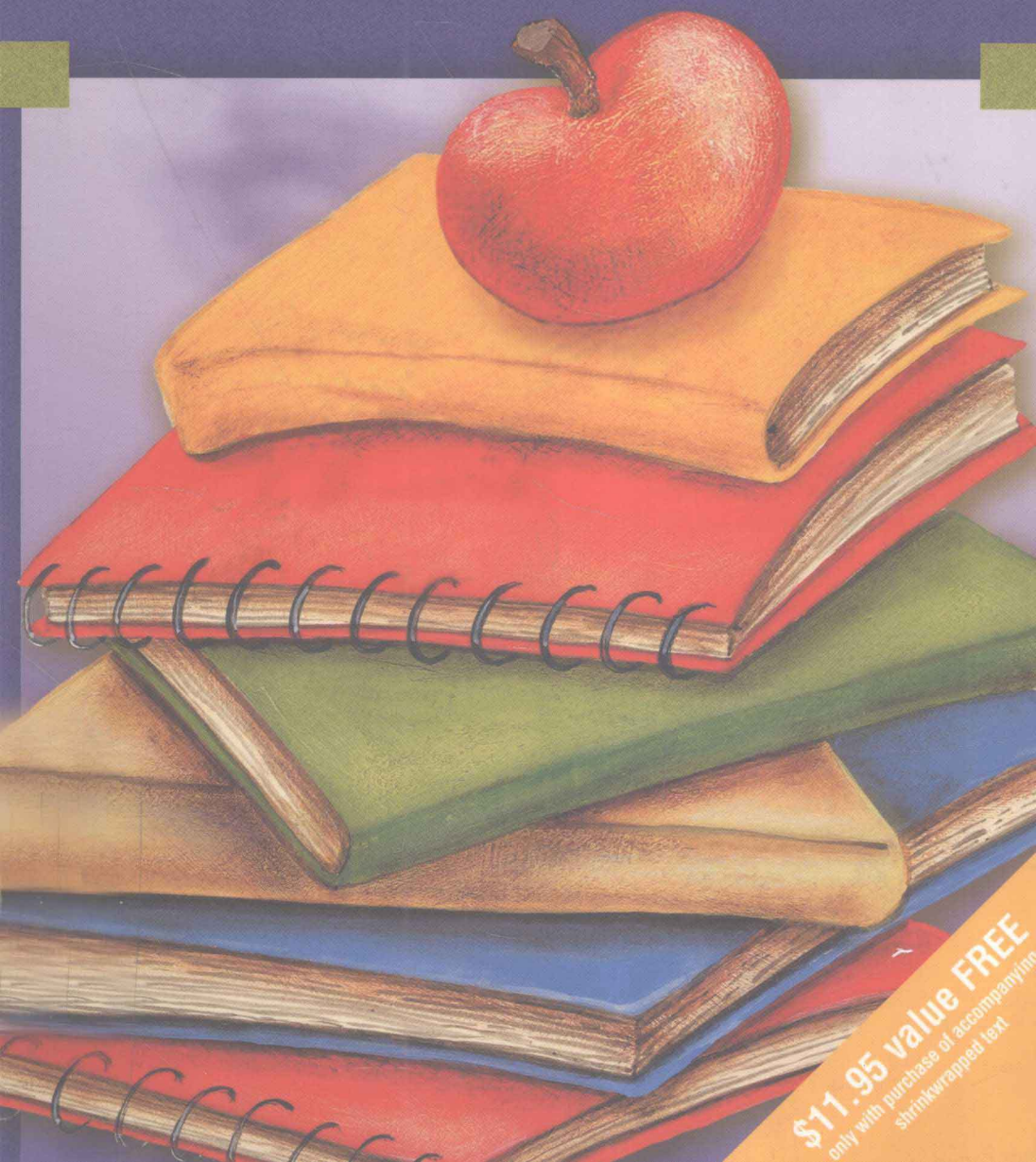


• Student Enrichment Series •

CHRISTINA PAPAROZZI SHORALL

Pass the Praxis

The Principles of Learning and Teaching



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Pass the Praxis

The Principles of Learning and Teaching

Christina Paparozzi Shorall

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DEDICATION

To my editor and friend, Dorothy Whitmer

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CHAPTER 1

PREPARATION FOR TAKING THE PRAXIS EXAM: *THE PRINCIPLES OF LEARNING AND TEACHING*

Nothing feels quite as good as acing an exam! Usually doing well on a test is the result of knowing what content is included, carefully planning a study strategy, and diligently following through on your plan. You will be happy to know that you can approach *The Principles of Learning and Teaching*, one of the Praxis exams, in the same manner. Successfully completing this exam will be a similar experience to other exams you have undertaken.

Where should you start? To keep this experience from being any scarier than it already is, let's take a step-by-step approach. Chances are you have already taken the Pre-Professional Skills Tests, the Praxis I. The procedure for registering is the same. You can pick up a registration form in the education department of your college or you can register on-line at the Educational Testing Service website. Remember to register early so a testing center near you will have space available.

Once registered, begin to strategize. *The Principles of Learning and Teaching* is designed to determine if you are prepared to practice in the field of education. Successful performance lies in sound preparation. Begin obtaining a copy of the *Tests at a Glance* booklet, available through your education department or on-line at the Educational Testing Service website. This booklet gives an overview of the format of the test, the basic topics with which you must familiarize yourself, and fifty practice questions.

If the items in the *Tests at a Glance* booklet are already familiar to you, this guide will be a good overview of what to expect. If you review the booklet and find concepts that you are unsure about, or perhaps never learned, this guide will provide a comprehensive review. Keep in mind that few questions on the test are simple facts. *The Principles of Learning and Teaching* requires you to practically apply and compare information; therefore, as you read, try to imagine what the educational implications are for the information contained in this guide.

I suggest you read this guide in the following manner:

- Highlight unfamiliar concepts during initial reading.
- Concentrate on the highlighted areas during a second reading. Underline with a pencil or pen the concepts that are still not a part of your knowledge repertoire.
- On the third and final reading, you should focus on the underlined passages or concepts.

Reviewing in this manner enables you to interact with the information. This increased focus improves retention of the information required to successfully pass *The Principles of Learning and Teaching*. The more apprehensive you are concerning success, the more structure you should give to your study time.

Test-taking strategies vary depending upon the type of question. *The Principles of Learning and Teaching* is a two-hour exam that contains four sections. Three of the sections require you to read a case study and answer seven multiple choice questions plus two constructed response questions pertaining to that case study. The remaining section consists of twenty-four multiple-choice questions.

Reading and Answering the Case Studies

You should allow approximately thirty minutes to read each case study and answer its corresponding seven multiple-choice questions and the two constructed response questions. The essay-type constructed response questions require you to demonstrate an awareness of curriculum and pedagogical issues.

Preparing for the constructed response questions:

- Before reading each of the case studies, briefly review the two constructed response questions that accompany them to focus your reading.
- While reading, underline information that will help you construct a response so your answer will be well structured.

- Scorers are looking for answers that address the question, are logical and concise, and indicate an understanding of the subject.

Keep in mind the following when answering the constructed response questions:

- Restate the question in your introductory sentence to maintain focus and receive a point.
- Legible writing will make your response more welcoming to the grader; however, spelling and grammar do not count.
- You may use bulleted sentences to delineate specific points for the grader instead of writing in paragraph form.

Restating the question, drawing on pedagogical knowledge, and maintaining a focus on the question will ensure that you receive the necessary points to do well. Make a final check upon completion to ensure you addressed all aspects of the constructed response question.

Reading and Answering Multiple Choice Questions

Multiple-choice questions frequently require you to be familiar with several concepts and to have the ability to apply them to a given situation. Do not leave any question unanswered, as no penalty exists for answering incorrectly. Seven multiple-choice questions follow each case study. There is also a section of twenty-four unrelated multiple-choice questions, which you should allow yourself approximately twenty-five minutes to complete.

Below are sound test-taking strategies for multiple-choice tests. Familiarizing yourself with these strategies can raise your score several points:

- Completely read the question; qualifying words late in the sentence can change the overall meaning.
- Notice whether they are asking for *the answer* or *the one answer that is not correct*.
- Narrow the choices by eliminating unlikely options in the answer selection.

- Use the test as an information source; sometimes you can find the answer to a question in another part of the test.
- Sweeping generalizations in answer options such as *never*, *only*, *always*, and *must* are often incorrect; likewise, if one exception exists, then that answer is not correct.
- Well-qualified answer choices are frequently true. Look for words like *sometimes*, *may*, *often*, and *frequently*.

The Principles of Learning and Teaching exam is not designed to fool test takers. Do not read too much into the test. An efficient use of time is critical. If a particular question appears to be difficult, circle that item in the test booklet, answer it to the best of your ability, and continue. If you have time remaining when you have finished the test, then return to the circled questions and study them more closely. Do not, however, change answers unless there is a definite mistake. More often than not, your first answer is the right answer. If you choose to skip an item, remember to leave a space blank on the answer sheet.

Chapter Twelve of this guide contains fifty multiple-choice questions for you to practice once you have read the entire guide as suggested. When answering the practice questions, it is advisable to time yourself and approach this exercise with the same seriousness with which you would approach the actual test. If you can complete the practice questions in fifty minutes, your timing should be on target for the actual test.

While all of this may seem overwhelming at first, this guide is here to help you. Together, we will go through important concepts covered on the exam to help you prepare and, hopefully, ace it!

CHAPTER 2

THE COGNITIVE DEVELOPMENT OF STUDENTS

A review of how your students will develop cognitively encompasses assessing their capabilities at various stages. The subject of cognitive development in *The Principles of Learning and Teaching* requires you to display a working knowledge of four facets of development:

- Cognitive Ability
- Social and Cultural Aspects of Cognitive Development
- Information Processing
- Linguistic Development

Cognitive Ability

Jean Piaget proposed the most comprehensive theory of cognitive ability. Piaget's four ***stages of development*** provide teachers with a framework for the cognitive characteristics of certain ages and the accompanying educational implications. Emphasizing the importance of active participation, Piaget's theory reminds teachers that students think differently at different stages of their lives. Piaget believed that while all people pass through the four stages, they might proceed at different rates.

Schemes, according to Piaget, are an individual's generalized way of responding to the world. These schemes are methods of organization. New information is adapted into existing schemes by processes referred to as assimilation, accommodation, and equilibration. ***Assimilation*** occurs when people deal with a new experience in a manner that is consistent with a present scheme. ***Accommodation*** occurs when people must incorporate a new experience that requires them to modify an old scheme or form a new scheme. ***Equilibration***, a period of flux, happens when individuals are attempting to adjust prior schemes with new experiences that do not fit into their existing schemes. Examples of the three schemes are:

- ***Assimilation***: A five year old identifies a clog as a type of shoe.

- **Accommodation:** The five year old recognizes the clog is made of glass and cannot be an actual shoe.
- **Equilibration:** The period of time when the five year old must mentally wrestle with the clog dilemma until he/she can explain the object in terms of an existing or new schema: A clog can be either a shoe or a decoration.

By understanding the approximate ages, characteristics, and educational implications of cognitive development stages, teachers can identify children with developmental delays or talents, and select or design age-appropriate activities.

Sensorimotor (ages 0-2 years).

Characteristics:

- Cognitive development comes through use of body and senses
- No object permanence
- Language absent until end of period
- Egocentrism

Educational Implications:

- Provide multiple objects for stimulation of various shapes, colors, and sizes
- Allow students to actively engage environmental objects

Preoperational (ages 2-7 years).

Characteristics:

- Begins using symbols but cannot manipulate them
- Realism, animism, artificialism, transductive reasoning, centering, egocentrism, and irreversibility
- Beginnings of representation
- Egocentric and socialized speech

Educational Implications:

- Deferred imitation, symbolic play, drawing, and mental images
- Encourage the use of language

Concrete operations (ages 7-11 years).

Characteristics:

- Can perform mental operations with the use of concrete objects, not verbal statements
- Conservation, seriation, classification, and number concepts
- Verbal understanding

Educational Implications:

- Classification activities
- Integrated activities that allow students to make connections between ideas previously thought to be separate

Formal operations (ages 11 years and up).

Characteristics:

- Released from the restrictions of tangible and concrete
- May separate real from the possible, hypothetic/deductive reasoning
- Development of logico-mathematical structures
- Language freed from concrete, able to express the possible

Educational Implications:

- Challenge, do not frustrate
- Be aware of adolescent limitations
- Encourage analysis of information in drawing conclusions

Social and Cultural Aspects of Cognitive Development

The social and cultural environments of your students affect their cognitive development. Lev Vygotsky proposed that children's social interactions with those more knowledgeable could actually aid in cognitive development. Vygotsky's theory of a ***Zone of Proximal Development*** implies an optimal time for students to learn. This Zone is an area in which, with assistance from more knowledgeable others, students can grasp ideas they would otherwise not be able to attain. It is the span between unactualized potential to actualized potential.

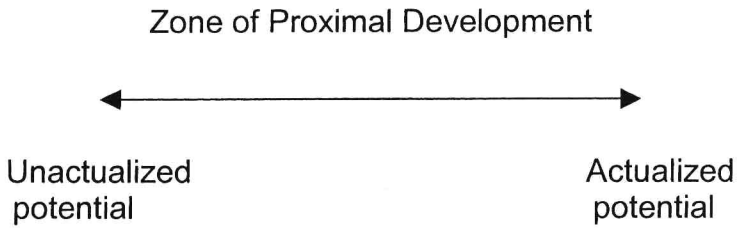


Figure 2.1 The Zone of Proximal Development

Jerome Bruner used the word *scaffolding* for the support learners need to receive when faced with a task that presents too much of a challenge to accomplish alone. The support students receive in the Zone of Proximal Development can be referred to as scaffolding:

- An actual development level exists (capabilities without help)
- A level of potential development exists (capabilities with assistance)
- The Zone of Proximal Development equals the area of potential development an individual is capable of attaining with assistance from a more competent partner (teacher/student/parent)

The social aspect of Vygotsky's theory hinges on the interaction between learners and mentors (or students and teachers) in the Zone of Proximal Development. Methods exist to maximize effectiveness:

- Relating new knowledge to prior knowledge assists in understanding.
- Tasks should be designed from less to more complex as the student becomes increasingly sophisticated.
- Apprenticeship consists of working with an expert, thinking and planning how to perform a task.
- Interaction with peers helps by having similar others explain concepts and justify ideas.

Information Processing

Information processing theory emphasizes the impact of maturity on cognition. As students grow, their attention, learning strategies, knowledge base, and metacognitive ability improve. Information Processing Theory emphasizes the maturation of cognitive processes.

Attention:

- As children grow, they become less distractible.
- Children learn what they *intend* to learn.

Learning Strategies:

- As children grow, they use rehearsal strategies.
- As children grow, organization improves.
- As children grow, learning strategies become increasingly efficient.
- Elaboration emerges around puberty.

Knowledge Base:

- As children grow, their amount of knowledge increases.
- As children grow, their knowledge base becomes increasingly integrated.
- The more information children have, the easier it is to remember things.

Metacognition:

- As children grow, knowledge of their own cognitive processes improves.
- As children grow they become more aware of their limitations.
- As children grow, they become more aware of effective learning strategies.

A simple rule for designing the length of activities equates with age. According to conventional wisdom, the age of the child is a guide for the number of minutes he can attend to any given task. A ten-year-old student can pay attention for ten minutes.

Linguistic Development

Language development encompasses sound, structure, meaning and context. Most of our language acquisition is complete by the age of four or five. For this reason, young children should be encouraged and given opportunities to talk. All children in all cultures progress at the same rate linguistically under normal circumstances.

The Components of Language:

- **Phonemes:** the smallest unit of sound
- **Morphemes:** the smallest unit with meaning (like a base or an affix, for example *ed*)
- **Semantics:** the meaning
- **Syntax:** the sentence structure
- **Pragmatics:** the use of language to communicate
- **Phonology:** the sound system of language

The Development of Language:

- Cooing: 6-8 weeks
- Babbling: approximately 4 months
- Holophrastic: approximately 1 year
- Single words, multiple meanings: about 18 months
- Experiences with tense and number: 18 months and older
- Simple sentences: about 2 years

Common irregularities.

Young children occasionally make errors in their use of language with overgeneralization, undergeneralization, and overregularization being the most common types:

- **Overgeneralization:** Over extending the use of a word by using one label for several objects (such as using the word *dog* for a cow or horse)
- **Undergeneralization:** Too restrictive in the application of a word by leaving out situations when the word applies (such as only applying the word *animal* to those animals with fur)

- ***Overregularization:*** Incorrectly applied grammar (using the past tense *ed* as in *she comed*)

CHAPTER 3

THE PSYCHOSOCIAL DEVELOPMENT OF STUDENTS

As a teacher, how will you structure your classroom to maximize positive psychosocial development? Teachers must consider the factors affecting students' psychosocial development as well as cognitive development. Self-image, social interaction, moral reasoning—all facets of psychosocial development—can contribute to academic success. *The Principles of Learning and Teaching* contains questions relating to several psychosocial topics:

- Social Interaction
- Adolescent Development
- Patterns of Moral Growth
- Parenting Styles and Their Impact
- Contemporary Issues Affecting Social Development
- Self-Esteem
- Self-Control

Social Interaction

Erik Erikson proposed that eight *stages of psychosocial development* exist spanning from birth through adulthood. Each stage contains a development crisis. Each crisis stage has the potential for a positive or a negative outcome. Positive experiences lead to positive outcomes, and negative experiences lead to negative outcomes. While Erikson suggests a range of ages for each stage, variations occur.

General education teachers must consider stages one through five of Erik Erikson's eight stages. The five stages are explained in terms of the age, the positive social experiences, the negative social experiences, and the educational implications.

Stage 1: trust vs. mistrust (ages 0-18 months).

- Trust: If nurtured and basic needs are met, children learn that others can be dependable and reliable.