

Early Childhood Education Comprehensive Exam Summary:

Undergraduate Level

Peregrine Academic Services (PAS) provides assessment services for performing direct assessment of learning outcomes in a range of academic disciplines. The online exams are used to evaluate retained student knowledge in relation to the academic program's learning outcomes.

This document outlines the Early Childhood Education assessment service for the associate and bachelor's academic degree levels.

The assessment service is designed for use by US-based schools and programs.

PAS places a high priority on ensuring the validity and reliability of the assessment services. These practices begin at the design stage and continue through beta-testing, and with ongoing regularly scheduled quality reviews. A description of the approach used to ensure ongoing validity and reliability is provided at the end of this document.

The undergraduate test bank of questions is used for both associate and bachelor's levels because:

- a) The questions are associated with foundational knowledge levels.
- b) Using the same test bank for both associate and bachelor's level testing is an accreditation/articulation requirement for undergraduate transfer students completing a degree program at the associate level and continuing forward with a bachelor's program.

When used for the associate and bachelor's degree exams, the academic program manager selects topics that align with their learning outcomes and the program curriculum (usually 4-6 topics per exam for the associate degree and 8-10 topics for the bachelor's).

The exams include 10 questions for each topic and each exam is unique as questions are selected at random from the test bank with 50-200 questions per topic.

This document provides information on:

- Topics and the subjects covered within each topic.
- Example questions.
- Assessment Service Validity and Reliability.

The Topics are:

1. Application of Content
2. Assessment
3. Content Knowledge
4. Instructional Strategies
5. Leadership and Collaboration
6. Learner Development
7. Learning Differences
8. Learning Environment
9. Planning for Instruction
10. Professional Learning and Ethical Practice

Topic: Application of Content

Subjects

- Cognitive Development
- Communication
- Creativity
- Language Development
- Physical Development
- Schools, Media, and Culture
- Self-Development
- Social Development

Example Questions

Toddlers who hear two or more languages _____.

- A. will be confused
- B. are delayed in their language development
- C. have smaller vocabularies than their monolingual peers
- D. follow the same language learning patterns as their monolingual peers

Correct Response: D

Gross Motor Skills refers to the child's ability to _____.

- A. use a spoon to feed himself
- B. use large muscles of the body
- C. turn pages in a picture book
- D. interact positively with his peers

Correct Response: B

Topic: Assessment

Subjects

- A Comprehensive Assessment System for Birth Through Age 8
- Application of Assessment Data to Guide Instruction
- Choosing the Right Measure
- Developing Family Partnerships in Assessment
- Observing as the Key Method in the System
- Record Keeping, Reporting, and Collaborating with Families and Others
- Using Alternate Assessment Strategies
- Using Basic Concepts of Measurement

Example Questions

Confidentiality in testing _____.

- A. means that competencies of individual children are not discussed with people outside the school
- B. must be waived when making reports to boards
- C. means that individual results are discussed, but numerical results are never included
- D. means that children are tested one by one in private
- E. a and d are both correct

Correct Response: A

Rating scales require teachers to judge child performance on some predetermined behavioral description. When developing rating scales what should one seek to create and why?

- A. Look for well-defined categories and those that are observable behaviors because behavior can become complicated to rate and the greater the chance for error.
- B. No number of categories can adequately rate any number of children.
- C. Look for as many categories as possible to fit each child's action. The more categories there are, the simpler the process to rate children.
- D. Less defined categories allow for more flexibility to rate children. This allows the teacher to experience less stress to categorize student actions.

Correct Response: A

Topic: Content Knowledge

Subjects

- Assessment of Young Children
- Classroom Management
- Families
- Guidance
- Guiding Young Children in the Classroom
- Health
- Learning Environments
- Professionalism
- Program Management
- Safety
- Student Teaching
- Supportive Instruction
- Understanding Diverse Communities and Interacting With Families

Example Questions

Schedules are important because _____.

- A. teachers need to have consistency for planning
- B. parents like to know what is occurring at specific times
- C. the principal demands it
- D. young children feel more secure and less stressed

Correct Response: D

Which of the following is the most appropriate way to handle a three-year-old child who spills milk during snack?

- A. Don't allow him to have milk for the rest of the week.
- B. Give him a sippy cup to drink from.
- C. Help him clean up the spill.
- D. Send him to the two-year-old room to learn how to pour.

Correct Response: C

Topic: Instructional Strategies

Subjects

- Applying Theories to Practice
- Appreciating Differences
- Assessment
- Effective Teaching Through Evaluation
- Infants and Toddlers
- Kindergarten Education
- Planning the Curriculum
- Technology and Young Children
- The Preschool Years
- The Primary Grades
- Theories Applied to Teaching and Learning

Example Questions

Appropriate assessment strategies can help the early childhood professional find answers to all of the following questions except:

- A. What concepts are my students ready to learn?
- B. What concept is Lauren ready to learn?
- C. What can I tell Juan's parents about his language development?
- D. What type of discipline strategies work best for this child?

Correct Response: D

The concept that objects have an independent existence beyond the child's perception of them is called

_____.

- A. object permanence
- B. primary circular reactions
- C. temperament
- D. accommodation
- E. reflexive actions

Correct Response: A

Topic: Leadership and Collaboration

Subjects

- Building School Partnerships with Families and Community Groups
- Community Resources
- Early Care and Education Programs as Community Resources
- Establishing and Maintaining Collaborative Relationships
- Families and Their Partnerships with Professionals
- Social Policy Issues
- Societal Influences on Children and Family
- The Child in Context of Family and Community
- Working with Families of School-Age Children

Example Questions

Which of the following is not a necessary component for successful partnerships?

- A. Being committed to the concept.
- B. Devising plans to involve others in the program.
- C. Widespread publicity about the program.
- D. Gaining knowledge about the program and persons connected to it.

Correct Response: C

Using a preventive approach that would be less expensive and more desirable than dealing with children and families in crisis includes _____.

- A. taking more children away from their families to be reared by people who know more about children than the average family
- B. making systemic reforms to help families have what they need to support and nurture their children and keep the family intact
- C. deciding as a society who should and shouldn't have babies
- D. putting every child in the nation in an early education program starting in infancy

Correct Response: B

Topic: Learner Development

Subjects

- Cognitive Development
- Cognitive Development and Learning
- Emotional Development
- Enhancing Language Development in Infants and Toddlers
- Enhancing Language Development in Kindergartners
- Enhancing Language Development in Preschoolers
- Enhancing Language Development in Primary Years
- Language Development and Learning
- Language Development in Kindergartners
- Language Development in Preschoolers
- Language Development in Primary Years
- Language Development of Infants and Toddlers
- Memory and Thought Development
- Moral Development
- Motor Development and Learning
- Physical Development
- Social Development

Example Questions

According to the idea of "socially shared cognition," _____.

- A. thinking extends beyond the individual and includes that of pairs and groups
- B. thinking must revert to the question of "whose idea is it?"
- C. individuals are unable to think independently
- D. individuals share information unconsciously through body language

Correct Response: A

Because memory is reconstructive, we know that _____.

- A. we cannot hold on to too much information
- B. we store only certain pieces of information
- C. it is usually an accurate account of events
- D. most people have similar memory abilities

Correct Response: B

Topic: Learning Differences

Subjects

- Attention-Deficit/Hyperactivity Disorder
- Autism
- Communication Disorders
- Emotional or Behavioral Disorders
- Gifted and Talented
- Hearing Loss
- Intellectual Disability
- Learning Disabilities
- Linguistic Diversity
- Multiple Disabilities
- Physical Disabilities
- Traumatic Brain Injury
- Visual Impairments

Example Questions

Failing to give close attention to details, difficulty sustaining attention, forgetful, easily distracted, difficulty organizing tasks, and loses things necessary for tasks are characteristics of which of the following?

- A. AD/HD inattentive type
- B. AD/HD hyperactive/impulsive type
- C. AD/HD with learning disability
- D. AD/HD combined type

Correct Response: A

Which of the following refers to a malfunction in the spinal cord?

- A. Cerebral palsy
- B. Spina bifida
- C. Other health impairments
- D. Orthopedic impairments

Correct Response: B

Topic: Learning Environments

Subjects

- Arranging an Effective Environment
- Creating a Healthy and Safe Environment
- Design Considerations
- Establishing a Context for Learning
- Establishing an Emotionally Supportive and Equitable Environment
- Importance of Environment

Example Questions

You find that the children in your classroom are having difficulty sharing toys. Which would be the most appropriate way to solve this problem?

- A. Eliminate any toy or material that the children fight over.
- B. Spend more time in structured activities.
- C. Provide fewer learning centers.
- D. Provide duplicates of popular toys.

Correct Response: D

Julianna, a teacher of young toddlers, and Tessa are playing with toy trucks. Which of the following statements made by Julianna would be an example of parallel talk?

- A. What color is your truck?
- B. I'm driving my blue truck around and around.
- C. Do you want the blue truck or the red truck?
- D. Today we are going to have pears for lunch.

Correct Response: B

Topic: Planning for Instruction

Subjects

- Creating Outdoor Environments
- Developing Art Centers
- Developing Block and Building Centers
- Developing Dramatic Play Centers
- Developing Literacy Centers
- Developing Manipulative and Sensory Centers
- Developing Math Centers
- Developing Music Centers
- Developing Science Centers
- Integrating Technology

Example Questions

There are many different types of playgrounds. Which of the following statements comparing playgrounds is true?

- A. When using traditional playgrounds children spend most of their time in creative activity.
- B. Children are most active in contemporary playgrounds than in traditional playgrounds.
- C. Children engage in a wider range of activities when playing in an adventure playground rather than a contemporary or traditional playground.
- D. Traditional playgrounds are the most effective of the playground types in developing motor fitness and balance.

Correct Response: C

Which of the following statements regarding the early childhood teacher's science background is true?

- A. "It is not necessary for the early childhood teacher to have science background because she can learn it as she goes."
- B. "As long as the teacher knows where to find the answer to a question posed by a child she has adequate science knowledge for early childhood."
- C. "Teachers need science background information so that they can provide children additional information and avoid teaching misconceptions."
- D. "Science background is not necessary for teachers of young children because they are not yet learning science concepts."

Correct Response: C

Topic: Professional Learning and Ethical Practice

Subjects

- Becoming a Knowledgeable and Reflective Practitioner
- Becoming an Early Childhood Professional
- Building Supportive Relationships with Families and Communities
- Exploring History, Philosophy, and Advocacy
- Guiding Behavior and Creating a Classroom Community
- Promoting and Sustaining Professionalism in Early Childhood Education
- The Early Childhood Professional
- The Infant-Toddler Professional
- Understanding Diversity and Inclusion

Example Questions

Teacher's can support the development of infants and toddlers when they_____.

- A. use every day routines to teach essential concepts
- B. work hard with toddlers to get them toilet trained before they turn 3 years old
- C. makes sure they eat everything that is served to them
- D. direct a lot of whole group activities to get the children used to formal school routines

Correct Response: A

Mentors are different than supervisors because in addition to fulfilling many of the same roles as the mentors the supervisors also _____.

- A. create opportunities for professionals to gain knowledge and skills
- B. develop a relationship
- C. encourage the professional to develop goals
- D. evaluate the professional's job performance

Correct Response: D

Assessment Service Validity and Reliability

Introduction

The programmatic assessment services provided by Peregrine Academic Services (PAS) are used to assess retained knowledge of students at various academic degree levels. Schools deploy these services to evaluate the effectiveness of their academic programs, identify areas for improvement, and demonstrate program outcomes to external stakeholders.

PAS places a high priority on ensuring the validity and reliability of the assessment services. These practices begin at the design stage and continue through beta-testing, and with ongoing regularly scheduled quality reviews. The following outlines the approaches used to ensure ongoing validity and reliability.

Validity refers to the extent to which the test banks and the services measure the phenomena under consideration.

Reliability refers to the extent to which the exam results are repeatable and therefore data sets can be compared over time.

Design Features that Impact Validity and Reliability

The following features apply to all assessment services.

- Exam scoring is 100% objective using automated marking.
- Each exam viewed by a student is unique using a random selection of questions from the test bank in random topic order.
- Timed response periods for questions. When the user navigates away from the exam screen, the screen fades, a message appears informing the user that he/she has left the exam window and the questions are timed.
- Students are unable to copy/paste from the exam window.
- The exam services meet the security requirements for Management of Information Technology (MIS) Sarbanes-Oxley (SOX) compliant organizations.
- Abandoned exams are excluded from summary reports.

Ensuring Ongoing Validity and Reliability

Validity

To ensure test bank validity, the following measures were adopted when the initial test banks were created. The same principles are used with subsequent changes to the test banks.

- The specific accreditation or certification requirements related to learning outcomes evaluation were used to determine the topics and subjects for the test banks.
- Current teachings for each topic were considered regarding the foundational level of each test bank.
- Exam questions were written and reviewed by academic professionals within each discipline. Similar subject matter experts are used with subsequent editing and for new questions.
- Each topic has questions designated for 4-8 subjects per topic to help ensure appropriate breadth of coverage and allow for specific learning outcomes measurement.
- Exam responses are either correct or incorrect with only one possible correct choice. Scores are determined by summarizing the percent correct: per subject, per topic, and by total score.

Reliability

PAS contracted with external experts to design a comprehensive and statistically sound approach to measuring assessment service reliability. The result is that each year, a *Reliability Report* is generated for each assessment service. The report generates data for several reliability metrics and the data for each are compared with acceptability criteria to determine which test questions should be modified or replaced. Subject matter experts in the field are then contracted to modify/replace the targeted questions. Hence, the assessment service is regularly reviewed and improved to ensure ongoing reliability.

Reliability is determined by measuring *Item Difficulty*, *Item Discrimination* and *Question Interchangeability*.

Item Difficulty refers to percentage of students who answer questions correctly. Data are generated by topic and for each individual question. The target Item Difficulty is 60 percent correct with an acceptable range of 35 – 80 percent.

Item Discrimination refers to how well a question distinguishes between those students with more knowledge (higher overall exam scores) from those with less knowledge. Two measures are used: *Discrimination Index* and *Point-Biserial Correlation*.

For a given question, the Discrimination Index compares the scores of students with high overall test scores with students with low overall test scores. The scale is -1 to +1, with higher values indicating that a given question better distinguishes between high and low performing students. A value of ≥ 0.20 is considered acceptable.

Point-Biserial Correlation is equal to the Pearson's Correlation Coefficient between the scores on the entire exam and the scores on a specific question. A score of ≥ 0.10 is considered acceptable.

When assessing the quality of questions, both the Discrimination Index and the Point-Biserial Correlation Coefficient are reviewed.

Question Interchangeability refers to the ability to substitute a question in the test bank with another without significantly affecting the total score that an individual would receive on the exam. This is determined using Cohen's Effect Size d calculated based on a two-tailed t -test comparing the total score for all students who had that question in their exam versus the total score of the students who did not have that question in their exam. The scale is 0-1.0 and a score of < 0.20 is considered acceptable.