of business occupations and several job titles within each category.

Level 4

Describes the differences between entry-level and advanced positions within a selected category of business occupations.
BUSINESS EDUCATION

OBJECTIVES

4.2 To become aware of mental, physical, and personal characteristics that are commonly valued in business

4.3 To identify specific requirements and additional background required for entry into occupations

4.4 To identify training or experience that is required or desirable for advancement in occupations

4.5 To describe how various career choices affect the environment and its resources

4.6 To select courses, programs, or schools appropriate to personal qualifications, interests, and career plans

GOAL 5.0: To use job search techniques successfully

SAMPLES OF LEARNER BEHAVIORS

5.1 To demonstrate knowledge of sources for finding employment (e.g., school placement service, friends, personnel offices, employment agencies, classified ads)

Level 3

Lists characteristics such as manual dexterity, alertness, honesty, loyalty, and perseverance as those that are commonly valued by employers of secretaries.

Researches and lists specific skills and educational background required for entry into the accounting field.

Researches and describes a career ladder in a specific business occupational category.

Gains firsthand experiences with various agencies in the community and evaluates the effect of their operations on the environment (e.g., federal and state resource management agencies, factories, service organizations).

Uses the high school course description booklet to select business courses.

Level 4

Lists mental and personal characteristics valued by employers when considering employees for promotion in clerical occupations.

Identifies several educational institutions where advanced training in the field of accounting can be obtained.

Lists the training and experience required for advancement from an entry-level business occupation to a higher level position.

Evaluates career alternatives as to their effect on the environment (e.g., park rangers, environmental technologists).

Identifies courses necessary for employment in chosen occupation.

Develops a plan for a job search that includes the use of several sources.
OBJECTIVES

5.2 To demonstrate knowledge of steps for applying for a job (e.g., letter of application, data sheet, application blank, interview, follow-up)

5.3 To demonstrate ability to fill out an application blank and to prepare a letter of application, a personal data sheet, and a follow-up letter

5.4 To demonstrate ability to conduct an interview when applying for a job (e.g., dressing appropriately, taking necessary documents, knowing what to say, when to leave, and how to follow up)

GOAL 6.0: To use appropriate business principles, procedures, and skills in managing personal affairs

SAMPLIES OF LEARNER BEHAVIORS

OBJECTIVES

6.1 To keep records of personal income, savings, and expenditures, and to prepare a personal budget

6.2 To demonstrate the ability to manage a personal bank account (e.g., complete forms, make deposits, keep records)

6.3 To demonstrate knowledge of types of investments (e.g., bank accounts, credit union shares, real estate, stocks)

BUSINESS EDUCATION

Level 3

Uses one method to record income and expenditures for self or others over a two-month period.

Level 4

Prepares a budget based on perceived needs and a specific income.

Level 3

Level 4

Level 4

Uses the bank statement and returned checks to balance records in a simulation exercise.

Summarizes advantages and disadvantages of different types of investments.

Analyzes the distinguishing features of savings and investment plans available from different institutions.
BUSINESS EDUCATION

OBJECTIVES

6.4 To demonstrate knowledge of factors involved in planning an insurance program (e.g., coverage, amount needed, cost)

6.5 To demonstrate knowledge of the elements and types of contractual agreements and the personal responsibilities in completing a contract

6.6 To demonstrate knowledge of the sources and kinds of credit and criteria upon which credit approval is based

GOAL 7.0: To gain knowledge and skills necessary to perform the personal, social, political, economic, and ecological responsibilities of a citizen in the conduct of business affairs

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

7.1 To demonstrate knowledge of the ways in which federal and state laws regulate credit

7.2 To demonstrate knowledge of personal, societal, and marketing factors which influence the purchase of goods and services (e.g., age, sex, needs, status, economy, advertising, pricing)

7.3 To demonstrate knowledge of alternatives open to consumers interested in preventing or correcting consumer abuses (e.g., reports, participation in consumer interest groups, Better Business Bureau, legal remedies, social action)

Level 3
Identifies personal risks for which insurance is needed.
Identifies important items a person should look for when signing a credit contract.
Lists advantages and disadvantages of borrowing from others.

Level 4
Evaluates various insurance programs that would assist in the achievement of long-term financial goals.
Assesses legal responsibilities and obligations stated or implied in several contracts.
Explains how credit ratings are determined and how they affect one's ability to obtain credit.

Level 3
Identifies risks taken when lending or borrowing money.
Identifies factors that influence choices when buying products or services.

Level 4
Cites major federal and state laws which regulate consumer credit.
Interprets effects of the increasing complexity and sophistication of the marketplace on consumers.
Examines ways in which consumer protection agencies and consumer organizations assist consumers with legal problems and provide avenues of recourse.
OBJECTIVES

7.4 To demonstrate knowledge of the rights of both sellers and consumers

7.5 To demonstrate knowledge of the economic system in the United States including concepts of capitalism, free enterprise, and supply and demand

7.6 To demonstrate knowledge of the ways in which state and local governments regulate business structures and practices (e.g., taxation, licensing, zoning)

Level 3

- Examines ways in which the government protects the consumer.
- Identifies personal roles as consumer and producer in the economy.
- Describes legal requirements for establishing a specific business.

Level 4

- Explores ways in which competition can act as a control on quality and prices of goods and services.
- Explores ways in which competition can act as a control on quality and prices of goods and services.
- Analyzes ways in which business tax rates vary with the type of tax levied.

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

American Vocational Association (A.V.A.)
2020 N. 14th St.
Arlington, VA 22201
Publication: Vocational Education

California Business Education Association (CBEA)
P.O. Box 633
Los Altos, CA 94022

National Business Education Association (NBEA)
1906 Association Dr.
Reston, VA 22091
Publication: Business Education Forum
CAREER EDUCATION

POINT OF VIEW

The primary purpose of career education is to assist students in the development of their careers through a collaborative effort that includes school, home, and community. Career education is a process that begins in early childhood and continues after formal schooling throughout the life of an individual. Educators from each curriculum area cooperate in providing a broad approach to the economic, social, and psychological development of all students.

Career education is not an add-on to curriculum. It is infused at all levels into many aspects of each subject matter area. Subject matter specialists and career educators cooperate to analyze a program for content and instructional strategies that help students develop the knowledge and skills they need in planning and implementing their careers. Additional content is infused into instruction, guidance, work experience, and extracurricular activities.

With the cooperation of business, industry, labor, and other community resources students are offered opportunities to assess their capabilities and aspirations; to develop goals for personal, social, educational, and occupational development; to make choices about life-styles and values; and to develop decision-making and problem-solving skills in relation to career development.

Career education is unique in its reliance upon collaboration among educators, and between the school and the community. Each group brings a different expertise to this endeavor. Both the school and the community profit from this collaboration and increase the chance for success in their common goal of career satisfaction for all individuals.
GOAL 3: To weigh significant factors in career-related decisions including personal interests, aptitudes, and abilities, and the implications of the decision alternatives for life roles as citizen, user of leisure, and family member

LEVEL 1

The teacher in a second grade class is developing students' awareness of the variety of occupations which people are employed in within the community. The class takes a few field trips to see and interview people at their places of work. Groups of students develop reports about these trips and the class makes a chart, using materials from a variety of sources, to describe and classify the various occupations. The class discovers that it is possible to classify a single occupation in more than one way. For example, occupations can be classified by the training required and the skills that are essential for successful performance.

The teacher develops a set of worker cards briefly describing one occupation on each card. The information on the card is taken from the chart which the class develops. The teacher distributes the cards and small groups of students discuss among themselves how to classify the occupations. One group decides to sort the cards into two categories—producers of goods and providers of services. The teacher asks the other group to sort their cards using the same categories. Afterwards, the groups compare the cards in each category.

As a follow-up, the students look through magazines and newspapers and cut out pictures of people at work. The pictures are put in a box and used as material for independent activities such as sorting or story writing. Students record the categories which the cards are sorted into.

LEVEL 2

The teacher in a fifth grade class is developing learning experiences that will enhance children's understanding of the ways in which occupations can be described. For example, in one activity students group themselves according to physical differences (e.g., height, weight), likes, dislikes, hobbies, leisure time, and preferred activities in school. The results are recorded on a chart. Students analyze the chart for any consistencies among the groups.

In another activity, students keep a diary of their activities for one week. Each student shares the diary with the class and the group develops a report about the variety of activities in which students were engaged. Activities are grouped into a number of categories and, subsequently, the group relates the categories to job titles. At another time, the students use these categories as the starting point for a brainstorming session about the differences in jobs such as: training required, salary, responsibilities, advantages, and disadvantages.

LEVEL 3

Students in an eighth grade class develop a plan for obtaining information about a number of jobs. Afterwards, each student selects a career area with personal interest, and outlines a process on "how to obtain a job." The following list includes examples of the information the students may decide they need to develop a description of the jobs.

- Name of occupation
- Description of work to be performed
- Educational requirements
- Training time necessary
- Worker traits
- Working conditions
- Identification of industries which hire these workers

LEVEL 4

Students in a twelfth grade class are studying about a number of careers which they have an interest in examining in terms of further education and training. They identify various persons in the community who are knowledgeable about these occupations. They invite these persons to come and speak to the class about different aspects of each occupation. Prior to each visit the students brainstorm about the types of information in which they are interested. A list of questions is sent to each speaker. These questions include requests for information about specific requirements (e.g., educational background) and more general information (e.g., nature of work, personality traits).

As part of their study, students read a number of books on job search techniques. They use the information in discussions to design resume forms that are suitable for different occupations about which they have studied. Each student completes a resume which is reviewed by the class for form and content.

The students ask several speakers to send them application forms which are used by the personnel offices in the different companies the speakers represent. Each student completes the different application forms and, again, the class reviews and discusses the results, using criteria which the speakers have given them for completeness of the information and neatness.

They also ask each of the speakers to talk about interview procedures. They use the information given by the speakers in role playing interview situations.
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To understand and value the importance of work for the individual and society

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

<table>
<thead>
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<tbody>
<tr>
<td>1.1 To recognize the importance and contribution of all work to society</td>
<td>Describes work performed at school and home.</td>
<td>Identifies different kinds of work people do and some contributions each one makes to the community (e.g., telephone installer, trash collector, nurse, delivery person, police officer).</td>
<td>Describes the impact of work on one's life and the need to make a meaningful career choice.</td>
</tr>
<tr>
<td>1.2 To demonstrate understanding of the wide range in degree and kinds of satisfaction derived from school and work</td>
<td>Describes feelings when completing a task successfully.</td>
<td>Describes how work roles contribute to personal well-being.</td>
<td>Analyzes individual occupations for growth and development opportunities and describes the interrelationship among occupations.</td>
</tr>
<tr>
<td>1.3 To understand the contribution that individuals' roles make to group or community success</td>
<td>Identifies jobs necessary to maintain the community (e.g., grocer, teacher, police officer, street maintenance worker).</td>
<td>Demonstrates ability to work cooperatively with other members of a group to accomplish an assigned task.</td>
<td>Identifies the interpersonal skills required for a specific occupational title.</td>
</tr>
</tbody>
</table>

GOAL 2.0: To develop knowledge and understanding of the relationship of the career role of worker to other career roles and life-styles including citizen, family member, and user of leisure

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

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<tr>
<td>2.1 To understand roles of self and others as family members, users of leisure, students, and citizens</td>
<td>Gives examples of good citizenship at home and in school.</td>
<td>Compares the various leisure-time activities of family members and friends.</td>
<td>Identifies rights and responsibilities of oneself to others in a family or school setting.</td>
</tr>
</tbody>
</table>
OBJECTIVES

2.2 To understand the ways in which an occupation contributes to life-style and personal fulfillment

Describes ways in which an earned salary can be used to enhance life-style and personal fulfillment.

Level 1

2.3 To demonstrate positive attitudes about various life-styles and social and work roles, at different occupational levels

Identifies three occupations that provide services for people in the community.

Level 2

Level 3

Compares a variety of life-styles with specific occupations to determine which life-styles would be realistic for each occupation.

Discusses work roles of doctor, nurse, therapist, technician, and medical receptionist and describes probable life-styles for each of these occupations.

GOAL 3.0: To weigh significant factors in career-related decisions including personal interests, aptitudes, and abilities, and the implications of the decision alternatives for life roles as citizen, user of leisure, and family member

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

Level 1

Identifies likes and dislikes in school and home activities.

Describes the influences that have led to the development of interests.

Relates interests and activities to potential career choices.

Selects a job or role based on personal aptitudes, interests, or abilities.

Level 2

Identifies similarities and differences existing in home and school roles.

Researches three jobs and identifies factors that may influence career choice for each (e.g., biologist, truck driver, bookkeeper).

Identifies factors that influence career decisions (e.g., life-style, training required).

Demonstrates ability to reassess career plans at intervals and change if necessary.

Level 3

Level 4

CAREER EDUCATION

Identifies an occupation and develops a budget that includes expenditures for living needs and leisure-time activities, and income based on the typical salary received in occupation.

Interviews someone employed in a particular occupation about opportunities for entry and advancement in that occupational field.
CAREER EDUCATION

OBJECTIVES

3.3 To use a decision-making process in solving personal and career problems

Level 1:
Identifies components of the decision-making process.

Level 2:
Applies the decision-making process to home and social-related problems.

Level 3:
Applies the decision-making process to a study of careers.

Level 4:
Uses the decision-making process to identify career possibilities.

GOAL 4.0: To develop knowledge and understanding of the physical, psychological, and educational requirements of a variety of occupations

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

4.1 To demonstrate knowledge of the U.S.O.E. clusters of occupations

Level 1:
Identifies various occupations within the agricultural cluster.

Level 2:
Compares the duties, working conditions, and benefits to society of the occupations of logger, forest ranger, and sawmill operator.

Level 3:
Compares occupations in the agricultural cluster with those in the construction cluster.

Level 4:
Selects a specific occupation from one of the clusters and observes someone actually working at that job.

4.2 To recognize the relevance of process and content in a school program to occupational requirements

Level 1:
Identifies ways in which oral communication skills are used in occupations in the agricultural cluster.

Level 2:
Identifies ways in which reading skills are used by loggers, forest rangers, and sawmill operators.

Level 3:
Identifies several occupations in the construction cluster and lists ways in which listening skills are important in each of them.

Level 4:
Writes report about the importance of writing skills in specific occupations within the construction cluster.

4.3 To develop basic knowledge, habits, and attitudes needed for competence in a variety of occupations

Level 1:
Identifies acceptable and unacceptable behaviors and attitudes for grocery clerks.

Level 2:
Identifies examples of work habits and attitudes necessary for successful entry into the occupation of firefighter.

Level 3:
Identifies attitudes, behaviors, and educational background necessary for success in the occupation of accountant.

Level 4:
Describes the differences in knowledge and skills required at successive levels within an occupational category.

GOAL 5.0: To acquire job acquisition and marketable skills leading to entry-level employment or enrollment in advanced education programs

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

5.1 To demonstrate appropriate job acquisition skills (e.g., filling out an application, preparing a personal resume, appropriate grooming)

Level 3:
Lists and describes the various job acquisition skills needed when looking for employment.

Level 4:
Completes a sample employment application form neatly and accurately.

5.2 To develop competencies needed for entry into the labor market or for entry into the next educational level

Level 3:
Interviews employees in an occupation and prepares a list of competencies required for the job.

Level 4:
Demonstrates competencies for an identified entry-level occupation.
The major purpose of a consumer education program is to help students develop a satisfying life-style. Life-styles are determined by personal values and goals and wise choices in the use of resources that are available for achieving those goals.

A consumer education program helps students determine the costs and benefits of different choices of life-styles. They develop an awareness of the opportunities and responsibilities which they have as members of a community. They also become knowledgeable about economic and environmental factors which affect and are affected by different life-styles. Part of this knowledge is based on an understanding of how the economic system operates in this country and a recognition of the impact which that system has on the cultural and social aspects of society. On a different level students develop knowledge about the interrelationships between an individual's choices in developing a life-style and the public welfare. For example, understanding the complex connection between taxes and recreational facilities, and between motorcycles and the environment can help individuals make responsible choices.

Exploration of career possibilities is another important part of a consumer education program. Students learn to assess their personal capabilities, limitations, and interests in terms of choosing careers that will help them achieve satisfying life-styles.
GOAL 7: To analyze ways in which the quality of the environment affects and is affected by the lifestyles of individuals

LEVEL 1

In the following activity, teacher and students develop a chart which is a record of the supplies that are needed for a period of one or two weeks in the classroom. In an opening discussion, the teacher asks the group to make a list of the materials which they might use during a typical day in school. Items such as paper, pencils, erasers, and crayons are recorded down one side of the chart. The days during which the survey is to be kept are listed across the top of the chart. During the discussion, the teacher asks each student to make an estimate of the supplies that will be needed for personal use during the period of the survey. For example, the students estimate the number of pencils or the number of sheets of paper for writing or drawing that they will need. The estimates for each item are totaled by a student committee and the teacher writes the estimate on the right-hand side of the chart.

At specified times during the day, members of the class record the amount of supplies which have been used. This should be done twice a day, before lunch and before going home in the afternoon, to assure accuracy. At the end of each week, the numbers are totaled for each item.

At the end of the survey period, the consumption figures are totaled for each item and the group discusses the results. The teacher asks the students to think about whether or not they could use fewer supplies during another survey period of the same duration. The students brainstorm ways in which they could reduce consumption. For example, they might use both sides of paper or they might cut the paper into smaller sizes. After they have recorded several ways in which they might conserve supplies, the group designs another chart and conducts another survey. At the end of the second survey, they total the figures for consumption and compare the results with those of the first survey.

LEVEL 2

The students in a fifth grade class are preparing for a "consumer education dig" on the school grounds. They begin by touring the school grounds and making a list of all the litter which they can see. They divide the school area into zones and groups of students are assigned to patrol each zone. In a discussion, the teacher helps the students to work out a plan for the dig. The students decide:

- To collect the litter at specified times each day
- To sort and classify the litter into disposable and nondisposable groups
- To keep a count of the types and amounts of litter collected during the course of the project
- To compare the appearance of the project area with adjacent areas before, during, and after the project using photographs and written reports
- To identify the major causes of pollution in the school area
- To create a collage using the collected litter
- To create a report using photographs and written materials that will be attractive and easily read in order to inform the rest of the school about the project

LEVEL 3

A fifth grade class is studying the effects which the byproducts of their consumer choices and activities have on the environment of persons who live and work adjacent to the school area. At the beginning of the study the students list the areas in the neighborhood where school-age children might congregate in numbers. Playgrounds, streets used for play, and refreshment concession areas are listed on a chart. Afterwards, the teacher assigns groups of four students to study the pollution in each area. Two students in the group are designated to take slide photographs of the area. The other two students are designated to list all litter and other pollution in the area and to describe the effects which the pollution has on the appearance of the area.

After visiting the assigned area each group works separately to coordinate the slide photographs with the material in the written report. The reports of each group are combined in a single report which is presented to the school.

After the presentation, one group of students leads a discussion asking members of the audience to respond to the following questions:

- What did you see in the pictures?
- How do you feel about it?
- Why do you think these things happen?
- Did you ever participate in an activity like this?
- How would you feel if this were done to your house or property?
What are the costs of vandalism to property owners for repairs; to taxpayers in taxes; to consumers in loss of services and goods; and to the community in the quality of the environment?

LEVEL 4

Students in a twelfth grade class are studying the advantages and disadvantages of the automobile as the primary form of transportation. At the beginning of the study the students are asked to think of the major problems which automobiles create for our society. Following is a list of five major ideas generated by the group:

- Valuable land is used for freeways, highways, and parking lots.
- Automobile exhaust pollutes the air.
- Automobiles cause traffic congestion.
- Automobiles consume fuel and other natural resources.
- Automobiles discourage the development of public transportation systems.

Afterwards, the ideas are typed on a ditto sheet, run off, and distributed to the class. Each student scores the items for importance on a scale from one to five. A score of five indicates the problem is acute. A score of one indicates the problem is not serious. The scores are tallied and reported to the class.

In a subsequent period, students discuss sources for public money to finance efforts to reduce pollution caused by cars. The group agrees on five sources:

- Special taxes such as gasoline or road taxes
- Bond issues for the sole purpose of financing rapid-transit projects
- User fees for riding on a bus or train or using freeways
- Special tax on purchase of cars
- Graduated tax on cars based on size of the engine

Later, the teacher assigns five questions for students to discuss as a group. They take notes during the discussion and afterwards each student writes a response to one question. The issues are:

- Who will bear the major financial cost?
- Who will benefit most?
- Will those who benefit most pay the most?
- Who will be hurt the most?

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To relate personal and family values, goals, and resources to a desired life-style

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

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<tr>
<td>1.1 To analyze personal values and goals in relation to life-styles</td>
<td>Identifies own preferred activities and the purposes for which money is being saved.</td>
<td>Distinguishes own wants and likes from those of others.</td>
<td>Identifies personal abilities and interests that will help to achieve goals.</td>
</tr>
<tr>
<td>1.2 To assess the resources for achieving and maintaining a desired life-style</td>
<td>Identifies personal resources that would be used to obtain a present for mother or father.</td>
<td>Identifies personal resources which could help to accomplish one identified goal.</td>
<td>Analyzes ways in which a resource such as time can be substituted for a more limited one such as money.</td>
</tr>
</tbody>
</table>
## CONSUMER EDUCATION

### OBJECTIVES

**Level 1**
- Identifies likes and wants when faced with a consumer choice.

**Level 2**
- Differentiates between needs and wants when making consumer choices.

**Level 3**
- Applies steps in the decision-making process to consumer choices.

**Level 4**
- Adapts the decision-making process to the nature of the choice and the resources involved.

### GOAL 2.0: To assess potential satisfactions and financial benefits of a career choice in terms of personal values

#### SAMPLES OF LEARNER BEHAVIORS

**Level 1**
- Describes own preferences for activities.

**Level 2**
- Identifies personal skills and competencies which contribute to the family.

**Level 3**
- Assesses personal traits and abilities which could contribute to future success on a job.

**Level 4**
- Relates career goals to personal values, interests, aptitudes, and abilities.

### GOAL 3.0: To relate financial management—including effective use of consumer credit, savings, investment, and insurance—to increased consumer satisfaction and accomplishment of goals

#### SAMPLES OF LEARNER BEHAVIORS

**Level 1**
- Keeps a record of money received and what it is spent on.

**Level 2**
- Develops a simple plan for the use of spending money.

**Level 3**
- Establishes priorities based on needs and wants for the use of personal spending money.

**Level 4**
- Develops a financial plan based on personal values, goals, and present or future income.

### CAREER

**Level 1**
- Identifies family members who work outside the home for income.

**Level 2**
- Identifies sources of personal income and how it is used.

**Level 3**
- Explores personal traits, abilities, and skills which might be used to earn money.

**Level 4**
- Relates investment of time and money in continuing education or training to increased employment opportunities.
OBJECTIVES

3.3 To develop a financial plan which includes the effective use of credit as an economic resource

3.4 To make informed choices in the marketplace that increase consumer satisfaction and economic efficiency

GOAL 4.0: To relate individuals' activities to the national economy

SAMPLES OF LEARNER BEHAVIORs

OBJECTIVES

4.1 To relate basic economic components and the operation of the economic system to roles of consumer, producer, citizen

4.2 To relate the role of financial institutions to the flow of money between segments of the economy

GOAL 5.0: To relate availability and quality of community services to the quality of life of individuals, families, and communities

SAMPLES OF LEARNER BEHAVIORs

OBJECTIVES

5.1 To analyze ways in which public and volunteer services in the community extend the resources of individuals and families

CONSUMER EDUCATION

4.4 To relate availability and quality of community services to the quality of life of individuals, families, and communities

CONSUMER EDUCATION

4.4 Analyzes ways in which consumer choices affect and are affected by the economy.

Examines the ways financial institutions affect and are affected by consumers' activities in the marketplace.

Evaluates the availability and quality of community services when choosing a place to live.
## CONSUMER EDUCATION

### OBJECTIVES

**5.2** To examine the consequences when voting on issues affecting the quality of community services.

**5.3** To analyze the contribution of volunteer programs to the needs of individuals and families in the community.

**GOAL 6.0:** To make an informed choice among a variety of products and services in the marketplace.

### SAMPLES OF LEARNER BEHAVIORS

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<td><strong>5.2</strong> Describe the social benefits provided to all citizens through tax money.</td>
</tr>
<tr>
<td><strong>6.0</strong> To make an informed choice among a variety of products and services in the marketplace.</td>
<td><strong>5.3</strong> Examine volunteer services that could be performed in the school, neighborhood, or larger community.</td>
<td><strong>6.0</strong> Evaluate sources of consumer information for accuracy and reliability.</td>
<td><strong>6.0</strong> Evaluate which programs and services should be provided through taxes for public use when voting on community issues.</td>
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<td><strong>5.3</strong> To analyze the contribution of volunteer programs to the needs of individuals and families in the community.</td>
<td><strong>5.3</strong> Identify services contributed by volunteers in school or in the community.</td>
<td><strong>5.3</strong> Examine volunteer services which would give the most satisfaction and enjoyment.</td>
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OBJECTIVES

6.4 To exercise the right to be heard by communicating needs, preferences, satisfactions, and grievances to business and government

Level 1
Identifies steps to be taken when merchandise is unsatisfactory or defective.

Level 2
Explains appropriate procedures for communicating consumer grievances to the business community.

Level 3
Identifies where a consumer might go for assistance when sellers fail to respond to a reasonable request for recourse.

GOAL 7.0: To analyze ways in which the quality of the environment affects and is affected by the life-styles of individuals and families

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

7.1 To analyze ways in which the consumption patterns of individuals and families affect the quality of the environment

Level 1
Identifies litter problems at school caused by the purchase of snacks.

Level 2
Describes the effects of packaging on waste disposal.

Level 3
Describes how paper and containers used by the fast food service industry have contributed to pollution and depletion of natural resources.

Level 4
Evaluates the effects of consumption patterns on the environment.

7.2 To assume personal responsibility for protecting the environment

Level 1
Identifies practices for reducing pollution.

Level 2
Proposes a plan for eliminating pollution on the school campus and in the neighborhood.

Level 3
Participates in community activities which improve the environment.

Level 4
Evaluates willingness to make sacrifices to improve the environment and conserve scarce resources.

7.3 To understand the effect of the physical environment and the availability of natural resources on human health, comfort and well-being

Level 1
Lists and describes the basic needs of all living things and describes how natural resources are used to supply these needs.

Level 2
Describes the relationship between individual lifestyle choices, environmental health, and resource consumption.

Level 3
Compares living conditions in other countries and at other times in history to contemporary American life in terms of effects on the environment.

Level 4
Observes examples of individual and social behavior in a variety of national and worldwide situations. Describes the effect of these practices on the health, comfort, and well-being of people.

CONSUMER EDUCATION

Level 4
Examines ways in which consumer protection agencies and consumer organizations assist consumers with legal problems and other avenues of recourse.
CONSUMER EDUCATION

GOAL 8.0: To understand the ways in which mass media communicate social and economic standards and values which may influence the life-styles of individuals and families

OBJECTIVES

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<td>8.1 To analyze the ways in which the mass media influence perception of life-styles and standards of living</td>
<td>Describes life-styles of favorite child characters on television.</td>
<td>Analyzes personal values of various television characters who are admired and emulated in own life.</td>
<td>Examines how increased sophistication of and concern for individuality rather than conformity can act as a countervailing force to the mass media.</td>
</tr>
<tr>
<td>8.2 To analyze the ways in which mass media affect consumption patterns of individuals and families</td>
<td>Describes personally desired products advertised on television and explains why they are desired.</td>
<td>Evaluates claims for selected advertisements, using information from other sources (e.g., nutritional value of sugar-coated cereals).</td>
<td>Evaluates the social and psychological appeals of advertising directed toward teenagers.</td>
</tr>
</tbody>
</table>

SAMPLES OF LEARNER BEHAVIORS
DRAMA/THEATRE

POINT OF VIEW

Drama/theatre, in education, offers students the opportunity to express creativity through the use of dramatic imagination in problem solving and communication. Active participation by students in dramatic processes is emphasized from the beginning of schooling. Factual data and dramatic concepts are important inssofar as they are related to actual participation in dramatic processes and enhance students' awareness of their cultural heritage.

Drama/theatre is an interdisciplinary approach to learning, offering techniques for learning from the past, for acquiring and communicating fresh insights, for cultivating sensitivity to the art, for applying basic principles of the art form, and for understanding human motivation and behavior in all ages and places.

The continuum of the drama/theatre process begins at the kindergarten levels and becomes increasingly sophisticated in involvement and practice. At the lower levels dramatic presentations can be infused into many curriculum areas. The process of drama/theatre serves as an aid to self-development, offering a unique opportunity for the re-creation of different times, places, and persons, using total physical, emotional, and mental involvement. At the higher levels drama/theatre frequently incorporates other art forms such as music, dance, design, and literature.
GOAL 5: To develop skills for solving problems in both real and imagined situations using critical, evaluative, and creative methods of drama/theatre techniques

LEVEL 1

The general goal of this activity is to develop understanding of the communication problems that exist when there is a language barrier between people. The teacher asks simple questions such as:
- What if someone came into the room who could not understand what is being said?
- How could he join the class?
- How could you show him he was welcome?
- Show how you would greet him.
- Show how you would make him understand what we are doing.
- Show how he would feel when he could not understand what was being said.

Some students are asked to demonstrate what could be done. Other students perform the role of the foreign student. After each demonstration the teacher asks questions such as:
- How did the actor show he could not understand what was being said?
- How did the actions make clear what we are doing?
- How could it have been made clearer?
- Show what would happen if we continued to do as was demonstrated in week, in a month, in a year?
- What could be done to make ourselves clearer to the one who could not understand us?
- Show us.

The activity can be adapted to a number of situations depending on the problem a teacher might want to present to the group. For example, the new person coming into the classroom could be deaf or to present a different problem, the new person could come from different periods in history.

LEVEL 2

A fifth-grade social science class is studying westward expansion in the United States. Students in a small group discuss how the cultural artifacts of the settlers affected the lifestyles of native Americans. The group decides to develop a dramatic presentation in which an Indian woman watches a settler woman in a wagon train prepare a meal. Using improvisational techniques, several groups of students act out the situation. Whether the cultural artifacts are accepted or rejected at the conclusion of each presentation depends on the development of events within the scene.

Afterwards, the teacher asks the class to consider the historical accuracy of the different presentations. The students review their knowledge of the westward movement and apply it to this situation.

In this particular situation, several students decide to develop a brief play in which they present events from the life of a family moving west. They make props and costumes and outline the events for presentation using a book they have read for descriptions of the characters and general ideas for the events. After the presentation, the teacher asks two questions to help the class discuss the play:
- What are the implications of the situation for the future lives of each family member?
- What would be similar situations in the world today?

During the discussion the teacher focuses other questions on the clarity and organization of the presentation.

LEVEL 3

The teacher in an eighth grade class selects several historical situations for dramatic presentations by different groups of students. For example, one situation is a debate to determine whether Napoleon should be executed or exiled to St. Helena. The teacher specifies the playing area and time limit. The students develop the characters and the arguments in the debate using resource materials which describe the historical context of the situation.

With this background, the students use improvisational techniques to play out the situation. Afterwards, the class evaluates the presentation in terms of the historical accuracy of the arguments and the effectiveness of the presentation.

LEVEL 4

A twelfth grade class adapts the poem The Highwayman for dramatization. They develop a detailed outline specifying the characters, their actions, emotions, and general demeanor. Beginnings and endings of scenes are also specified. The scenes are acted out spontaneously. Afterward, the performance is evaluated by the total class and replayed until it is satisfactory. Finally, it is presented to other classes in the school.
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop understanding of oneself through use of the processes and concepts of drama/theatre

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>SAMPLES OF LEARNER BEHAVIORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 To use theatrical forms in expressing feelings, sensations, thoughts, memories, attitudes, fantasies, and values</td>
<td>Level 1: Expresses specific emotions (e.g., anger, elation, disappointment) with individuality.</td>
</tr>
<tr>
<td>1.2 To relate self to the world through theatrical forms of expression</td>
<td>Engages in constructive evaluation of dramatic activities guided by the teacher.</td>
</tr>
</tbody>
</table>

GOAL 2.0: To promote responsible and cooperative interaction in society through the discipline inherent in the art of drama/theatre

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>SAMPLES OF LEARNER BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 To engage in theatre as a cooperative act among all individuals participating and responding within the art</td>
<td>Level 1: Decides with the group the events in an improvisation or from a story which are to be included in the dramatic activity.</td>
</tr>
</tbody>
</table>
**Drama/Theatre Objectives**

2.2 To develop awareness of human behavior and use it as raw material in drama/theatre productions

2.3 To participate in evaluating dramatic presentations with peers

**Goal 3.0:** To grow in knowledge, skill, and sensitivity to theatre as an art form

**Samples of Learner Behaviors**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 To become a more discerning, perceptive and responsive theatre-goer and viewer of other theatrical media (film and television)</td>
<td>Analyzes and critiques live theatrical performances and those observed through media.</td>
<td>Develops a more perceptive and analytical manner in response to live theatre and other media.</td>
<td>Shows selectivity and judgment in attendance/viewing of theatrical forms.</td>
<td>Reveals greater depth in aesthetic, affective, and ethical responses as viewing experience accumulates.</td>
</tr>
<tr>
<td>3.2 To develop an understanding and appreciation of theatrical processes, concepts, and resources</td>
<td>Participates in evaluation of a theatrical work based on teacher-directed expectations.</td>
<td>Uses the terminology of evaluation to assess the affective and ethical meanings of theatrical performances.</td>
<td>Relates growing awareness of aesthetic values and critical standards to theatrical activities.</td>
<td>Demonstrates ability to discuss dramatizations with more specific and precise recognition of exemplary qualities.</td>
</tr>
<tr>
<td>3.3 To develop aesthetic, affective, and ethical responses as experience with theatre accumulates</td>
<td>Reacts with enjoyment and enthusiasm to planned viewing experiences in theatre.</td>
<td>Describes a wider range of genres, styles, and periods found in plays and school productions without necessarily identifying them by these terms.</td>
<td>Evaluates with peers the overall worth and effectiveness of theatrical works viewed with regard to aesthetic and ethical standards.</td>
<td>Demonstrates taste, judgment, and awareness of form and value in selection of dramatic works which reveal the full range of human existence.</td>
</tr>
</tbody>
</table>
## OBJECTIVES

4.1 To develop an understanding of rhythm, movement, individualized gesture, and facial expression as the external expression of an internal idea, intention, or feeling.

4.2 To develop use of the voice as an instrument for expression of meaning and feeling, whether in speech or nonverbal sound.

4.3 To select and interpret basic emotions for effective dramatic use.

4.4 To evaluate the drama/theatre experience in terms of the intent, effectiveness, and worth of the work (see also Objective 7.2).

## SAMPLES OF LEARNER BEHAVIORS

### Level 1
- Shows an awareness that the body can express many things: feelings, activities, and characters.
- Discriminates and conveys moods and feelings such as anger, joy, sadness, and fear through tonal variation.
- Projects visible and honest emotional reactions to immediate, recalled, or imagined sensations.
- Responds to the simple questions of dramatic content (What was it about?), and effectiveness (What did it mean to you?).

### Level 2
- Shows original creative ideas and feelings through movements and makes them seem real, logical, and spontaneous.
- Conveys appropriate feeling and energetic involvement in describing situations, dramatizing stories, reading aloud, or improvising character.
- Demonstrates increasing awareness of emotional content and expression in behavior of peers in dramatic activity, attempting to eliminate cliches and preconceived responses.
- Develops deeper insight into questions of Level 1 and adds area of worth or overall value (Does it have a lasting quality?).

### Level 3
- Develops effective manipulation of facial expression and use of bodily gestures as well as total body muscle tone.
- Uses projection, articulation, variety, and timing to dramatize theatre literature effectively.
- Uses sensory and emotional recall with increasingly fine discrimination in the development and interpretation of a character.
- Develops understanding of theatre terminology and the connotations of the terms in areas of intent, structure, effectiveness, and worth.

### Level 4
- Expresses complex characterization and human emotional conditions through controlled expressive use of the body.
- Speaks memorized, complex prose and poetic drama effectively, imaginatively, and with understanding.
- Uses sensory and emotional recall with taste and objectivity in the development of a character in formal presentation.
- Applies principles of Level 3 to theatrical performances and dramatic literature.
**GOAL 5.0:** To develop skills for solving problems in both real and imagined situations, using critical, evaluative, and creative methods of drama/theatre techniques

**OBJECTIVES**

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<tr>
<td>5.1 To discover patterns of relationships among people and their ideas, learning how to play many roles from fact or fantasy, to simulate a broad range of life experiences, and to evaluate the results.</td>
<td>Responds spontaneously using creative and intuitive abilities to solve imaginary problems and evaluate performance.</td>
<td>Reinforces and explores in greater depth the range of experiences in Level 1 with increasing complexity of problems and finer evaluative techniques.</td>
<td>Uses structural components of drama (exposition, complication, crisis, resolution) in solving problems.</td>
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<tr>
<td></td>
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<td></td>
<td>Incorporates other disciplines (literature, play writing) and formulates an approach, in writing, to recurring problems and suggested solutions.</td>
</tr>
</tbody>
</table>

**SAMPLES OF LEARNER BEHAVIORS**

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<td>Level 4</td>
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**GOAL 6.0:** To learn from all societies, past and present, including multiethnic and multicultural groups which make up the American heritage

**OBJECTIVES**

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<tbody>
<tr>
<td>6.1 To discover the rich heritage of the theatrical tradition.</td>
<td>Observes and shares in simple theatrical activities (puppets, song, dances) of many cultures.</td>
<td>Observes and evaluates theatrical productions, film, and television in a broad range of styles and periods, with adult guidance.</td>
<td>Seeks out theatrical material from a wide spectrum of periods and cultures for active recreation.</td>
</tr>
<tr>
<td>6.2 To explore how the dramatist has communicated the timelessness and universality of the human condition.</td>
<td>Uses creative dramatic activity based on teacher-selected stories, scenarios of dramatic literature, and children’s plays to find reflection of own life and experiences.</td>
<td>Observes formal children’s theatre productions and discusses how dramatists have made events and people of all history “come to life” for audiences.</td>
<td>Analyzes play scripts and performances to discover general themes and experiences which are common to all human beings.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Studies theatre history in texts and plays to discover how plays mirror society and behavior, and how the past and other cultures form drama/theatre of today.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Analyzes dramatic performances and character development in terms of common human relationships and motivations depicted by dramatists from all cultures and all times.</td>
</tr>
</tbody>
</table>
### OBJECTIVES

6.3 To perceive how the common past, as well as personal experiences can be captured and preserved in dramatic form to be re-created for audiences.

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<tbody>
<tr>
<td>Re-creates for peers the significant events of one’s own life, using simple pantomime and improvisation.</td>
<td>Role-plays characters from the past and the present who have figured largely in the development of society.</td>
<td>Locates and enacts plays of an historical or biographical nature to link common backgrounds and experiences.</td>
</tr>
</tbody>
</table>

## GOAL 7.0:

To approach other art forms with insight and appreciation, and to discover the relationships between the process of theatre art and processes of music, art, dance, and literature.

### SAMPLES OF LEARNER BEHAVIORS

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</thead>
<tbody>
<tr>
<td>7.1 To become aware of theatre processes and concepts related to those of the other arts</td>
<td>Discusses how sensory and emotional stimuli created in theatrical productions involve other arts.</td>
<td>Analyzes how line, space, movement, color, and rhythm, as found in art, dance, and music, are integral to all dramatic activity.</td>
<td>Utilizes concepts and techniques of art, dance, and movement to assist in the visual creation of dramatic literature.</td>
<td>Uses design concepts, directing and acting skills, preparation of scenery, costume design, lighting, and use of space in a synthesis of the arts and literature in a theatrical production.</td>
</tr>
<tr>
<td>7.2 To establish criteria for dramatic criticism and aesthetic judgment</td>
<td>Verbalizes preferences in recognition of elementary artistic standards for own dramatic activities.</td>
<td>Progresses from narrative to evaluative criticism of dramatic performances.</td>
<td>Recognizes and applies intuitive and learned judgments to the analysis of a piece of dramatic literature.</td>
<td>Produces written responses to own and other theatrical productions, evaluating artistic elements as they combine to form an aesthetically satisfying composition/performance.</td>
</tr>
</tbody>
</table>

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**Drama/Theatre**

Level 4

Studies and performs plays depicting significant events and persons from all levels and periods of society to understand the richness of a cultural and artistic heritage.
## DRAMA/THEATRE

### OBJECTIVES

#### Level 1
- Adds color, line, and space in rudimentary costume and background to creative dramatic movement and pantomime activities.

#### Level 2
- Designs costumes, makeup, and settings for movement of actors in brief theatrical performances.

#### Level 3
- Analyzes processes of design, directing, and acting, and how they coalesce in a work of dramatic art.

#### Level 4
- Acquires limited mastery of artistic design concepts and techniques which enable an individual to develop special interests, as one member of a group responsible for formal productions.

### ENVIRONMENTAL

#### Level 1
- Learns songs, reads stories, views plays, and studies pictures on environmental subjects. Identifies and expresses positive and negative feelings generated by each example.

#### Level 2
- Writes simple stories and poems, writes or participates in plays, performs music, and creates art to express personal feelings about the environment and its resources.

#### Level 3
- Studies historical examples of how artistic expression influenced various social events (e.g., *Uncle Tom's Cabin*, slavery; *We Shall Overcome*, civil rights; *Grapes of Wrath*, 1930's social conditions).

#### Level 4
- Identifies specific environmental problems in the community, state, nation, or world, and develops one or more forms of artistic expression to apply to specific environmental problems.

### PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

- **American Theatre Association**
  - Publication: *Theatre News*

- **Children's Theatre Association of America**
  - Publication: *Children's Theatre Review*

- **Secondary School Theatre Association**
  - Publication: *Secondary School Theatre Journal*

- **California Educational Theatre Association**
  - Richard D. Parks, Secretary/Treasurer
  - 55 South Sixth Street
  - San Jose, CA 95112

1029 Vermont Avenue, N.W.
Washington, D.C. 20005
Using the English language to think and to respond is the primary concern in the English language arts curriculum. Teachers' understanding of the various ways that students process and use language is as important as teaching the content of the course—language study, literature, and media. With students as the central focus, the English language arts curriculum addresses what students do with language, how students perceive and understand, and how their lives are dependent upon and shaped by language. The instructional program must take into account the students' divergent needs which result from the life experiences.

The process of using language refers to two types of interdependent activities:

- The observable skills of listening, speaking, reading, and writing.
- The unobservable skills of thinking involved in producing a product and the shaping processes of transforming, generating, and composing.

The language processes can also include the following:

- The receptive acts of listening to and reading about.
- The productive acts of telling about and composing about.

The content of English language arts provides substance for the study of how language operates, of literature, and of media. Unlike process, the content of English language arts can be categorized, cataloged, systemized, and isolated for examination (the novel, the sentence, the film).

English language arts should be a totally integrated program. The processes of language should work in concert with content and both should work in concert with the language user's and interpreter's experience.
ENGLISH LANGUAGE ARTS

GOAL 7: To write with clarity and precision for practical, creative, and aesthetic purposes

This activity is a writing experience prior to a class field trip. The teacher records words that the students suggest about the field trip. When the list is complete, the teacher and students write three or four sentences using the word bank. Afterwards, the students, either individually or in pairs, write sentences on long paper strips. The students read their sentences aloud and add or change words for clarity with the help of the teacher and their peers. To complete the assignment, students rewrite their sentences and submit them for "publishing" on the bulletin board.

The sentences are typed on small strips of paper and placed in a box as an independent activity in which students use the sentences to develop stories.

Students are paired for a talk/write experience about a class field trip. Each pair of students is given a large piece of butcher paper and a large felt pen. The partners discuss the field trip with each other for five to ten minutes and decide what they will write about. Afterwards they write their thoughts on the paper, taking turns dictating and writing.

The purpose of this activity is to have students anticipate a field trip experience and use the material in writing letters. The teacher leads a discussion about a forthcoming field trip. The conversation touches on topics such as rules for behavior on the trip, how the group will travel, items each person should bring, what they will see, and how they will record the experience. During the discussion, two or three students act as recorders at chalk boards before the class. At first, as the students are talking, the teacher paraphrases their comments and the recorders note down what the teacher says. Later, the teacher asks different students to paraphrase points that other students are talking about. After the discussion the students pair up or work individually writing letters in which they explain some aspect of the trip to someone such as the principal, a teacher, a friend, or someone who is unfamiliar with schools. The teacher assigns an audience to each of the writers.

The teacher works with each letter writing group to refine the wording, correct spelling, and check format for proper heading, greeting, etc. When the students read their letters aloud, the teacher asks the group to notice if the styles can be differentiated according to the audiences for the letters.

In this activity students use the editorial form for discussing their viewpoints about field trips. Prior to the field trip, the group notes what they will be doing on the trip and aspects of the trip which might be examined in terms of an editorial. The group has read editorials in different newspapers and magazines and each student is familiar with the form.

After the trip they discuss the experience and outline a viewpoint and supporting arguments for the editorial. The group discusses a few of the outlines to help each other in understanding how to go about clarifying the presentation of ideas in the editorial form.

After completing the first draft, students read their editorials to other members of the class in small groups. Members of the group offer constructive criticism to the writers about points such as the clarity of the thoughts and sentence structure. The second drafts are submitted to the teacher for comments before preparing final drafts.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop a sense of personal effectiveness in communication
### OBJECTIVES

1. **To develop a sense of self**
   - **Level 1**: Listens to self on a tape recorder.
   - **Level 2**: Evaluates own voice by listening to self read a selection on the tape recorder.
   - **Level 3**: Evaluates self after oral presentation to a group of peers.

2. **To participate in interpersonal exchanges to develop effective communication skills**
   - **Level 1**: Contributes and accepts ideas in oral group activity.
   - **Level 2**: Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).
   - **Level 3**: Participates courteously and effectively in small peer group activities.

3. **To employ basic communication skills as a means of working with others to solve environmental and/or resource use problems**
   - **Level 1**: Talks to others and writes stories related to the maintenance of a clean and healthy school environment.
   - **Level 2**: Writes letters to officials expressing ideas and concerns on resource and environmental matters. Uses written and oral means of communication to gain information relating to environmental problems.
   - **Level 3**: Gathers information concerning communication methods in other countries and at other times in history and contrasts these with contemporary American practices.
   - **Level 4**: Identifies own communication patterns after taped oral presentation and evaluation. Expresses increased sophistication in discussion and presentation of topics ranging from immediate concerns to concerns of community and larger world.

### GOAL 2.0: To develop a sense of social consciousness in communicating skills

### SAMPLES OF LEARNER BEHAVIORS

#### ENGLISH LANGUAGE ARTS

<table>
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</tr>
<tr>
<td>Explains reasoning underlying statements and actions (e.g., explain why characters behave as they do in a dramatic play situation).</td>
<td>Distinguishes between imagination and reality in recounting events.</td>
<td>Cites and uses contributions of peers during classroom discussions to further develop own ideas.</td>
<td>Prepares and delivers effective written and oral communications to elected officials, representatives of resource management agencies, and the general public on environmental matters and resource use concerns.</td>
</tr>
<tr>
<td><strong>Level 4</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 2</strong></td>
<td><strong>Level 1</strong></td>
</tr>
<tr>
<td>Identifies own communication patterns after taped oral presentation and evaluation. Expresses increased sophistication in discussion and presentation of topics ranging from immediate concerns to concerns of community and larger world.</td>
<td>Gathers information concerning communication methods in other countries and at other times in history and contrasts these with contemporary American practices.</td>
<td>Participates courteously and effectively in small peer group activities.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
</tr>
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<td><strong>Level 2</strong></td>
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<td><strong>Level 4</strong></td>
</tr>
<tr>
<td>Contributions and accepts ideas in oral group activity.</td>
<td>Talks to others and writes stories related to the maintenance of a clean and healthy school environment.</td>
<td>Participates courteously and effectively in small peer group activities.</td>
<td>Identifies own communication patterns after taped oral presentation and evaluation. Expresses increased sophistication in discussion and presentation of topics ranging from immediate concerns to concerns of community and larger world.</td>
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<td><strong>Level 4</strong></td>
<td><strong>Level 2</strong></td>
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<tr>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
<td>Identifies own communication patterns after taped oral presentation and evaluation. Expresses increased sophistication in discussion and presentation of topics ranging from immediate concerns to concerns of community and larger world.</td>
<td>Participates courteously and effectively in small peer group activities.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
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<td><strong>Level 4</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 2</strong></td>
<td><strong>Level 1</strong></td>
</tr>
<tr>
<td>Levels of account-ability for ideas expressed.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
<td>Participates courteously and effectively in small peer group activities.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
</tr>
<tr>
<td><strong>Level 3</strong></td>
<td><strong>Level 2</strong></td>
<td><strong>Level 1</strong></td>
<td><strong>Level 4</strong></td>
</tr>
<tr>
<td>Evaluates own voice by listening to self read a selection on the tape recorder.</td>
<td>Participates courteously and effectively in small peer group activities.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
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<td><strong>Level 1</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 4</strong></td>
</tr>
<tr>
<td>Evaluates self after oral presentation to a group of peers.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
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<td><strong>Level 4</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 2</strong></td>
</tr>
<tr>
<td>Listens to self on a tape recorder.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
<td>Evaluates self after oral presentation to a group of peers.</td>
<td>Practices roles of courteous listener and speaker (e.g., telephone conversation, introductions of peers).</td>
</tr>
</tbody>
</table>
## ENGLISH LANGUAGE ARTS

### OBJECTIVES

#### 2.2 To develop social consciousness in communication

- **Level 1**: Participates actively in class discussions, respecting the rights of others.
- **Level 2**: Listens attentively to opinions of others. Asks questions to gain insight.
- **Level 3**: Learns that everyone speaks a dialect and that no one dialect is superior to another.

#### 2.3 To use creative expression as a means of bringing about constructive action to solve social and environmental problems

- **Level 1**: Learns songs, reads stories, views plays, and studies pictures on environmental subjects. Identifies and expresses positive and negative feelings generated by each example.
- **Level 2**: Writes simple stories and poems, writes or participates in plays, performs music, and creates art to express personal feelings about the environment and its resources.
- **Level 3**: Studies historical examples of how artistic expression influenced various social events (e.g., Uncle Tom's Cabin, slavery; "We Shall Overcome," civil rights; Grapes of Wrath, 1930's social conditions).
- **Level 4**: Maintains a friendly attitude while debating issues with strong emotional overtones. Acts as a "devil's advocate" where minority views are not otherwise presented. Identifies specific environmental problems in the community, state, nation, or world and develops one or more forms of artistic expression to apply to specific environmental problems.

### GOAL 3.0: To develop observing and listening skills in order to receive messages, both nonverbal and verbal

#### SAMPLES OF LEARNER BEHAVIORS

##### OBJECTIVES

#### 3.1 To identify ideas or feelings expressed in words

- **Level 1**: Listens attentively to directions and relates them in order.
- **Level 2**: Restates the main points of a story read aloud to the class.
- **Level 3**: Paraphrases a message heard.
- **Level 4**: Identifies meaning in a spoken message as it is affected by the context.

#### 3.2 To determine the ideas or feelings transmitted through nonverbal symbols

- **Level 1**: Identifies sequence of events in a pantomime.
- **Level 2**: Pantomimes feelings such as happy, sad, tired, joyous.
- **Level 3**: Follows nonverbal instructions.
- **Level 4**: Identifies body language used deliberately and incidentally by the speaker.

#### 3.3 To retain key ideas and essential facts from the information presented in a communication situation

- **Level 1**: Listens to a story and then recalls major details a day or so later.
- **Level 2**: Reconstructs the main points of an oral communication.
- **Level 3**: Takes notes while listening to a short lecture.
- **Level 4**: Restates the supporting evidence of a communication at a later time.

### GOAL 4.0: To develop acting and speaking skills in order to send messages through both verbal and nonverbal means
**GOAL 5.0: To develop comprehension skills in reading**

**OBJECTIVES**

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<tbody>
<tr>
<td>5.1 To develop oral language as a basis for reading comprehension</td>
<td>Listens to stories to gain information, receives and responds to instructions, and recalls significant details accurately.</td>
<td>Answers literal and inferential questions to extend thinking skills.</td>
<td>Improvises dialog about an episode.</td>
</tr>
<tr>
<td>5.2 To identify words and their meanings through vocabulary development</td>
<td>Identifies and understands new words in context of a sentence and/or paragraph.</td>
<td>Recognizes and understands common synonyms, antonyms, and homonyms.</td>
<td>Recognizes and understands both connotative and denotative meanings of words.</td>
</tr>
<tr>
<td>5.3 To develop word identification skills</td>
<td>Uses both auditory and visual discrimination to identify sounds and forms.</td>
<td>Uses structural analysis to identify and build on base words.</td>
<td>Identifies and uses affixes to change word meaning.</td>
</tr>
<tr>
<td>5.4 To develop comprehension through sustained silent reading</td>
<td>Reads a story silently after having heard it.</td>
<td>Reads library books and magazines of own choice.</td>
<td>Chooses literary works to read, appreciating and understanding what is read.</td>
</tr>
</tbody>
</table>
ENGLISH LANGUAGE ARTS

OBJECTIVES

5.5 To generate ideas about a topic prior to reading

5.6 To interpret meaning through use of literal analysis

5.7 To apply skills of critical and analytical reading

5.8 To apply skills of interpretive comprehension

GOAL 6.0: To use reading as a means of learning

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

6.1 To read in content areas through the application of reading skills

6.2 To adjust reading rate to the content of the material to be read and the purpose for reading

6.3 To use dictionaries as a rich source of information built upon research about spoken and written language
### OBJECTIVES

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
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</thead>
<tbody>
<tr>
<td><strong>6.4</strong> To apply study (locating) skills in using reference sources</td>
<td>Uses the table of contents, glossary, index, and bibliography of a book.</td>
<td>Interprets and reads maps, signs, posters, graphs, charts, and diagrams.</td>
</tr>
<tr>
<td><strong>6.5</strong> To use the library/resource center to attain desired information</td>
<td>Uses the library/resource center for pleasurable listening, viewing, and reading experiences.</td>
<td>Uses the appropriate parts of books to locate information (e.g., table of contents, chapter headings, glossary).</td>
</tr>
</tbody>
</table>

### GOAL 7.0: To write with clarity and precision for practical, creative, and aesthetic purposes

#### SAMPLES OF LEARNER BEHAVIOR

<table>
<thead>
<tr>
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<th>Level 4</th>
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<tbody>
<tr>
<td><strong>7.1</strong> To use personal experiences and recollections for narration and descriptive writing</td>
<td>Dictates a personal experience to an adult and reads the story.</td>
<td>Writes narrative/descriptive paragraph about a personal experience.</td>
<td>Writes about a past experience such as a childhood memory as if it were happening in the present.</td>
</tr>
<tr>
<td><strong>7.2</strong> To organize ideas/concepts to clarify meaning</td>
<td>Arranges a series of pictures in a sequence.</td>
<td>Writes the directions for a recipe from a given list of foods.</td>
<td>Uses transitions to show relationships within the paragraph.</td>
</tr>
<tr>
<td><strong>7.3</strong> To use a variety of written forms for practical writing including letters, resumes, memos, and job applications</td>
<td>Tells and writes letter to parent with aid of teacher.</td>
<td>Writes letter to peer, teacher, or parent about career aspirations including qualifications to be achieved.</td>
<td>Writes for a particular purpose such as job application, college entrance, and for a particular audience.</td>
</tr>
<tr>
<td><strong>7.4</strong> To respond in writing to ideas from literature and media</td>
<td>Relates own reaction(s) to story read and writes one or two sentences that express response to story.</td>
<td>Sketches the setting of a short story, then describes setting in a paragraph.</td>
<td>Composes an analysis of the events contributing to changes in the main character of a novel.</td>
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**ENGLISH LANGUAGE ARTS**

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<th>Level 4</th>
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<tbody>
<tr>
<td>Uses guides and symbols to locate information in references such as dictionary, encyclopedia, thesaurus, readers’ guide, atlas, and telephone book.</td>
</tr>
</tbody>
</table>

Uses note-taking and organizational skills that permit effective use of information found.
**ENGLISH LANGUAGE ARTS**

### OBJECTIVES

#### Level 1

1. **7.5** To write for a variety of audiences using appropriate forms and language
   - Writes to teacher and classmates.

#### Level 2

2. **8.0:** To understand how language functions in order to express ideas

#### Level 3

3. **8.1** To develop the ability to build more complex utterances from simpler ones
   - Writes compositions to share with peers in order to receive audience reaction.

#### Level 4

4. **8.2** To spell correctly and develop a sensitivity to the need for spelling correctness
   - Builds words by adding and changing prefixes and suffixes.

5. **8.3** To understand how the English language with its Anglo-Saxon base is augmented by extensive borrowing from other languages and is constantly changing
   - Builds words using a range of appropriate subordinating and coordinating structures.

6. **8.4** To recognize levels of usage and use the levels appropriately
   - Lists English words borrowed from other languages.

7. **8.5** To understand how rules for language usage operate systematically and to use the conventions of edited American English appropriately
   - Identifies how new words come into the English language through technology and usage.

### GOAL 8.0: To understand how language functions in order to express ideas

#### SAMPLES OF LEARNER BEHAVIORS

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>7.5 To write for a variety of audiences using appropriate forms and language</td>
<td>Writes to teacher and classmates.</td>
<td>Writes compositions to share with peers in order to receive audience reaction.</td>
<td>Writes compositions for school literary magazine or newspaper.</td>
<td>Writes to local newspapers, public figures, and businesses for information or comment.</td>
</tr>
<tr>
<td>8.0 To understand how language functions in order to express ideas</td>
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</tr>
<tr>
<td>8.1 To develop the ability to build more complex utterances from simpler ones</td>
<td>Writes simple sentences using appropriate word order.</td>
<td>Combines several sentences into one sentence.</td>
<td>Expands sentences to achieve more richly textured sentences.</td>
<td>Writes sentences using a range of appropriate subordinating and coordinating structures.</td>
</tr>
<tr>
<td>8.2 To spell correctly and develop a sensitivity to the need for spelling correctness</td>
<td>Spells words correctly and asks for help when needed.</td>
<td>Spells words using sound/letter relationships.</td>
<td>Uses regular and irregular spelling patterns correctly.</td>
<td>Builds words by adding and changing prefixes and suffixes.</td>
</tr>
<tr>
<td>8.3 To understand how the English language with its Anglo-Saxon base is augmented by extensive borrowing from other languages and is constantly changing</td>
<td>Lists English words borrowed from other languages.</td>
<td>Identifies how new words come into the English language through technology and usage.</td>
<td>Listens to a recording of dialect mixtures and identifies words and phrases which are unique or are used differently among regional and ethnic dialects.</td>
<td>Develops list of present day slang words/phrases and identifies equivalent words/phrases which were used by grandparents' and parents' generations during their teen years.</td>
</tr>
<tr>
<td>8.4 To recognize levels of usage and use the levels appropriately</td>
<td>Uses appropriate language to greet the principal, the teacher, and other adults.</td>
<td>Dramatizes a situation in which formal language is required.</td>
<td>Listens to a recording of various statements and identifies the purpose of each through the choice of words and tone.</td>
<td>Writes three letters—to a friend, an adult, and a newspaper—about the same topic using appropriate language.</td>
</tr>
<tr>
<td>8.5 To understand how rules for language usage operate systematically and to use the conventions of edited American English appropriately</td>
<td>Supplies the conventions for beginning and ending sentences in a short paragraph.</td>
<td>Writes sentences from dictation using appropriate punctuation.</td>
<td>Categorizes a list of words under the generalizations governing capitalization.</td>
<td>Composes a fictional story, factual report, or narrative, which uses a range of punctuation symbols.</td>
</tr>
<tr>
<td>OBJECTIVES</td>
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<tr>
<td><strong>8.6 To write legibly and with reasonable efficiency</strong></td>
<td>Identifies examples of good handwriting from a variety of samples.</td>
<td>Practices good handwriting in routine practice, classwork, and homework.</td>
<td>Experiments with speed of writing from dictations transmitted at varying speeds.</td>
<td>Uses criteria to judge neatness, orderly arrangement, and good handwriting from a variety of samples.</td>
</tr>
<tr>
<td><strong>8.7 To recognize the purposes for which language is used</strong></td>
<td>Identifies symbols which communicate ideas and/or feelings.</td>
<td>Illustrates words with varying levels of abstraction (e.g., car, Ford, Pinto, green 1979 Pinto).</td>
<td>Analyzes a passage for the use of euphemisms and rewrites the passage for clarity.</td>
<td></td>
</tr>
</tbody>
</table>

**OBJECTIVES**

9.1 To respond positively to literature

9.2 To enjoy reading, hearing, and viewing literature

9.3 To extend experience through reading

9.4 To respond with increased sensitivity to and understanding of our multicultural society through experience with literature and other related forms

**ENGLISH LANGUAGE ARTS**

**LEVEL 1**

Identifies examples of good handwriting from a variety of samples.

Identifies symbols which communicate ideas and/or feelings.

Reads a picture book or a simple poem and describes the feelings experienced.

Reads, views, or hears recording of a literary piece, identifying favorite scenes.

Cites new knowledge gained from something that was read.

Reads and tells about the customs and life-style of a particular group.

**LEVEL 2**

Practices good handwriting in routine practice, classwork, and homework.

Illustrates words with varying levels of abstraction (e.g., car, Ford, Pinto, green 1979 Pinto).

Identifies the different ways of doing and behaving illustrated in a short story.

Selects excerpts from favorite stories or dramas to act out before the class.

Reads self-selected material based on an area of interest and relates new information gained to knowledge previously possessed.

Acts out folktales and legends of different cultures.

**LEVEL 3**

Experiments with speed of writing from dictations transmitted at varying speeds.

Analyzes a passage for the use of euphemisms and rewrites the passage for clarity.

Identifies several passages describing actions of a character and interprets those actions.

Reads self-selected books in school, finding pleasure and satisfaction in reading.

Compares and contrasts the situations portrayed in the literature with personal experiences.

Reads and contrasts customs, life-styles, and arts of various cultural groups.

**LEVEL 4**

Uses criteria to judge neatness, orderly arrangement, and good handwriting from a variety of samples.

Analyzes a passage for the use of euphemisms and rewrites the passage for clarity.

Writes a letter to the main character to explain how a personal experience was similar to or different from that of a main character.

Reads both for information and recreation outside of school.

Reads fantasy and science fiction works and contrasts them with reality.

Reads historical fiction written by authors of other cultures or about other cultures.

**GOAL 9.0: To extend experiences through response to a variety of forms of literature and media**

**SAMPLES OF LEARNER BEHAVIORS**

**LEVEL 1**

Reads a picture book or a simple poem and describes the feelings experienced.

Identifies the different ways of doing and behaving illustrated in a short story.

Reads, views, or hears recording of a literary piece, identifying favorite scenes.

Cites new knowledge gained from something that was read.

Reads and tells about the customs and life-style of a particular group.

**LEVEL 2**

Identifies symbols which communicate ideas and/or feelings.

Illustrates words with varying levels of abstraction (e.g., car, Ford, Pinto, green 1979 Pinto).

Identifies the different ways of doing and behaving illustrated in a short story.

Selects excerpts from favorite stories or dramas to act out before the class.

Reads self-selected material based on an area of interest and relates new information gained to knowledge previously possessed.

Acts out folktales and legends of different cultures.

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Identifies several passages describing actions of a character and interprets those actions.

Reads self-selected books in school, finding pleasure and satisfaction in reading.

Compares and contrasts the situations portrayed in the literature with personal experiences.

Reads and contrasts customs, life-styles, and arts of various cultural groups.

**LEVEL 4**

Uses criteria to judge neatness, orderly arrangement, and good handwriting from a variety of samples.

Analyzes a passage for the use of euphemisms and rewrites the passage for clarity.

Writes a letter to the main character to explain how a personal experience was similar to or different from that of a main character.

Reads both for information and recreation outside of school.

Reads fantasy and science fiction works and contrasts them with reality.

Reads historical fiction written by authors of other cultures or about other cultures.
ENGLISH LANGUAGE ARTS

OBJECTIVES

9.5 To gain knowledge of various genres and subgenres recognizing effective use of word choice and style, sound, and rhythm by different writers

9.6 To relate personal values and experiences to values and experiences described in literature

9.7 To analyze the structures and conventions of television, radio, and film

9.8 To develop through production an understanding of the structure and conventions of communication forms such as television, film, and broadcasts

9.9 To demonstrate skill in using creative expression as a means of bringing about constructive action to solve social and environmental problems

Level 1

Listens to a variety of stories read by teacher and discusses sound and rhythm of different writers' expressions.

Acts out the situation of a character in a story.

Discusses a television program or film in class.

Composes a story with pictures.

Level 2

Identifies imagery, sound, and diction in selected poems.

Presents an interpretation of a scene and relates it to personal experiences and values.

 Writes a commercial using persuasive techniques.

Composes a commercial, storyboarding the audio and visual.

Level 3

Reads and recognizes a variety of nonfiction forms (e.g., autobiographies, biographies, encyclopedias, historical selections).

Writes a letter from the point of view of the main character.

Identifies and differentiates the purpose of editorials, human interest stories, news stories, and other forms.

Produces verbal or visual/verbal media to inform, persuade, or entertain selecting the medium, storyboarding, and scripting the production.

Studies historical examples of how artistic expression influenced various social events (e.g., Uncle Tom's Cabin, slavery; "We Shall Overcome," civil rights; Grapes of Wrath, 1930's social conditions).

Level 4

Writes short selections, imitating various aspects of literature (e.g., point of view, characterization).

Compares and contrasts values in two literary works with today's values.

Produces a television program or radio broadcast selecting the medium, storyboarding and scripting the production.

Identifies and uses the communicative effects of shape, focus, distance, angle, balance, composition, line, contrast, color, sequence, timing, and pacing in understanding and producing media.

Identifies specific environmental problems in the community, state, nation, or world and develops one or more forms of artistic expression to apply to scientific environmental problems.
PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

American Association of School Librarians (AASL)
50 East Huron St.
Chicago, IL 60611
Publication: School Media Quarterly

Association for Educational Communications and Technology (AECT)
1201 - 16th Street, N.W.
Washington, D.C. 20036
Publications: Audiovisual Instruction
Communication Review

American Speech-Language Hearing Association (ASHA)
10801 Rockville Pike
Rockville, MD 20852
Publication: Language, Speech and Hearing Services in Schools

California Association of Teachers of English (CATE)
P.O. Box 4427
Whittier, CA 90607
Publication: California English

California High School Speech Association (CHSSA)
Larry Smith, President
Herbert Hoover High School
5550 North First Street
Fresno, CA 93710
Publication: Bulletin

California Media/Library Educational Association (CMLEA)
1575 Old Bayshore Highway
Burlingame, CA 94010
Publication: CMLEA Journal

California Reading Association (CRA)
3400 Irvine Avenue
Newport Beach, CA 92660
Publication: California Reader

California Speech Association (CSA)
Norman R. Page
Department of Speech Communication
California State University
Fullerton, CA 92634
Publication: Concord

International Reading Association (IRA)
6 Tyre Avenue
Newark, DE 19711
Publications: Journal of Reading
Reading Teacher
Reading Research Quarterly

National Council of Teachers of English (NCTE)
1111 Kenyon Road
Urbana, IL 61801
Publications: English Journal
Language Arts
Research in the Teaching of English

Speech Communication Association (SCA)
5205 Leesburg Pike
Falls Church, VA 22041
Publication: Communication Education

Western Speech Communication Association (WSCA)
Robert O. Hirsch, Executive Secretary
Arizona State University
Tempe, AZ 85281
Publication: Western Journal of Speech Communication
ENVIRONMENTAL EDUCATION

POINT OF VIEW

An environmental education program is concerned with aesthetics, values, and morality in relation to helping students understand and respect their interdependence with a finite and limited ecosystem. In developing this understanding, students are encouraged to define a personal life-style which is compatible with a healthy physical environment.

An environmental education program is future oriented. It is designed to give students firsthand, practical learning experiences in making observations, gathering data, and solving problems in relation to environment-resource management. Students acquire the skills, knowledge, attitudes, and behaviors that are necessary to work independently or with others to control pollution, conserve resources, and otherwise protect everyone's right to live in a healthy, productive, and aesthetically satisfying physical environment.

An environmental education program is infused into a number of curriculum areas including science, social sciences, and the practical arts.
GOAL 5: ENVIRONMENTAL PROBLEM SOLVING — To develop the ability to create viable solutions to environmental problems and to work independently or cooperatively to implement them

LEVEL 1

Following a discussion of the detrimental effects of litter on human health and environmental beauty and the waste of resources it represents, a third grade class decides to learn more about these problems by developing a litter garden.

The students fence in a small plot of land on the school grounds. Examples of litter are found and placed in the litter garden. These might include an apple core, a piece of paper, a bottle, an aluminum can, a steel can, and a piece of a rubber tire. Identification cards are placed on each item with information about the name of the object, the composition of the object, and when it was placed in the litter garden.

The students observe the items in the litter garden each day and record what happens to each as it is exposed to the elements. At the end of the month the class evaluates the data they gathered and makes some generalizations based on their activities.

A time line is developed showing how long it took each item to decompose. At the end of the activity, questions such as the following are discussed:

- Which items broke down and went back into the environment? Which did not?
- Is litter pretty or ugly?
- A student brought in a 100-year-old bottle found on a weekend trip to the desert. What does this tell us about the need for disposal of such items?
- Which litter items can be recycled by nature? Which should be recycled by people?
- How does litter affect the health of pets, humans, and other animals?

LEVEL 2

A sixth grade class organizes and conducts a school-wide energy audit. They work with teachers, the principal, the custodian, and other staff members to develop ways of saving electricity, natural gas, petroleum, and other forms of energy. After the conservation plan is developed, sixth graders work with students in lower grades to make them aware of the program and of the need for cooperation. They also teach the younger students specific techniques for saving energy which could be practiced at school and home.

Professional assistance is obtained from the local utility company. Students learn to read meters and to apply various techniques for conserving energy. Representatives from the utility company also work with the school staff, supplying them with additional information they can use in extending the study of conservation.

The class keeps records on a monthly basis to determine how much energy is saved through the program. This information is reported to students in other classrooms. Groups of students from the sixth grade class lead discussions in other classrooms about how the program can be made even more efficient. Posters, written reports, and skits are developed to publicize the program throughout the school.

A newsletter is prepared by the students and sent home, keeping parents informed about the results of the program. Energy saving techniques that can be used at home are described in a newsletter.

At the end of the program, students evaluate the efforts and consider these questions:

- Is it possible for people to cut down on energy waste without too much inconvenience?
- Can energy conservation programs save money at school? At home?
- How could the money saved in school and at home be used?
- How does energy conservation help our country?
- Who in the community could help us save energy?
- Could we do a better job of saving energy by working together?

LEVEL 3

Eighth graders conduct a survey to determine what students and selected community members perceive as major environmental problems in their geographic area. A questionnaire is prepared and mailed to a number of people in the community. Students conduct interviews to supplement the information gathered through the questionnaires.

After all the data are gathered, the class defines one major problem which could be solved by parents, students, and community agencies working together.

Students tap the appropriate sources of expertise to learn how to analyze the problems in order to determine the effect it has had on environmental health. The best techniques for solving the problem are identified.

Students then develop plans for using various social mechanisms and institutions in the community to obtain appropriate action. The students ask...
the following questions in developing the plan:

- Is it a legal problem? Are there laws which can be used in solving the problem? If so, what action is appropriate?
- Is it a political problem? Is legislation or action by elected bodies or officials appropriate? How can we get some action?
- Is it a problem of people’s attitudes and behaviors? How could written, spoken, artistic, musical, dramatic, and other forms of communication be used to change these attitudes and behaviors? What means do we use to contact the public?
- Is it a governmental problem? What city or county agencies could be called in to help us solve it? What action is appropriate?
- Is it an economic problem? How could consumers working together solve it? Who or what group could organize the solution to such a program?

A plan for action involving several social agencies or institutions is developed and implemented. After a period of time, the action plan is evaluated. These questions are considered in the evaluation.

- Is independent action or community action most effective in solving environmental problems?
- Will people cooperate when the need is clear?
- What are the strengths and weaknesses of the various social processes in relation to solving environmental problems?

**LEVEL 4**

A contemporary problems class in a high school conducts a study of worldwide environmental and resource use problems. As an extension of this study, they examine information about careers in environmental management.

The basic information for defining the problems is gathered from teachers in the school through a systematic search of library materials. All areas of expertise which relate to environmental problem solving are covered. Outside authorities also are invited to speak about several topics which are defined beforehand by the group. These include science, technology, government, law, economics, and communication skills as they relate to the study of environmental problems.

Afterwards each student chooses an area of environmental interest for further study. The list of areas includes water resource management, energy production, wildlife management, chemical pollution, natural beauty, and historical resource preservation. The students use school and community resources to explore such questions as:

- What is the present status of my area of interest at state, national, or international levels? What are the trends?
- What social factors relate to this area of interest—values and ethics, government, economics, laws?
- How can I get involved?

Groups of students also explore career opportunities and interview people in professional organizations, governmental agencies, business, and industry to gather information that would help them define a personal and group orientation to environmental and resource management. Finally, each group of students develops a plan for action on environmental issues that includes information about how careers, activities at home, leisure activities, and political activities can be used to promote greater awareness of the issues.

After finishing the independent study, the class discusses ways in which they can share what they have learned with other students and with the community. One activity suggested by students is to develop a local Environmental Quality (EQ) Index similar to the one published by the National Wildlife Federation.

**GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING**

**GOAL 1.0:** NATURAL BEAUTY - RESPECT FOR LIFE — To develop an appreciation of natural beauty and aesthetically pleasing surroundings and a reverence for all forms of life
## Objectives

1. **To become aware of and value natural beauty**
   - Level 1: Observes, records, and describes feelings about examples of natural beauty observed in the school and community such as flowers, a beautiful sunset, and patterns in nature.
   - Level 2: Creates a personal environment which includes examples of natural beauty. Expresses feelings about nature through various media such as creative writing, music, and drama.
   - Level 3: Seeks experiences which provide for the enjoyment of natural beauty.
   - Level 4: Considers aesthetics in career choices and recreational pursuits.

2. **To respect all forms of life and treat all creatures humanely**
   - Level 1: Has firsthand or vicarious learning experiences with animals. Treats pets, domestic animals, and wildlife humanely and advocates such behavior in others.
   - Level 2: Collects information on problems relating to pets, domestic animals, and wildlife. Advocates programs and practices leading to humane treatment and protection of endangered species.
   - Level 3: Uses firsthand and vicarious experience to evaluate the effectiveness of community agencies which deal with animals such as local humane societies and wildlife protection groups.
   - Level 4: Collects information on worldwide programs and activities related to animals. Participates with various organizations in programs to protect animals. Evaluates career and recreational choices in regard to those which foster humane treatment and personal enjoyment of animals.

## Environmental Education

**GOAL 2.0:**

**Ecology - Resource Management** — To develop an understanding of basic ecology and the use of technology in activities for the management of renewable and nonrenewable resources (e.g., planning for the use of land, producing and conserving energy, controlling pollution, protecting wildlife)

### Objectives

1. **To demonstrate an understanding of the principles of ecology and related sciences**
   - Level 1: Describes the basic needs of all living things and relates the fulfillment of these needs to natural resources. Identifies the common forms of pollution and describes their harmful effect on the environment.
   - Level 2: Illustrates with specific examples the concept that everything in nature is connected to everything else.
   - Level 3: Describes a food chain and the role of each component in it. Describes a water cycle and the effect of human activities on the waters of the world.
   - Level 4: Understands the spaceship earth concept and relates worldwide conditions to the health of the planet.
## ENVIRONMENTAL EDUCATION

### OBJECTIVES

**Level 1**

2.2 To become aware of the positive and negative effects of various technologies on the environment and its resources.

- Describes the work and equipment used by the school custodian and other workers in the immediate neighborhood and evaluates the effect of their work on our comfort, safety, and health.

### GOAL 3.0: VALUES - SOCIAL MECHANISMS

To understand how values, ethics, and morality form the basis upon which environmental and resource use decisions are made and the role that social institutions play in providing the mechanisms through which these decisions are implemented.

### SAMPLES OF LEARNER BEHAVIORS

**OBJECTIVES**

**MULTICULTURAL**

3.1 To understand how personal and social values, ethics, and morality in different cultural settings affect consumption of natural resources, treatment of the physical environment, and regard for all forms of life.

- Describes the resources involved and the environmental effects of fulfilling personal value choices such as walking vs. riding in a car.

3.2 To understand the role of government and the need for laws to protect environmental quality and conserve resources.

- Participates in setting up and following simple school rules regarding pollution and resource waste (e.g., litter, energy, materials waste).

### LEVELS

**Level 1**

- Describes the work and equipment used by the school custodian and other workers in the immediate neighborhood and evaluates the effect of their work on our comfort, safety, and health.

**Level 2**

- Lists the work of various resource management agencies in the community and evaluates the effect of their technologies on environmental health and resource management.

**Level 3**

- Evaluates land use planning practices in the community and region.
- Explains the need and function of the various technological devices and practices used in the home and work environment such as auto smog controls and home energy saving devices.

**Level 4**

- Identifies career choices in environmental management.
- Describes the effect of technology on the world environment and evaluates constructive and harmful practices.

- Identifies the factors which shape the personal and social values of subcultures within our own country and other countries and relates these factors to environmental health.

- Describes the complexities of international politics as they relate to worldwide environmental problems and gives rationale for the need to cooperate to avoid disastrous action such as wars.
### OBJECTIVES

#### Level 1
- Relates personal, family, and school purchases to natural resource and energy use and describes how purchases have an environmental cost (e.g., candy bar requires raw materials and energy to produce and transport and comes in materials which could become litter).

#### Level 2
- Describes the resources used, the energy involved, and the pollution generated as a result of the manufacture and distribution of commonly used products (e.g., fast foods, highway and off-road vehicles, products made from wild animals).

#### Level 3
- Describes and cites examples of how government and other groups (organized labor, conservation groups, trade associations, financial institutions) can affect the economic system and thereby affect the environment and its resources.

#### Level 4
- Analyzes the economic implications of world trade, balance of payments, gross national product, and other factors as they affect the environment and its resources.

### GOAL 4.0: PERSONAL LIFE-STYLE — To develop a personal life-style which supports the environmental rights of others and contributes to the maintenance of a healthy and productive physical environment

### SAMPLES OF LEARNER BEHAVIORS

#### OBJECTIVES

#### Level 1
- Lists and describes the basic needs of all living things and describes how natural resources are used to supply these needs.

#### Level 2
- Describes the relationship between individual life-style choices, environmental health, and resource consumption.

#### Level 3
- Compares living conditions in other countries and at other times in history to contemporary American life in terms of effects on the environment.

#### Level 4
- Observes examples of individual and social behavior in a variety of national and worldwide situations. Describes the effect of these practices on the health, comfort, and well-being of people.

#### LEVEL 3
- Participates in environmental and resource conservation activities such as recycling programs, litter cleanup, energy conservation, and civic beautification projects. Works with others to evaluate consumption and activity choices and to select those which support a healthy environment.

#### Level 4
- Demonstrates increasing sophistication in the use of materials, selection of recreational activities, transportation options, consumer decisions, and other factors which affect resource use and environmental quality.

#### LEVEL 4
- Makes life-style decisions such as career choices, family planning, and transportation which safeguard the environmental rights of others.
GOAL 5.0: ENVIRONMENTAL PROBLEM SOLVING — To develop the ability to create viable solutions to environmental problems and to work independently or cooperatively to implement them

SCHEDULES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.1 Problem Identification</strong></td>
<td>Assess the home-school environment and identifies simple problems such as litter, and waste of material, water, and energy.</td>
<td>Evaluates personal or social behavior in the community which adversely affects environmental health.</td>
<td>Demonstrates skill in working independently or cooperatively to conduct simple surveys, use monitoring equipment, and to seek information on environmental problems from appropriate agencies and individuals.</td>
<td>Collects and evaluates data on state, national, or international environmental problems and predicts the effect of these conditions on the ecosystem.</td>
</tr>
<tr>
<td><strong>5.2 Problem Solving</strong></td>
<td>Uses simple tools and works with others to keep home and school environment healthy and to conserve resources.</td>
<td>Participates in school or community environmental problem-solving activities and exercises peer leadership to involve others.</td>
<td>Identifies the various social organizations and institutions which affect environmental decision-making and participates in their activities as appropriate.</td>
<td>Demonstrates skills in organizing peers or participating in solving a variety of environmental problems using skills and knowledge from a variety of areas.</td>
</tr>
<tr>
<td><strong>5.3 Evaluation</strong></td>
<td>Makes simple before-and-after comparisons of home and school cleanup or resource conservation activities.</td>
<td>Assesses and quantifies the effectiveness of school or community activities to control waste or protect environmental health.</td>
<td>Collects and evaluates data to determine the effectiveness of various public and private agencies in dealing with such problems as air pollution, noise, energy conservation, and material waste.</td>
<td>Understands the environmental concept that everything is connected to everything else and applies this concept to the evaluation of regional, national, or worldwide environmental protection and/or resource conservation activities.</td>
</tr>
</tbody>
</table>
PROFESSIONAL ASSOCIATIONS, PUBLICATIONS, AND SERVICES

Conservation Education Association
Richard I. Myshak, President
Department of the Interior
18th & C Streets, N.W.
Washington, D.C. 20240
Bibliography and other useful publications. Conducts a convention annually.

California Energy Education Forum
721 Capitol Mall
Sacramento, CA 95814
Various publications and services available. Conducts regular meetings for the exchange of materials and expertise.

California Natural Resources Federation
2775 Cottage Way, Suite 39
Sacramento, CA 95825
Various publications from the National Wildlife Federation are available through CNRF. Active in environmental legislation.

National Association for Environmental Education
P.O. Box 560931
Miami, FL 33156
Various publications, including a high school course of study. Conducts a convention annually.
FOREIGN LANGUAGE

POINT OF VIEW

The main purpose of foreign language in the curriculum is to provide students with opportunities to acquire communication skills beyond the limits of the native language community and culture. To the extent that language organizes our experience and makes rational thought possible, the acquisition of additional languages increases the capacity for experience and enhances our power to share the experiences of others. It is through experience that we live and grow.

The underlying purpose of education is to provide the learner with skills for gaining as well as for processing experience. Language is the primary channel through which education flows. Each new language is an additional channel increasing not only the potential flow, but also adding a new dimension for organizing and using the extended supply of experience.

The study of a foreign language makes explicit certain linguistic processes which might otherwise remain implicit in the learner's use of the first language. This explicitness can stimulate the learner's awareness of the native language and so increase the extent and depth of command of that language.

Beyond personal benefits, multilingual/multicultural Americans can make a valuable contribution to this country. An understanding of cultural diversity can help make them good citizens; they are better able to accept and appreciate the behavioral differences which they encounter in fellow Americans from other cultural backgrounds.

Foreign language study has at least two unique characteristics. It can enable learners to communicate in another language. It also can provide a key to entering and participating in other human cultures.
GOAL 1: To communicate through the language being studied

LEVEL 1

Half of the students are given cards with dialogs written on them. These phrases and responses have been introduced previously and drilled with the entire class. The students pair off, one with a card and one without, to practice the dialog. Student A, who has the card, reads the first phrase. Student B responds. If the response is appropriate, student A continues with the next line which would logically follow student B’s response.

If student B’s response is not appropriate, student A repeats the phrase and one of the acceptable responses. Student B listens to the repetition and repeats after student A. Student A repeats the phrase again, student B responds, and the exercise continues.

This can be an activity involving the entire class at the same time or an evaluation technique with only two students performing at a time.

LEVEL 2

The students see a set of visuals on a cultural aspect of the country whose language is being studied (e.g., vacations in Germany). Following the visuals, the students hear several recorded interviews with people from that country. The subject of the interviews is related to the visuals. For example, the visuals might include scenes of a German city; preferred vacation spots for Germans, both in Germany and in other countries; and then a series of scenes about jagged Autobahns, crowded trains, and busy airport terminals. In the interviews people would talk about such things as when they go on vacation, how they travel, where they go and why some places are popular for vacationing. The students see the visuals and hear the interviews as many times as necessary for student comprehension.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To communicate through the language being studied

Before hearing the interviews, the students receive a set of questions regarding the interviews. After they have listened to the interviews, they write the answers to the questions. In answering the questions, the students complete a short report on how and when Germans take their vacations. Afterwards the students make an oral report in German on the subject of Germans and their vacations.

LEVEL 3

The students see a set of visuals showing a group of young men and women sitting at a table in a restaurant in France. The students also hear recordings of the conversational flow among the young people. This conversational flow contains information supporting the scenes depicted in the visuals, indicating that the gathering is a celebration and containing clues as to its nature (e.g., birthday, passing the baccalaureate). The students see the visuals and hear the accompanying tapes as many times as necessary for comprehension. The students then prepare and deliver an oral report in French on the events preceding the gathering in the restaurant (e.g., the occasion, suggestions as to the nature and place for celebration, list of participants).

LEVEL 4

The students either read, see in visuals, or hear recordings of part of a story or play with a clear narrative line. They do this as many times as necessary for full comprehension. Afterwards the students prepare and deliver orally in the target language their versions of the rest of the story.
### FOREIGN LANGUAGE

#### OBJECTIVES

<table>
<thead>
<tr>
<th>Level</th>
<th>Objective</th>
<th>Sample of Learner Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1</strong> To comprehend the spoken language</td>
<td>Level 1</td>
<td>Executes oral commands.</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
<td>Sees a scene or picture and distinguishes between accurate and inaccurate oral statements about the material seen.</td>
</tr>
<tr>
<td></td>
<td>Level 3</td>
<td>Hears a short dialog, conversation, or narrative (10-15 sentences) and distinguishes between accurate and inaccurate statements.</td>
</tr>
<tr>
<td></td>
<td>Level 4</td>
<td>Hears a conversation, short story, or skit (15-30 sentences) and distinguishes between accurate and inaccurate statements about the content or the material.</td>
</tr>
<tr>
<td><strong>1.2</strong> To speak the language comprehensively</td>
<td>Level 1</td>
<td>Responds appropriately to questions or comments on a designated topic so that meaningful conversational flow is maintained.</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
<td>Describes orally the action or situation seen in a series of visuals.</td>
</tr>
<tr>
<td></td>
<td>Level 3</td>
<td>Describes orally the possible actions, situations, or events which might logically precede or cause a given action, situation, or event.</td>
</tr>
<tr>
<td></td>
<td>Level 4</td>
<td>Gives an original, oral impromptu ending for an unfinished story.</td>
</tr>
<tr>
<td><strong>1.3</strong> To comprehend the written language</td>
<td>Level 1</td>
<td>Matches a written statement with an appropriate scene or picture.</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
<td>Arranges written sentences in a meaningful sequence to form a coherent paragraph.</td>
</tr>
<tr>
<td></td>
<td>Level 3</td>
<td>Reads a dialog, conversation, or narrative (15-30 sentences) and distinguishes between accurate and inaccurate written statements.</td>
</tr>
<tr>
<td></td>
<td>Level 4</td>
<td>Distinguishes between valid and invalid summaries and resumes of visual or written material.</td>
</tr>
<tr>
<td><strong>1.4</strong> To write the language comprehensively</td>
<td>Level 1</td>
<td>Writes words and sentences upon dictation.</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
<td>Writes brief original compositions on selected topics.</td>
</tr>
<tr>
<td></td>
<td>Level 3</td>
<td>Describes in writing the events which might logically precede or cause the actions, situations, or events depicted in a visual or series of visuals.</td>
</tr>
<tr>
<td></td>
<td>Level 4</td>
<td>Writes a description of characters and/or events in a play or story.</td>
</tr>
</tbody>
</table>

#### GOAL 2.0: To function in the culture(s) in which the language is used

#### SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>Level</th>
<th>Objective</th>
<th>Sample of Learner Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1</strong> To understand the attitudes, values, customs, traditions, and taboos of the culture</td>
<td>Level 1</td>
<td>Learns the important festivals and holidays of the culture and how they are celebrated.</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
<td>Learns the important personal transitional events of the culture (e.g., birthdays, coming of age).</td>
</tr>
<tr>
<td></td>
<td>Level 3</td>
<td>Demonstrates knowledge of attitudes in a cultural group toward honesty, work, male/female relationships, and aging in the culture.</td>
</tr>
<tr>
<td></td>
<td>Level 4</td>
<td>Demonstrates an awareness that languages reflect the thought processes and social attitudes of the culture which produced them.</td>
</tr>
</tbody>
</table>
2.2 To use cultural signals in a variety of social contexts
Selects culturally appropriate clothing for a given situation.
Selects the appropriate greeting for a given situation.
Recognizes and understands how individuals from different cultural backgrounds use the concept of time (e.g., being late or early for appointments).
Demonstrates use of pitch levels in the language studied to signal simple statement commands, interrogation, surprise, indignation, and other meanings.

2.3 To recognize and use body language and other modes of nonverbal communication (e.g., conversational distance, demonstration of affection)
Matches a gesture with an appropriate verbal meaning.
Uses an appropriate gesture in place of verbalization.
Recognizes and uses the range of gestures and other nonverbal modes of communication appropriate to the language and culture.
Analyzes the role of body language and other modes of nonverbal communication in human cultures.

GOAL 3.0: To appreciate the similarities and diversities among languages, cultures, and value systems within the United States and throughout the world

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

3.1 To recognize language patterns that are different from the native language
Cites two or three patterns of the language being studied.
Practices a basic inventory of contrastive language patterns.
Compares patterns in the language being studied with patterns in the native language.
Creates skits in the language being studied which contrast with skits in the native language.

3.2 To recognize behavioral patterns of cultures that are different from the native culture
Lists two or three behavioral patterns of the culture of the language being studied.
Dramatizes a basic inventory of contrastive behavioral patterns.
Distinguishes between behavioral patterns of the culture of the language being studied.
Creates situations or skits which contrast behavioral patterns of the two cultures.

3.3 To recognize common elements of humanity in diverse cultures
Lists elements of humanity common to all human beings.
Identifies common human elements in situations typical of the culture being studied.
Categorizes common human elements drawn from situations typical of the culture being studied.
Compares the common human elements in situations typical of the culture being studied and the native culture.
FOREIGN LANGUAGE

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

American Council on the Teaching of Foreign Languages
62 Fifth Avenue
New York, N.Y. 10011

Publication: Foreign Language Annals

California Foreign Language Teachers Association (CFLTA)
Harold Wingard, Curriculum Specialist
San Diego City Unified School District
3100 Normal Street
San Diego, CA 92103

Publication: CFLTA News

Classical Association of the Pacific States
3480 Del Paseo Boulevard
North Sacramento, CA 95815

Foreign Language Review, Inc.
200 Park Avenue, South
New York, N.Y. 10003

Publication: Foreign Language Review

Modern Language Association of America
62 Fifth Avenue
New York, N.Y. 10011

Publication: PMLA
POINT OF VIEW

The school health program promotes a philosophy of personal, mental-emotional, and social health based on educated decisions and responsible action. According to this philosophy, health is a way of living. Health develops throughout the individual's life and carries on to future generations. The role of the school is to provide programs and a climate which will enhance and promote the health of children, youth, and school personnel—thus improving the quality of life.

A health education program is developed around a group of three broad multidisciplinary goals. These goals focus on the interrelated development of general awareness, decision-making skills, and coping behavior in relation to maintaining physical well-being.

*The goals, objectives, and learner behaviors included in this section have been adapted from material in the Health Instruction Framework. The goals reflect the three multidisciplinary goals in the Framework. The objectives under each goal reflect the content area goals in the Framework.
HEALTH EDUCATION

GOAL 1: To develop awareness of the importance of good health

In the following activity students classify a variety of foods by sorting them according to likeness (e.g., vegetables) or difference (e.g., color). Students use magazines and newspapers to collect pictures of foods. Initially, the pictures are collected in a large box. Groups of students are assigned the task of sorting the pictures according to two or more categories. For example, one group sorts the pictures according to foods which they like or dislike. Another group sorts them according to foods they have eaten or not eaten. After each group sorts the pictures, they list the food items in each of the categories. The lists are displayed on the bulletin board. Later the teacher assigns other groups to sort the pictures using the categories on the lists. Students compare the items in their categories with those on the lists.

The teacher uses the lists in discussions. The group analyzes whether or not the items belong in each of the categories and gives reasons for changes in classification.

LEVEL 1

The following questions are designed to help students explore their attitudes regarding foods that are particularly important for the carbohydrate content. The activity can be extended to deal with food habits and customs.

The teacher or a student reads the questions from a prepared list. After each question, the students express their feeling through a show of hands—up for affirmative, folded for undecided, and “thumbs down” for negative.

The group response is recorded and the students express any additional comments or information that is relevant.

How many of you... (repeat each time):
- Prefer rye bread to white bread?
- Have tasted millet?
- Would like to eat right now?
- Think broccoli is okay?
- Would rather eat carrots than talk about them?
- Have tasted garbanzo beans?
- Would like to try kohlrabi?
- Can tell your mom what you want to eat?
- Eat tacos for breakfast?
- Think it is all right to leave food on your plate?
- Eat turnips raw?

LEVEL 2

Students construct a panorama using pictures of food, people, and inanimate objects from magazines. Afterwards they write short skits using the collage as a source for inspiration. The teacher also suggests several topics such as:

- Write a conversation among three of the characters. Example—conversations among an elementary school child, a young adult, and a grandparent as to their food needs.
- Select a character and write a story for that person as to food needs.
- Write or role play a story in which the characters are two foods and one person.
- If any of the foods, people, or inanimate objects stepped into the world of 2050, what would they say?
- Make up a TV news item using the collage as your reporting source and topic.

LEVEL 4

Students pretend to be a fetus at a particular gestational age. They are to imagine themselves as a fetus and describe their activity, growth needs, and dietary needs. Students record these needs on a piece of paper. The teacher questions students at different fetal ages about developmental events and major nutritional needs. The information is recorded in the form of a timeline on the wall of the room. Developmental events are matched with age and nutritional requirements for the full gestational period. For example:

<table>
<thead>
<tr>
<th>Age</th>
<th>Developmental Event</th>
<th>Nutrient Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 weeks</td>
<td>Fertilized egg divides into many cells.</td>
<td>Protein, Folacin</td>
</tr>
<tr>
<td>1 month</td>
<td>Beginning of heartbeat. Organs including brain begin development.</td>
<td>Protein, Folacin, Calories</td>
</tr>
</tbody>
</table>

Students then review nutrient food exchange lists to plan a balanced diet for the fetus of the age that the student selected. They compare diet plans and revise them.
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop awareness of the importance of wellness

OBJECTIVES

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 To understand the relationship between personal behavior and wellness</td>
<td>Wellness Explains personal health habits that might contribute to different levels of wellness.</td>
<td>Relates how health is affected by daily health practices and prompt attention to symptoms of illness.</td>
<td>Relates life-styles to lifelong health status.</td>
<td>Recognizes that levels of health are constantly changing and are influenced by an individual's attitudes and actions.</td>
</tr>
<tr>
<td>1.2 To understand how the family setting—in many different forms—can provide a nurturing environment</td>
<td>Family Composition Describes contributions and responsibilities of family members.</td>
<td>Cites the contributions of the family in promoting the health of its members.</td>
<td>Describes factors that influence the family's standards, values, and attitudes.</td>
<td>Interprets the impact of the life cycle on the changing roles of family members.</td>
</tr>
<tr>
<td>1.3 To develop an understanding of the relationship of eating patterns to physical, social, psychological, economic, and cultural factors</td>
<td>Food Choices Classifies foods according to kinds, food groups, textures, sources, and traditions.</td>
<td>Demonstrates the ability to make food choices according to nutrient content.</td>
<td>Evaluates own daily food choices in terms of recommended nutritional needs and costs to optimal health.</td>
<td>Assesses dietary needs and possible alternatives to maintain individual and family health.</td>
</tr>
<tr>
<td>1.4 To develop an understanding of how emotional health is influenced by genetic, biological, social, cultural, environmental, and ecological factors</td>
<td>Acceptance of Self and Others Discusses ways new pupils may be made to feel welcome.</td>
<td>Tells about ways that help individuals get along with others, including parents and teachers.</td>
<td>Proposes ways of becoming acquainted with persons of other ethnicities and national origins.</td>
<td>Suggests ways of promoting an understanding of oneself and others in multicultural relationships.</td>
</tr>
</tbody>
</table>
### HEALTH EDUCATION

#### OBJECTIVES

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uses of Substances</strong></td>
<td><strong>Causal Factors</strong></td>
<td><strong>Responsibility for the Use of Health Resources</strong></td>
<td><strong>Accident Prevention</strong></td>
</tr>
<tr>
<td>Differentiates between helpful and harmful substances in the home and school environment.</td>
<td>Explains practices that are contributing causes of diseases and disorders.</td>
<td>Demonstrates ways that show acceptance of responsibility for one's own health.</td>
<td>Demonstrates safety behavior when crossing streets, riding vehicles, using tools and playthings, participating in water sports, and handling animals.</td>
</tr>
<tr>
<td><strong>Causal Factors</strong></td>
<td><strong>Causal Factors</strong></td>
<td><strong>Causal Factors</strong></td>
<td><strong>Causal Factors</strong></td>
</tr>
<tr>
<td>Explains the role of microorganisms in the spread of communicable diseases.</td>
<td>Explains the role of microorganisms in the spread of communicable diseases.</td>
<td>Explains factors that contribute to the use of substances and to long- and short-term effects.</td>
<td>Identifies and recognizes the symptoms of the diseases and disorders causing the highest morbidity and mortality rates among selected populations.</td>
</tr>
<tr>
<td><strong>Responsibility for the Use of Health Resources</strong></td>
<td><strong>Responsibility for the Use of Health Resources</strong></td>
<td><strong>Responsibility for the Use of Health Resources</strong></td>
<td><strong>Responsibility for the Use of Health Resources</strong></td>
</tr>
<tr>
<td>Demonstrates value of having regular medical and dental checkups and follow-ups on immunizations.</td>
<td>Demonstrates use of appropriate sources of health information in selecting health services.</td>
<td>Identifies attitudes and behavior conducive to accident causation.</td>
<td>Discusses consumer rights in obtaining full and accurate information about one's health.</td>
</tr>
<tr>
<td><strong>Accident Prevention</strong></td>
<td><strong>Accident Prevention</strong></td>
<td><strong>Accident Prevention</strong></td>
<td><strong>Accident Prevention</strong></td>
</tr>
<tr>
<td>Analyses the role of attitudes in accident prevention and causation.</td>
<td>Identifies attitudes and behavior conducive to accident causation.</td>
<td>Identifies attitudes and behavior conducive to accident causation.</td>
<td>Interprets the relationship between psychological factors and the occurrence of accidents.</td>
</tr>
<tr>
<td><strong>Community Health Resources</strong></td>
<td><strong>Community Health Resources</strong></td>
<td><strong>Community Health Resources</strong></td>
<td><strong>Community Health Resources</strong></td>
</tr>
<tr>
<td>Identifies procedures for locating community resources that provide medical and social services.</td>
<td>Analyzes the relationship of cultural and socioeconomic factors to the use of health resources.</td>
<td>Discusses people's roles in using the political system to fulfill unmet health needs.</td>
<td><strong>Community Health Resources</strong></td>
</tr>
</tbody>
</table>

1. To develop awareness of the use of substances by individuals
2. To develop an understanding of the causal factors of diseases and disorders and of the extent to which certain diseases and disorders can be prevented, treated, and controlled
3. To develop an understanding that choices about health information, products, and services are affected by needs, feelings, values, cultural experiences, knowledge, and economic resources
4. To develop an understanding that a safe environment and preparedness to deal with emergency situations contribute to wellness
5. To develop an understanding of the types of health resources needed to protect the health of people in all types of communities
OBJECTIVES

1.10 To develop an understanding that an environment in ecological balance enhances people's mental, social, and physical well-being.

GOAL 20: To develop the understandings and skills necessary for decision making in relation to the maintenance of health

SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>LEVEL 1</th>
<th>LEVEL 2</th>
<th>LEVEL 3</th>
<th>LEVEL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBJECTIVES</strong></td>
<td><strong>Level 1</strong></td>
<td><strong>Level 2</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 4</strong></td>
</tr>
<tr>
<td>1.10 To develop an understanding that an environment in ecological balance enhances people's mental, social, and physical well-being</td>
<td><strong>Environmental Quality</strong></td>
<td>Illustrates factors in the surroundings that promote health and safety.</td>
<td>Examines the relationship between the quality of the environment and the way a person feels.</td>
<td>Describes the interrelationship between human life-styles and the ecological balance of other life forms.</td>
</tr>
<tr>
<td><strong>GOAL 20:</strong> To develop the understandings and skills necessary for decision making in relation to the maintenance of health</td>
<td><strong>SAMPLES OF LEARNER BEHAVIORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OBJECTIVES</strong></td>
<td><strong>Level 1</strong></td>
<td><strong>Level 2</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 4</strong></td>
</tr>
<tr>
<td><strong>OBJECTIVES</strong></td>
<td>Oral Health</td>
<td>Recognizes the importance of regular dental evaluations and care.</td>
<td>Identifies the structures of the teeth, the surrounding tissues, and the specialized functions of the teeth.</td>
<td>Appraises reliable sources of information concerning the selection of qualified professional personnel for prevention and care of dental problems.</td>
</tr>
<tr>
<td><strong>OBJECTIVES</strong></td>
<td>Interpersonal Relations</td>
<td>Demonstrates ways in which each family member depends on other family members.</td>
<td>Explains the impact of family harmony on the health of family members.</td>
<td>Compares the characteristics that are desirable in a dating situation with those that are desirable in a marital situation.</td>
</tr>
<tr>
<td><strong>OBJECTIVES</strong></td>
<td>Factors Influencing Choices</td>
<td>Compares similar and different foods from ethnic groups.</td>
<td>Describes the effects of food on a person's performance and behavior.</td>
<td>Examines factors influencing personal and family food choices.</td>
</tr>
<tr>
<td><strong>OBJECTIVES</strong></td>
<td>Emotions</td>
<td>Describes ways to deal with upset feelings.</td>
<td>Identifies how situations may change emotions.</td>
<td>Illustrates ways that stress can affect body functions.</td>
</tr>
</tbody>
</table>
## Health Education

### Objectives

<table>
<thead>
<tr>
<th>Level</th>
<th>Decision Making</th>
<th>Prevention and Control</th>
<th>Criteria</th>
<th>Emergency Health Care</th>
<th>Shared Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.5</strong></td>
<td>To develop decision-making and valuing skills about the use and misuse of substances</td>
<td><strong>Level 1</strong></td>
<td>Distinguishes ways the media influence decisions.</td>
<td><strong>Level 2</strong></td>
<td>Selects and applies scientific information to prevent and control diseases.</td>
</tr>
<tr>
<td><strong>2.6</strong></td>
<td>To make decisions for obtaining early diagnosis and treatment of suspected diseases and disorders</td>
<td><strong>Level 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.7</strong></td>
<td>To use evaluative criteria when selecting health information, products, and services</td>
<td><strong>Level 1</strong></td>
<td><strong>Criteria</strong></td>
<td><strong>Level 2</strong></td>
<td>Discusses health products that are commonly misrepresented through advertising.</td>
</tr>
<tr>
<td><strong>2.8</strong></td>
<td>To evaluate and decide on alternative procedures for emergency situations, considering factors of time and consequence</td>
<td><strong>Level 1</strong></td>
<td><strong>Emergency Health Care</strong></td>
<td><strong>Level 2</strong></td>
<td>Demonstrates the steps in providing basic first aid in life-threatening situations.</td>
</tr>
<tr>
<td><strong>2.9</strong></td>
<td>To make decisions that will contribute to the development of community health resources based on human needs and desired outcomes</td>
<td><strong>Level 1</strong></td>
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</tr>
</tbody>
</table>

**HEALTH EDUCATION**

**Level 1**
- Decision Making
- Distinguishes ways the media influence decisions.

**Level 2**
- Prevention and Control
- Illustrates personal actions to maintain health and to prevent diseases.
- Criteria
- Distinguishes among health products that may be beneficial, worthless, or detrimental to a person's health.
- Emergency Health Care
- Tells what to do for simple injuries.

**Level 3**
- Describes how values influence personal decisions to use or not to use specific substances.
- Lists the symptoms of common diseases among youth, including sexually transmitted diseases, and the importance of early diagnosis and treatment.
- Discusses health products that are commonly misrepresented through advertising.
- Develops factors to consider when evaluating, selecting, and using health products, services, and information.

**Level 4**
- Analyzes how individual needs and values interact with the social environment to determine the individual's use of substances.
- Accepts the value of local, national, and international efforts to prevent and control diseases.
- Determines the qualifications and skills needed for various health professions and vocations.
- Demonstrates appropriate advanced first aid procedures for major emergencies and life-threatening situations requiring mouth-to-mouth resuscitation and cardiopulmonary resuscitation.

**Shared Responsibility**
- Illustrates ways to work with others in promoting family and community health.
OBJECTIVES

2.10 To make decisions which will help reduce all types of pollution and other environmental hazards

GOAL 3.0: To develop coping skills for the maintenance of good health

SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environmental Protection Describes what people can do to promote a healthy and safe environment.</td>
<td>Relates what family members can do to maintain and protect the environment where they live, work, and play.</td>
<td>Reports on the efforts of community groups and agencies to protect and improve the environment.</td>
<td>Evaluates the programs of official agencies that have jurisdiction over the environment and of voluntary agencies dedicated to environmental improvement.</td>
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<tr>
<td>3.1 To develop personal practices which contribute to wellness</td>
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<tr>
<td></td>
<td>Physical Fitness and Cardiovascular Health</td>
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<tr>
<td></td>
<td>Participates in a well-rounded program of activities that promote strength, agility, coordination, and physical development.</td>
<td>Describes contributions of physical activities to the improvement of muscle tone and cardiovascular fitness.</td>
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<tr>
<td>3.2 To engage in and promote satisfying human relationships through which individuals can be nurtured and grow</td>
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<tr>
<td></td>
<td>Parenting</td>
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<tr>
<td></td>
<td>Describes how families in other cultures care for their young.</td>
<td>Discusses socioeconomic implications of family size.</td>
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<tr>
<td>3.3 To develop eating patterns which contribute to wellness</td>
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<tr>
<td></td>
<td>Consumer Competencies</td>
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<tr>
<td></td>
<td>Selects a food and states the reasons for making the choice.</td>
<td>Evaluates the usefulness of words and pictures on food packages.</td>
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<tr>
<td>3.4 To develop patterns of behavior which promote sound mental-emotional health</td>
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<tr>
<td></td>
<td>Coping with Stress and Anxiety</td>
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<td></td>
<td>Describes alternative behaviors in situations where something frustrating happens.</td>
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</tbody>
</table>

HEALTH EDUCATION

Level 3

Identifies ways in which physical fitness contributes to physical, mental, and social health.

Level 4

Formulates a balanced program for physical fitness that reflects the need for regular exercise throughout adult life.

Presents examples of shared responsibilities of parenthood and family planning.

Describes resources that may be used in developing alternatives for satisfying dietary needs and budgetary constraints.

Relates physiological aspects of stress and anxiety to various body systems and to the onset of certain diseases.
### HEALTH EDUCATION

#### OBJECTIVES

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.5</strong> To demonstrate responsible behavior in using various chemical substances</td>
<td><strong>3.6</strong> To demonstrate responsible behavior in the prevention and control of diseases</td>
<td><strong>3.7</strong> To exhibit selective practices in choosing and using health information, products, and services</td>
<td><strong>3.8</strong> To assume responsibility for improving the health of the community</td>
</tr>
<tr>
<td><strong>Responsibility for Prevention</strong></td>
<td><strong>Prevention and Control</strong></td>
<td><strong>Social Factors and Health Care</strong></td>
<td><strong>Health Planning</strong></td>
</tr>
<tr>
<td>Explains the customs and rules of the family, the school, and the community regarding the use of substances.</td>
<td>Discusses health practices which will hasten recovery from infectious diseases.</td>
<td>Recognizes different types of health facilities and services used by families.</td>
<td>Discusses ways families cooperate with school personnel in promoting the health of family members.</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td><strong>Level 3</strong></td>
<td><strong>Level 4</strong></td>
<td><strong>Environmental Protection</strong></td>
</tr>
<tr>
<td>Identifies scientific contributions that have been made to help prevent people from diseases and disorders.</td>
<td>Evaluates programs designed to prevent substance misuse and to assist persons with related problems.</td>
<td>Supports and encourages individual and community efforts to prevent and control diseases, including sexually transmitted diseases.</td>
<td>Reports on different kinds of pollution.</td>
</tr>
<tr>
<td><strong>Level 3</strong></td>
<td><strong>Level 4</strong></td>
<td><strong>Level 4</strong></td>
<td><strong>Level 4</strong></td>
</tr>
<tr>
<td>Evaluates programs designed to prevent substance misuse and to assist persons with related problems.</td>
<td>Analyzes life-styles and personal health practices designed to reduce risk factors in the occurrence of major diseases and disabilities.</td>
<td>Supports and encourages individual and community efforts to prevent and control diseases, including sexually transmitted diseases.</td>
<td>Identifies factors which are involved in making a home safe for infants and children.</td>
</tr>
<tr>
<td><strong>Level 4</strong></td>
<td></td>
<td></td>
<td>Identifies factors which are involved in making a home safe for infants and children.</td>
</tr>
<tr>
<td><strong>Level 4</strong></td>
<td></td>
<td></td>
<td>Develops plans for participating in community health planning.</td>
</tr>
<tr>
<td>Describes the relationship among society's values, the use of certain substances, and efforts to prevent misuse.</td>
<td>Analyzes life-styles and personal health practices designed to reduce risk factors in the occurrence of major diseases and disabilities.</td>
<td>Reports on health practices of different cultures.</td>
<td>Examines the interrelationship of factors that are involved in maintaining and improving environmental standards.</td>
</tr>
</tbody>
</table>

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**Level 1: Responsibility for Prevention**

- Explains the customs and rules of the family, the school, and the community regarding the use of substances.

**Level 2: Prevention and Control**

- Discusses health practices which will hasten recovery from infectious diseases.

**Level 3: Social Factors and Health Care**

- Recognizes different types of health facilities and services used by families.

**Level 4: Accident Prevention**

- Demonstrates appropriate behavior during emergency drills.

**Level 5: Health Planning**

- Discusses ways families cooperate with school personnel in promoting the health of family members.

**Level 6: Environmental Protection**

- Reports on different kinds of pollution.
PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

American Public Health Association
1015 - 18th Street, N.W.
Washington, D.C. 20036
Publication: American Journal of Public Health

American School Health Association
P.O. Box 708
Kent, Ohio 44240
Publication: Journal of School Health

Association for the Advancement of Health Education
1201 - 16th Street, N.W.
Washington, D.C. 20036
Publication: Health Education

California Association for Health, Physical Education and Recreation
401 S. Hartz Avenue, Suite 306
Danville, CA 94526
Publication: CAHPER Journal

California School Health Association
1353 Lausen Drive
Millbrae, CA 94030
Publication: CSHA Journal

California School Nurses Association
Mary Avery, President
P.O. Box 214003
Sacramento, CA 95821
Publication: The Newsletter

National Association of School Nurses
1201 - 16th Street, N.E.
Washington, D.C. 20036
Publication: The School Nurse
Home economics education is a multidisciplinary program which includes the areas of management of finances, resources, and services; child development and family relations; housing and home furnishings; foods and nutrition; and clothing and textiles. New curriculum development has emphasized consumer education, interpersonal relationships and human development, sexual equality, parenthood education, nutrition education, and preparation for changing roles.

The home economics education program is concerned with helping young people develop skills, attitudes, and knowledge to cope with the responsibilities they will be expected to accept both as family members now and in the multiple roles of homemaker, wage earner, and participating member of a community in the future.

Home economics programs are formally offered at the grade levels which correspond to levels 3 and 4 in the Course of Study. Vignettes are included for those levels. However, students can be introduced informally to many of the concepts in a home economics program at levels 1 and 2. Samples of learner behaviors have been included for those levels to demonstrate how the goals and objectives can be used in developing many different types of activities.
VIGNETTES

GOAL 4: RESOURCE MANAGEMENT — To develop skills for creative management of resources to achieve desired life goals

LEVEL 3

The teacher asks students to list all the decisions they have made since they awakened that morning. When the lists are completed, the teacher asks the students to read their lists. The group discusses whether all possible decisions have been listed. It may be necessary to explain that even getting out of bed in the morning can be interpreted as a decision. Also, letting someone else make a decision for you can be counted as a decision made by you. At the conclusion of the activity the students discuss the steps necessary to making an important decision. Finally, they develop a list of steps that are included in a decision-making process.

HOME ECONOMICS

LEVEL 4

In this activity the teacher gives examples of the common practice in our country of seeking advice from experts (e.g., lawyer, doctor, counselor) when an important problem arises. The teacher describes a community in which the leaders have decided to provide expert help to everyone for making decisions. At great expense of time and public funds the community leaders have trained a decision agent. In order to make the agent's services available to a majority of the local citizens, each person can ask for help with only three decisions in a lifetime. Students are asked to write down the three decisions each of them would ask the decision agent to make.

Afterwards, the teacher explains that the service has become very popular and successful. As a result the community leaders have trained more agents and now require that all decisions be made by them. Community members now can make only three decisions in a lifetime. The teacher asks the students to write down the three decisions they will make themselves.

At the conclusion of the activity the teacher leads a discussion asking the students how they felt when doing the activity, what problems arose in making choices about decisions given to the agent, and whether or not a decision agent would be desirable.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: PARENTHOOD EDUCATION/FAMILY RELATIONS — To develop students' abilities to help children realize their potential

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

1.1 To develop the ability to plan for parenthood by assessing personal, emotional, physical, and economic readiness to assume the responsibility

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Talks with mothers about caring for babies.</td>
<td>Discusses special responsibilities of babysitting with siblings.</td>
<td>Describes the experiences and problems encountered in babysitting.</td>
<td>Describes tasks and responsibilities involved in caring for a young child for one week.</td>
</tr>
</tbody>
</table>
### HOME ECONOMICS

#### OBJECTIVES

**Level 1**

1.2 To develop understanding of physical, emotional, social, and intellectual developmental tasks

Participates in non-sex-segregated activities.

1.3 To be aware of changes in stereotypes regarding acceptable sex roles that broaden lifestyle options for both men and women

Participates in non-sex-segregated activities.

1.4 To become aware of changing marriage and family patterns and expectations

Talks about being a family member.

1.5 To analyze ways of dealing with parenthood

Deals with stress through change in own activities.

1.6 To develop awareness of methods that can be used in developing a positive self-concept in children

Describes an environment that encourages positive self-concept.

**Level 2**

Works as teacher in kindergarten.

Develops and acts on plans to contribute to family activities.

Deals with stress through change in own activities.

**Level 3**

Describes the needs and behaviors of preschool children.

Describes situations in which family members provide support to each other.

Describes the personal stress involved in child care.

**Level 4**

Uses Piaget's concept of conservation of matter with preschool children to assess developmental levels.

Determines subcultural differences in sex-role expectations.

Describes alternatives for family ties in adulthood.

Describes the support system for battered and neglected children in the community.


### GOAL 2.0: INTERPERSONAL RELATIONS — To develop the ability to be effective in personal relationships, to cope with stress, and to clarify personal values in relation to experiences within a family setting

#### OBJECTIVES

**Level 1**

2.1 To develop skills for effective communication

Communicates feelings in specific situations.

**Level 2**

Listens and responds when others speak.

**Level 3**

Analyzes ways of communicating with family members.

**Level 4**

Suggests ways of improving communication among different generations.
## OBJECTIVES

<table>
<thead>
<tr>
<th>Level 1</th>
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<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 To demonstrate understanding of stress and ways to cope with it</td>
<td>Participates in rest periods.</td>
<td>Participates in tension reducing exercises.</td>
<td>Describes stress situations and anticipates ways to cope during these situations.</td>
</tr>
<tr>
<td>2.3 To develop a positive self-concept</td>
<td>Describes own perception of situations in which there is conflict with others.</td>
<td>Discusses own strengths and weaknesses in relation to specific tasks.</td>
<td>Participates effectively in a variety of roles in activities with peers.</td>
</tr>
<tr>
<td>2.4 To clarify values and how they affect interactions with others</td>
<td>Talks about values (e.g., tell the truth, be honest).</td>
<td>Demonstrates values in role playing situations.</td>
<td>Analyzes the development of own values and sets goals.</td>
</tr>
<tr>
<td>2.5 To become aware of the unique problems of aging</td>
<td>Discusses relationships with older persons.</td>
<td>Participates in class project to help older people in the community.</td>
<td>Describes responsibilities that can be anticipated at different stages in the life cycle.</td>
</tr>
<tr>
<td>2.6 To develop a sense of social responsibility and respect for the diversity among people</td>
<td>Assumes responsibility for own actions.</td>
<td>Talks about own beliefs.</td>
<td>Discusses differences in values expressed by peers.</td>
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</tbody>
</table>

## HOME ECONOMICS

<table>
<thead>
<tr>
<th>Level 4</th>
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<tbody>
<tr>
<td>Describes ways of offering support to others during periods of stress.</td>
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</table>

## GOAL 3.0: NUTRITION AND FOODS — To design a variety of nutritious diets and plan and prepare meals

### SAMPLES OF LEARNER BEHAVIOR:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 To apply the Basic Four criteria in planning a variety of diets</td>
<td>Tries new foods.</td>
<td>Lists Basic Four groups.</td>
<td>Lists the Basic Four and recommends number of servings for food groups.</td>
<td>Evaluates own diet for a week using Basic Four criteria.</td>
</tr>
<tr>
<td>3.2 To become aware of special diet requirements for specific purposes such as weight reduction, pregnancy, lactation, and old age</td>
<td>Chooses fruit over candy for snack.</td>
<td>Identifies foods high in sugar content.</td>
<td>Lists categories of food to avoid for safe weight loss.</td>
<td>Plans a diet for weight reduction over a two-week period.</td>
</tr>
</tbody>
</table>
HOME ECONOMICS

OBJECTIVES

3.3 To demonstrate knowledge of an individual’s need for protein, carbohydrates, fats, vitamins, minerals, and water in maintaining physical health

Level 1: Chooses milk over soft drinks.

Level 2: Lists reasons for including protein foods in food choices.

Level 3: Identifies the foods eaten during the day that contain protein.

Level 4: Explains the differences between complete and incomplete protein and chooses foods that provide all amino acids.

3.4 To develop skills in planning, purchasing, and preparing food

Level 1: Prepares a nutritious snack.

Level 2: Prepares a quick bread.

Level 3: Plans and prepares a simple breakfast.

Level 4: Plans and prepares a three-course dinner.

GOAL 4.0: RESOURCE MANAGEMENT — To develop skills for creative management of resources to achieve desired life goals

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

4.1 To understand the role of responsible decision making in the use of resources, including consideration of costs to society, environmental effects, and personal and family values and goals

Level 1: Eliminates waste in using materials in class.

Level 2: Practices recycling of materials used in the classroom.

Level 3: Describes the effects of own consumer choices and practices on the community and the environment (e.g., water consumption).

Level 4: Analyzes ways in which decisions about the use of present resources can open up opportunities to achieve a satisfying lifestyle.

4.2 To analyze the factors that contribute to effective decision making

Level 1: Identifies opportunities in school to make decisions such as in the choice of materials for an art project or planning for independent activities.

Level 2: Makes decisions about ways to meet class requirements.

Level 3: Lists all the decisions made in the last 24 hours and the factors that contributed to them.

Level 4: Lists decisions that affect self but are made by others.
GOAL 5.0: CONSUMER EDUCATION — To be aware of consumer rights and to make decisions in the marketplace which increase satisfaction and economic efficiency

SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>5.1 To become aware of alternative uses of personal resources other than money to achieve goals</td>
<td>Performs household tasks for other family members.</td>
<td>Performs tasks for a neighbor.</td>
<td>Identifies personal resources that can be used to achieve a goal.</td>
<td>Exchanges special talents with a friend so that both benefit.</td>
</tr>
<tr>
<td>5.2 To develop a method of financial record-keeping to meet personal needs</td>
<td>Tells how allowance is spent.</td>
<td>Keeps record of spending.</td>
<td>Relates the use of a spending plan to accomplishment of goals.</td>
<td>Develops a budget plan for personal spending.</td>
</tr>
<tr>
<td>5.3 To develop personal savings practices in relation to values, goals, and resources</td>
<td>Makes arrangements to save through parents' help.</td>
<td>Makes a plan for regular savings through a bank.</td>
<td>Identifies various kinds of insurance available.</td>
<td>Compares advantages and disadvantages of saving to buy something with using credit for purchases.</td>
</tr>
<tr>
<td>5.4 To become aware of the personal risks for which insurance is needed and the types of insurance programs available</td>
<td></td>
<td></td>
<td></td>
<td>Describes advantages and disadvantages of different insurance plans.</td>
</tr>
<tr>
<td>5.5 To relate cost and effective use of credit to the ability to accomplish future goals</td>
<td>Describes personal feelings about advertising on television.</td>
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<td></td>
<td>Identifies sources of credit available to teenagers.</td>
</tr>
<tr>
<td>5.6 To assess the accuracy and reliability of various sources of consumer information</td>
<td></td>
<td>Evaluates consumer advertising in media such as newspapers, magazines, radio, and television.</td>
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<td>Identifies rights of individuals under the Fair Credit Reporting Act.</td>
</tr>
</tbody>
</table>

HOME ECONOMICS

Level 4

Exchanges special talents with a friend so that both benefit.

Develops a budget plan for personal spending.

Compares advantages and disadvantages of saving to buy something with using credit for purchases.

Describes advantages and disadvantages of different insurance plans.

Identifies sources of credit available to teenagers.

Identifies rights of individuals under the Fair Credit Reporting Act.

Analyzes ways in which misleading advertising, inadequate labeling, and deceptive packaging restrict the consumer's right to full and accurate information.
| GOAL 6.0: CLOTHING AND TEXTILES — To consider aesthetic and practical factors in choice, construction, repair, and care of clothing |  |
|---|---|---|---|
| OBJECTIVES | Level 1 | Level 2 | Level 3 | Level 4 |
| 5.7 To become aware of consumer rights and of procedures for assuring legal protection |  |
| GOAL 7.0: HOUSING AND COMMUNITY — To be able to make housing decisions based on personal values, needs, and the responsibility of community membership |  |
| OBJECTIVES | Level 1 | Level 2 | Level 3 | Level 4 |
| 7.1 To recognize how values affect housing decisions and use of financial resources |  |
| 6.1 To develop skills in clothing construction and sewing machine operation | Makes project that uses stitchery. | Sews on a button. | Operates a sewing machine (e.g., makes a simple garment). | Cleans, oils, and makes simple repairs on a sewing machine. |
| 6.2 To demonstrate knowledge of good personal grooming and complementary wardrobe selection | Helps to choose clothing from a selection made by parent. | Chooses colors of clothing. | Evaluates why selected colors are attractive on oneself. | Plans a wardrobe with color coordination. |
| 6.3 To demonstrate adequate skill in repair and maintenance of clothing | Keeps clothing clean by wearing protective coverings such as aprons. | Sorts and folds laundry. | Explains care required for polyesters, cotton, and wool garments. | Removes common stains from a garment made of identified fiber. |
| SAMPLES OF LEARNER BEHAVIORS |  |  |  |  |
### OBJECTIVES

| 7.2 | To recognize the need and the responsibility that residents have for resources and services a community provides. |
| 7.3 | To develop an appreciation for aesthetic qualities that enhance the living environment. |
| 7.4 | To understand the ecological impact of housing choices. |

### GOAL 8.0: 
**HOME ECONOMICS-RELATED OCCUPATIONS** — To develop knowledge and skills necessary for entry-level employment or admission to advanced training in one or more of the following home economics-related occupational areas: care and guidance of children, clothing management, production and services, food management, home furnishings, equipment and services, institutional and home management, and supporting services.

### SAMPLES OF LEARNER BEHAVIORS

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>To demonstrate basic entry-level employment skills.</td>
<td>Uses tools (e.g., hammer, saw) to make something.</td>
<td>Uses tools in a manner which is safe, personally and to others.</td>
<td>List rules for safe operation of tools used in classroom.</td>
</tr>
<tr>
<td>8.2</td>
<td>To demonstrate minimum competencies that are unique to specific occupational areas (e.g., food services).</td>
<td>Interviews parents about occupational responsibilities.</td>
<td>Studies various work roles and responsibilities.</td>
<td>Analyzes skills and responsibilities required in self-selected work roles.</td>
</tr>
</tbody>
</table>
POINT OF VIEW

The major purpose of industrial arts education is to provide opportunities for students to develop an understanding of the technical, occupational, organizational, managerial, consumer, recreational, social, historical, and cultural aspects of industry and technology.

Industrial and technical knowledge and competencies are developed through activities that emphasize experimenting, planning, designing, constructing, and evaluating. Students use tools, machines, and materials in these activities.

An industrial arts education program is organized to assist individuals to make informed and meaningful occupational career choices. Programs are designed to provide a continuum of experiences and activities that further the development of each student’s career potential, technical awareness, judgment, self-reliance, and resourcefulness in order to become an effective individual in our industrial-technical society.
GOAL 2: To develop skills and knowledge needed for entry-level jobs, advanced training, and avocational activities

LEVEL 1

The students receive instruction, demonstrations, and materials for assembling a model airplane. After class discussion of the many careers involved in the aircraft industry, the students become builders by assembling their airplanes. They use simple hand tools in the construction of the plane and show concern for the safety of self and others by using the tools in a specified area of the classroom and keeping the area free of clutter. When the task is finished, each student shares the experience and the product with the rest of the class.

LEVEL 2

Pairs of students design a "Rube Goldberg" type machine to rid the area of smog. They write instructions for construction and list all materials and tools needed for construction as well as advantages and disadvantages of the invention. The groups assemble materials and tools, follow step-by-step instructions to create their machines, test the working parts, and apply finishing touches. When the task is finished, each pair of students demonstrates and explains their invention to the class.

LEVEL 3

A group of students plan the construction of a ticket booth, design the booth, make scale drawings with construction notes and accurate dimensions, list materials and equipment, and order and receive materials; attention is given to checking invoices, deciding the site, and studying the environmental impact. The group develops a work plan and constructs the booth using hand and power tools to cut materials, mix concrete, and apply adhesives. After construction, the group decorates the booth and opens it for business.

LEVEL 4

A group of students form a company for the repair of automobiles. They elect a foreman and an accountant. The group develops a system to account for all expenditures and to record the time worked by company members. They may or may not sell stocks to purchase supplies and parts. They advertise the services available and the prices for typical services. They solicit work and analyze the services needed using an oscilloscope, infrared exhaust analyzers, alignment, and measuring devices. They order and receive the necessary parts. They install the parts making necessary calibrations to ensure proper operation of the vehicle. At all times, they follow prescribed safety procedures. The accountant computes the charges for parts and labor, collects the money, and credits the amounts to the proper accounts.

At the end of the year the accountant reports on profits and losses. The company members decide how to share the profits or make up the losses.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop basic educational skills of communication, computation, and decision making necessary in solving problems of an industrial nature
### INDUSTRIAL ARTS

#### OBJECTIVES

1.1 To read and interpret charts, specifications, and drawings necessary for the completion of a product or task

1.2 To read, compute, and analyze information obtained from instruments or machines and apply the information

1.3 To develop skills for planning and completing tasks

1.4 To express technical ideas in writing instructions, making charts, laying out pictorial representations, and building scale models

1.5 To compute material costs

#### SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>Level 1</th>
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<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1</strong></td>
<td>Examines simple drawings and selects the correct one to complete a project.</td>
<td>Reads drawings in the early stages of production to determine size, shape, material requirements, and processes necessary for completion of a product.</td>
<td>Reads informative literature such as auto tune-up specifications which indicate the number of degrees from top, dead center for timing the point gap in thousands and the plug gap in thousands and applies this information in tuning up a car.</td>
</tr>
<tr>
<td><strong>1.2</strong></td>
<td>Follows an organized process for solving problems which require the use of hand tools.</td>
<td>Uses basic technical information to evaluate results and plan for corrections.</td>
<td>Reads, computes, and analyzes readings from a variety of instruments and synthesizes the information to make adjustments in the completion of a project.</td>
</tr>
<tr>
<td><strong>1.3</strong></td>
<td>Draws a picture resembling the item to be described.</td>
<td>Scales ideas in pictorial and three-view drawings which show dimensions necessary for construction of a product.</td>
<td>Uses technical knowledge and procedures necessary to obtain solutions to real problems such as a car that will not start.</td>
</tr>
<tr>
<td><strong>1.4</strong></td>
<td>Computes the total direct cost when given cost of components.</td>
<td>Determines direct cost of personally constructed items by use of formulas, weight scales, charts, price sheets, and catalog.</td>
<td>Develops a complete set of data including pictorials, schematics, industrial samples, and production notes necessary for production of an item.</td>
</tr>
<tr>
<td><strong>1.5</strong></td>
<td>Computes cost of mass produced objects and shows some understanding of analyzing indirect cost of production.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OBJECTIVES
1.6 To select measuring devices and use accurately in completing an industrial-related task

Level 1
Determines the longest, largest, shortest, and smallest objects by comparison of physical shape.

Level 2
Makes linear measurements.

Level 3
Selects correct simple measuring devices such as calipers, dividers, scales, and squares to determine diameter, center, length, width, and thickness.

2.0: To develop skills and knowledge needed for entry-level jobs, advanced training, and avocational activities

OBJECTIVES

2.1 To identify basic hand tools and equipment using proper nomenclature

Level 1
Recognizes common tools of a household nature (e.g., pliers, screwdriver, saw, hammer).

Level 2
States the proper names of hand tools used in industrial arts class.

Level 3
Names the power tools and equipment common to the shop area.

Level 4
Identifies all tools and equipment in a particular shop and points out the major components of each.

2.2 To use hand tools and equipment in a proficient and skillful manner

Level 1
Uses hand tools to assemble simple object.

Level 2
Plans a simple construction project and uses appropriate tools for the problem.

Level 3
Uses an industrial process, materials, hand tools, and selected power equipment in the manner demonstrated by the teacher.

Level 4
Solves industrial type problems using all necessary equipment in a safe, skillful, and efficient manner.

2.3 To plan, design, and construct a useful product

Level 1

Level 2
Makes a sketch with dimensions of a simple project and completes the project.

Level 3
Draws plans and selects and bills out materials for a project.

Level 4
Uses design principles of form and function to make a drawing. Gives the step-by-step procedure for producing the product. Selects appropriate materials and figures cost. Uses appropriate tools, equipment, and procedure to construct and assemble project.

SAMPLES OF LEARNER BEHAVIORS

INDUSTRIAL ARTS
Level 4
Selects and applies the correct instrument from a variety of measuring devices such as dial indicating meters, scope, and micrometers.
INDUSTRIAL ARTS

OBJECTIVES

2.4 To identify and select the appropriate material for a particular application

- Level 1: With the teacher's help, selects an appropriate material to complete the assigned task.
- Level 2: Makes an accessory for own bedroom.
- Level 3: Selects the basic material necessary for the completion of a task.
- Level 4: Considers the form, function, and purpose of a product or task and selects correct basic material (fasteners, adhesives, coating, lubricants, parts) to complete the product.

2.5 To develop a positive attitude toward safety as it relates to self and others

- Level 1: Identifies areas of the workroom which are significant in terms of safety (e.g., location of fire extinguishers, exit procedures, earthquake procedures).
- Level 2: Participates in proper storage of materials and tools and demonstrates safe usage of hand tools.
- Level 3: Demonstrates safe usage of power tools toward self and others. Demonstrates use of safety devices (e.g., safety goggles, machine guards, exhaust ventilation systems, electrical disconnects).
- Level 4: Participates in the maintenance of a safety program and explains its importance to the welfare and health of self and others.

2.6 To understand the relationship of industrial education to leisure time activities

- Level 1: Names two things families do for leisure.
- Level 2: Lists at least two skills and two informational ideas learned in industrial arts classes that can be used in hobbies or recreational activities.
- Level 3: Constructs products that are useful in everyday living in industrial arts classes.
- Level 4: Uses information and skills learned in industrial arts to read, comprehend, and communicate in daily life.

GOAL 3.0: To develop knowledge about careers related to industry

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

3.1 To gather career information about occupations in the industrial sector

- Level 1: Describes what jobs are held by family members.
- Level 2: Listens to guest speakers' presentations on careers. Participates in field trips to industrial sites.
- Level 3: Explores several occupations by actually performing some elementary industrial task.
- Level 4: Selects a career cluster and begins developing knowledge and skills of that cluster by taking related classes.

3.2 To identify a career within the industrial sector that has personal interest

- Level 1: Describes jobs held by family members.
- Level 2: Lists several occupations which have personal appeal.
- Level 3: Lists manufacturers in the geographic area which offer employment in field of interest.
- Level 4: Names and discusses requirements of jobs that fit within personal profile, based upon test scores from interest and skills inventory.
**GOAL 4.0:** To develop an awareness of the economic structure of our industrial society

**OBJECTIVES**

4.1 To develop an awareness of the basic political and economic units of our industrial society

4.2 To develop awareness of the relationship between environment and industry.

**ENVIRONMENTAL OBJECTIVES**

- Level 1: Describes a variety of occupations within the community.
- Level 2: Describes how consumer needs and industrial production are interrelated through supply and demand.
- Level 3: Analyzes how small and large industrial operations are financed.
- Level 4: Explains rationale and gives examples of private, public, and governmental ownership of industry and business.

**GOAL 5.0:** To develop an understanding of the nature and function of industrial processes

**OBJECTIVES**

5.1 To develop an understanding of the material processes of industry

5.2 To develop an understanding of the products of industry

**LEVEL 1**

- Level 1: Describes how industries take raw materials and process them to produce a product.
- Level 2: Describes the industrial process used in constructing or manufacturing a school project.
- Level 3: Uses a variety of materials, processes, and people in the manufacture of a product.
- Level 4: Describes in detail the major processes used by industry: mixing, combining, classifying, separating, removing material, forming, coating, assembling.

**PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS**

- American Industrial Arts Association (AIAA)
  1201 Sixteenth Street, N.W.
  Washington, D.C. 20036
- American Vocational Association (AVA)
  2020 North Fourteenth Street
  Arlington, CA 22201
  Publication: AVA Journal
- California Association of Vocational Education (CAVE)
  P.O. Box 4387
  Mountain View, CA 94040
- California Council of Industrial Teacher Educators (CCITE)
  William Brown
  California State University
  Chico, CA 95926
- California Industrial Education Association (CIEA)
  5110 E. Clinton Way #205
  Fresno, CA 93727
  Publications: CIEA News
  CIEA Journal
The major purpose of a mathematics program is to develop students' abilities to apply mathematics in solving problems in everyday living. This requires understanding of the various ways in which mathematical information can be organized, analyzed, and used in problem solving. This understanding is developed through students having practical experience in a variety of situations in which mathematical problem solving is required.

Because of the practical orientation of mathematics education, it is important that students have experience both with a variety of situations and with concrete materials in the use of mathematics. Emphasis is placed on manipulation of concrete materials to define the information that is available, to analyze the parameters of a problem, and to organize the information for problem solving. Students' understanding of mathematics in relation to concrete materials is the foundation on which more abstract concepts can be developed.

Mathematics is an integral part of other curriculum areas such as music, art, science, and the social sciences. Through these curriculum areas and others, students learn about the range and variety of situations in which mathematics can be used for problem solving. Consideration should be given to developing a coordinated approach to the use of mathematical knowledge throughout the curriculum.

Computational skills are developed in conjunction with problem-solving skills. Continual practice in the application of these skills in a variety of problem-solving situations helps students understand the importance of this fundamental knowledge.
GOAL 1: To perform accurate and efficient computations using mathematics facts, operations, and number concepts which are necessary for functioning in our society

LEVEL 1

A third grade class is studying about metric units in relation to consumer goods. The project begins with students bringing in empty cartons, bottles, and jars with labels that designate quantity in metric units. The students develop a chart listing various metric units, the symbols found on the labels, what they measure (e.g., weight, volume, liquid capacity), and the customary measuring units which the metric units replace. Students use scales and calibrated containers to check the accuracy of the labels. They calculate the difference between the customary unit and the metric unit which replaces it (e.g., milliliters replaces teaspoon, tablespoon, cup fluid ounce, and pint). The students also perform calculations to discover the decimal relationship among metric units (e.g., 1000 milliliters = 1 liter; 100 centimeters = 1 meter; 1000 grams = 1 kilogram).

LEVEL 2

A sixth grade class is developing a similar project with consumer goods brought in by the students. They are comparing the unit prices of similar products in order to determine which is the best buy. The students decide to concentrate on certain products, collecting labels from different brands and different sizes of each product. Computations are performed by the students to determine the various costs per unit (using metric units when given) for each product in order to compare brands and sizes. A separate chart is developed for each product.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To perform accurate and efficient computations using mathematics facts, operations, and number concepts which are necessary for functioning in our society
### MATHEMATICS

#### OBJECTIVES

1. **To apply the structure of our number system in a variety of concrete and abstract experiences**

2. **To apply the decimal structure of our place value system**

3. **To apply the concepts and properties of addition and subtraction to related computation algorithms using concrete instructional aids and oral and written exercises**

4. **To apply the concepts and properties of multiplication and division to computational algorithms using concrete materials, verbalization, and writing skills**

5. **To use the concepts of rational numbers in operations with fractions, decimals, and percents in a variety of concrete and abstract experiences**

#### SAMPLES OF LEARNER BEHAVIORS

<table>
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<tr>
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<tbody>
<tr>
<td>Uses chip-trading games to develop place value concepts.</td>
<td>Plays cribbage or other games involving computation.</td>
<td>Uses positive and negative numbers in the 4-quadrant Battleship game.</td>
<td>Applies methods for finding large prime numbers.</td>
</tr>
<tr>
<td>Counts by 10's.</td>
<td>Uses money, metric measures, and calculators for setting decimal points and rounding off.</td>
<td>Uses scientific notation, expanded notation, and exponents.</td>
<td>Uses very large and very small numbers (e.g., light years, wavelengths) in problems.</td>
</tr>
<tr>
<td>Uses Cuisenaire rods and Unifix cubes.</td>
<td>Plays modified card game of War in which students play two cards and the highest sum or difference takes all.</td>
<td>Explores addition of numbers leading to palindromes.</td>
<td>Keeps a set of books, entering debits and credits and explains cash flow.</td>
</tr>
<tr>
<td>Decides how to divide (share) six cookies among five students.</td>
<td>Uses cubes or blocks to model dimensions and volume.</td>
<td>Describes how to use patterns to determine maximum volume from a given piece of cardboard.</td>
<td>Multiplies and divides with very large (e.g., astronomy) and very small (e.g., microscopic biology) numbers.</td>
</tr>
<tr>
<td>Uses concrete models to explain and demonstrate that the object is made up of parts.</td>
<td>Classifies and orders fractions (greater than, equal to, less than).</td>
<td>Solves a variety of problems using fractions.</td>
<td>Solves problems using decimals and percent (including money problems).</td>
</tr>
</tbody>
</table>
### OBJECTIVES

1.6 To demonstrate an understanding of the concepts of irrational numbers in operations with other mathematical systems (e.g., imaginary numbers, modular arithmetic)

#### Level 1

#### Level 2

#### Level 3

#### Level 4

**DISCOVERS VALUE OF PI THROUGH EXPERIMENTATION AND COMPUTATIONS RELATING CIRCUMFERENCE AND DIAMETER MEASUREMENTS OF A LARGE VARIETY OF CIRCULAR OBJECTS SUCH AS WASTEBASKETS, COINS, AND CLOCK FACES.**

### GOAL 2.0:

**To use logical thinking strategies in selecting and applying appropriate mathematical concepts, operations, and models for the analysis and solution of problems**

#### SAMPLES OF LEARNER BEHAVIORS

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<tbody>
<tr>
<td>2.1 To determine the existence of a problem situation and identify relevant information</td>
<td>Defines and solves problems using manipulative materials in a variety of situations.</td>
<td>Defines a problem using both concrete and abstract models.</td>
<td>Reads and discusses a number of problem statements, defines the problem situations, and identifies data relevant to solving the problems.</td>
<td>Analyzes and interprets puzzles and brainteasers.</td>
</tr>
<tr>
<td>2.2 To analyze problem situations and develop alternative solutions</td>
<td>Solves problems using manipulative materials such as toys and blocks.</td>
<td>Determines possible methods for solution of a variety of verbal and concrete problems.</td>
<td>Examines both concrete and abstract problem situations and explores alternative solutions.</td>
<td>Discusses possible methods to solve real-life situation problems.</td>
</tr>
</tbody>
</table>

#### GOAL 3.0:

**To apply the principles of nonstandard and standard measurement, including the metric system, in everyday situations and in specialized, technical fields**

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<tbody>
<tr>
<td>3.1 To use appropriate terminology in direct comparison activities</td>
<td>Identifies tallest and shortest using a wide variety of concrete objects and the students themselves.</td>
<td>Uses appropriate terms to compare capacities of various common containers such as cups, pitchers, and milk cartons.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**USES IRRATIONAL NUMBERS IN SOLVING A WIDE VARIETY OF PROBLEMS.**
| OBJECTIVES |
|-----------------|-----------------|-----------------|-----------------|
| 3.2 To select and use appropriate non-standard units of measurement in a variety of activities |
| Level 1 |
| Draws pictorial representations of a wide variety of nonstandard units such as hands, feet, paper cups, and widgets, and applies these units in problem solving. |
| Level 2 |
| Measures distances outdoors with nonstandard units such as bicycle wheels, car wheels, and paces. |
| Level 3 |
| Estimates and verifies length and area of common simple shapes using metric and non-metric units. |
| Level 4 |
| Applies standard measurement units to specialized fields such as medicine, engineering, and auto mechanics. |
| 3.3 To explain and demonstrate the advantages of a standard unit of measurement and particularly the metric system |
| Level 1 |
| Uses linear measurement in making comparisons of everyday objects with a meter stick and a yardstick estimating and verifying whether objects are longer or shorter than these standards. |
| Level 2 |
| Estimates and verifies length, area, capacity, and mass of everyday objects using metric and non-metric units. |
| 3.4 To use concepts and operations with standard units of measurement |
| Level 1 |
| Level 2 |
| Practices operations of addition, subtraction, multiplication, and division with standard metric and non-metric units. |
| Level 3 |
| Practices conversion of units within each system such as grams to kilograms. |
| Level 4 |
| Solves a variety of problems based on measurement activities. |
| 3.5 To develop skills in the use of mathematics to quantify pollution and resource waste problems |
| Level 1 |
| Counts or otherwise quantifies simple pollution or resource waste data in the home-school environment (e.g., litter, water waste, school supplies, fuel). |
| Level 2 |
| Collects and evaluates data on community environmental problems and communicates these data to others (e.g., air pollution, noise, energy, and fuel use). |
| Level 3 |
| Compares information from other periods in history or other places to present day resource use and environmental pollution. |
| Level 4 |
| Identifies a community, national, or international environmental problem and assembles statistical data on it. Uses graphs, charts, or other means of mathematical communication. |
| Level 5 |
| Solves a variety of problems based on measurement activities. |
| 3.6 To choose appropriate units when given various measurement situations |
| Level 1 |
| Chooses tool appropriate to measuring the length of objects when given a variety of common objects and a choice of measuring tools such as inch cubes, one foot rulers, yardsticks, and meter sticks. |
| Level 2 |
| Selects the appropriate tools for measuring volume and mass of common objects. |
| Level 3 |
| Given a recipe in customary units, converts measurements to metric units and uses the revised recipe in preparing food. |
| Level 4 |
| Chooses the appropriate unit to apply to the measurement of various objects including length, area, volume, and mass. |
GOAL 4.0: To recognize, appreciate, and use geometric concepts

OBJECTIVES

4.1 To identify and construct simple geometric figures and three-dimensional models by applying appropriate concepts

4.2 To apply appropriate computational skills in determining area and volume of two- and three-dimensional geometric shapes

4.3 To solve algebraic problems applying coordinate geometry principles

4.4 To apply logical thinking skills in developing geometric proofs using definitions, postulates, and theorems

SAMPLES OF LEARNER BEHAVIORS

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<tbody>
<tr>
<td>4.1</td>
<td>Describes similarities and differences among attribute blocks.</td>
<td>Develops chart showing Euler's formula (Vertices + Faces = Edges + 2).</td>
<td>Constructs a hexahedron (a complex geometric figure).</td>
<td>Constructs a stellated polyhedron (a complex geometric figure).</td>
</tr>
<tr>
<td>4.2</td>
<td>Uses graph paper to measure area of quadrilaterals.</td>
<td>Measures surface area and volume of Cuisenaire rods, noting patterns that relate to length of rods.</td>
<td>Determines surface area and volume of various cylinders, cones, and rectangular prisms.</td>
<td>Determines maximum volume for minimum surface area of various cardboard container shapes.</td>
</tr>
<tr>
<td>4.3</td>
<td>Completes dot-to-dot pictures using points for which coordinates are given.</td>
<td>Determines linear equations from lines on a coordinate plane, and given an equation, plots the corresponding line.</td>
<td>Plots various curved lines such as circles ($x^2 + y^2 = 25$), parabolas ($y = x^2$), and hyperbolas.</td>
<td>Develops solutions to simultaneous equations from corresponding lines and intersections.</td>
</tr>
<tr>
<td>4.4</td>
<td>Explores congruence and similarity (e.g., all squares are similar but may not be congruent).</td>
<td>Uses Venn diagrams to classify quadrilaterals such as a parallelogram, rhombus, square, rectangle, and trapezoid.</td>
<td>Analyzes the relationship between the angles and the number of sides of different polygons.</td>
<td>Studies various proofs of the Pythagorean theorem and attempts to create a new proof.</td>
</tr>
</tbody>
</table>

GOAL 5.0: To apply the principles of probability and statistics to interpreting and making predictions
### MATHEMATICS

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<tbody>
<tr>
<td>5.1 To use techniques for collecting and organizing statistical data</td>
<td>Collects data for a &quot;Birthday Month&quot; chart.</td>
<td>Represents one set of data in different ways using charts, bar graphs, line graphs, and pies in order to discover the advantages of each.</td>
<td>Constructs a line graph to accompany a science or physics experiment.</td>
<td>Selects a project and represents collected data in an appropriate manner (e.g., line graph chart showing sunset times and location on the horizon over a six-month period).</td>
</tr>
<tr>
<td>5.2 To interpret and draw conclusions from existing data</td>
<td>Predicts how long it will take a candle to burn down using partial data on a line graph.</td>
<td>Determines adequacy of water available for crops using charts of snow depths.</td>
<td>Discusses own standardized test scores in relation to norms, mean, median, standard deviation, and quartiles.</td>
<td>Shares conclusions of own data collection project with a class through oral presentation or a written report.</td>
</tr>
<tr>
<td>5.3 To use the principles of probability to hypothesize and make inferences</td>
<td></td>
<td>Selects color cubes randomly from a bag and predicts the number of cubes of each color.</td>
<td>Demonstrates the high risk of gambling, determining the level of probability of various events (e.g., dice totals, betting odds).</td>
<td>Determines the level of probability of various combinations and permutations (e.g., cards, digits, sequences).</td>
</tr>
</tbody>
</table>

**GOAL 6.0:** To develop an appreciation and understanding of the contributions that various cultures have made to mathematical concepts and applications

<table>
<thead>
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<tr>
<td>6.1 To relate the contributions of other cultures to the development of our modern number system and other areas of mathematics</td>
<td>Identifies basic shapes and patterns in artwork from other cultures.</td>
<td>Uses numeral systems such as Roman numerals.</td>
<td>Uses ancient systems of bases other than ten such as Mayan or Phoenician.</td>
<td>Describes achievements of great mathematicians in terms of the advancement these achievements facilitated.</td>
</tr>
<tr>
<td>6.2 To recognize similarities and differences between the counting system used in English and systems used in other languages</td>
<td>Counts to ten in Spanish.</td>
<td>Counts to ten in several Romance languages.</td>
<td>Counts to ten in Far Eastern and Middle Eastern languages.</td>
<td>Uses counting systems that are structured differently from ours (e.g., Eskimo, Tasmanian).</td>
</tr>
</tbody>
</table>
### OBJECTIVES

<table>
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<tr>
<td>6.3 To identify the variations in computational algorithms as performed in different cultures</td>
<td>Computes with Scottish subtraction method.</td>
<td>Computes with European long and short division method.</td>
<td>Computes with lattice multiplication.</td>
<td>Computes with Hindu multiplication method.</td>
</tr>
<tr>
<td>6.4 To use computational instruments from other cultures</td>
<td>Uses the Abacus and Soroban.</td>
<td>Uses Napier’s Rods.</td>
<td>Uses the same instruments for more advanced problems.</td>
<td>Uses logarithmic tables.</td>
</tr>
</tbody>
</table>

### GOAL 7.0: To develop a positive attitude toward mathematics which will result in sustained involvement in mathematical studies

### SAMPLES OF LEARNER BEHAVIORS

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<tbody>
<tr>
<td>7.1 To apply fundamental skills, concepts, and structures of mathematics in problem solving related to everyday experiences</td>
<td>Takes attendance by counting students orally.</td>
<td>Keeps records such as scores, batting averages, and temperatures.</td>
<td>Estimates the height of a tree using similar triangles.</td>
<td>Computes the velocity of streams or traffic flow.</td>
</tr>
<tr>
<td>7.2 To develop self-confidence and competence in the use of mathematics in a wide range of success-oriented activities</td>
<td>Maintains a notebook that describes simple projects.</td>
<td>Checks computations with a calculator.</td>
<td>Explores open-ended problems.</td>
<td>Tutors younger students in selected mathematical operations.</td>
</tr>
<tr>
<td>7.3 To develop independence and initiative through discovery-oriented activities</td>
<td>Develops a system to classify a personal collection of objects (e.g., baseball cards).</td>
<td>Keeps a record of physical growth and school progress.</td>
<td>Chooses an independent study project to explore and present to class.</td>
<td>Prescribes own program of remediation and enrichment in mathematics.</td>
</tr>
</tbody>
</table>
# Mathematics Objectives

<table>
<thead>
<tr>
<th>7.4</th>
<th>To apply mathematics in school activities related to personal consumer economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>To understand how job satisfaction in mathematics-related occupations can be obtained by people with different attitudes, interests, and characteristics</td>
</tr>
</tbody>
</table>

## Level 1
- Visits grocery stores to purchase items for class project.
- Describes various training routes to job entry in mathematics and mathematics-related occupations.

## Level 2
- Organizes a fund raising project.
- Describes the skills necessary to acquire, maintain, and progress in a mathematics career.

## Level 3
- Plans a class banking system using a local banker as a resource person.
- Describes skills and processes that are necessary for a selected mathematics career.

## Level 4
- Cooperatively plans a stock market speculation project.
- Matches individual abilities and interests with skills and processes needed in a mathematics occupation.

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## Professional Associations and Their Publications

**National Council of Teachers of Mathematics (NCTM)**
- 1906 Association Drive
- Reston, VA 22091
- Publications: *Arithmetic Teacher, Mathematics Teacher*

**California Mathematics Council (CMC)**
- Floyd Downs
- 3334 Verdun
- San Mateo, CA 94403
- Publication: *California Mathematics*
The basic aim of a multicultural instructional program is to help students accept themselves and other persons as having dignity and worth. To achieve this aim, a multicultural program places emphasis on similarities and differences among individuals and groups. Similarities are viewed as those characteristics which make people human. Differences are viewed as those characteristics which make each person or group unique and special. In this context, differences are viewed as positive. Thus, students are helped to respect and accept a wide range of diversity including physical differences, emotional differences, cultural differences, and differences in life-style among individuals and groups.

A multicultural instructional program is cross-cultural in nature instead of being structured upon separate and distinct racial or ethnic groups. A cross-cultural approach is more likely to promote respect and acceptance of all individuals and groups.

The program is also interdisciplinary in nature and draws from and contributes to instruction in social sciences, language arts, music, other arts, and other subjects whenever appropriate.
GOAL 5: To identify stereotyping, prejudice, and discrimination as it is manifested in many forms

LEVEL 1

Students in a third grade class are exploring differences among people, other living things, and objects. The teacher is helping the students discuss their feelings about differences among themselves and others and between what is familiar and unfamiliar. The students are exposed to several stories in which differences are a theme. The teacher reads stories such as The Ugly Duckling and Cinderella to the group. The teacher poses a series of questions which help the group draw on what they have read or listened to in thinking about the effects which differences often have for relations among people and groups. The questions are written on a chart in the reading area and are used frequently in group discussions. Following are some questions in the series:

- What does the word "different" mean?
- Describe the differences among various toys, fruits, and animals.
- List the ways in which people who are considered different are treated such as a new student in the class, someone who doesn't know how to play a game, people who are quiet, wear braces, or belong to a different ethnic or religious group. Role-play alternate ways to treat people who are considered different.
- Tell how characters in children's stories are treated negatively. Why were they treated this way? How do you think the negatively treated characters felt? What alternate and more positive behaviors could the characters in the story demonstrate when associating with someone they feel is different?

LEVEL 2

The teacher in a fifth grade class is helping the group develop a broad and personalized understanding of the effects of prejudice and stereotyping. The teacher reads different articles and stories in which some form of prejudice and discrimination is a major theme. These materials range from the story of Cinderella to a newspaper article describing a lawsuit concerned with charges of discrimination against women in hiring practices. Following is a general outline which the teacher has developed for a discussion. After the discussion, each student is required to write down at least three examples of prejudice or discrimination that were mentioned in the discussion.

- What kinds of remarks or jokes have you heard about people who are short, wear glasses, or have different ethnic or religious backgrounds?
- What remarks have you made about people whom you think are different? Have you heard these remarks before?
- What remarks have you heard that were made about you? How did you feel about the remarks? Were they fair? Should they have been stated?
- What did you think about the person who was making the statements? How did it make you feel about yourself?
- Think of the stories you have read or heard. Were there characters in these stories who made unfair remarks about others? How did the other characters feel? What happened?

LEVEL 3

The students in a ninth grade class are examining their own attitudes and behavior for evidences of prejudice and use of stereotypes. Following are three steps in a group activity which is designed to help students deal with this topic.

- Describe the kinds of stereotypic behavior that you have shown toward people you consider different.
- Suggest alternate, non-stereotypic behavior for you to demonstrate.
- Role-play for the class the new, non-stereotypic behaviors you plan to demonstrate.

LEVEL 4

The students in a twelfth grade class are analyzing examples of behaviors or situations which are perceived to be prejudiced or discriminatory in relation to a particular person or people. The group collects articles discussing prejudice and examples from their own experience which they describe to the group. In small group discussions, the students analyze the examples. The main purpose of the analysis is to develop students' abilities to understand the motivation and intention underlying prejudiced behavior in other persons or the social factors that reinforce stereotypes and patterns of discrimination.

The small groups report to the total class on the examples and the highlights of the discussions. Other students suggest ways in which the person being discriminated against could handle the situation. The class repeats this activity on a regular basis.
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

**GOAL 1.0:** To be aware of ethnic ancestry and cultural heritage in relation to self-definition

### OBJECTIVES

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
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</thead>
<tbody>
<tr>
<td>1.1 To demonstrate appreciation of the characteristics of one's own ethnic ancestry and cultural heritage</td>
<td>Identifies major characteristics of racial, ethnic, cultural, and/or religious groups to which one's own family belongs.</td>
<td>Identifies one or two major contributions that one's own racial, ethnic, cultural, or religious group has made to the development of the United States.</td>
<td>Describes the characteristics of one's own racial, ethnic, cultural, or religious group that have been passed down through many generations.</td>
</tr>
<tr>
<td>1.2 To analyze the influence of ethnic/cultural heritage and experiences on one's values and lifestyle</td>
<td>Identifies the factors which contribute and shape the life-style of cultural groups (e.g., environment, family roles, composition).</td>
<td>Describes how ethnic/cultural heritage has influenced aspirations, likes, and dislikes.</td>
<td>Describes how personal perceptions of ethnic/cultural heritage influence self-identity.</td>
</tr>
<tr>
<td>1.3 To define personal strengths, capabilities, and limitations</td>
<td>Identifies some personal capabilities and limitations.</td>
<td>Shares information with others about personal accomplishments and capabilities.</td>
<td>Analyzes ways to minimize personal limitations by fully utilizing strengths and capabilities.</td>
</tr>
</tbody>
</table>

**GOAL 2.0:** To be aware of the similarities and differences among individuals from diverse racial, ethnic, cultural, and religious groups within the community, the United States, and the world

### OBJECTIVES

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<tbody>
<tr>
<td>2.1 To recognize similarities and differences among diverse socioeconomic, racial, ethnic, cultural, and religious groups</td>
<td>Describes personal feelings or family customs that are held in common with people who are racially/culturally different from self.</td>
<td>Compares characteristics among ethnic/racial/cultural groups using sources for information such as poetry, short stories, biographies, dances, art, music, and cooking.</td>
<td>Compares experiences of various cultural/ethnic groups in the U.S. and identifies some major contributions of each group.</td>
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## Multicultural Education

### Objectives

**2.2** To accept alternative beliefs, manners, customs, and life-styles of individuals and groups different from self.

- **Level 1:** Enjoys learning about people culturally/racially different from self.
- **Level 2:** Seeks social involvement in activities with students who are culturally different from self.
- **Level 3:** Compares alternative ideas about such things as beauty, value systems, and styles of communication.
- **Level 4:** Describes different perspectives which diverse racial/ethnic/cultural groups have on historical and contemporary events in the United States.

**2.3** To understand how people from various places in the world differ in their views on resource use and environmental pollution.

- **Level 1:** Develops simple action plans for working with others to solve problems.
- **Level 2:** Contrasts resource and environmental practices in other places in the world.
- **Level 3:** Discusses environmental-resource management concerns and works out cooperative programs to solve problems of common interest.
- **Level 4:** Demonstrates skills to gain information on feelings and attitudes toward natural resources and environmental conservation problems.

### Goal 3.0: To be aware of the elements of different cultures

#### Samples of Learner Behaviors

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3.1 To describe the elements that make up different cultures</td>
<td>Describes the elements of culture.</td>
<td>Analyzes the various elements of one’s own culture.</td>
<td>Describes how elements of culture have influenced the various life-styles of ethnic and racial groups in historical and contemporary societies.</td>
<td>Explains how the cultural characteristics of groups in the U.S. have changed throughout the nation’s history.</td>
</tr>
<tr>
<td>3.2 To compare the elements of diverse cultures</td>
<td>Identifies similarities and differences among elements of various cultural groups.</td>
<td>Describes how cultures have influenced one another.</td>
<td>Analyzes how diverse cultures have contributed to the common culture of the United States.</td>
<td>Identifies ways of thinking and acting which support the rights of various cultural groups to coexist with equal opportunity in the United States.</td>
</tr>
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</table>
GOAL 4.0: To demonstrate skills in maintaining positive relationships with other individuals or groups and in responding constructively to conflict in relationships

SAMPLES OF LEARNER BEHAVIORS

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<tbody>
<tr>
<td>4.1 To develop sensitivity to problems of others through learning and practicing interpersonal skills</td>
<td>Identifies behaviors which have a positive or negative impact on others.</td>
<td>Describes ways in which different people express their feelings.</td>
<td>Responds in supportive ways when others express or demonstrate a need.</td>
<td>Initiates cross-cultural communication and is comfortable working with others who are culturally/racially different.</td>
</tr>
<tr>
<td>4.2 To analyze factors that contribute to conflicts</td>
<td>Describes personal behaviors which contribute to conflicts with others.</td>
<td>Describes influence others have on one's participation in interpersonal or group conflicts.</td>
<td>Analyzes ways in which different styles of verbal and nonverbal communication influence conflicts.</td>
<td>Takes the initiative to prevent or resolve conflicts that might not affect them.</td>
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GOAL 5.0: To identify stereotyping, prejudice, and discrimination as it is manifested in many forms

SAMPLES OF LEARNER BEHAVIORS

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<tr>
<td>5.1 To identify causes and consequences of stereotyping, prejudice, and discrimination</td>
<td>Describes the actions of people in situations found in stories in terms of &quot;fairness.&quot;</td>
<td>Discusses own experience in daily living with stereotyping, prejudice, and discrimination.</td>
<td>Identifies own behaviors which are a result of prejudice or stereotyping.</td>
<td>Identifies alternate ways of thinking and acting in situations involving stereotyping, prejudice, or discrimination.</td>
</tr>
<tr>
<td>5.2 To confront behavior in self and others which is based on stereotyping, prejudice, and discrimination</td>
<td>Describes own and others' behavior which reflects stereotyping or prejudicial thinking.</td>
<td>Discusses examples of stereotyping, prejudice, and discrimination related to racial and ethnic groups in newspapers, instructional materials, and on television.</td>
<td>Analyzes the causes and consequences of racism in the United States for specific groups of people.</td>
<td>Compares discrimination patterns and stereotyping among different cultural groups and nations.</td>
</tr>
</tbody>
</table>
The main purpose of music education is to develop students’ understanding and appreciation of the expressive and aesthetic qualities of music as a modality of communication. To accomplish this, concepts and skills are presented in a sequential and developmental manner. Activities are designed to allow students to participate actively in demonstrating understanding of the concepts of rhythm, melody, harmony, form, tempo, tone color, dynamics, texture, and style. Emphasis is placed on learning through exploration, discovery, and inquiry. All types and styles of music such as folk, art, popular, and ethnic are performed and analyzed.

Music has other values in education. Emotions can be experienced and expressed in a positive, constructive way, giving students an opportunity to explore and understand their feelings. Self-knowledge and sensitivity to others are developed through group interaction as students create, perform, and actively listen to music. Many levels of individual needs can be accommodated within the context of group experience.

Music provides a unique vehicle for developing multicultural and historical understandings.
GOAL 2: **To develop the skills necessary for students to be able to function as intelligent listeners, performers, and creators of music**

**LEVEL 1**

In the following activity the teacher is helping students develop their ability to perceive aurally the patterns of various rhythms. The activity is one in a series in which the students use the visual, tactile, and kinesthetic senses to reinforce aural acuity. Although it is a group activity, because of the nature of the response the teacher is able to identify students who are not able to respond accurately.

The teacher claps a brief portion of the rhythm of a song. The rhythm is a pattern which the students identify and echo by clapping in response to the teacher. If any individual response is not accurate, the teacher asks the group to close their eyes and listen again. The students echo the teacher each time. The teacher can also ask individual students to echo the pattern.

**LEVEL 2**

The following activity is designed to develop concentration and listening acuity by students.

Initially students clap the rhythm in canon, one measure behind the teacher. After the students have mastered this exercise, they sing the melody and clap the rhythm in canon, one measure behind the melody. The effect is similar to singing a round with themselves.

**LEVEL 3**

The following activity is an example of an exercise that is designed to develop students' aural acuity through the analysis of compositional techniques such as octave displacement, fragmentation, diminution, canonic imitation, and syncopation. Aural perception of these techniques can be reinforced at this level through the use of musical instruments and the voice.

The musical selection which the students analyze is Stravinsky's *Greeting Prelude*. The students listen to the selection several times. During each listening session they are guided by the teacher who poses questions and makes comments which help the students identify the compositional techniques used by the composer.

Initially the students recognize that Stravinsky has used *Happy Birthday* as the basic melody for the composition. Listening to the selection a second time, the students discover that the technique for octave displacement, either higher or lower, is applied to the melody. At this point, the group applies the technique to another selection, *Are You Sleeping?*, using their voices or various instruments.

Building on this experience, the group listens to the selection another time and identifies how octave displacement is used through instrumental fragmentation, with different tones of the melody played by different instruments.

In another listening session the students discover that the melody is repeated in diminution after each statement of the first two phrases of the song. They discuss the term "to diminish" (i.e., to shorten durational values to half of the original) and clap the rhythm in original and diminution forms to clarify their understanding of this technique.

Through further listening the teacher leads the students to discover that, in the third phase, the trombones imitate the melody played by other instruments at a distance of two beats. It sounds like a round. During a final listening, students recognize that the final chord of the first statement of the theme falls off the beat. It is a displaced accent, the basis of syncopation.

**LEVEL 4**

The following activity uses a series of questions to develop advanced students' understanding of the constituent and expressive elements of music. The questions may be used also in nonperformance classes concerned with areas such as general music theory, music history, and literature. Musical selections that include combinations of polyphonic and homophonic textures are used.

Two examples are the Fugue in G Minor by Bach and the Hallelujah Chorus from *The Messiah* by Handel.

Students answer the following questions during independent study and/or during group discussion:

- Imitation is one technique used in this music. Can you give examples of where it is used?
- The texture of the music varies from pure polyphony to pure homophony. Can you give examples of where it is used?
- How is contrast created?
- Where and how is counterpoint used?
- Where do modulations of key and mode occur? Why do they occur?
- Where and how do cadences occur? What is their meaning?
- How do repetition and variety occur in the music?
- What techniques are used to create tension and to provide for a release from tension?
## GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

### GOAL 1.0: To develop the ability to perceive and respond to the expressiveness of sounds in music and to formulate aesthetic criteria for making value judgments about music

### OBJECTIVES

**1.1** To increase awareness and pleasure in listening to musical sounds

**1.2** To increase awareness and pleasure in experiencing the aesthetic qualities of musical patterns and designs

**1.3** To value music both in and out of school in a variety of musical experiences

**1.4** To recognize the value and role of music in the lives of individuals and cultures

**1.5** To use aesthetic criteria for making value judgments and expressing individual musical preferences

### SAMPLES OF LEARNER BEHAVIORS

<table>
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<tbody>
<tr>
<td>Interprets music through body movement.</td>
<td>Works with many different kinds of sound producers including homemade, ethnic, and traditional instruments.</td>
<td>Seeks out opportunities to listen to and learn about music.</td>
<td>Analyzes experimental music for unusual combinations of sounds.</td>
</tr>
<tr>
<td>Repeats specific patterns in music.</td>
<td>Identifies repetition in music through clapping and other body movements.</td>
<td>Improvises musical repetition and variety using the voice or a musical instrument.</td>
<td>Analyzes sophisticated patterns and designs in the structure of music that contribute to a sense of unity and variety.</td>
</tr>
<tr>
<td>Participates in classroom musical activities by singing, playing simple instruments, moving to music, and listening attentively to music.</td>
<td>Participates in classroom music instruction, instrumental classes, and choral ensembles for deepening experiences with music.</td>
<td>Participates in musical experiences both in and out of school including attendance at concerts in the community.</td>
<td>Demonstrates increased skill and mastery in a variety of musical activities, both in active performance and active listening.</td>
</tr>
<tr>
<td>Performs in musical activities that involve the music of many different ethnic groups and cultures.</td>
<td>Identifies musical compositions.</td>
<td>Expresses increasing discrimination in judgment and appreciation of artistic performance and composition.</td>
<td>Describes musical achievements within social and historical contexts.</td>
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<tr>
<td>Uses a broad vocabulary of musical and aesthetic terms in describing and judging music and musical performances.</td>
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**GOAL 2.0:** To develop the skills necessary for students to be able to function as intelligent listeners, performers, and creators of music

**SAMPLES OF LEARNER BEHAVIORS**

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<tbody>
<tr>
<td>2.1 To develop listening skills</td>
<td>Identifies and differentiates simple characteristics of rhythm, pitch, tempo, dynamics, tone color, and form.</td>
<td>Identifies and differentiates more complex melodic and rhythmic patterns and harmonic structure.</td>
<td>Identifies compositional techniques in music such as augmentation, diminution, polyphony, polyrhythms, syncopations, and modulations.</td>
<td>Independently analyzes the use of elements of music and techniques of composition to structure statements in music.</td>
</tr>
<tr>
<td>2.2 To develop singing skills</td>
<td>Sings a song such as &quot;Go Tell Aunt Rhody&quot; with melodic and rhythmic accuracy.</td>
<td>Sings rounds and melodies with descants expressively and accurately.</td>
<td>Adapts to the maturational changes in singing voices.</td>
<td>Sings alone and in ensembles with increasing independence and artistry.</td>
</tr>
<tr>
<td>2.3 To develop skills in moving to music</td>
<td>Expresses and responds freely to musical concepts with the body.</td>
<td>Illustrates musical structure such as melodic contour and form through movement in space.</td>
<td>Expresses complex musical concepts such as irregular meters, polyrhythms, counterpoint and theme, and variation through movement.</td>
<td>Choreographs dances.</td>
</tr>
<tr>
<td>2.4 To develop skill in playing instruments</td>
<td>Plays simple tunes, ostinatos, and bourdons on melodic instruments and uses rhythm. Instruments to accompany singing, playing, and moving to music.</td>
<td>Plays the recorder and common orchestral instruments.</td>
<td>Plays the guitar or orchestral instruments in ensembles.</td>
<td>Participates in performing organizations.</td>
</tr>
<tr>
<td>2.5 To develop skill in creating music</td>
<td>Improvises simple melodies and rhythm patterns using voice, body, percussion, and instruments.</td>
<td>Creates vocal and instrumental ostinatos and harmony and uses aleatory techniques.</td>
<td>Creates compositions using binary, ternary, rondo, and theme and variation forms.</td>
<td>Uses techniques such as fragmentation, octave displacement, retrograde inversion, augmentation, and diminution, and tape treatments in composing original music.</td>
</tr>
</tbody>
</table>
## MUSIC EDUCATION

### OBJECTIVES

#### 2.6 To develop skill in reading and writing music

- Level 1: Labels, notates, and reads interval patterns of the pentatonic scale and rhythmic values including whole, half, quarter, 8th notes, and their equivalent rests.
- Level 2: Reads simple melodies and complex rhythm patterns.
- Level 3: Reads two- and three-part harmony.
- Level 4: Sight reads music at a functional level to participate in a choral or instrumental performing group.

### GOAL 3.0: To develop understanding of the constituent and expressive elements of music that are essential to promote musicality, aural discrimination, aesthetic sensitivity, and understanding of musical application

#### SAMPLES OF LEARNER BEHAVIORS

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<tr>
<td>3.1 To demonstrate understanding in the use of rhythm</td>
<td>Demonstrates understanding of the pulse, meter, and pattern of rhythm in singing, playing, or moving to music.</td>
<td>Claps or moves to polyrhythms and changing meter.</td>
<td>Analyzes how a composer uses rhythmic concepts to achieve various effects.</td>
<td>Performs music that contains complex rhythmic relationships.</td>
</tr>
<tr>
<td>3.2 To demonstrate understanding in the use of pitch</td>
<td>Distinguishes pitches that are relatively higher or lower, indicates the contour of a melody through movement or line drawing, and discriminates melodic direction.</td>
<td>Uses letter names as symbols for pitch, forms the pattern of major, minor, and pentatonic scales, and plays simple melodies on an instrument.</td>
<td>Builds a tone row and identifies various pitch-related compositional techniques such as imitation, retrograde inversion, and octave displacement.</td>
<td>Constructs various modes and analyzes the effect that the contour of music has upon the listener and the meaning of the music.</td>
</tr>
<tr>
<td>3.3 To demonstrate understanding in the use of harmony</td>
<td>Shows sensitivity to a balance between harmony and melody in singing or playing an accompaniment.</td>
<td>Sings or plays a round and maintains a balance with the other voices.</td>
<td>Constructs tonic, dominant, and subdominant chords with resonator bells, identifies them on the autoharp, and uses them to accompany folk songs.</td>
<td>Sings four-part harmony and plays a chordal accompaniment on the piano, autoharp, or guitar.</td>
</tr>
<tr>
<td>3.4 To demonstrate understanding in the use of form</td>
<td>Moves to a phrase and identifies like and unlike phrases or sections of music.</td>
<td>Illustrates common forms of music through movement in space with others, compositions, and graphics.</td>
<td>Analyzes common forms in listening to and performing music.</td>
<td>Analyzes larger forms and free forms in listening to or performing music.</td>
</tr>
</tbody>
</table>
### OBJECTIVES

3.5 To demonstrate understanding in the use of tempo and dynamics

**Level 1**
- Responds to tempo and dynamics in movement to music.

**Level 2**
- Uses tempo and dynamics sensitively in performing and creating music.

**Level 3**
- Analyzes how and why dynamics and tempo are used to achieve musical meaning and to express ideas.

3.6 To demonstrate understanding in the use of tone color (timbre)

**Level 1**
- Identifies instruments of the orchestra by sound according to family and selects sounds for accompaniment to heighten the musical effect.

**Level 2**
- Uses a vocal quality suitable to the music being performed and identifies all of the major orchestral instruments by sound.

**Level 3**
- Analyzes how tone color is used to express musical ideas effectively.

3.7 To demonstrate understanding in the use of texture

**Level 1**
- Associates the texture of music with tactile or visual senses.

**Level 2**
- Illustrates the texture of music in a concrete manner such as with line drawings or movement.

**Level 3**
- Identifies homophonic, polyphonic, and monophonic texture in analyzing music.

**Level 4**
- Uses different kinds of texture in performance or composition.

## GOAL 4.0:
To develop understanding and appreciation of various styles, forms, and functions of folk/ethnic, popular, commercial, and serious art music

### SAMPLES OF LEARNER BEHAVIORS

#### OBJECTIVES

4.1 To become aware of how the purpose and function of music in a particular situation influences composition, selection, and performance

**Level 1**
- Discusses purposes of songs (e.g., a lullaby which has a slow tempo, soft dynamics, and a legato melody because its purpose is to put people to sleep).

**Level 2**
- Analyzes how the elements of music can be used to describe a mood or an action or to suggest a story.

**Level 3**
- Analyzes how music is used to heighten the impact of radio and TV commercials and to manipulate the emotions of the listener/viewer.

**Level 4**
- Uses aesthetic criteria for programmatic and absolute music to draw conclusions regarding the various functions for which music is used in different cultures and societies.

4.2 To become aware of how instruments influence composition and style in music

**Level 1**
- Explores the quality and expressiveness of sound with voice and instruments.

**Level 2**
- Analyzes how the distinctive sounds of jazz, folk, and ethnic music are determined in large part by the instruments at hand.

**Level 3**
- Analyzes how electronic sound producers have influenced the development of new and unique styles in music.

**Level 4**
- Analyzes how instruments available at different times in history contributed to the styles and performance practices of art music.
### MUSIC EDUCATION OBJECTIVES

#### MULTICULTURAL

4.3 To become aware of the ways in which the constituent and expressive elements have been combined in music from various countries and periods of time to produce characteristic styles and forms.

4.4 To demonstrate skill in using creative expression as a means of bringing about constructive action to solve social and environmental problems.

#### ENVIRONMENTAL

Level 1
Performs, moves to, and listens to a wide variety of folk, ethnic, popular, and art music, some with foreign language texts.

Level 2
Analyzes musical styles and forms that express the ideas and feelings of a variety of ethnic groups and cultures.

Level 3
Describes different combinations and emphases in the use of constituent and expressive elements of music to express people's concerns and feelings.

Level 4
Analyzes music of various historical periods to show how characteristic styles and forms of music have been influenced by social values and environments.

- Level 1
  - Performs, moves to, and listens to a wide variety of folk, ethnic, popular, and art music, some with foreign language texts.
  - Learns songs, reads stories, views plays, and studies pictures on environmental subjects. Identifies and expresses positive and negative feelings generated by each example.

- Level 2
  - Analyzes musical styles and forms that express the ideas and feelings of a variety of ethnic groups and cultures.
  - Writes simple stories and poems, writes or participates in plays, performs music, and creates art to express personal feelings about the environment and its resources.

- Level 3
  - Describes different combinations and emphases in the use of constituent and expressive elements of music to express people's concerns and feelings.
  - Studies historical examples of how artistic expression influenced various social events (e.g., Uncle Tom's Cabin, slavery; "We Shall Overcome," civil rights; Grapes of Wrath, 1930's social conditions).

- Level 4
  - Analyzes music of various historical periods to show how characteristic styles and forms of music have been influenced by social values and environments.
  - Identifies specific environmental problems in the community, state, nation, or world, and develops one or more forms of artistic expression to apply to specific environmental problems.

### PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

- **American Orff Schulwerk Association (AOSA)**
  - P.O. Box 18495
  - Cleveland Heights, Ohio 44118
  - Southern California Chapter
    - P.O. Box 902
    - Los Angeles, CA 90028
  - Northern California Chapter
    - P.O. Box 26268
    - San Francisco, CA 94126
  - Publication: Orff Echo

- **California Music Educators Association (CMEA)**
  - Henry Avila, President 1978-80
  - P.O. Box 5091
  - Carmel, CA 93921
  - Publication: CMEA News
  - Mary Val Marsh, Editor
  - 879 Rosecrans St.
  - San Diego, CA 92106

- **Music Educators National Conference (MENC)**
  - 1902 Association Drive
  - Reston, VA 22091
  - Publication: Music Educator's Journal

- **Organization of American Kodaly Educators (OAKE)**
  - 131 Second Street
  - Farmingham, MA 01701
  - Publication: Envoy
The physical education program provides a laboratory in which students acquire skills, knowledge, and attitudes by participating in a wide range of physical movement related to the growing body. It is a program and a process in which the teacher assists each student to understand and respect the body, gain skill in efficient and effective movement, and develop attitudes and practices that contribute to maintaining good physical fitness for life.

As students progress through a widening range of experiences, emphasis is given to identifying individual interests and purposes with group interests and purposes through recognition that the common good is achieved through the joint efforts of all. Social abilities and interests are developed along with self-evaluation.

In view of the prediction of a phenomenal increase in time free from work, the physical education program should put stress on developing motivation and skills for the satisfying use of leisure time. The end result of a well-balanced program of physical education is young men and women who move with ease and confidence, who utilize physical activity as a satisfying means of expression, and who maintain a high level of physical performance.

The emphasis on refining movement and control of the body in physical expression is a unique characteristic of a physical education program.
GOAL 3: To develop and maintain the best possible level of performance, understanding, and appreciation for physical fitness to meet the demands of wholesome living and emergency situations

LEVEL 1

Students skip back and forth between two markers for a distance of approximately 50 feet. When they are finished, they sit and the teacher leads a discussion asking the students for their thoughts about why they are breathless. In summary, the students develop a definition of endurance in their own terms.

LEVEL 2

After completing the California Physical Fitness Test, the class reviews each item with the teacher. The students are asked to think about what each item is designed to test and why it is important. In conclusion, the students are asked to list different careers that make extra demands on each of the body components. For example, a firefighter needs strength in the upper body and, particularly, in the shoulders. An athlete needs to be agile. Housewives need endurance. Construction workers must have strong legs. Nurses need strength in the abdomen.

LEVEL 3

The students are scattered on the floor or playground with each assuming a guarding stance as in basketball: One foot is ahead of the other and the hands are out as if guarding. Movements forward and backward are made using a shuffle step with the feet retaining their appropriate position. Movements to the side should be sliding. The leader of the group stands in front with a whistle and points in a direction. The players move in that direction (forward, backward; or to either side) as quickly as possible. When the whistle is blown again, everyone stops. Other signals such as “go” or “stop” can be used in lieu of a whistle. In a follow-up discussion the students are asked to describe the various careers associated with basketball including playing, officiating, score keeping, sports writing, sales, radio and television broadcasting, and maintenance of supplies, equipment, and facilities.

LEVEL 4

The students are challenged to perform a number of endurance hops. They must complete each full set of hops without stopping.

- Hops on both feet—up to 200
- Staddle hops, laterally—up to 200
- Scissor hops, forward and backward—up to 200
- Hops on right foot—up to 50
- Hops on left foot—up to 50
- Squat jumps touching hands to floor and springing upward again and again as long as possible

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop a positive self-image which includes awareness and understanding of the performance of one’s body, the use of the body as an important means of expression, and the body as an instrument for self-realization

SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 To understand body structure and function</td>
<td>Identifies and uses body parts on request.</td>
<td>Answers question “Why do I get breathless after running?”</td>
<td>Explains the effects of fatigue, illness, relaxation, exercise, and stress on the body.</td>
<td>Describes the relationship of nutrition to exercise for weight and growth rate.</td>
</tr>
</tbody>
</table>
### Goals

1. **Level 1**
   - Demonstrates self-confidence by freely choosing to play a game.
   - Tells a story through rhythmical movement.
   - Walks backwards on a balance beam.

2. **Level 2**
   - Shows positive attitudes about improving own skills.
   - Expresses joy, fear, anger, through movement.
   - Performs a head balance or cartwheel.

3. **Level 3**
   - Participates willingly in coeducational activities.
   - Creates a movement sequence by self or with others depicting "Life in the Wild West."
   - Dribbles the ball with feet or hands around a maze.

4. **Level 4**
   - Moves with confidence and ease and is willing to try new activities.
   - Moves with ease and confidence in different situations indicating a sense of well-being.
   - Catches a wave at its peak and rides down its face.

### Samples of Learner Behaviors

<table>
<thead>
<tr>
<th>Level 1</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Threws an object overhand using the principles of opposition and follow-through.</td>
<td>Demonstrates eye fixation and focus by catching batted, ground, and fly balls.</td>
<td>Demonstrates stable base for support by performing an inverted tumbling stunt.</td>
<td>Demonstrates correct body mechanics in lifting, pushing, and carrying heavy objects.</td>
</tr>
</tbody>
</table>

**Goal 2.0:** To develop efficient and effective motor skills, to understand the principles involved in those skills, and to develop an appreciation for the aesthetic quality of movement.
### PHYSICAL EDUCATION

#### OBJECTIVES

- **2.2** To demonstrate effective movement in performing activities necessary for daily living and participation in games, sports, and dances appropriate to each individual.

- **2.3** To demonstrate an appreciation for the skillful performance of others.

- **2.4** To comprehend the correct elements of various movements, strategies, safety procedures, and basic rules.

- **2.5** To understand that physical education can contribute to a person's total lifestyle in several ways.

#### CAREER

- **Level 1** Participates in children's games and rhythms requiring running, hopping, dodging, catching, throwing, kicking, and striking.

- **Level 2** Participates in dances of different cultures using the dance skills necessary.

- **Level 3** Demonstrates balancing, springing, and vaulting skills in tumbling and activities on apparatus.

- **Level 4** Executes the skills necessary for successful participation in one or more lifetime activities (e.g., golf, tennis, swimming, racquetball, dance).

### GOAL 3.0:

**To develop and maintain the best possible level of performance, understanding, and appreciation for physical fitness to meet the demands of wholesome living and emergency situations**

#### SAMPLES OF LEARNER BEHAVIORS

<table>
<thead>
<tr>
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<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.1</strong> To strengthen the muscles of the heart and improve the other parts of the cardiovascular system in order to perform harder and longer with less effort.</td>
<td>Jumps a short or long rope for an extended period of time.</td>
<td>Runs a course around the playground increasing the distance covered each week.</td>
<td>Jogs fast enough and long enough to maintain heart rate at the correct intensity.</td>
<td>Participates in activities that are aerobic in nature such as cycling, swimming, and dancing.</td>
</tr>
</tbody>
</table>
### OBJECTIVES

3.2 To acquire sufficient muscular strength and endurance to keep healthy and to perform activities based on needs and interests

3.3 To maintain and acquire sufficient flexibility to move freely and to perform activities based on personal needs and interests

3.4 To understand and appreciate the components of physical fitness as they affect behavior and health

3.5 To understand that all individuals need physical fitness to help cope with the changing society

### PHYSICAL EDUCATION

**Level 1**
- Supports own weight from overhead horizontal ladder.

**Level 2**
- Performs a series of knee-bent situps.
- Demonstrates a full range of motion in arm and leg swings and stretches.
- Answers the question "Why does the heart beat faster during and after jumping rope?"
- Recognizes that the performance of the team or group superscedes the individual.

**Level 3**
- Performs a combination of stunts on a horizontal bar.
- Demonstrates muscular balance and symmetry in static and dynamic posture.
- Compiles own physical performance test records based on previous scores and evaluates own progress in each component of performance.
- Demonstrates an appreciation for all forms of physical endeavor.

**Level 4**
- Demonstrates sufficient muscular strength and endurance to maintain efficient posture, perform work requirements, and meet emergency situations.
- Demonstrates efficient flexibility of the muscles and joints by performing at a satisfactory level tests which measure flexibility of muscles of lower back and back of legs, front of shoulder joint, and upper back and trunk.
- Designs a physical fitness program based on knowledge of personal strengths and weaknesses.
- Describes the importance of physical fitness and its contribution to society.

### GOAL 4.0: To develop socially desirable behavior in interactions with others

#### SAMPLES OF LEARNER BEHAVIORS

**OBJECTIVES**

4.1 To develop a feeling of group consciousness

<table>
<thead>
<tr>
<th>Level 1</th>
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<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participates in activities with rules decided upon and adhered to by the group.</td>
<td>Recognizes that the performance of the team or group supersedes the individual.</td>
<td>Carries out assignment to accomplish group or team task.</td>
<td>Accepts the majority decision of group or team members.</td>
</tr>
</tbody>
</table>
PHYSICAL EDUCATION

OBJECTIVES

4.2 To develop a sense of responsibility
Assumes responsibility for the care and use of equipment.

4.3 To develop awareness and respect for other persons
Lets others join in activities already in progress.

4.4 To understand the relationship between physical education skills acquired through education and employability in physical education related occupations
Develops rules with others, accepts direction, and takes responsibility.

GOAL 5.0: To develop interest and proficiency in using the skills essential for successful participation in worthwhile physical recreation activities

SAMPLES OF LEARNER BEHAVIORS

OBJECTIVES

5.1 To participate in physical activities as a source of enjoyment in leisure time
Participates in a variety of activities during noon time and recess such as skipping with a rope, playing hopscotch, and playground games.

5.2 To understand the value of participation in physical activities as a worthwhile use of leisure time
Chooses to play outside rather than watch television.

Level 1
Assumes responsibility for the care and use of equipment.

Level 2
Assumes the responsibility of leadership in roles such as those of team captain, square leader, and referee.

Level 3
Takes turns in use of courts in playing handball, paddle ball, or tennis.

Level 4
Plans and fulfills a personal contract.

Level 2
Chooses to play outside rather than watch television.

Level 3
Participates in the organization of a variety of school and community recreational activities such as dances, sporting events, and outdoor activities.

Level 4
Is committed to physical activity on a regular basis.

Level 3
Chooses to be involved in a physical activity after school.

Level 4
Discusses the level of personal satisfaction derived from accomplishing a difficult selected physical task (e.g., completing a long distance run or backpacking trip).
## OBJECTIVES

<table>
<thead>
<tr>
<th>5.3 To learn about recreational opportunities in the community</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows the safest way to the neighborhood park.</td>
<td>Knows of various private and public community agencies offering recreational programs.</td>
<td>Knows how to take advantage of the variety of activities provided by the school and community.</td>
<td>Identifies own role in society and its effect on increased personal satisfaction and improved group achievement and morale through recreational activities.</td>
<td>Demonstrates mastery of the skills basic to a chosen recreational activity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.4 To develop the knowledge and interest in physical education that can enhance leisure time activities</th>
<th>Career</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates understanding of the importance of each individual in a team effort.</td>
<td>Participates in class walks around the neighborhood to enjoy flowers, animals, and to observe examples of ecological phenomena.</td>
<td>Gains skills in outdoor physical activity and observation of natural phenomena. Observes and evaluates the effects of recreational practices on the local environment.</td>
</tr>
</tbody>
</table>

## PHYSICAL EDUCATION

<table>
<thead>
<tr>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows what is required and the procedures necessary in order to use the recreational facilities in the neighborhood and surrounding communities.</td>
</tr>
</tbody>
</table>

## PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

<table>
<thead>
<tr>
<th>American Alliance for Health, Physical Education and Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1201 - 16th Street, N.W.</td>
</tr>
<tr>
<td>Washington, D.C. 20036</td>
</tr>
<tr>
<td>Publication: American Alliance for Health, Physical Education and Recreation Journal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>California Association for Health, Physical Education and Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>401 South Hartz Avenue, Suite 306</td>
</tr>
<tr>
<td>Danville, CA 94526</td>
</tr>
<tr>
<td>Publication: California Association for Health, Physical Education and Recreation Journal The Times</td>
</tr>
</tbody>
</table>
Science learning experiences should be a source of values and attitudes that help students care about themselves and how they relate to their environment. As students become aware of natural beauty, they develop appreciation for all life forms. As they learn about career opportunities in science, they develop awareness of social problems that depend heavily on science and technology for management. When students engage in constructive and critical thinking, they develop a willingness to have their own ideas questioned and tested.

Science is a discipline for gathering information from nature and thinking about it. As students observe and measure natural phenomena, they learn ways to organize and present the data. This information, in turn, is the basis for proposing hypotheses and testing them through further observation and measurement. The cyclic process of scientific inquiry never ends. Use of the process depends on the development and reinforcement of skills in the use of language and mathematics.

Science is also a body of knowledge, including facts, generalizations, and theories. Overarching principles relate science disciplines to one another and to other areas of human thought. Scientific literacy includes understanding of how knowledge can be used through technology and the political process to benefit human beings.

A science program, particularly in the early learning stages, contributes to the reinforcement of oral and written language skills without learning being completely dependent on those skills. If science has a unique characteristic, it is that the subject matter is as broad and varied as the universe itself.
VIGNETTES

GOAL 3: To develop fundamental skills in the manipulation of materials and equipment, in caring for and handling living organisms, and in the gathering, organization, and communication of scientific information.

LEVEL 1.

In the following activity, students learn about the steps and procedures that are necessary in a scientifically organized experiment. One basic process, dyeing cloth, is repeated several times. Each time either the steps are varied or the materials are changed. The results of each trial are examined and some inferences are drawn concerning the consequences that can be predicted in future experiments.

The teacher provides a variety of natural materials which can be used to dye cloth such as beets and onion skins. The beets need to be dried before being used for dyeing. The students weigh the beets and hang them in a place where they can be observed easily. As the beets dry out, the students repeatedly weigh them and fill a plastic bag with water equivalent to the difference in weights between the last observation and the original one.

The students develop a chart for presenting these data.

The students use a simple book on dyeing, read the instructions, and develop a plan to vary materials and steps in the process within a systematic framework. After each trial of the experiment, the results are recorded in a book with a sample of the dyed material. By the final trial of the experiment the group has developed a book recording the results. Throughout the experiment, the students discuss and predict the results of each new trial using their experience with previous trials to substantiate the predictions.

LEVEL 2.

Students in this science activity are required to observe a group of objects that have been sorted and to use the process of logical deduction in order to verbalize the rule or categories used in the classification.

LEVEL 3.

Given the results of an experiment, students are required to analyze the steps in the experimental process and develop further variations on the original experiment.

The teacher provides students with strips of paper towel or newsprint, each with a spot near one end marked with various combinations of marking pens. Students allow water to soak up into the towel from the marked end, observing that colors separate along the strip. Discussion reveals that different colors seem to move along the strip at different rates in a consistent manner. Students are then challenged to predict which pens were used to mark their strips and to devise a way of finding out. Follow-up activities can involve other sources of color and solvents.

LEVEL 4.

The class is studying about how things adapt in order to survive in a variety of environments. The class is divided into groups of three or four students. Each group is given a description of an environment which includes temperature range, moisture and light conditions, geographic features, and possible predators. The groups are given the assignment to invent an organism which could survive in that environment. Each group makes a presentation to the class which includes oral, written, and pictorial representations of the organism and its environment, a discussion of how its structures and behaviors are adapted to the environment, what it eats, how it survives, how dense the population might be expected to be, and how it might relate to man.
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

**GOAL 1.0:** To develop values, aspirations, and attitudes which promote personal involvement of the individual with the environment and society

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>LEVEL 1</th>
<th>LEVEL 2</th>
<th>LEVEL 3</th>
<th>LEVEL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 To develop ways of expressing curiosity about objects and events</td>
<td>Asks questions about unfamiliar objects and events.</td>
<td>Shows willingness to examine and organize objects and events in the environment.</td>
<td>Seeks relationships between an event and what precedes it and/or what follows it.</td>
<td>Speculates about properties of substances that are not testable with available resources.</td>
</tr>
<tr>
<td>1.2 To show an awareness of and respond in a positive manner to beauty and orderliness in the environment</td>
<td>Responds in a positive manner to color, form, texture, arrangement, and the design of objects in the environment.</td>
<td>Seeks opportunities to share observations and feelings about aesthetic experiences in science.</td>
<td>Searches for and reports evidences of order and symmetry when observing and investigating the environment.</td>
<td>Uses science skills and knowledge to create pleasing effects in sound, color, and texture.</td>
</tr>
<tr>
<td>1.3 To appreciate and respect all living organisms (including self) and their place in the environment</td>
<td>Shows concern for the safety and well-being of self and others.</td>
<td>Accepts responsibility for the care of living organisms in natural and artificial environments.</td>
<td>Seeks to influence others to treat and care for living things properly.</td>
<td>Describes the interdependence of organisms and the implications for survival.</td>
</tr>
<tr>
<td>1.4 To take an active role in solving social problems related to science and technology</td>
<td>Practices conservation in use of food, energy, and materials (e.g., avoids wasting paper).</td>
<td>Describes ways in which the products of science could be used for the betterment of mankind.</td>
<td>Expresses an opinion on a social issue (e.g., land use, alternative energy sources) using knowledge of science/technology to support it.</td>
<td>Compares viewpoints of various groups on science/technology-related social issues such as energy use.</td>
</tr>
<tr>
<td>1.5 To weigh alternative scientific, economic, psychological, and social factors when considering possible resolutions to problems</td>
<td>Demonstrates a willingness to examine changing conditions when dealing with problems.</td>
<td>Identifies alternative factors or tradeoffs involved in problems such as pollution control (e.g., cost, employment).</td>
<td>Deliberately examines a variety of alternative viewpoints on scientific issues with a view to forming opinions about them.</td>
<td></td>
</tr>
<tr>
<td>OBJECTIVES</td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
<td>SCIENCE EDUCATION</td>
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<tr>
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<tr>
<td>1.6 To organize and report the results of scientific investigations in an honest and objective manner</td>
<td>Describes what is actually observed.</td>
<td>Shows willingness to log only those data actually gathered.</td>
<td>Reports results honestly and objectively, even when data conflict with own ideas.</td>
<td>Takes initiative in estimating the reliability of findings and the accuracy of conclusions based on data gathered.</td>
</tr>
<tr>
<td>1.7 To practice a willingness to subject data and ideas to the criticism of peers</td>
<td>Listens to the ideas of others.</td>
<td>Readily admits own mistakes upon becoming aware of them.</td>
<td>Shows a willingness to listen critically to explanations of others.</td>
<td>Accepts and responds objectively to criticism of own ideas.</td>
</tr>
<tr>
<td>1.8 To exhibit a critical, questioning attitude toward inferences, hypotheses, and theories</td>
<td>Asks questions about statements.</td>
<td>Offers alternative hypotheses to explain something (e.g., why leaves turn in the fall).</td>
<td>Shows a willingness to confront contradictions between data and possible explanations.</td>
<td>Tests “theories” of others which disagree with own.</td>
</tr>
<tr>
<td>1.9 To habitually apply rational and creative thinking processes when trying to find relationships among seemingly unrelated phenomena and when seeking solutions to problems</td>
<td>Spontaneously attempts to describe an object or event that has attracted one’s attention.</td>
<td>Shows willingness to look for problems and note the unexpected.</td>
<td>Persists in seeking causes for events when they are not immediately apparent.</td>
<td>Applies science problem-solving techniques in a non-school situation (e.g., diagnosing what is wrong with a car engine).</td>
</tr>
<tr>
<td>1.10 To give attention to and value science as an endeavor of human beings from all racial, ethnic, and cultural backgrounds</td>
<td>Enjoys stories and biographies about scientists and others engaged in science-related activities.</td>
<td>Expresses belief that race, sex, or nationality should not constitute a barrier to scientific study.</td>
<td>Describes the scientific contributions of human beings from varying cultural backgrounds.</td>
<td></td>
</tr>
<tr>
<td>1.11 To consider science-related careers and make realistic decisions about preparing for such careers, taking into account abilities, interests, and preparation required</td>
<td>Identifies individuals in various science-related careers.</td>
<td>Acknowledges importance of many science-related careers of people in our society.</td>
<td>Values the abilities, interests, and preparation required for a science-related career.</td>
<td>Makes a responsible, realistic decision about the pursuit of a science-related career.</td>
</tr>
</tbody>
</table>
### GOAL 2.0: To develop and apply rational and creative thinking processes

#### OBJECTIVES

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<tr>
<td><strong>2.1</strong> To generate data by observing, recalling, recognizing, identifying, and measuring</td>
<td>Names or describes characteristics of an object (e.g., temperature, weight, color, size, texture, structure).</td>
<td>Recognizes in an unfamiliar object properties identified in previous observations of familiar objects (e.g., dispersal adaptation of an unfamiliar seed).</td>
<td><strong>Verbalizes need to repeat observations as a means of improving reliability and to verify data.</strong></td>
</tr>
<tr>
<td><strong>2.2</strong> To organize data by comparing, ordering, classifying, and relating</td>
<td>Identifies similarities and differences in a set of objects; separates a set into groups according to a single characteristic such as size, shape, or color.</td>
<td>Identifies and uses various ways to classify objects including systems commonly used by scientists.</td>
<td><strong>Develops arbitrary classification systems wherein objects can be put into mutually exclusive categories; uses quantitative measurements as a criteria for grouping.</strong></td>
</tr>
<tr>
<td><strong>2.3</strong> To apply and evaluate data and generate theories by hypothesizing, predicting, inferring, generalizing, theorizing, explaining, justifying, and judging</td>
<td>Suggests possible reasons as to how events have taken place and what has caused them.</td>
<td>Identifies statements or data that have no direct relationship to the solution of a specific problem; identifies contradictions that appear within the data.</td>
<td><strong>Draws inferences from data; distinguishes between data and inferences.</strong></td>
</tr>
<tr>
<td><strong>2.4</strong> To use data-generating and theory-building processes in a cyclic manner to solve a problem</td>
<td>Describes a discrepant event and seeks possible explanations of it (e.g., why the frost forms on only part of the roof).</td>
<td>Defines a problem related to a discrepant event and tests alternate solutions to the problem.</td>
<td><strong>Evaluates and revises hypotheses on the basis of new data.</strong></td>
</tr>
</tbody>
</table>

#### GOAL 3.0: To develop fundamental skills in the manipulation of materials and equipment, in caring for and handling living organisms, and in the gathering, organization, and communication of scientific information
<table>
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</thead>
<tbody>
<tr>
<td>3.1 To assemble and use laboratory apparatus, tools, and materials in a skilled manner, giving due attention to accident prevention</td>
<td>Manipulates simple materials, apparatus, and equipment in a safe manner.</td>
<td>Demonstrates growth in the ability to manipulate more complex science materials and equipment (e.g., microscope, telescope).</td>
<td>Acquires and assembles appropriate science apparatus, materials, and equipment in order to obtain data.</td>
<td>Designs and constructs experimental apparatus; selects materials to conduct independent investigations.</td>
</tr>
<tr>
<td>3.2 To demonstrate proper techniques in handling and caring for living organisms</td>
<td>Handles classroom plants and animals carefully, following suggested procedures.</td>
<td>Identifies and meets basic needs for humane treatment of animals studied in the classroom and local environment.</td>
<td>Provides and maintains appropriate environment for plants and/or animals kept in the classroom or at home.</td>
<td>Instructs others in caring for living organisms.</td>
</tr>
<tr>
<td>3.3 To gather the descriptive and quantitative information needed for developing or testing references and hypotheses by making purposeful, objective observations of things and events</td>
<td>Makes guided observations of objects and events, defining basic characteristics.</td>
<td>Identifies discrepancies between different reports of the same event.</td>
<td>Distinguishes the difference between a guess or unsubstantiated opinion and a hypothesis based on organized data.</td>
<td>Describes expected outcomes of future observations based on inferences from past observations.</td>
</tr>
<tr>
<td>3.4 To gather needed information which has been generated by others from a variety of sources</td>
<td>Listens to the ideas and explanations of others.</td>
<td>Reads and comprehends science textbooks and reference materials and watches and comprehends science films and TV programs.</td>
<td>Finds sources of information needed to solve a problem.</td>
<td>Interviews an &quot;expert&quot; to obtain needed information; asks relevant questions.</td>
</tr>
<tr>
<td>3.5 To record observations accurately and organize data and ideas in ways that enhance their usefulness</td>
<td>Orally describes a series of events that took place.</td>
<td>Records data in tabular form.</td>
<td>Interprets graphs and displays data graphically.</td>
<td>Uses computer program to store, retrieve, and process data.</td>
</tr>
<tr>
<td>3.6 To communicate with others (orally and in writing) in a manner that is consistent with scientific conventions</td>
<td>Orally describes observations and answers questions.</td>
<td>Explains, either orally or in writing, the methods and procedures involved in carrying out an investigation.</td>
<td>Presents in oral and/or written form an accurate and documented description of an investigation.</td>
<td>Uses precise terminology and quantitative data in communicating about investigations or experiments.</td>
</tr>
</tbody>
</table>
## SCIENCE EDUCATION

### OBJECTIVES

#### 3.7 To use the SI metric system effectively
- Level 1: Counts, uses numbers, and balances objects on an equal-arm balance scale.
- Level 2: Measures linear distances using a metric ruler. Uses a balance to determine the mass of objects. Measures volume of liquids in a graduated cylinder marked in milliliters.
- Level 3: Estimates small distances, areas, volumes, and masses using appropriate units.
- Level 4: Uses a variety of instruments to measure distance, mass, temperature, volume, and electricity and makes calculations using metric units.

#### 3.8 To apply appropriate mathematical concepts and skills in interpreting data and solving problems
- Level 1: Calculates temperature changes during the day.
- Level 2: Calculates rates (speed, flow, population growth) from data.
- Level 3: Finds mean (average), median, and modes of a series of measurements.
- Level 4: Determines degree of precision of measurements and quantities derived from measurements.

### GOAL 4.0: To develop knowledge of processes, facts, principles, generalizations, and applications—the products of science—and encourage their use in the interpretation of our natural environment

### SAMPLES OF LEARNER BEHAVIORS

#### OBJECTIVES

##### 4.1 To demonstrate knowledge of the processes of scientific inquiry
- Level 1: Experiments with a variety of dye solutions made from natural materials, records contents of each solution, and prepares a report with examples of cloth dyed with each solution.
- Level 2: Distinguishes between trial-and-error and more controlled investigations.
- Level 3: Matches names of various processes and products of scientific inquiry with examples (e.g., data, theory, experiment, inference).
- Level 4: Criticizes a scientific investigation, pointing out aspects of the inquiry process that have been omitted or inadequately done.

##### 4.2 To demonstrate knowledge of the content of the major scientific subdisciplines
- Level 1: Names various science subdisciplines.
- Level 2: Matches activities of individual scientists to their respective disciplines.
- Level 3: Lists and briefly describes major content areas included within the biological, physical, earth, and space sciences.
- Level 4: Participates in scientific experiences within at least one of the science disciplines.

**Earth and space**
- Identifies the sun as the earth's chief source of radiant energy.
- Describes the phases of the moon and gives a brief explanation of them.
- Identifies the planets in the solar system and their motions, relative distance from the sun, and major known characteristics.
- Discusses theory of plate tectonics as it relates to location of major mountain ranges, earthquake belts, and volcanic activity.
<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>SCIENCE EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biological science</strong>&lt;br&gt;Identifies common characteristics of living things.</td>
<td><strong>Level 1</strong>&lt;br&gt;Biological science Identifies common characteristics of living things.</td>
<td><strong>Level 2</strong>&lt;br&gt;Describes how a variety of living things are adapted to survive in their habitats.</td>
<td><strong>Level 3</strong>&lt;br&gt;Identifies major predator-prey relationships in a community.</td>
<td><strong>Level 4</strong>&lt;br&gt;Describes the flow of energy through an ecosystem.</td>
</tr>
<tr>
<td><strong>Physical science</strong>&lt;br&gt;Identifies various materials as solids, liquids, or gases.</td>
<td><strong>Level 2</strong>&lt;br&gt;Physical science Identifies various materials as solids, liquids, or gases.</td>
<td><strong>Level 3</strong>&lt;br&gt;Describes how the theory of moving molecules accounts for properties of solids, liquids, and gases.</td>
<td><strong>Level 4</strong>&lt;br&gt;Identifies examples of various forms of energy including kinetic and potential, mechanical, heat, chemical, electrical, radiant, and nuclear.</td>
<td></td>
</tr>
<tr>
<td>4.3 To demonstrate understanding of some basic generalizations, relationships, and principles applicable to all sciences (e.g., energy exists in a variety of convertible forms)</td>
<td><strong>Level 1</strong>&lt;br&gt;Recognizes that fuels are burned to generate electricity, heat homes, cook food, transport goods and people, and manufacture products.</td>
<td><strong>Level 2</strong>&lt;br&gt;Recognizes that the capture of radiant energy by green plants is basic to the growth and survival of all life on earth.</td>
<td><strong>Level 3</strong>&lt;br&gt;Recognizes that the capture of radiant energy by green plants is basic to the growth and survival of all life on earth.</td>
<td><strong>Level 4</strong>&lt;br&gt;Recognizes that the capture of radiant energy by green plants is basic to the growth and survival of all life on earth.</td>
</tr>
<tr>
<td>4.4 To demonstrate knowledge of the relationships between science and society</td>
<td><strong>Level 1</strong>&lt;br&gt;Gives examples of societal problems related to science (e.g., energy, pollution, food supply).</td>
<td><strong>Level 2</strong>&lt;br&gt;Gives examples of ways in which the use of scientific knowledge has affected society.</td>
<td><strong>Level 3</strong>&lt;br&gt;Identifies examples of ways in which the use of scientific knowledge has affected society.</td>
<td><strong>Level 4</strong>&lt;br&gt;Identifies examples of ways in which the use of scientific knowledge has affected society.</td>
</tr>
<tr>
<td>4.5 To demonstrate knowledge of science-related career opportunities and the preparation needed</td>
<td><strong>Level 1</strong>&lt;br&gt;Compares the work done by people in different occupations, including science-related occupations.</td>
<td><strong>Level 2</strong>&lt;br&gt;Identifies ways in which careers such as engineering, medicine, chemistry, and agriculture are science related.</td>
<td><strong>Level 3</strong>&lt;br&gt;Identifies science-related careers of interest and describes preparation needed.</td>
<td><strong>Level 4</strong>&lt;br&gt;Identifies science-related careers of interest and describes preparation needed.</td>
</tr>
<tr>
<td><strong>CAREER</strong></td>
<td></td>
<td></td>
<td></td>
<td>Engages in part-time career activities related to science.</td>
</tr>
</tbody>
</table>
SCIENCE EDUCATION

OBJECTIVES

4.6 To demonstrate knowledge of contributions to science and technology made by men and women of various races and nationalities.

4.7 To demonstrate knowledge of the relationship of science to other areas of human endeavor (e.g., art, history, literature, government).

4.8 To demonstrate knowledge of the ways in which attitudes, thinking processes, and skills can be coupled with content knowledge to be used in personal decision making.

MULTICULTURAL

Level 1
Recognizes the names of several scientists from different races, nationalities, and sexes.

Level 2
Identifies scientific discoveries in terms of the person(s) who were responsible for the discovery and the historical and cultural context in which the discovery was made.

Level 3
Describes instances in which a major scientific or technological advance has been based on the work of persons of several races and nationalities.

Level 4
Compares the variety of artwork possible using only naturally occurring materials with what is possible using synthetic materials. Describes use of scientific knowledge and processes in crime investigation.

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

American Association for the Advancement of Science (AAAS)
John R. Mayor, Director of Education
1515 Massachusetts Avenue, N.W.
Washington, D.C. 20005
Publication: Science

Association for the Education of Teachers of Science (AETS)
Richard Smith
Department of Natural Science
San Jose State University
125 S. Seventh Street
San Jose, CA 95192

California Science Teachers Association (CSTA)
Robert Rice, Executive Director
Lawrence Hall of Science
University of California
Berkeley, CA 94720
POINT OF VIEW

The central purpose of social sciences education is to develop responsible citizens who will in turn preserve and continue to advance progress toward a just society.

In order that such responsible citizens can be developed, individuals must grow in understanding of themselves, the others with whom they live, other Americans, and others in the world. Thus, they must acquire concepts about human beings, human societies, and the processes by which learning can be continuous throughout life. Among the essential processes to be learned are critical thinking, problem solving, work-study skills, valuing, self-direction, and social participation. In part, the achievement of responsible citizenship will be shown in students' respect and understanding for themselves and others.

The development of responsible citizens begins in kindergarten and continues throughout life. The social sciences curriculum focuses on the development of effectively functioning human beings who choose to be active members of their communities and to exercise the duties, rights, and obligations of citizenship.
GOAL 1: To develop understandings based on data, generalizations, and interdisciplinary and disciplinary concepts drawn from the various social sciences including anthropology, economics, geography, history, political science, psychology, and sociology.

LEVEL 1

Community Study
Setting: Local Community (Past-Present)

Students in a third grade class in Central City are studying the community. They invite five senior citizens who have lived in the community all their lives to meet with them and talk about the community. Mr. Hertzel, the teacher, suggests they ask Mrs. Nakagiri, Mr. Standing Elk, Ms. Garcia, Mrs. Bronowski, and Mr. Thomas. Each is well known to the children as volunteer aides in the school. Each represents a different ethnic community. Before the visitors come, the class develops a list of questions to ask their visitors:

- Where were you born?
- When did you come to live in Central City?
- What was the city like?
- Did you have parks? Did you have movies?
- What did you do for fun?
- What was your school like?
- What do you think has changed most since you were our age?
- What things have not changed very much?

One guest is scheduled to come each week. With the guidance of the teacher, Mr. Hertzel, the class chooses the persons who will ask each question. Other students may ask follow-up questions. Another group of students takes turns tape recording each speaker. Another group greets the guests and introduces them to the class. The remaining students are divided into four groups of five; each is to listen carefully and remember the following:

Group 1: What stores, schools, parks, and other things were in Central City when [ ] was young?
Group 2: What things were not in the city then?
Group 3: What has changed most?
Group 4: What has changed least?

The students listen carefully, collect their data, and with Mr. Hertzel's help make a retrieval chart.

Retrieval Chart

<table>
<thead>
<tr>
<th>Mrs. Nakagiri</th>
<th>Mr. Standing Elk</th>
<th>Ms. Garcia</th>
<th>Mrs. Bronowski</th>
<th>Mr. Thomas</th>
</tr>
</thead>
<tbody>
<tr>
<td>What Places - Then</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What Places - Not Then</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed Most</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed Least</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The students can now generalize and respond to the following questions:
- Did each person remember the same things?
- Why might they remember different things?
- How has the city changed?
- What things have not changed very much?
- What things seem to change most?
- What things seem to change least?
- Why do things and people change?

LEVEL 2

Western Hemisphere
Settings: Brazil, Argentina, Chile, Ecuador, Colombia, Peru (1860-1979)

Mrs. James' sixth grade class has spent a year studying South America. She wants the students to review and synthesize their learning by looking once again at the cultures they studied. She divides the class into six teams of five students each. Each team is given a culture to review: Brazil, Argentina, Chile, Ecuador, Colombia, or Peru. Each team looks at one country as of today and as of the year 1800 and collects the following data:

- Economics—resources, agriculture (crops, cattle, dairies, etc.), industries, exports, and imports
- Politics—form of government, leaders, and problems
SOCIAL SCIENCES

Before beginning its study, each team is asked to state criteria for a good urban environment. The class then discusses these proposed criteria and makes a first draft of criteria to be used to determine whether the quality of life has been improved by the specific redevelopment project being studied. Two senior government teachers, the environmental studies teacher, a local city councilman, and the biological sciences teacher are asked to give information and suggestions. Individual students interview these persons and their ideas are evaluated and incorporated if the committee judges them to be of value. The data are accumulated from all available sources—books, magazines, newspapers, transcripts of radio and television programs. The data are summarized and generalizations are drawn and tested against criteria. Each final report weighs the extent to which the quality of life has been improved and at what costs to whom. A report of the investigation is prepared for the local newspaper and a presentation is made to the local Chamber of Commerce by a team of students.

LEVEL 4

World Studies

Settings: Selected Modern Nations

In expanding on the study of technology, Ms. Andrade focuses her twelfth grade senior contemporary problems course on the worldwide problems of war, poverty, ecology (overpopulation and pollution), human rights, and increased participation by citizens in governmental decision making. After preliminary investigations, these problems are divided among five in-depth research teams for further study. Each team:

- Investigates historical and contemporary aspects of the problem
- Determines to what extent modern technology exists which could be used
- Determines to what extent the problem is one a single nation can effectively bring to solution, or whether a multinational approach is needed
- Projects future dimensions of the problem when causative and ameliorative variables are analyzed
- Makes recommendations for effective solutions (technological, social strategies, political action, other)
- Plans programs for communicating findings to local civic groups through radio, television, newspapers, brochures, visual displays, and letters
GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To develop understandings based on data, generalizations, and interdisciplinary and disciplinary concepts drawn from the various social sciences including anthropology, economics, geography, history, political science, psychology and sociology

OBJECTIVES

1.1 To understand selected examples of interdisciplinary concepts through studies of human experience

<table>
<thead>
<tr>
<th>Environment</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzes how settings for work and play can be made more beautiful and functional by own efforts.</td>
<td>Analyzes physical and social considerations in planning environments.</td>
<td>Evaluates the effects of unlimited exploitation of natural resources in various regions of the United States and in developing nations.</td>
<td>Describes how urban growth has affected the environment.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Freedom</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies factors which allow for personal freedom or constrain individuals in the immediate environment.</td>
<td>Identifies some of the important values that may be affected by the exercise of freedom and considers the emotional, intellectual, social, cultural, legal, and political aspects of freedom.</td>
<td>Identifies and describes some phenomena that affect freedom (e.g., emotional factors such as self-confidence; intellectual factors such as the understanding of various alternatives; social and cultural factors such as the existence of realistic and varied alternatives; legal and political factors such as First Amendment guarantees of belief, expression, and association).</td>
<td>Analyzes specific problem situations to determine limitations that should be placed on the exercise of freedom and the values promoted or inhibited in each situation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Justice</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies procedures for making decisions in the home, school, and community and evaluates decisions in terms of fairness or unfairness.</td>
<td>Evaluates issues concerning the fair correction of wrongs or injuries (e.g., situations involving wrongs or injuries suffered by students, employees, or citizens).</td>
<td>Distinguishes among rules and laws designed to promote fair distribution of resources, fair means of making decisions, and fair corrections of wrongs or injuries.</td>
</tr>
</tbody>
</table>

*The examples of concepts which are listed under objectives 1.1 and 1.2 have been selected from a more comprehensive listing in the Social Sciences Education Framework.
<table>
<thead>
<tr>
<th>Truth</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes the importance of making accurate statements so that a positive and constructive classroom environment can be created.</td>
<td>Considers economics and use of resources in relation to the development of California water resources for electric power.</td>
<td>Reads materials written by the early Western settlers and compares the settlers' views with the views expressed in selected motion pictures depicting life during the same period.</td>
<td>Studies the development of a major local or national problem as reported on three or more radio and/or television networks.</td>
<td></td>
</tr>
</tbody>
</table>

**OBJECTIVES**

1.2 To understand selected examples of concepts derived from the disciplines through studies of human experience

<table>
<thead>
<tr>
<th>ANTHROPOLOGY</th>
<th>CULTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devises rules to resolve conflicts and meet needs in class and playground activities.</td>
<td>Shows respect for other students in the class who are trying to establish their own identities, values, and lifestyles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECONOMICS</th>
<th>SCARCITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practices economical use of school materials and develops an understanding that these materials are provided by tax money paid by their parents.</td>
<td>Analyzes use and misuse of resources in attempts to fulfill the wants of the growing population of the world.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GEOGRAPHY</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links items used with places where the items originated.</td>
<td>Identifies natural resources (e.g., minerals, water) and describes comparative uses of such resources.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HISTORY</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describes types and rates of change in community.</td>
<td>Analyzes economic, political, social, and technological changes that have occurred since the beginnings of the nation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POLITICAL SCIENCE</th>
<th>AUTHORITY/POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates knowledge of the need for order in the classroom when certain tasks are to be performed.</td>
<td>Analyzes situations in which authority exists and identifies its intermediate and alternate sources (e.g., the authority of teachers which is based upon custom, tradition, law, need, and consent).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzes situations to determine some values that are promoted and some that are inhibited by the exercise of authority (e.g., parents setting an evening curfew for children).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES</th>
<th>AUTHORITY/POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describes the formal and informal political processes by which individuals and cultural groups effect social change.</td>
<td>Identifies and describes the use of human resources in a particular historical event.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzes why it is often difficult for individuals and groups to tolerate the diverse life-styles of others.</td>
<td>Computes the social cost of using human and physical resources in various ways and makes choices about the allocation of capital mineral wealth.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describes why resources available to human beings are scarce in relation to their needs and wants.</td>
<td>Explains the significance of changes in technology for social, political, and economic systems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzes the scope and limits of authority within a specific situation and explains some of the values and interests involved (e.g., limits on the exercise of authority by a specific branch or agency of the U.S. government).</td>
<td>Analyzes the scope and limits of authority within a specific situation and explains some of the values and interests involved (e.g., limits on the exercise of authority by a specific branch or agency of the U.S. government).</td>
</tr>
<tr>
<td>SOCIAL SCIENCES</td>
<td></td>
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<tr>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>LEVEL 1</td>
<td></td>
</tr>
<tr>
<td><strong>PSYCHOLOGY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>NEEDS</strong></td>
<td></td>
</tr>
<tr>
<td>Describes how people meet their needs for food, clothing, shelter, love, and security.</td>
<td></td>
</tr>
<tr>
<td><strong>SOCIOLOGY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL CONTROL</strong></td>
<td></td>
</tr>
<tr>
<td>Uses personal experiences to identify rules which are common to several groups and rules that are unique to a particular group.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 To use the data from which concepts have been derived and to develop and test understandings based on data</td>
</tr>
<tr>
<td>Keeps a record of time spent in different activities and discusses alternative ways to use time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PSYCHOLOGY</strong></td>
</tr>
<tr>
<td><strong>NEEDS</strong></td>
</tr>
<tr>
<td>Compares own ways of meeting needs with the ways in which others meet their needs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIOLOGY</strong></td>
</tr>
<tr>
<td><strong>SOCIAL CONTROL</strong></td>
</tr>
<tr>
<td>Describes changes in interpretation and implementation of laws designed to protect certain individual rights of all citizens.</td>
</tr>
<tr>
<td>Compares socialization of youth in different ethnic/cultural groups in the United States.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 To develop valid conceptual schemes which students may employ in furthering their understandings of aspects of human experience such as culture, belief systems, justice, and representative explanations of human origins</td>
</tr>
<tr>
<td>Participates in developing rules and procedures for classroom management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIOLOGY</strong></td>
</tr>
<tr>
<td><strong>SOCIAL CONTROL</strong></td>
</tr>
<tr>
<td>Evaluates experiences of contemporary institutions in meeting needs and hypothesizes about ways in which these needs may be met in the future.</td>
</tr>
<tr>
<td>compare social conditions in a foreign country with conditions in the United States using information from a variety of sources (e.g., newspapers, statistical reports on employment levels and income distribution, editorial commentaries).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies and analyzes historical events related to the labor movement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MULTICULTURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lists the situations where being “fair” is important, where following the “rules” is important, and where being “just” is important.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GOAL 2.0:</th>
</tr>
</thead>
<tbody>
<tr>
<td>To enable students to develop and practice a variety of intellectual and work-study skills appropriate to the social sciences</td>
</tr>
</tbody>
</table>
**OBJECTIVES**

2.1 To develop and use the skills involved in critical thinking

2.2 To develop and use valuing skills that are useful in the processes of recognizing and clarifying problems as well as managing and resolving them

2.3 To develop and use creative ways to solve problems

2.4 To develop and use work-study skills

2.5 To become increasingly self-directing

2.6 To identify needs for continuous learning in order to keep abreast of changes in social science disciplines

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**SAMPLES OF LEARNER BEHAVIORS.**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
<td><strong>Level 2</strong></td>
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<td><strong>Level 4</strong></td>
</tr>
<tr>
<td><strong>OBJECTIVES</strong></td>
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<td><strong>OBJECTIVES</strong></td>
</tr>
<tr>
<td><strong>2.1 To develop and use the skills involved in critical thinking</strong></td>
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</tr>
<tr>
<td><strong>2.2 To develop and use valuing skills that are useful in the processes of recognizing and clarifying problems as well as managing and resolving them</strong></td>
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</tr>
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<td><strong>2.3 To develop and use creative ways to solve problems</strong></td>
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<td><strong>2.5 To become increasingly self-directing</strong></td>
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<td><strong>2.6 To identify needs for continuous learning in order to keep abreast of changes in social science disciplines</strong></td>
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**SOCIAL SCIENCES**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discriminates between fact and imagination.</strong></td>
<td><strong>States a variety of generalizations about the effects of actions of different groups on the use of land and resources in California.</strong></td>
<td><strong>Makes and tests hypotheses, uses relevant information, develops generalizations, and avoids overgeneralizations.</strong></td>
<td><strong>Extrapolates from past and present conditions and makes predictions.</strong></td>
</tr>
<tr>
<td><strong>Identifies problems that occur among persons or groups, lists steps for resolving a problem, and predicts consequences of the suggestions.</strong></td>
<td><strong>Discusses problems related to the attitudes and values of classroom members and gives reasons for possible future behaviors on the basis of one's own feelings, attitudes, and values.</strong></td>
<td><strong>Identifies problems in individual and peer group relationships, develops alternative solutions, predicts the consequences of actions based on such solutions, and maintains a log of events to verify predictions.</strong></td>
<td><strong>Develops alternative solutions to problems and evaluates the consequences of the solutions.</strong></td>
</tr>
<tr>
<td><strong>Discusses and identifies a variety of ways for sharing materials.</strong></td>
<td><strong>Participates in small-group discussions to present ideas, expands and clarifies ideas, listens to others, and comments and builds on the ideas of others.</strong></td>
<td><strong>Develops a plan for analyzing the impact of a new technology on a developing nation.</strong></td>
<td><strong>Generates proposals for the use of alternative materials and processes in an area where resources are diminishing.</strong></td>
</tr>
<tr>
<td><strong>Identifies symbols on a simple neighborhood map.</strong></td>
<td><strong>Uses a variety of graphic resources such as encyclopedias, almanacs, graphs, and maps to obtain information about the United States.</strong></td>
<td><strong>Develops charts and graphs to illustrate changes in educational opportunities for various cultural groups in the United States.</strong></td>
<td><strong>Interprets, generalizes, and infers from data and communicates ideas and findings effectively through verbal and written presentation.</strong></td>
</tr>
<tr>
<td><strong>Discusses and plans ways for using time wisely.</strong></td>
<td><strong>Works in groups of various sizes to plan activities and carry them through to completion.</strong></td>
<td><strong>Works in small groups to develop a plan for resolving a community problem.</strong></td>
<td><strong>Develops procedures for the investigation of a problem, develops criteria, and evaluates outcomes of the study.</strong></td>
</tr>
<tr>
<td><strong>Relates basic skill developments to life roles within the community.</strong></td>
<td><strong>Demonstrates an understanding of the importance of successful accomplishments to a positive image of self.</strong></td>
<td><strong>Develops a tentative schedule to acquire necessary and desired special skills.</strong></td>
<td><strong>Develops a plan for acquisition of the necessary skills for a chosen life-style.</strong></td>
</tr>
</tbody>
</table>
### SOCIAL SCIENCES

**GOAL 3.0:** To enable and encourage students to understand and respect individual and cultural differences and similarities

#### OBJECTIVES

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<tbody>
<tr>
<td><strong>3.1</strong></td>
<td>To understand and appreciate the world as a multiracial, multicultural, multilingual, and multinational phenomenon</td>
<td>Identifies cultural differences in the class and discusses similarities and differences in the way people satisfy basic needs.</td>
<td>Identifies regions on a map from which racial groups come to the United States and reports on one aspect of the original culture of these groups.</td>
<td>Analyzes the multicultural development of the United States (e.g., Native American, European, Mexican, African, Asian).</td>
</tr>
<tr>
<td><strong>3.2</strong></td>
<td>Discusses the advantages of being able to speak more than one language.</td>
<td>Studies one example of an ethnic/cultural group from family's background.</td>
<td>Analyzes the contributions of different ethnic/cultural groups to the development of religious and cultural pluralism in the United States.</td>
<td>Describes unique cultural contributions of different groups in the United States.</td>
</tr>
<tr>
<td><strong>3.3</strong></td>
<td>Prepares food from different ethnic/cultural origins.</td>
<td>Analyzes similarities and differences among selected cultures.</td>
<td>Describes the unique and significant contributions to life in the United States made by different groups.</td>
<td>Analyzes the differences in legal, social, and economic rights and privileges between men and women.</td>
</tr>
<tr>
<td><strong>3.4</strong></td>
<td>Examines the variety of jobs in a complex society.</td>
<td>Participates in a survey of the occupational roles of parents and explains how parents selected their occupations.</td>
<td>Analyzes the contributions various ethnic/cultural groups have made to the economic developments in the United States.</td>
<td>Interviews persons with varied backgrounds about socioeconomic factors that influence career choices.</td>
</tr>
<tr>
<td><strong>3.5</strong></td>
<td>Identifies similarities and differences among students.</td>
<td>Analyzes advertisements, television programs, and &quot;comics&quot; to identify cultural, social, and economic stereotypes in our society.</td>
<td>Analyzes socioeconomic factors which have perpetuated patterns of discrimination against various ethnic/cultural groups in the United States.</td>
<td>Analyzes the forces that have led to legal acts and social sanctions of discrimination against specific groups.</td>
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</table>

#### SAMPLES OF LEARNER BEHAVIORS

<table>
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<td></td>
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<td>Analyzes the forces that have led to legal acts and social sanctions of discrimination against specific groups.</td>
<td>Lists similarities and differences in human beings and the implications of this knowledge for equalizing social, political, economic, and educational opportunities.</td>
<td></td>
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</tbody>
</table>

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**Note:** The image includes a reference to the ERIC database, indicating that this page may be part of a larger resource or publication. The page number 132 is also noted, suggesting this is page 132 of a document or book.
### OBJECTIVES

#### 3.6 To understand different units of human organizations:
- World organizations,
- Nation-states,
- Ethnic/racial groups,
- Entrepreneurial and labor groups,
- Kin groups,
- Families

#### Level 1
- Works cooperatively in committees planning for and accomplishing specific tasks such as collecting data and reporting to the class.

#### Level 2
- Studies the organization of societies in the past and compares to present-day social organization.

#### Level 3
- Studies the origins and purposes of labor organizations in the United States and compares to the present-day functions of the same or similar organizations.

### GOAL 4.0: To enable students to reflect on their society's values and to develop and clarify a personal set of values

### OBJECTIVES

#### 4.1 To become aware of personal value positions and the positions held by other individuals and groups
- Listens to the thoughts of fellow students, family members, and members of the larger community in which they reside.

#### 4.2 To develop feelings of self-worth and confidence in personal capabilities
- Participates in school and community groups.

#### 4.3 To develop an appreciation of and a concern for all living things
- Describes own accountability for actions in family, school, or neighborhood situations.

#### 4.4 To see that controversies are usually related to value differences or interpretations
- Describes different types of human behavior in terms of personal value systems.

#### 4.5 To understand and appreciate the rights, privileges, and duties of citizenship in a democracy
- Demonstrates ability to share responsibility in group work.

### SAMPLES OF LEARNER BEHAVIORS

#### SOCIAL SCIENCES

#### Level 4
- Uses a variety of sources for information (e.g., newspapers, magazine articles, TV) about present-day social/economic/political organizations and evaluates the effectiveness of these organizations.

#### Level 4
- Clarifies personal value positions when confronted with different social problems.

#### Level 4
- Analyzes personal strengths and weaknesses and identifies alternatives for life planning.

#### Level 4
- Identifies value positions reflected in the actions of various groups in the world.

#### Level 4
- Participates in solving current social problems.

#### Level 4
- Generalizes about goals and tactics that characterize different groups committed to social action.
SOCIAL SCIENCES

GOAL 5.0: To enable students to participate in activities in the society as individuals and as members of groups

OBJECTIVES

5.1 To analyze social situations, determine value issues, and prepare appropriate solutions upon which the students are willing to act.

5.2 To use their knowledge and intellectual skills effectively in participating in civic and other activities.

5.3 To develop interpersonal relationship skills in social activities.

5.4 To understand how to use social processes in order to solve resource use and environmental problems.

SAMPLES OF LEARNER BEHAVIORS

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<tr>
<td>Participates in formulating an appropriate set of classroom rules.</td>
<td>Works cooperatively to develop a plan for resolving conflicts on the playground.</td>
<td>Participates in community projects designed to improve the environment.</td>
<td>Analyzes the performance of national leaders to determine the values underlying their behavior.</td>
</tr>
<tr>
<td>Works cooperatively to develop a plan for sharing classroom equipment.</td>
<td>Analyzes school-community traffic problems.</td>
<td></td>
<td>Explores the need for social services in the community.</td>
</tr>
<tr>
<td>Demonstrates behaviors that contribute to good interpersonal relations.</td>
<td>Explores a variety of roles essential for successful group functioning and performs the roles successfully in school.</td>
<td></td>
<td>Discusses controversial public issues.</td>
</tr>
<tr>
<td>Applies rules for school and community behavior in respect to littering, resource waste, pollution, and care for animals.</td>
<td>Relates social activities concerned with environmental matters from the past and/or in other cultures to current American practices.</td>
<td></td>
<td>Demonstrates a long-term commitment to continuing environmental awareness and a willingness to work individually and with others to solve identified problems.</td>
</tr>
</tbody>
</table>

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

California Council for the Social Studies
2205 - 16th Street
Sacramento, CA 95818
Publication: The Social Studies Review

National Council for the Social Studies
1515 Wilson Boulevard, Suite 101
Arlington, VA 22209
Publication: Social Education
The main purpose of traffic safety education is to develop students’ understanding and observance of the system of signs and procedures that have been developed for the safe use of vehicles and protection of pedestrians. The program aims to increase students’ awareness of their responsibilities in relation to traffic safety through a systematic and detailed exposure in practice and in analysis to the system for traffic safety.

At the elementary level, emphasis is placed on learning to observe the functions of signs, signals, and procedures through the practice of good safety habits. There is some indication that potential problem drivers can be identified among elementary school children. This suggests that efforts should be planned to modify the characteristics that will predispose these children to accidents.

Secondary schools are well qualified to prepare young people for use of the traffic system. As students reach legal driving age, they are prepared to function safely and efficiently as vehicle operators, passengers, pedestrians, and consumers. They also learn about ways in which they can responsibly and actively support and initiate efforts to improve system components (roadway, vehicles, and highway users) and management.

Many concepts and values that are included in other areas of the curriculum also can be developed in the traffic safety program. For example, the drinking and driving problem is part of the alcohol problem in general. The same can be said about drug use, emotions, the aging process, law and order, and other social problems. These concerns are identified in the traffic environment by poor performance and accidents.

Most students have a strong interest in learning how to drive. This interest can be used as a motivation to consider these concepts and values and to apply them as operators of vehicles and as pedestrians.

A traffic safety education program is implemented informally at levels 1 and 2. Vignettes are included for those levels as examples of the types of activities which can be used. Samples of learner behaviors are described only for levels 3 and 4 when the program is formally implemented.
GOAL 1: To take all possible precautions to reduce risk of injury

LEVEL 1

The teacher takes the class outside to the sidewalk adjacent to the school. One at a time, the children walk to the edge of the street and begin to look for moving vehicles. The student points toward a moving vehicle, follows the vehicle with the arm, and states to the teacher when the vehicle has passed the student’s body and—if there is no other approaching vehicle—that it is safe to cross the street.

Students may be assigned in pairs to perform this activity, informing each other of approaching vehicles.

Students who have difficulty with this activity should repeat it until they are successful.

LEVEL 2

The following activity is a game which can be used to develop awareness about the hazards that bicycle riders might encounter and the procedures they can use either to avoid or respond to hazards.

A series of slides is shown. These illustrate various traffic situations and hazards which a bicycle rider might encounter. Each slide is given a value of from one to three points, depending on how obvious the hazard is. The class is divided into two teams. As each slide is shown, the teams take turns identifying the hazards. If a team member identifies the hazard, the points are added to the score of that team. If not, the other team is given a chance to identify the hazard. After students identify the hazards, they describe ways in which the hazards can be avoided or reduced.

LEVEL 3

Dyne-O-Myte is a game based on facts about drugs other than alcohol. Cards are used which have questions related to facts about drugs printed on them. Four teams are selected. The team that reaches the “O” in the center of the Dyne-O-Myte diagram first wins the game. The teacher draws a diagram on the chalkboard as follows:

```
DYNE

O

MYTE
```

Team members take turns drawing cards. The person drawing the card reads and answers the question on it. If the answer is correct, the scorekeeper crosses off the outermost letter in the diagram. If the answer is incorrect, a member of the next team has a chance to answer the question. The game can be played several times in a single class period.

This game is one in a series of learning activities taken from Taking Risks, a book being prepared for publication by the Department of Education. It is a series of activities and materials for teaching about alcohol, other drugs, and traffic safety. The publication will be released in 1979.

LEVEL 4

In this learning activity the student driver describes those elements in the traffic environment which could produce a conflict. In each case, the student explains what is taking place, including the steps being taken to prevent a collision.

This learning activity gives the teacher the opportunity to evaluate the development of perceptual skills through the spoken word.

GOALS, OBJECTIVES, AND SAMPLES OF LEARNER BEHAVIORS FOR PROGRAM PLANNING

GOAL 1.0: To take all possible precautions to reduce risk of injury
OBJECTIVES

1.1 To use skills for pre-entry, participation, and exiting in highway traffic

1.2 To assess the risk associated with using the highway transportation system while under the influence of alcohol or other drugs

GOAL 2.0: To develop awareness of the importance of the highway transportation system and participate in activities which influence the maintenance and improvement of the system

SAMPLES OF LEARNER BEHAVIORS

Bicycle Exit
Level 3
Indicates intention to leave the highway transportation system and receives information which indicates response from other drivers.

Identifies and appraises motivations that prompt young people to drink and develops personal guidelines for behavior that will minimize the risks associated with drinking and driving.

TRAFFIC SAFETY EDUCATION

Level 4
Trip Planning
Chooses a route to a destination which offers the greatest possibility of arriving safely.

Formulates a set of personal guidelines for avoiding harmful highway consequences from drug misuse.

SAMPLES OF LEARNER BEHAVIORS

Level 3
Identifies natural resources used in the highway transportation system and explains the need for conservation.

Identifies elements in the highway transportation system which are harmful to the environment.

Describes products manufactured for the protection of passengers.

Level 4
Describes appropriate actions to conserve natural resources.

Describes ways in which elements in the highway transportation system are harmful to the environment.

Identifies the available options within the transportation system as they relate to the needs of the individual and society.

Identifies organizations which provide information related to the safety of highway users.

Identifies problems in the highway transportation system which affect the safety of highway users.

Identifies the role of a citizen in initiating and supporting efforts to improve the highway transportation system.

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OBJECTIVES

CAREER

2.7. To be aware of career opportunities available in the highway transportation system.

TRAFFIC SAFETY EDUCATION

Level 3

Level 4

Creates a list of ten unrelated job opportunities available in the highway transportation system.

PROFESSIONAL ASSOCIATIONS AND THEIR PUBLICATIONS

American Driver and Traffic Safety Education Association (ADTSEA)
1201 - 16th Street, N.W.
Washington, D.C. 20036

Publication: Journal of Traffic Safety Education
P.O. Box 253
Los Alamitos, CA 90720

California Association for Safety Education (CASE)
P.O. Box 4077
Foster City, CA 94404
CALIFORNIA ASSESSMENT PROGRAM

The California Assessment Program (CAP) is a statewide testing program which provides information to the state legislature, the public, and school personnel about how well students in California's public schools are learning the basic skills. The California Assessment Program was first fully implemented in 1974-75. It is unique in the nation in design, development, and procedures.

The principal features of the program are:

- **CAP provides information only about groups of students and not about individuals.** CAP results are aggregated and reported at the school, district, and state levels.
- **CAP employs a testing strategy known as matrix sampling.** In matrix sampling a long test is developed and subdivided into many (10 to 20) equally difficult forms. Each student completes only a portion of the test. Matrix sampling allows for both an increase in content coverage and a reduction in testing time and effort for teachers and students.
- **The basic skills achievement tests used by CAP are tailored especially to the curriculum taught in California's public schools.** The objectives of the reading, mathematics, and written language tests are based upon the state-adopted curriculum frameworks in each of these areas. Committees of curriculum specialists representing a cross section of institutions and regions throughout California assisted in compiling the test objectives for reading, language, and math in 1972-73. The committees selected items which were judged to be sound and accurate measures of the various objectives.
- **The test booklets and scoring are provided without charge to school districts.**

The California Assessment Program has evolved in many ways since it was first implemented in 1974-75. In 1979-80, reading, math, and written language will be assessed at grades 3, 6, and 12 according to the schedule:

<table>
<thead>
<tr>
<th>September 1979</th>
<th>December 1979</th>
<th>April 1980</th>
<th>April-May 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Level</td>
<td>Grade 12</td>
<td>Grade 6</td>
<td>Grade 3</td>
</tr>
</tbody>
</table>

**DESCRIPTION OF BASIC SKILLS AREAS**
Grades 3, 6, and 12

These three matrix sampling tests measure achievement in four content areas: reading, written language, spelling, and mathematics. The skill area breakdown for each of these areas is as follows:

**Reading**
- Word identification—phonetic and structural analysis, vocabulary, literal and interpretive/critical comprehension

**Language**
- Word forms, language choices, sentence recognition and manipulation, paragraphs, capitalization, and punctuation

**Spelling**
- Predictables, demons, word formation, and homophones

**Mathematics**
- Number and numeration, number theory and properties, whole number computation and application, fraction computation and application, decimal computation and application, algebraic computation and application, geometric facts and application, probability and statistical computation and application
USE OF CAP RESULTS

School staffs are encouraged to examine the information that is made available through the California Assessment Program and to use it in assessing needs and in planning for instructional programs. Following are some of the steps that can be used in this process.

- Prior to testing, staffs review the test content specifications and identify important skill areas.
- Using the information from this analysis, staffs review the curriculum for the specific skill areas and make judgments about the relevance of curriculum content to the test specifications.
- Immediately prior to the testing period, staffs review procedures for test administration to assure optimal conditions for student performance.
- When the reports of the results of testing arrive, staffs use the Interpretive Supplement (see publications) to analyze the results for a particular school site.
- Planning groups combine the information from the testing results with other sources of information such as opinion surveys, staffing patterns, and school population to assess the needs of the school site in program planning.
- Planning groups use this aggregated information about school site needs in setting goals and objectives and in developing curriculum activities.

CALIFORNIA ASSESSMENT PROGRAM PUBLICATIONS*

Interpretive Supplement — This publication is sent with each school report. It contains a description of all information printed on the report and other information that is useful in interpreting the results such as percentile rank tables and illustrative items.

Filmstrips — Two filmstrips in one package give an overview of the California Assessment Program and describe how to use the results of the school report.

Student Achievement in California Schools - 1977-78 (published annually) — This publication describes the statewide test results for each content area and for each grade. Results are presented in detail, pointing out specific strengths and weaknesses in achievement for the statewide student population. Results are also presented for a variety of subgroups. The final section of the report presents the results for California relative to national pupil norms.

Test Content Specifications for California State Reading Test and Survey Skills — This set of three documents—one each for reading, mathematics, and written expression and spelling—is the culmination of months of research into what was commonly taught in California public schools. They form the framework from which the Survey of Basic Skills: Grade 6 was developed.

*These publications are available from Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802.
CURRICULUM FRAMEWORKS

Unless otherwise noted, the major sources of goals and content for the curricular areas in this Course of Study were the California State Frameworks.

The California State Board of Education has adopted Frameworks for California public schools, grades kindergarten through 12, in the following curricular areas. Copies of these Frameworks may be obtained by writing to California State Department of Education, P.O. Box 271, Sacramento, CA 95802.

Art Education Framework (1971)
Drama/Theatre Framework for California Public Schools (1974)
English Language Framework for California Public Schools (1976)
Foreign Language Framework for California Public Schools (1979)
Health Instruction Framework for California Public Schools (1979)
Mathematics Framework for California Public Schools (1975)
Mathematics Scope and Sequence Charts (set of four) (1975)
Music Framework for California Public Schools (1975)
Physical Education Framework for California Public Schools (1973) - out of print, revision in progress
Framework in Reading for Elementary and Secondary Schools in California (1973)
Science Framework for California Public Schools (1978)
Social Sciences Framework for California Public Schools (1975)