

## **HELPING STUDENTS PREPARE FOR THE PRAXIS EXAM**

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### **I. Overview of Format and Content of Test**

ASHA has been using some form of a national certification exam since 1956, always administered by ETS. Although the format and content have changed over the years, the exam remains a major component for ASHA certification and most state licensing requirements.

#### **How were the tests designed?**

- Job analysis surveys are done every 5 to 7 years. SLPs and audiologists around the country in various job situations were asked to judge which knowledge and skills a beginning clinician needs to possess.
- Test specifications or blueprints were developed based on these surveys.
- Praxis committees consisting of subject matter experts created test questions.
- Skills validation studies examined the tests question by question and evaluate each question for its relevance to beginning clinicians. These are repeated every 5 to 7 years.
- Standard setting studies are also performed periodically to determine how many questions a beginning clinician should be able to answer correctly. A

recommended passing score is then approved by the Council for Clinical Certification (CFCC).

### **Who writes the questions?**

Several groups of individuals are involved in developing the questions to be included in the exams. ASHA nominates subject matter experts to serve on Praxis committees who work with ETS. There are actually four committees:

- Praxis SLP National Advisory Committee and Praxis AUD National Advisory Committee - review new test questions and test forms, review questions identified as potentially flawed during a test administration, and provide feedback on the current scope of practice and changing demands of clinical practitioners.
- Praxis SLP Local Development Committee and Praxis AUD Local Development Committee – work closely with ETS to develop test questions in their area of expertise, based on the SLP test blueprint and the audiology test blueprint.

These exams are comprehensive, covering material learned throughout both undergraduate and graduate courses in communication disorders. As a result, test-takers will need to synthesize information they have learned from many sources and understand the subject as a whole. Most importantly, studying for these exams is essential. The following information may be helpful to students:

- Be familiar with the test format
- The Praxis exam is actually 2 exams, one in speech-language pathology (0330) and one in audiology (0340).

- Each test currently consists of 150 multiple choice questions; however, as of Fall 2004 each test will have 120 questions. Test-takers will still have 2 hours to complete the exam.
- These exams are comprehensive, covering material learned throughout both undergraduate and graduate courses in communication disorders.
- Most importantly, studying for these exams is essential.
- Understand how the exam is scored
- Only questions answered correctly count toward the reported score. It is better to guess than leave an answer blank.
- The passing score for ASHA certification is 600 out of a possible 800.
- Typically, 80% of students pass the exam on their first attempt.

### **Know the content of the test (the blueprint)**

The Speech-Language Pathology exam covers seven major areas, in the following proportions:

#### **Basic Human Communication Processes (17%)**

- Language acquisition and learning theory
  - normal development of speech and language
  - developmental norms in phonology, syntax, semantics, and pragmatics
  - theoretical models of learning related to language and cognition
  - behavior management and modification
  - cognitive development
  - developmental, motor, and linguistic processes
- Language science
  - the structure of language
  - the phonetic and phonological representations of speech sounds
  - phonological theory as it relates to normal development
  - grammatical categories
  - morphology, syntax, semantics, and pragmatics, as these fields relate to normal language processing and production
- Learning theory

- theoretical models of learning related to language and the effective treatment of disorders
- models of behavior management and modification
- theories of cognitive development
- Multicultural awareness
  - applications of theoretical models of language in society to a variety of linguistic and cultural groups
  - cultural and socioeconomic factors that influence speech and language
  - communicative differences between speakers of the same language, including idiolectal and dialectal distinctions
  - differentiation between first language/dialect interference and speech/language disorders
  - cultural differences in the use of nonverbal communication
- Speech science
  - speech perception
  - physiological phonetics
  - acoustic phonetics
  - anatomy and physiology, as related to the production, reception, and processing of speech, language, and hearing
  - neural bases of speech and hearing

#### Phonological and Language Disorders (19%)

- Phonological disorders
  - articulation disorders as influenced by anomalous, oral-motor, dental, learning, or behavioral factors
  - phonological process disorders
- Language disorders
  - developmental, motor, and linguistic processes
  - differentiation of normal, delayed, and disordered language development
  - the nature of expressive and receptive language disorders
  - treatment of language delays and language disorders

#### Speech Disorders (13%)

- Fluency disorders
  - theories of fluency
  - neurological and psychological factors
  - assessment, treatment, and prevention of fluency disorders
- Resonance disorders
  - resonance, as influenced by congenital anomalies, neuralgic disorders, disease, trauma, and behavioral factors
  - assessment, treatment, and prevention of resonance disorders
- Voice disorders
  - phonation, as influenced by respiratory, laryngeal, and airway problems resulting from malformations, neuralgia, disease, trauma, and behavioral factors
  - alaryngeal speech

- assessment, treatment, and prevention of voice disorders

#### Neurogenic Disorders (19%)

- Neurological disorders
  - aphasia
  - progressive disorders
  - motor speech disorders
  - traumatic brain injury
  - cognitive communication disorders
- Dysphagia
  - the process of swallowing
  - causes and effects of swallowing disorders
  - assessment and treatment of swallowing disorders

#### Audiology/Hearing (5%)

- Hearing science
  - principles of hearing
  - anatomy and physiology of the hearing mechanism
  - congenital and acquired hearing loss in children and adults
- Audiological assessment
  - hearing screening for clients of all ages
  - interpretation of audiograms and tympanograms
  - referrals to appropriate professionals
- Auditory habilitation and rehabilitation
  - management of clients with hearing loss
  - issues of intervention relevant to the practice of speech-language pathology

#### Clinical Management (19%)

- Alternative/augmentative communication
  - assessment and use of alternative/augmentative communication devices
  - determining candidacy for alternative/augmentative devices
- Counseling
  - communicating assessment and treatment plans, progress, and results to clients and appropriate professionals
  - interpersonal communication and counseling techniques
- Documentation and monitoring client progress
  - collecting and using information from other agencies
  - communicating to other professionals concerning the client's history
  - data gathering and interpretation
  - determining termination criteria based on prognosis, progress, and motivation
  - procedures for referral and follow-up
  - writing professional reports
- Efficacy

- demonstration of results of clinical services in relation to speech, language, and hearing
- determining and communicating information about the outcomes of assessment and treatment
- Instrumentation
  - instrumentation used in speech and language analysis
  - the purpose, use, and applications of technological developments with respect to assessment and treatment of speech and language disorders
- Speech-language assessment
  - establishing clients' past and present status
  - formulating recommendations, including impact of life conditions, type of treatment, and service-delivery models
  - identifying individuals at risk for communication disorders
  - interviewing techniques and interpersonal skills
  - procedures for screening clients of all ages
  - selection and administration of standardized evaluation procedures, such as formal tests
  - selection and administration of non-standardized procedures, such as language samples and behavioral observations
- Speech-language intervention
  - diagnostic intervention
  - selecting activities appropriate to the client's age, sociocultural membership, and disorder
  - implementing remediation methods and strategies for disorders
- Syndromes and genetics
  - basic principles of genetics
  - syndromic and nonsyndromic inherited and developmental conditions
  - influence of syndromic and nonsyndromic conditions on hearing, speech and language development, production, and processing

#### Professional Issues/Psychometrics/Research (8%)

- Ethical practices
  - understanding standards for professional conduct
  - making referrals, obtaining permissions, keeping and using client records
  - ensuring client privacy
  - handling staffing issues in a professional and legally prudent manner
- Research methodology/psychometrics
  - criteria for selection of test materials
  - determining the reliability of assessment procedures
  - models of research design
  - test construction principles
- Standards and laws
  - designing appropriate assessment and treatment through knowledge of governmental regulations and professional standards
  - federal laws and regulations impacting delivery of services
  - reporting requirements of governmental agencies

The Audiology exam covers eight major areas, in the following proportions:

Basic Human Communication Processes (26%)

- Acoustics
  - calibration of audiometric equipment
  - principles of acoustics as related to audiological testing
  - principles of acoustics as related to speech sound
  - the phonetic and phonological representations of speech sounds
- Anatomy and Development
  - anatomy and physiology of the hearing mechanism
  - attributes of the human ear
  - embryology of the ear
  - knowledge of syndromes
- Medical Diagnosis Studies
  - pathologies associated with various findings
- Pathologies
  - effects on auditory function
  - effects on various test procedures
- Physiology
  - assessment methods
  - effects of various lesions on function
  - systems responsible for various test results
- Psychoacoustics
  - auditory perception for various stimuli
  - response criteria
  - test parameters
- Speech-Language Sciences
  - developmental milestones
  - outcomes associated with various disorders
- Syndromes and Genetics
  - basic principles of genetics
  - conditions associated with various syndromes
  - genetic influences on speech and language production, reception, and processing

Prevention/ID (10%)

- Hearing Conservation
  - criteria for instituting and evaluating programs
  - selection of suitable tests
- Hearing Screening
  - conditions warranting hearing screening
  - guidelines for screening programs
  - selection of appropriate screening procedures
- Ototoxicity
  - agents necessitating monitoring of hearing and vestibular function
- Universal Precautions

- procedures for infection control

#### Behavioral Assessment/Interpretation (13%)

- Behavioral Speech
  - characteristics of various test materials
  - selection of appropriate test materials and procedures
- Behavioral Tone
  - limitations of test procedures
  - patterns of test findings
  - selection of age-appropriate test methods
- Case History
  - collection and use of information from other agencies in an appropriate manner
  - interview of patient and significant others
  - potential etiological factors
  - present status
- Physical Examination
  - expected findings associated with various test results
  - otoscopy

#### Electrophysiological Measurement/Interpretation (8%)

- Auditory
  - appropriate selection of test procedures
  - findings associated with various pathologies
  - principles of specific measures
- Vestibular
  - findings associated with various pathologies
  - principles of specific measures
  - test findings associated with various lesions

#### Rehabilitative Assessment (11%)

- Audiological Rehabilitative Assessment
  - influences of other sense modalities
  - selection of appropriate test methodology
- Evaluation of Disability/Handicap interpretation of findings
  - selection of appropriate instruments and procedures
- Hearing Aid Selection, Fit, and Verification
  - criteria for candidacy
  - differences in performance of various types
  - effects of modifications on performance
  - measurement procedures

#### Rehabilitative Technology (11%)

- Assistive Devices
  - appropriate selection, assessment, and use of various devices
  - criteria for candidacy

- Cochlear Implants
  - coding strategies
  - criteria for candidacy
- Hearing Aid Instruments
  - function of hearing aid components
  - measures of hearing aid performance
  - performance characteristics of various circuit

#### Rehabilitative Management (11%)

- Audiological Rehabilitative Management
  - age-appropriate techniques
  - implementation of appropriate methodologies
- Counseling
  - acceptance, adjustment, motivation, and coping
  - appropriate communication regarding information about assessment, treatment plans, progress, and results
  - interpersonal communication and counseling techniques
- Patient Management and Referral
  - criteria based on prognosis, progress, and motivation
  - data gathering and interpretation
  - procedures for referral and follow-up

#### Professional Issues/Psychometrics/Research (10%)

- Ethical Practices
  - confidentiality
  - informed consent
  - staffing issues
  - standards for professional conduct
  - referrals, permissions, client records
- Laws and Standards
  - appropriate management through knowledge of governmental, legislative, and regulatory mandates
  - knowledge of professional standards
- Multicultural/Deaf Culture
  - applications of theoretical models of language in society to the evaluation and treatment of hearing disorders
  - cultural and socioeconomic factors that influence speech, language, and hearing
  - service-delivery models
- Practice Management and Business
  - accrediting agencies
  - professional standards, record keeping, and office management
- Research Methodology/Psychometrics
  - criteria for selection of test materials
  - determination of reliability and validity of assessment procedures
  - research integrity

- test construction principles

## **II. ASHA National Exam Performance Survey**

- Survey in 2000 of students, recent graduates, and program directors.  
Approximately 4000 students and recent graduates participated along with 250 program directors.
- Less than half of students/recent grads were satisfied with the level of assistance received from their instructors about the Praxis exam.
- Less than half of program directors believed that faculty provided adequate information to students.
- Less than a quarter of programs reported making special efforts to assist students who may be at risk for not passing.
- Most of the information received about the Praxis was from other students.
- Individual study was the most widely used preparation strategy, followed by use of the ETS study guides.
- The most frequently noted comment dealt with timing issues. Respondents indicated a need for test-takers to learn to pace themselves during the exam.

(National Examination Performance Survey, Final Report Spring 2000 Conducted for the ASHA Executive Board Subcommittee on National Examination Performance by REDA International, Inc., Wheaton, MD.)

## **III. General Tips for Faculty to Help Students**

- Consider ways to incorporate case study multiple-choice questions into course activities.
- Give students opportunities to practice clinical problem-solving test items in academic classes. Provide sample exam questions for each class and discuss the answers during class.

- Request that the college bookstore and the college library stock Praxis study guides.
- Discuss the Praxis examinations throughout the academic programs as a certification and licensure requirement.
- Schedule department comprehensive examinations at a time that does not conflict or compete with the Praxis examinations.
- Help students organize study groups/review sessions.
- Encourage the students to STUDY, STUDY, STUDY for the examination.

**Understand the Registration Bulletin and On-line registration option.** ETS has all the necessary resources for test-takers, including on-line registration, available on the Web at [www.ets.org/praxis](http://www.ets.org/praxis). The SLP and Audiology exams are Praxis II, Specialty Area Subject Assessment tests. The Registration Bulletin can be ordered in hard copy from ETS (for mail-in registration) by calling 609-771-7395 or it is available in PDF format on the Web at [www.ets.org/praxis](http://www.ets.org/praxis). Communication Sciences and Disorders (CSD) academic programs should keep copies available for their students.

**Students may need your assistance to register for the test.** The registration form can be confusing, and the codes used by test-takers will affect the reports received by the university and CSD program after the test and annually. It is very important that the test-taker use the correct codes. Items on the registration form that need particular attention:

- **Item 11) College Where You Received Training Relevant to the Test.** Use the Attending Institution/Recipient Code List (List C) on pages 30-35. These “A”

codes are for the institution where the test-taker received/is receiving CSD training.

- **Item 12) Agencies to receive score reports.** For CSD test-takers, there is a separate list of recipient codes on page 35. If students want their score sent to ASHA, they should use code R5031. Encourage your students to also have the score report sent directly to the CSD program, using the R codes on page 35. If they use the R codes on pages 30-35, it will go to a designated institutional contact and may not be forwarded to the CSD program. Also on page 35 are R codes for state licensing boards for SLPs and audiologists.
- **Items 14 & 15) Major Field and Certification Field.** Using List E on page 36, the code for audiology is 701 and the code for SLP is 705.

The reports that the test-taker and your institution will receive from ETS include:

#### **Reports after each test administration**

- Examinee Score Report (including categorical info)
- Designated Institution Score Report (goes to R code recipients)
- Roster of Examinee Scores (goes to agencies only – ASHA)

#### **Annual reports**

- Institutional Summary Report – goes to A code recipient at each institution
- No annual reports are generated for R code recipients (CSD programs)

#### **IV. Top Reasons for Low Scores**

Students are usually well aware of why they have not passed the exam. In most cases, they appreciate the opportunity to work with an individual faculty member to improve performance for the next test administration. If a student does not pass the exam on

numerous administrations, it may be necessary to refer the student to campus-based resources for assessment of:

- Any possible undiagnosed learning disability or information processing problem.
- Unusually high levels of test anxiety.

Some students become overly anxious, causing them to forget content, guess wildly, or lose concentration. Students who have high levels of text anxiety might benefit from taking a test prep course to prepare for the actual testing situation.

- Poor test-taking and/or study skills.
- Time management difficulty.
- The need for special accommodations under the “Americans with Disabilities Act.”
- Ineffective time management.

Many students have not learned how to pace themselves while taking an examination

When they realize they are running out of time, they may panic and skip over some questions without answering them. Only correct answers count toward a student's score. Therefore, it is better to guess than to leave an answer blank.

- Taking the Praxis exam too early in graduate school.

Many students either misunderstand, or are lead to several erroneous beliefs about when to take the exam. It is highly recommended that students take the Praxis examination in their last semester of graduate school or during their Clinical Fellowship.

This will better ensure that students have the knowledge base to pass the Praxis examination.

- Unfamiliarity with test content

The Praxis exam is not an IQ test that assesses one's innate intelligence. The exam covers a field of study that, like all complicated subjects, builds from fundamentals to a level of complexity that only an expert can understand. A student at the end of academic preparation is better suited than is a new graduate student to take a certification exam

**V. Resources** (ETS Test Preparation Materials <http://www.ets.org/praxis>)

### **Tests at a Glance**

- Printable version can be downloaded from the Praxis Web site.
- Includes content outlines, sample questions in each content area with rationale for the best answers, and test-taking strategies.
- Most up-to-date and current information.

### **Study guides**

- Available for audiology and speech-language pathology.
- Available for purchase (\$20 - \$25) from ETS. Encourage your school bookstore to stock copies.
- Guides include sample tests, test-taking strategies, explanations of correct answers to each question, scoring keys, and scoring instructions. You can practice taking a real test.

### **Examinee Score Report**

- Received by each test-taker after taking an exam.
- Includes information about performance in each of the categories included in the test blueprint.

### **More Resources...**

## ASHA Can Help

- Praxis Web site <http://www.asha.org/students/praxis/>
- National Office Staff Contact  
Lauren Ero, Academic Affairs Program Manager  
301-897-5700 ext. 4243 or [lero@asha.org](mailto:lero@asha.org)

## **Publications available from Thomson Delmar Learning:**

*How to Prepare for the Praxis Exam in Audiology* (K.T. Payne, 2001).

*How to Prepare for the Praxis Exam in Speech-Language Pathology* (K.T. Payne, 2001)

## **Web resources related to successful test performance:**

- “Assessing Test-Taking Skills” from *Teaching Test-Taking Skills* (T.E. Scruggs & M.A. Mastropieri)  
[www.ldonline.org/ld\\_indepth/teaching\\_techniques/testtaking.html](http://www.ldonline.org/ld_indepth/teaching_techniques/testtaking.html)
- Brigham Young University Counseling & Career Center <http://www.byu.edu/ccs/>
- Purdue University Academic Success Center <http://www.sla.purdue.edu/asc/>
- The Dartmouth Academic Skills Center  
[www.dartmouth.edu/~acskills/success/stress.html](http://www.dartmouth.edu/~acskills/success/stress.html)
- The University of Texas Learning Center [www.utexas.edu/student/utlc](http://www.utexas.edu/student/utlc)
- University of Maryland Counseling Center’s Learning Assistance Service  
[www.inform.umd.edu/CampusInfo/Departments/LASRV](http://www.inform.umd.edu/CampusInfo/Departments/LASRV)
- University of Chicago Student Counseling and Resource Service  
<http://counseling.uchicago.edu/vpc/virtulets.html>

- University of North Carolina at Chapel Hill Online Self-Help Information  
[http://www.unc.edu/depts/unc\\_caps](http://www.unc.edu/depts/unc_caps)
- Learning Support Centers in Higher Education [www.pvc.maricopa.edu/~lsche](http://www.pvc.maricopa.edu/~lsche)
- Virginia Tech Division of Student Affairs <http://www.ucc.vt.edu/stdyhelp.html>
- University of St. Thomas Study Guides & Strategies  
<http://www.iss.stthomas.edu/studyguides>
- York University Counseling and Development Centre  
<http://www.yorku.ca/cdc/lsp/index.htm>
- The College of Lake County Illinois Test Anxiety Student Workbook  
<http://www.clcillinois.edu/frameset.asp?url=http://clcpages.clcillinois.edu/home/co>  
[u052/](http://www.clcillinois.edu/frameset.asp?url=http://clcpages.clcillinois.edu/home/co)