Praxis II: Principles of Learning and Teaching

Study Guide

Praxis II: An Overview

The Praxis II: Principles of Learning and Teaching test (PLT) is designed to test beginning teacher knowledge of job-related criteria in the areas of educational psychology, human development, classroom management, and foundations of education. Most teacher education programs instruct undergraduate students in these topics, so preparing for this test will be primarily a review. Although you may chose from four different tests (based on the grade level you teach) each of the tests measures understanding of a broad range of topics related to the educational field. The tests are broken down by grade (see below):

Principles of Learning and Teaching: Early Childhood

Grades K-6 Grades 5-9 Grades 7-12

Regardless of the test you register for, each will require you to answer 36 questions—24 multiple-choice questions and 12 short-answer responses, in a two-hour test period. The 24 multiple-choice questions are included in two sections of 12 questions each and take about 10 minutes each to complete. The other 12 questions are based on four case histories that will be presented. Each case history is followed by three short-answer questions related to the teaching situation described and takes about 25 minutes each to complete.

The **test format** is as follows:

- Case history with three short-answer question/responses
- Case history with three short-answer question/responses
- 12 multiple-choice questions (not related to the case studies)
- Case history with three short-answer question/responses
- Case history with three short-answer question/responses
- o 12 multiple-choice questions (not related to the case studies)

The **test content** is broken down as follows:

0	Students as Learners (student development & learning processes, diverse learners, motivation & learning environment)	approx 33%
0	Instruction and Assessment (instructional strategies, planning strategies, assessment strategies)	approx 33%
0	Communication Techniques (effective verbal & nonverbal communication, cultural & gender differences, stimulating discussion)	approx 11%
0	Teacher Professionalism (reflective practitioners, the larger school community)	approx 22%

Register as soon as possible at the Educational Testing Service (ETS) website at www.ets.org/praxis or by phone at 800-772-9476

PART ONE:

STUDENTS AS LEARNERS

STUDENTS AS LEARNERS PART I: STUDENT DEVELOPMENT AND THE LEARNING PROCESS

Lev Vygotsky

- ZONE OF PROXIMAL DEVELOPMENT: social development theorist who believed the discrepancy between a child's mental age and the level he reaches in solving problems with assistance
 - Scaffolding—breaking learning into smaller task
 - The importance of CULTURE—
 - Humans use of tools and symbols to learn
 - Learning development is affected by culture—culture dictates what we learn and how
 - Elementary (or lower) functions gradually transform to higher functions through culture
- Central ROLE OF LANGUAGE
 - Language is made possible because of our culture (tools and symbols)
 - The learning of language or signs is brought about by social processes
 - Language or signs ultimately make thought possible
 - o Three stages of speech development
 - Social speech—speech to control the behavior of others
 - Egocentric speech (3-7 year olds)—talking to themselves to learn
 - Inner speech—soundless speech; thinking in our heads

Jerome Bruner

- Discovery Learning and Constructivism: cognitive theorist who believed learning
 is an active process in which learners construct new ideas or concepts based upon
 their current/past knowledge
 - Instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness).
 - Instruction must be structured so that it can be easily grasped by the student (spiral manner of organization)
 - Instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given)

BF Skinner

- Operant Conditioning: based on the idea that learning is a function of change in observable behavior; changes in behavior result from a person's response to events (stimuli). When a stimulus-response is reinforced (rewarded), the individual becomes conditioned to respond.
 - Behavior modification: extinguish an undesirable behavior and replace it with a desirable behavior by reinforcement

Albert Bandura

- **Social** (or observational) **learning theory:** social theorist that believed children learn by observing others; in a classroom setting, this may occur through modeling or learning through the experiences of others
 - o Steps in the modeling process: attention, retention, reproduction, motivation
- Self-regulation: controlling our own BEHAVIOR
 - o Self-observation: make sure you have an accurate picture of your behavior
 - Self-response: use self-rewards, not self-punishments

John Dewey

- Learning through Experience: progressive education practices that encourage individuality, free activity, learning through experiences such as project-based learning and cooperative learning groups
 - Education must engage with and enlarge experience
 - Exploration of thinking and reflection—and the associated role of educators
 - Concern with interaction and environments for learning
 - Passion for democracy, for educating so that all may share in a common life

Maria Montessori

- Follow the Child: an Italian physician whose philosophy and teaching practice
 affects many early-childhood programs and charter schools today. She believed
 that childhood is divided into four stages (birth-age 2, ages 2-5, ages 5 & 6, ages 712) and that adolescence can be divided into two levels (ages 12-15 and ages 1618).
- Believed in three stages to the learning process:
 - Stage I: Introduce a concept by lecture, lesson, experience, book read-aloud, etc.
 - Stage II: Process the information and develop an understanding of the concept through work, experimentation, and creativity
 - Stage III: Knowing, which is described as processing an understanding of something that is demonstrated y the ability to pass a test with confidence, teach the concept to another, or express understanding with ease

Jean Piaget

- Stages of Cognitive Development: a cognitive theorist who suggested four stages of cognitive development
- **Schemas**—skills to explore the environment to gain knowledge
- Adaptation—the term for what most of us would call learning; includes assimilation (assimilating new objects into an old schema) and accommodation (accommodating an old schema to a new object)

Carol Gilligan

 Stages of Ethic of Care: moral theorist that questions the male-centered personality psychology of Freud and Erikson, as well as Kohlberg's male-centered stages of moral development. Proposed the following stage theory of the moral development of women:

Approximate age range	Stage	goal
Not listed	Pre-conventional	Individual survival
Transition from selfishness		
to responsibility to others		
Not listed	Conventional	Self-sacrifice is goodness
Transition from goodness to		
truth that she is a person too		
Maybe never	Post-conventional	Principle of non-violence

Erik Erickson

• **Eight Stages of Human Development:** social theorist that suggested that the eight stages of human development are based on crisis or conflicts that each person resolves

Stage	Age range	Crisis or Conflict	Key Event	summary
I: Infancy	0-1	Trust vs. mistrust	Feeding	Form loving, trusting relationships w/caregiver or develop a sense of mistrust
II: Toddler	1-2	Autonomy vs. doubt	Toilet training	Energies directed toward the development of physical skills; learns control but may develop shame and doubt if not handled well
III: Early childhood	2-6	Initiative vs. guilt	Independence	Continues to become more assertive and take more initiative, but may be too forceful, leading to guilt feelings
IV: Elementary & middle school	6-12	Competence vs. inferiority	School	The child must deal with demands to learn new skills or risk a sense of inferiority, failure and incompetence
V: Adolescence	12-18	Identity vs. role confusion	Sense of identity	·
VI: Young adult	19-40	Intimacy vs. isolation	Intimate relationships	The young adult must develop intimate relationships or suffer feelings of isolation
VII: Middle adult	40-65	Generativity vs. stagnation	Supporting the next generation	
VIII: Late adult	65-death	Integrity vs. despair	Reflection and acceptance	

Lawrence Kohlberg

• **Theory of Moral Development:** moral theorist that developed the pre-conventional, conventional, and post-conventional levels of moral development that develops as follows:

Level	Stage	Social Orientation
Pre- conventio nal (ego- centric point of view,	ı	Obedience and Punishment: generally found at the elementary school level. In the first stage of this level, people behave according to socially acceptable norms because they are told to do so by an authority figure. This obedience is compelled by the threat of punishment.
individualisti c)	2	Individualism, instrumentalism, and exchange—right behavior means acting in one's own best interest
Conventio nal	3	"Good boy/girl"—characterized by an attitude which seeks to do what will gain the approval of others
(maintain positive relationships and rules of society)	4	Law and Order—oriented to abiding by the law and responding to the obligations of duty
Post-	5	Social Contract—understanding of social mutuality and a genuine
conventio nal (enlightened conscience, able to use reason over law)	6	interest in the welfare of others Principled Conscience—based on respect for universal principle and the demands of individual conscience

Abraham Maslow

- Emotional theorist who theorized that certain lower needs must be realized before higher needs will be met
- HEIRARCY OF NEEDS
 - o Physiological needs—basic needs such as air, water, food, sleep
 - Safety needs—establish stability and consistency in a changing world, such as secure home and family
 - o Love & Belonging needs—people need to be needed or people need to belong to groups, such as churches, schools, clubs, gangs, families
 - Esteem needs—self-esteem results from competence or mastery of tasks, thus ensuring attention from others
 - Self-actualization—people can maximize their potential; seek thing such as knowledge, peace, oneness with a higher power, or self-fulfillment

Howard Gardner

- Developed the theory of eight multiple intelligences that are as follows:
 - Verbal/linguistic: "word smart" students who learn best by saying, hearing, and seeing words; these students are motivated with books, talking, and letting them write
 - Logical/mathematical: "number/reasoning smart" students who are conceptual thinkers who explore relationships, patterns, and experimenting with things in an orderly and controlled manner
 - <u>Visual/spatial:</u> "picture smart" students who learn best with images, pictures, and color—motivated by videos, diagrams, maps, and charts
 - Bodily/kinesthetic: "body smart" students who learn through touching and moving—motivated by role play, dramatic improv, creative movement, and physical activity
 - Musical intelligence: "music smart" students who learn through rhythm and melody—motivated by tapes/CDs, musical instruments
 - Interpersonal: "people smart" students who are motivated with peergroup interaction opportunities and community activities
 - o <u>Intrapersonal:</u> "self smart" students who learn best by themselves motivated with private space and quiet introspection time
 - <u>Naturalist:</u> "nature smart" students who are motivated by opportunities to work outdoors; motivated with books on the natural world, binoculars, telescopes, or microscopes

STUDENTS AS LEARNERS PART II: STUDENTS AS DIVERSE LEARNERS

Areas of diversity...

Dialect, immigrant status, socio-economic background, discipline, ethnicity, race, creed/religion, language, color, social styles, learning or thinking styles, scholastic abilities, challenges, lifestyle

 How does learning about these influence your planning, teaching, and assessing?

Ideas to Know...

Cognitive styles: refers to the preferred way an individual processes information

- describes a person's typical mode of thinking, remembering, or problem solving
- denotes a tendency to behave in a certain manner
- usually described as a personality dimension which influences attitudes, values, and social interaction

Learning styles: specifically deals with characteristics styles of learning—approaches to or ways of learning

- four distinct learning styles—visual, auditory, tactile, and kinesthetic
- a child's learning style seems to be inborn and inherited, but it is also influence by family experience our natural preference dictates how we learn best—by looking, listening, or moving

Auditory (or aural) learner: process information through listening; they learn through lectures, discussions, listening to tapes, repeating information, and reading aloud.

Kinesthetic learner: process information through moving and doing; they learn through acting out scenes, putting on plays, moving to the beat, pacing out measurements on the sidewalk, etc.

Tactile learner: process information through touching; they learn through active involvement with the physical world—hands-on experiences

Visual learner: process information through seeing; they learn through visual displays, films, illustrated books, handouts, graphic organizers, bulletin boards, etc.

Understanding learning styles will help you—

- DECIDE what kind of instructional strategies or methods will be most effective for given individuals and learning tasks
- CREATE TEACHER AWARENESS of individual learning differences
- EMPLOY prescribed teaching methods, playthings, and learning activities best situated for a child's age and learning style

Concrete operational thinkers: children approximately 7-11 think in logical terms, not in abstract terms; they require hands-on experiences to learn concepts and manipulate symbols logically

Formal operational thinkers: children approximately 11-15 develop hypothetical and abstract thinking skills; they can use logical operations to work abstract problems

Gender differences: often males and females learn differently and excel in different subject areas

- Girls emphasize memorization—boys learn more by elaboration strategies
- Girls perform well in reading, but less in math—opposite for boys
- Girls express emotions with words—boys through activities

Cultural expectations and styles

- Cultural-based education reflects, validates, and promotes the values, world views, and languages of the community's cultures
- By understanding the differences in thinking about other cultures that students have, the teacher is able to plan appropriate lessons to meet the various students needs
- Issues: self-esteem, types of teaching methods, working with other students, flow and order of the classroom, etc.

STUDENTS AS LEARNERS PART II: STUDENTS AS DIVERSE LEARNERS

Areas of Exceptionality in Student Learning...

ELL: students who are learning English as a second (or third or fourth) language; teachers can support language acquisition in a variety of ways, including building on students' culture, supporting proficiency in their native language, giving students time to learn English, and offering opportunities for students to work and talk in small groups.

Visual and perceptual difficulties: visual and hearing disorders: only those whose senses remain impaired after treatment and correction (eyeglasses, hearing aids) are termed visually or hearing handicapped

- o Dysgraphia: developmental writing disorder
- o Dyslexia: developmental reading disorder
- o Dyscalculia: developmental arithmetic disorder
- o Dyspraxia: learning disability in motor skills

Special physical or sensory challenges: related to physical skills such as hand use, trunk control, mobility, etc. Individuals with medical conditions that affect strength and stamina

DISABILTIES: physical states or conditions that result in impairment of functioning (eg loss of a leg)

HANDICAPS: disabilities become handicaps when they interfere with the individual's ability to function in a specific situation

ACADEMIC NEEDS: Services may be provided by adapted physical education teachers or other motor specialists—social acceptance is another possible problem area

Behavioral disorders: also known as conduct disorders; a type of disruptive behavior disorder in students that may result in violation of rules, aggression towards people or animals, destruction of property, or deceitfulness

Developmental Delays: identified by a medical professional in a student before age 22. The student may have one or more of the following difficulties: self-care, expressive or receptive language, learning, mobility, self-direction, capacity for independent living, and economic self-sufficiency

Learning disabilities: a disorder in the ability to process information that can result in attention, perception, or memory deficits; despite adequate hearing, vision, and intelligence diagnosed by a physician or multidisciplinary team. Students with LD's are

not learning to their potential in one or more areas, such as reading, writing, oral language, or mathematics. There are three types of LD's: reading, mathematics, and written.

ACADEMIC NEEDS: Common characteristics include: poor coordination, poor depth perception, short attention span, impulsivity, difficulty following simple directions, hyperactivity, distractibility, delayed speech, limited vocabulary, difficulty recalling what is heard, dislike of being touched or cuddled, inappropriate use of words, low or high pain threshold, overreaction to noise

ADD: Attention Deficit Disorder—a term used in classification systems to describe individuals who may have difficulty focusing, following directions, organizing, making transitions, completing tasks, etc. The diagnosis may be made by a medical professional, not by school personnel.

ADHD: Attention Deficit Hyperactivity Disorder—a term used in classification systems to describe individuals who may have many of the same difficulties as students with ADD, but may also show poor attention due to distractibility, hyperactivity, and impulsivity, etc. The diagnosis may be made by a medical professional, not by school personnel.

Autism spectrum disorders: includes autism, Asperger syndrome, and other pervasive developmental delays; students with these disorders have difficulty socializing and communicating

Functional mental retardation: significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period. Characterized by both below-average intellectual ability and deficits in adaptive behavior. A low IQ score alone is not sufficient to determine retardation. The diagnosis may be made by a medical professional for a child who exhibits difficulties with age specific activities like communication, daily living activities, and getting along with others.

ACADEMIC NEEDS: learn at a slower rate, may not be ready to begin formal academic instruction, can acquire basic school skills, but their achievement is below grade level expectations.

STUDENTS AS LEARNERS PART II: STUDENTS AS DIVERSE LEARNERS

Legislation and Institutional Responsibilities Relating to Exceptional Students

Legislation	Basic Rights and Responsibilities Established
Americans with Disabilities Act (ADA)	
Individuals with Disabilities Education Act (IDEA)	
Individual Education Plan(IEP)	
Inclusion, mainstreaming, and Least Restrictive Environment (LRE)	
Section 504 of the Rehabilitation Act	
Due Process	

STUDENTS AS LEARNERS PART II: STUDENTS AS DIVERSE LEARNERS

Approaches for Accommodating Various Learning Styles, Intelligences, or Exceptionalities

Alternative assessment:		
Differentiated instruction:		
Testing accommodations:		
Second language acquisition/ELL support:		
English immersion		
English as a second language		
Bilingual education		
Two-way bilingual education		

STUDENTS AS LEARNERS PART III: STUDENT MOTIVATION AND THE LEARNING ENVIORNMENT

Lesson Planning...

OBJECTIVES: Written to answer the question "what are students

supposed to know or be able to do at the

conclusion of the lesson or unit?"

STANDARDS: Local, state, and national standards for content and

student performance that should guide lesson

planning

LEARNER FACTORS: The way your individual students influence your

lesson planning; ways to differentiate instruction for

a variety of learners; also consider students' learning styles and multiple intelligences

ENVIORNMENTAL FACTORS: How will students work (whole group, small group,

individually?), what resources will they access,

room climate/temperature, over stimuli in

classroom?

ASSESSING LESSON OBJECTIVES: Setting criteria for student performance and

showing how to evaluate student success; these

include rubrics and assessment tests

Principles of Effective Classroom Management...

- 1. Know your students
 - a. Age
 - b. Strengths
 - c. Areas to support
- 2. Know your role as a teacher
 - a. Set clear expectations
 - b. Enforce rules fairly and consistently
 - c. Posses positive and realistically high expectations
 - d. Highlight student strengths and support goals
 - e. Model appropriate behavior
 - f. Accept and understand students within the appropriate relationship
 - g. Establish daily procedures and routines
 - h. Give timely feedback
 - i. Communicate with parents
 - j. Maintain accurate records
 - k. Structure and pace of lessons

- 3. Set up the classroom for learning
 - a. Easy access to materials
 - b. Wait time
 - c. Arrangement of classroom space
 - d. Safe and comfortable learning environment
- 4. Punishment vs. discipline
 - a. Punishment...
 - i. Is teacher-centered and authoritative
 - ii. Communicates anger or disappointment
 - iii. Closes choices for students
 - iv. Is concerned with retribution or revenge
 - v. Is negative and short-term
 - b. Discipline...
 - i. Is student-centered and is based on logical consequences
 - ii. Communicates concern
 - iii. Keeps choices open for modifications
 - iv. Is concerned with changing behavior
 - v. Is positive and long-term

Specific Classroom Management Techniques

Canter and Canter "assertive discipline" approach: includes teachers setting clear expectations for behavior and following through consistently and fairly with consequences; students have a choice to follow the rules or face the natural consequences

Kounin "with-it-ness: constant monitoring and awareness of student behavior (with-it-ness), grouping decisions, and lesson planning are all part of effective classroom management; smooth lesson transition maximizes learning time

Ginott supportive and preventive discipline: recognizing the importance of the classroom atmosphere—socially and emotionally; teachers use "sane messages" to describe the issue or event of concern and enables students to consider the situation and develop solutions

Glasser "choice theory": teachers conduct class meetings with students to co-determine class rules, guidelines, and consequences; use these meetings to change student behavior and focus on student behavior as a whole, not individually

Hunter lesson planning: teacher opens with an anticipatory set to help students connect new content to prior knowledge and experience, then models the skill, provides guided practice, and finally an opportunity for individual practice

Jones %'s: 50% of instruction time is lost because students are off-task due to talking (80%) and goofing off (20%), mostly occurring during independent practice times; teachers can improve student time on task by body language, incentive systems, efficient individual help for students

PART TWO: INSTRUCTION AND ASSESSMENT

INSTRUCTION AND ASSESSMENT PART I: INSTRUCTIONAL STRATEGIES

Major Cognitive Processes Associated with Student Learning...

critical thinking:
creative thinking:
higher-order thinking:
inductive thinking
deductive thinking:
problem structuring and problem solving:
invention:
memorization and recall:

INSTRUCTION AND ASSESSMENT PART I: INSTRUCTIONAL STRATEGIES

Instructional Strategies...

Cooperative learning: a specific type of small group learning which has the following five essential elements: positive interdependence, face-to-face interaction, individual accountability, structured activity, teamwork skills and group processing *Classroom example:*

Direct instruction: teacher-centered instruction which includes lecture, presentation, and recitation

Classroom example:

Discovery learning: a constructivist approach in which students begin learning with an activity designed to lead them to particular concepts or conclusions; students acquire basic and advanced knowledge in random order *Classroom example:*

Whole-group discussion: discussion takes place amongst the whole class *Classroom example:*

Independent study: practice done without intervention by the teacher; this approach includes many activities done with a computer *Classroom example:*

Interdisciplinary instruction: involves any effort on the part of an instructor to design learning activities with products and activities to relate to more than one discipline *Classroom example:*

Concept mapping: any of several forms of graphic organizers, which allow learners to perceive relationships between concepts through diagramming keywords representing those concepts

Classroom example:

Inquiry method: a system in which students solve problem or answer questions by forming tentative answers (hypotheses) then collecting and analyzing data to provide evidence for or against their hypothesis *Classroom example:*

Questioning: have students apply "who, what, when, where, why, and how" to all problems, or ask students to generate questions Classroom example:

INSTRUCTION AND ASSESSMENT PART I: INSTRUCTIONAL STRATEGIES

Principles, Techniques, & Methods Associated with Various Instructional Strategies

Which are student centered and which are examples of direct instruction?

Demonstrations: providing modeling of what you want students to replicate in a smaller group, or a demonstration can be given to the whole class

Mnemonics: methods, devices, or even mental tricks for improving memory

Note-taking: students take notes as the teacher instructs; notes can be done as an entire class with all using the same format or students can select what information they feel is most pertinent

Outlining: a teaching technique where the teacher outlines a lecture, thus enabling student to know where the instruction is going

Use of visual aids: in order to met all needs of students, visual aids could be implemented to better instruct students who are visual learners; visual aids could include photographs, drawings, art work, graphs, charts, slides, videos, etc.

Inquiry learning: an investigative process of learning in which students are asked to pose questions, analyze data, develop conclusions or generalizations, classify, predict, and experiment

Discovery learning: an inquiry process in which learners pose questions and seek explorations

Cooperative learning (pair-share, jigsaw, teams, games, tournaments): learning based on small group approach to teaching in which students are held accountable for both individual and group achievement

Collaborative learning: students work together collaboratively in solving a problem or examining a situation; the benefits of collaborative learning are that it brings many perspectives to a problem, which in turn develops problem solving and mediation skills

Laboratories: used particularly in science classes where students test out their hypothesis

Project-based learning: students self-select a project that they would like to work on and all learning that occurs is centered around their project and ties in with it in some way

Simulations: a pretend setting or situation that parallels a real-world setting or situation and allows students to practice problem-solving skills

Graphic organizers: visuals that show relationships between concepts, terms, facts, or ideas in a learning activity

Matrixes: used for a variety of purposes to help students recall information; for example, a teacher might list categories along with first row and ask students to provide examples form the lesson for each category

Independent study: give students a chance to work at their own pace under the teacher's leadership or guidance; can be particularly beneficial for students who need material modified to be more challenging or simplified

Learning centers: designed to enable individuals or small groups to interact with course content after the teacher has taught the focus lesson or while the teacher is leading small-group sessions.

Reciprocal teaching: the teacher and student engage in a discussion of the text;

both the student and the teacher question and respond to the text in an effort to improve the student's comprehension of the material

School-to-work: offer students opportunities to transition successfully from the classroom to the workforce

Methods for Enhancing Student Learning Through the Use of a Variety of Resources and Materials

How would you incorporate these materials into your classroom?

- computers, Internet resources, Web pages, e-mail
- audiovisual technologies such as videotapes and compact discs (CDs)
- local experts
- primary documents and artifacts
- field trips
- libraries
- service learning

INSTRUCTION AND ASSESSMENT PART II: PLANNING INSTRUCTION

Techniques

Techniques for planning instruction, including addressing curriculum goals, selecting content topics, incorporating learning theory, subject matter, curriculum development, and student development and interests

Standards: specific expectations of what a student must know and be able to do; national, state, and local standards guide curriculum; there are two types:

- 1. performance standards: set the level of performance expectation for student groups; generally set at the state and local level and can be found on the state department of ed website and/or the local district website
- content standards: provide expectations for the knowledge students must demonstrate; these may be found on the websites for national specialized professional associations (NCTE, ACTFL, NCTM, NCSS)

Curriculum framework: lists the broad goals of a school district, state, or school and provide subject-specific outlines of course content, standards, and performance expectations

Emergent curriculum: based on the interests of the students, the teacher and family work together with other community members to set a possible direction for a project and then determine the actual curriculum based on student interest

Thematic instruction: a way to organize curriculum around large themes; integrated across several content areas, these units combine skill acquisition under a common topic or theme

Behavioral objectives: focus on observable student behaviors (ie define, describe, recreate, etc)

Cognitive objectives: focus on students' cognitive behaviors (ie reflect, recognize, comprehend, etc)

Transfer: the ability of students to use previously learned material in a new situation or context

Techniques for creating bridges between curriculum goals and students' experiences:

anticipatory sets
modeling
guided practice
independent practice
transitions
activating prior knowledge

encouraging exploration and problem solving building new skills on those previously acquired predicting

INSTRUCTION AND ASSESSMENT PART III: ASSESSMENT STRATEGIES

Types of Assessment

Type of Assessment	Description	Examples
Standardized test		
Norm-reference test		
Criterion-referenced		
test		
Achievement test		
Admic vernent test		
Aptitude test		
Aparado toot		
Structured observations		
ODSEI VALIOITS		
Anecdotal notes		
Assessment of prior		
knowledge		
Ctudent recognics		
Student response during a lesson		
daming a recoon		
Essays		
Journals		
Self-evaluations		
Performance		
assessment		
Portfolios		
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INSTRUCTION AND ASSESSMENT PART III: ASSESSMENT STRATEGIES

Characteristics of Assessments

Validity: the degree to which a test measures what it is intended to measure

Reliability: refers to the consistency of test results

Can it be reliable, but not valid?

Can it be valid, but not reliable?

Mean: the average

Median: the point at the middle

Mode: the most frequently occurring score

Samples: a smaller number of participants drawn from a total "population"; sometimes it is not feasible for researchers to collect or analyze all the scores of a given population and so a sample of scores is selected

Scoring Assessments

Raw score: equivalent to the number of questions a student answered correctly on an assessment; can be helpful in determining the number of items actually answered correctly or incorrectly

Analytical scoring: the assessment of student performance by means of a rating system, usually used to assess constructed-response test questions (essay, short-answer) and includes a detailed description of the criteria

Holistic scoring: the assessment of a student's work in its entirety, rather than judging a specific part, typically used for constructed response test questions (essays, journals, short-answer) and uses general descriptions of the criteria for each questions—can be more efficient than analytical scoring if there are fewer test items to score

Grade-level equivalent scores: demonstrate the grade and month of the school year to which a student score can be compared

Percentile rank: shows the percentage of students in a group whose scores fall above or below the given student's scores. The score range is between 1 and 99.

Quartiles: when you divide a normal distribution of scores into four equal parts, you can describe student data as it falls into one of the three quartiles

Q1/lower quartile: cuts off the lowest 25% of the data set/25th percentile

Q2/median: cuts the date set in half/50th percentile

Q3/upper quartile: cuts off the highest 25% or the lowest 75% of the data set/75th percentile

These enable schools to see the distribution of scores and can help define student achievement patterns over time

Rubrics: a scoring guide used in assessments that can be subject-specific, task-specific, or generic

Scaled score: based on mathematical transformation of a raw score; helpful when determining averages and to study change over time

Stanines: the distribution of possible scores divided into 9 parts—these scores range from 1 to 9; a score of 5 is the mean, scores from just below 4 to just about 6 are considered average; scores of 1 to 3 are below average and 7 to 9 are above average

Standard deviation: an index of how scores are spread out around the mean, regardless of the shape of distribution

Standard of error of measurement: used in judging reliability, it refers to the fact that no score is absolutely precise; a small standard of error indicates high reliability

Use of Assessments

Formative evaluation: on-going throughout the learning process—to discover where students are at in the learning process

Summative evaluation: a process in which the teacher determines how well students have mastered new concepts and skills and met lesson objectives

Diagnostic evaluation: are norm-referenced and standardized but are designed to be administered to students who are showing signs of difficulty in specific subject areas

PART THREE:
COMMUNICATION TECHNIQUES

COMMUNICATION TECHNIQUES PART I: VERBAL AND NONVERBAL COMMUNICATION

Verbal: talking and questioning

Nonverbal: listening, nodding, smiling, eye contact, etc.

Verbal	Nonverbal
Setting clear expectations:	Gestures:
Providing clear directions:	Eye contact:
Breaking down complex tasks:	"With-it-ness":
Signaling transitions:	Personal space:
Explicit teaching:	Noise level:
	Highlighting key information:

COMMUNICATION TECHNIQUES PART I: VERBAL AND NONVERBAL COMMUNICATION Questioning Techniques

Room arrangement
Getting the discussion started
Factual recall
Higher-level thinking
Probing for student understanding
Student question generating
All pupil response
Wait time
Helpful roles in a discussion

COMMUNICATION TECHNIQUES PART II: CULTURAL AND GENDER DIFFERENCES IN COMMUNICATION

4 general elements of communication:

- 1. <u>directness:</u> Like a continuum—on one side (direct) people mean what they say, little subtlety, tell it like it is, but on the other (indirect) people imply or suggest what they are saying, require interpretation
- 2. <u>context:</u> the amount of instinctive understanding a person is expected to bring to a communication setting

low context—in these cultures little is believed to be known, so there is a high emphasis on verbal communication; these cultures tend to be heterogeneous and individualist

high context—in these cultures much is known by the members, so spoken word is not the primary means of communication. Nonverbal cues and the setting are central in this type of communication; these cultures tend to e homogeneous and emphasize the group, not the individual

- 3. importance of saving face: acts that avoid the loss of a person's dignity or prestige; in cultures that value this people maintain harmony, avoid confrontation, and have trouble saying no. When this is less important, facts and getting something done are most important; criticism and feedback is straightforward and confrontation is fine. People tell people no.
- 4. <u>difference between the task and the person:</u> In some cultures the task is separate from the person; people do business first, then socialize. Building relationships is not essential to getting the job done well. In others, the goal is to build relationships; the task and the person cannot be separated. In these cultures people begin with small talk and the move into business. People are central to getting the job done.

Gender Differences

GIRLS

- Tend to emphasize memorization
- Evaluate their own learning during the learning process
- Perform well in reading activities
- Express emotions with words

BOYS

- Tend to learn by more elaboration strategies
- Tend to need more assistance in planning, organizing, and structuring their learning
- Perform well in math and science
- Express emotions through actions

Other Areas of Diversity in Classrooms

<u>Socioeconomic background:</u> highly connected to student achievement; have high expectations for all students and communicate these expectations in a positive and supportive manner.

<u>Social styles:</u> Students have a variety of social styles, which impact their learning in the classroom; some students need to work in group settings, others need to work individually. Use a variety of styles to accommodate all students.

<u>Learning styles:</u> Teachers need to communicate with their students in a variety of ways to help each learner. Review learning styles from week one.

<u>Scholastic abilities and challenges:</u> These include giftedness, learning disabilities, musical and athletic talent, handicaps, ADD, ADHD, bipolar disorder, addictions, etc. Each student brings a unique set of abilities and experience to the classroom; capitalize on these differences in your lessons and find strategies for each student.

<u>Lifestyles:</u> Family lifestyles vary greatly and require teachers to suspend judgment within their classroom. A "good" family is one in which the child feels supported, not necessarily just one with two parents.

Goal setting: teacher and students articulating long-term and short-term learning goals; once established, the teacher can show respect, support, and share in student success with the class; fosters a sense of teamwork and helps the students to see individual goals and differences as strengths

Curbing school violence: if students do not feel safe, they will struggle in school; includes guns, knives, drugs, gangs, bullying, harassment, intolerance, and insults; with a more personalized environment and a strong sense of belonging, fewer violent acts occur; in addition two-way communication between home and school is essential

COMMUNICATION TECHNIQUES PART III: STIMULATING DISCUSSION AND RESPONSES IN THE CLASSROOM

Technique	Looks like
Probing for learner understanding	Asking summarizing questionsAsking questions that have multiple responses
anderstanding	 Conduct a review session
Helping students articulate their ideas and thinking processes	 Why do you think that? What would happen if? Ask evaluative questions (emphasize the specific criteria that students should base their judgments): Why something is good or bad? Why something is important? Why one theory explains the facts better than another?
Promoting risk-	What is another way of solving that problem?
taking and problem- solving	How else could this be done?
Facilitating factual recall	 Mnemonic devices Poetry Constructivism (build upon what students already know)
	 Music, set facts to lyrics Mapping (concept maps, clustering)
	Cooperative learning groups
Encouraging convergent and	 Convergent thinking: asking questions that require students to give factual or specific answers
divergent thinking	 Divergent thinking: ask questions that encourage students to give complex, creative, and longer
	answers
Stimulating curiosity	Make a hypothesisKWL chart
	Answer "what if?
	BrainstormingSimulations
	Role playing
Helping students to question	 In order to develop student's critical or reflective thinking skills, or thinking skills in any way, teachers must help students to frame questions Play 20 questions—the teacher thinks of a concept or a problem and students attempt to discover it through questioning Have students prepare, study, or recite questions in front of the class

PART FOUR:
TEACHER PROFESSIONALISM

TEACHER PROFESSIONALISM PART I: THE REFLECTIVE PRACTIONER

Types of Resources Available...

Professional associations: each content area has a national professional association, and many have state and local chapters; by joining you show your willingness to become a lifelong learner and good colleague; benefits include publications, website resources, conferences, and people with whom you will interact Examples include: NCTE, NCTM, NSTA, ACTFL, NCSS

Colleagues: valuable resources and networking opportunities; provide feedback and cooperative learning

Conferences: one great way to learn more on the local and national level; an opportunity to network with colleagues outside of your school building and time to reflect on your teaching practices

Professional literature: journals and newsletters come from membership in a professional association, or are available in libraries or subscription; provide an opportunity to stay current in your field and read about research-based practices

Professional development: also known as in-service; may be small group discussion, conferences, peer coaching, or college courses; allows opportunity to reflect and refine teaching skills while adding to your knowledge base

Historical and Philosophical Foundations

Colonial Period (1600-1776): Puritan influence, state-funded public education, Harvard College, hornbooks, New England Primer

Early National Period (1776-1840): Benjamin Franklin, Thomas Jefferson, Noah Webster, Land Ordinance of 1785—allotted certain areas in the townships for schools

Common School Period (1840-1880): Common school, Horance Mann, Henry Barnard, Normal school, MuGuffy Readers w/themes of honesty, truthfulness, promptness, and being good and kind, compulsory attendance laws, National Education Association, kindergartens

Progressive Period (1880-1920): Impact of business and industry, the superintendent, the principal, division of school into grades, American Federation of Teachers

Modern Period (1920-present): John Dewey, Adult Education, Brown vs. Board of Education, Sputnik, ESEA, testing movement, A Nation at Risk, Goals 2000: The National Education Goals. NCLB

TEACHER PROFESSIONALISM PART II: TEACHERS AND THE LARGER COMMUNITY

Promoting Partnerships

Respectful communication: listening, frequent positive communication, as well as understanding, all contribute to positive communication between teachers and caregivers; don't just contact in case of problems; be aware of language issues, culture; some may prefer face-to-face communication, home visits, parent conferences, phone calls, e-mails, or notes

Shared decision making: give caregivers a voice in their child's education, make them a part of teams, ask for suggestions, inquire as to their goals for their child, ask about ways family members have found success working with the student

School as resource: parent resources centers are places parents can go to gather information, network with school personnel and other parents, and be a part of the educational process; examples include childcare, homework clubs or activities, enrichment activities, educational classes such as adult literacy, computer classes, or exercise classes

Teacher as resource: school newsletters, bulletin boards, interactive homework assignments, reading lists allow information and interaction; also, teachers can lead a club, serve on a committee, or lead charity organizations to interact in other ways in the community

Traits of Effective Teachers

- 1. high expectations—communicate clearly
- 2. involvement of parents
- 3. clear and measurable objectives
- 4. good planning—be well prepared
- 5. respect students
- 6. high self-esteem, positive self-concept
- 7. know a variety of teaching strategies that will support student learning
- 8. reflective

TEACHER PROFESSIONALISM PART III: MAJOR LAWS RELATED TO STUDENTS' RIGHTS AND TEACHER RESPONSIBILITES

Law	Description
Americans with Disabilities Act, Title II	
Individuals with Disabilities Act(IDEA)	
Individualized Education Plan (IEP)	
Section 504	
Public Law 94- 142/Equal Education	
Family Educational Rights and Privacy Act (FERPA)	
No Child Left Behind (NCLB)	

TEACHER PROFESSIONALISM PART III: MAJOR LAWS RELATED TO STUDENTS' RIGHTS AND TEACHER RESPONSIBILITES

Confidentiality and privacy: a general ethical principle held by most professional organizations is that confidentiality may be broken only when there is a clear and imminent danger to an individual or to society

Appropriate treatment of students: section 504 of the Rehabilitation Act of 1973

Americans with Disabilities Act of 1990

Reporting in situations related to possible child abuse: all abuse should be reported; check with state and local district on reporting procedures; most schools offer training in the detection of child abuse

Sample Case Study

Case I

Directions: Questions 1-3 require you to write short answers, or "constructed responses." You are not expected to cite specific theories or texts in our answers; however, your knowledge of specific principles of learning and teaching will be evaluated. Be sure to answer all parts of the question. Write your answers in the space provided.

Scenario: Justin

Justin is an 11-year old boy in the fifth grade. He is taller and heavier than most children in his age group, yet socially and emotionally he appears to be less mature. He recently moved with his three older sisters, father, and mother, who is a naval officer, to a school district that largely serves a Navy community since there is a military base within walking distance of the school. Justin has moved five times in his life and is very quiet on the first days of school. After those first few days, he has more overt difficulties. Mr. Smith is concerned that Justin may not be adjusting well to his new classroom, school, and community.

Mr. Smith does not have a cumulative record for Justin since it takes the school system several days, sometimes weeks, to request and obtain records through the central administration department in this large district that serves many transient students. That is a common problem in the school system and one that Mr. Smith has learned to work around. He has planned several "get-to-know-you" activities during the first weeks of school. Based on early observations and pre-testing, Mr. Smith has the following assessments to report to the Multi-Disciplinary Team (MDT) in late September.

- On the first few days of school, Justin wore his hood over his head and face and was very
 quiet. He seemed to observe the happenings in the classroom with interest, but did not
 participate in any discussions or activities. He was compliant when it came time to go to
 lunch, recess, and specialists' classes, such as Art, Music, and Physical Education. At
 lunch and recess, however, he sat alone.
- Justin has difficulty following class rules, especially raising his hand, taking turns, and remaining in his own personal space during work time and when walking in the hallway.
- On September 10, Justin initiated an argument in the coatroom that escalated to shouts and Justin throwing his backpack at a fellow student.
- Justin's instructional reading level is at the beginning of grade 3. He has difficulty with multiplication and division as well as problem-solving that requires two or more steps.
- On September 15, Justin and another boy were observed taking candy from the teacher's desk. While the other boy admitted his part in the incident, Justin adamantly denied that he took the candy.
- Justin enjoys drawing and music.
- On September 23, Justin took a new set of crayons from a boy in class, broke each one in half, and left them on the student's desk.
- On the same day, Justin had a fistfight on the playground and was suspended from school.

Mr. Smith is concerned about Justin's adjustment to his new school. He knows that students who move a lot, such as those like Justin who come from military families, often have gaps in academics, low self-esteem, or difficulty behaving. Mr. Smith has thought carefully about Justin's learning situation and has tried the following strategies to support Justin's transition to his new school and classroom before requesting the MDT meeting on Justin's behalf:

- "Classroom buddy"—a student who has also moved frequently and is high-achieving and polite has been assigned to help Justin as needed.
- Individual attention—Mr. Smith has allowed Justin to do special jobs for the teachers and has spent one-to-one time with him during a special "lunch with the teacher."
- Authentic praise—Mr. Smith has made a point to recognize Justin's positive contributions to the classroom and in his individual work.
- Lower-than-grade-level-tasks—Mr. Smith has given Justin mathematics problems and reading materials at his instructional level. This has led to some social difficulties, though, because Justin is the only student performing this far below grade level.
- Home/school communication—Mr. Smith has communicated with Justin's family by phone
 and in one parent-teacher conference. Justin's family appears to be concerned about and
 involved in Justin's educational progress. The parents reported that Justin has had
 difficulties with behavior at other schools and has frequent outbursts at home.

The MDT reviewed this information and samples of Justin's work and determined that Justin should be evaluated by the school psychologist and an educational diagnostician to determine the cause of his behavioral difficulties and his below-grade-level performance.

- Identify TWO additional strategies that Mr. Smith could use to support Justin's learning in his fifth-grade classroom while he waits for results from the school psychologist and the educational diagnostician. Be sure to base your response on the principles of learning and teaching.
- 2. Identify TWO potential reasons for Justin's behavior and academic performance in fifth grade. Be sure to base your answer on the principles of learning and teaching.
- 3. Suggest TWO additional ways that Mr. Smith and Justin's parents can work together to support Justin's behavior and academic performance in school. Be sure to base your response on the principles of learning and teaching.

Study Planning Guide

When: What You Need to Do: 3 months before: Register for the test Begin taking this class • Review study guides (don't wait until the last minute) 2 months before: Make sure you've registered for the test and set aside proof of registration Review study guides and notes from class (don't wait until the last minute) 1 month before: Figure out where you are taking the test (university/college and building), how to get there, about how much time you need, and where you can park • Take the practice tests again—self-assess the areas you are weak in and practice! Review study guides, notes, etc. One week before: • Set aside your proof of registration, a few #2 pencils with erasers, a couple of blue or black pens, and two valid forms of ID Review the tests, study guides, notes, etc. The night before: Talk to people who make you feel good and confident about the test and have a positive attitude Pack a water bottle and snack for after the test. • DON"T cram all night. Relax; you've already done all the work! Go to bed early and get plenty of rest. Eat a good breakfast The day of the test: Remember to bring your water bottle, snack, registration, ID, and writing utensils Arrive at the test center 15-20 minutes early

Pass the test!