# Analyze the adult learner assessment essay 

Life

ASSIGN BUSTER

Running head: ADULT LEARNER ASSESSMENT Adult Learner Assessment Enter Student Name Here Capella University August 26, 2012 ED7712 Classroom Assessment inEducationAll students are familiar with assessments. They have been assessed on various levels all throughprimary and secondaryschool, and if they attended school afterward they've experienced assessments in postsecondary school as well. Why do we do assessments? Assessments are necessary - they not only tell the instructor how well the students are doing but they also tell the instructor how well they are teaching. But there is much more to assessments than that.

Assessments can be " an excellent instructional method to provide understanding of what adults are learning, how they are thinking, what their progress is, and which learning problems to address" (Wlodkowski, 2008). This paper will demonstrate this. The purpose of this research paper is to demonstrate an assessment of the adult learning of students who are enrolled in IS100 - Introduction to Databases, a course at Two Rivers Community College. This course covers topics that include basic concepts of relational database systems, database architectures, data storage, and data mining.

This course utilizes problem-based learning. Problem-based learning is an education strategy that uses problem-solving for optimal learning and is particularly useful in environments such as informationtechnology. The benefits are twofold: students not only acquire knowledge but they also develop problem-solving skills necessary for real world application (Williams, Iglesias \& Barak, 2008). Therefore the best type of assessment for this course will include a problem-based learning assessment.

The learners are students who have been allowed to enroll in this course for one of three reasons: (1) it is a required course for the Information Systems major, (2) it is a being taken as an elective for another major, or (3) they are undecided on which major they want to pursue and want to learn more about this aspect of information systemscareerpath. The majority of the students who attend this course are predominately post-adolescent white males who range in ages from 18 to 23 years old and are in their first year at the community college.

These students typically complete their associates degree here prior to continuing their education to obtain a bachelor's degree in either ComputerScience, Information Systems Management, or Industrial Technology. However, in recent years there have been an increasing number of adult learners who are of mixed nationalities, range between 28 to 35 years old, and are returning to the community collegeenvironmentdue to job loss or a change in career path. These individuals have chosen the community college environment because of the short duration of time to complete a degree as compared to the traditional four year university.

Three Learning Outcomes The overall learning objective of this course is for students to demonstrate a fundamental understanding of database systems. To ensure this, students will be assessed on the following three learning outcomes throughout the course: 1. Unit 1: Students will demonstrate an understanding of the theory, history, and evolution of the relational database. 2. Unit 2: Students will demonstrate an understanding of the fundamentals of good relational database design. 3. Unit 3: Students will demonstrate basic knowledge of data mining and storage.

Adult Learner Assessment The assessment described here will be on assessing students learning after the first unit is covered. The first unit of instruction is designated for an overall view of databases. Topics include relational database theory, the history and evolution of databases, types of database models, database query languages, and an overview of databases in use today. It is imperative that students have a good understanding of this information before moving on the next unit, therefore an assessment of this understanding needs to be evaluated.

The two most widely used types of test items are selection-type items and supply-type items. The use of selection-type items will gauge how well the students can recognize or recall facts whereas the supply-type items will measure the more complex learning outcomes (Waugh \& Gronlund, 2013). Items from both of these will be used to design the assessment to get a true measurement of students learning after unit 1. The assessment is listed in Appendix A. Accommodating Learners With Special Needs

In accordance to the Americans with Disability Act and the policies of Two Rivers Community College, learners with special needs will have reasonable accommodations given during assessment taking. Reasonable and appropriate support services that may be needed for this course could include, but are not limited to: interpreters, questions and answer choices read out loud to the student, and extra testing time. Accommodations will be evaluated on a case-by-case basis and every means will be done to ensure the student has a fair chance to take the assessment.

The instructor will also seek guidance from The Alliance for Access to Computing Careers (aka AccessComputing). This organization partners with
postsecondary institutions to increase participation of people with disabilities to computing fields. This organization can provides optimal strategies for instructors to accommodate a student with special needs. Specific to assessment taking, they recommend: •Alternative, quiet testing locations and distraction free rooms. Alternative formats of the assessments, if needed. •Extended test-taking time. Reading or scribe services. All of these recommendations are already available at the school. Directions for the Assessment Administrator and the Adult Learner The way in which an assessment is administered to students is especially important for good assessment outcomes. Assessment administrators play a key role in this occurring. The main role of an assessment administrator for this course includes 1) to give clear instructions to the students and 2) to preventcheating. The following directions will be provided to the assessment administrator.

The instructions for the students will be written on the test itself: -Administrator: Prior to the class starting, ensure equal distance is between each student seat. Ensure there are no pieces of paper laying in or around the desks. When all the students have arrived, separate each student with a desk between them, if possible. Tell the students why they are there and the purpose of the test. Explain how the test is laid out (10 multiple choice questions, 10 true-false questions, and 3 short answer questions) and how much time they have to complete it (50 minutes).

Breaks will not be given unless extenuating circumstances would dictate otherwise. Once the student has completed the test, they are to bring the test to you and place the test face down on the desk. The student will gather
their things and quietly leave the room. Interpretation of the Results of the Assessment Assessments provide the instructor with a relative ranking of students and a description of the learning tasks a student can and cannot perform (Waugh \& Gronlund, 2013). These two items have more to do with the interpretation of the assessment results. Criterion-referenced vs.

Norm-referenced The first item is centered around an interpretation method called norm-referenced assessment whereas the second one is centered around criterion-referenced assessment. The basic difference between the two is what the results are compared to. When an instructor is using normreferenced assessment interpretation, they are comparing each student's performances with the other students in the class whereas when an instructor is using criterion-referenced interpretation, they are comparing each student's performance with a predefined set of criteria (Waugh \& Gronlund, 2013).

Each type of interpretation serves a specific purpose. If an instructor wants to use the interpretation of assessments for instructional decision-making, they would use the criterion-referenced approach whereas if they wanted to measure the psychometric different between students, they would use the norm-referenced approach. For the purpose of this paper, the criterionreferenced approach will be used to interpret the results of the assessments in this course. This will ensure the students have a clear guide to their learning objectives competency.

Grading For the students, assessment is about grades. Grades tell the student to what extent they are meeting the instructional objectives. However grading is just as important to the instructor. There are three
guiding principles that instructors use to determine their grading system for a course: 1 . choose the best reference (standard) for the basis of grading, 2. choose the best way to combine the various assessment results, 3. choose the most effective and fair grading system (Waugh \& Grunlund, 2013).

Similar to the assessment interpretation types noted above, when choosing the best grading standard, instructors have a choice between grading the student's performance against predetermined standard (absolute grading) or against their fellow peer's performance (relative grading). The most common way is to use the absolute grading approach by assigning letter grades based on a 100 point system. This will be the approach used in this course. In choosing the most effective and fair grading system, there are a number of things an instructor can do to enlist the confidence of their students.

First and foremost, the instructor should be upfront from the beginning with the students about their expectations of them, explain how the students will be graded, and explain the grading rubrics for the course. Lastly, the instructor should be sure to not grade based upon subjective components such as learning ability, the amount of improvement a student has achieved, or lack of or improved effort. In determine the best way to combine the various assessments, each graded item must be assessed. For this course, the students will have grades for four unit tests and one problem-based course paper.

Each unit assessment will count for $15 \%$ of their grade and the course paper will count for $40 \%$ of their grade. No weighted scores will be used. The best way to grade the student's course paper was to develop a scoring rubric. For the problem-based course paper, students are given a completed database
to study. Utilizing the Classroom Assessment Technique called Problem Recognition Tasks (Angelo \& Cross, 1993), they students are to 1. determine if it meets the definition of a relational database, 2 . elect and explain one relational database theory about their database (i. e. the relational model, dependency, normalization), 3. determine what database programming language was used to create it, 4 . discuss database design model, and 5. explain one technique they'd use to extract data from it. The scoring rubric and letter grades for the course paper is below. Criteria| 2 points| 1 point| 0 points| Determine if the database meets the definition of a relational database and provides supporting research to explain their reasoning for the decision. Correctly determines if the database meets the definition of a relational database and provides supporting research to explain their reasoning the decision. | Correctly determines if the database meets the definition of a relational database and but doesn't provide supporting research to explain their reasoning the decision. | Doesn't correctly determines if the database meets the definition of a relational database. | Thoroughly explains one relational database theory about their database. | Fully explains one relational database theory about their database. Somewhat explains one relational database theory about their database. | Doesn't explain one relational database theory about their database. | Correctly identifies the programming language use to create the database and thoroughly explains the programming language with supporting documentation. | Correctly identifies the programming language used to create the database and thoroughly explains the programming language with supporting documentation. | Correctly identifies the programming language used to create the database and but doesn't thoroughly explain https://assignbuster.com/analyze-the-adult-learner-assessment-essay/
the programming language with supporting documentation. Doesn't correctly identify the programming language used to create the database. | Correctly identifies the database design model used to create the database and thoroughly explains the model with supporting documentation. | Correctly identifies the database design model used to create the database and thoroughly explains the model with supporting documentation. | Correctly identifies the database design model used to create the database but doesn't thoroughly explain the model with supporting documentation. | Doesn't correctly identify the database design model used to create the database. Thoroughly explains what technique they'd use to extract data out of it. | Thoroughly explains what technique they'd use to extract data out of it. | Somewhat explains what technique they'd use to extract data out of it. | Doesn't explain a technique they'd use to extract data out of it. | Course Paper Letter Grades| 9-10 pts $=\mathrm{A}|7-8 \mathrm{pts}=\mathrm{B}| 5-6 \mathrm{pts}=\mathrm{C}|3-4 \mathrm{pts}=\mathrm{D}| 0-2$ pts $=\mathrm{F} \mid$ A series of steps were taken to arrive at the scoring rubric. First, the intended learning outcomes were evaluated and used to construct the items needed to be graded on.

Second, the focus of the assessment was determined by determining where the emphasis should be placed. It was determined that it should be focused on a process of examining a database for certain attributes. Third, it had to be determined if this would take the form of a paper-and-pen test or a practical exam. It was determined it would be best to be a paper-and-pen test due to the time constraints of such a task. Forth, the performance situation was determine to be a identification test because the students need to be able to do this in a real world setting.

Lastly, the method ofobservationchosen is the scoring rubric because they will provide the instructor with an objective scoring guideline, and they will give the students a clear guideline of what is expected of their final paper. (Waugh \& Gronlund, 2013). In conclusion, the goal of this paper was to demonstrate assessment in an information technology course at a community college. The overall goal of instructing is to provide the highest possible quality of learning. Assessments, in forms of varying degrees, can be utilized to ensure this is happening.

Specifically, the problem solving assessment described here will be a driving force in directing students' efforts towardcritical thinkingand real world applications. Appendix A IS100 - Introduction to Databases Unit 1 Assessment Name:

Date:
Assessment Instructions: This test is being given to assess your understanding of the theory, history, and evolution of the relational database. The Assessment Administrator will monitor your progress during the est to ensure students are completing their own work and not sharing their responses with others. Multiple Choice Directions: For each of the following multiple-choice questions, please select the best answer for each question and circle the letter to the left of the answer you have chosen as the most appropriate response. || Question 1: Which of the following databases was an early implementation of the relational model developed by E. F. Codd ? A. IDMS B. DB2 C. dBase-II D. R: base Question 2: An online commercial site such as Amazon. om is an example of $a(n)$ : A. single-user database B. multiuser database C. e-commerce database D. data mining database Question 3: Which of the following was the first to
implement true relational algebra in a database? A. IDMS B. dBase-II C. Oracle D. R: base Question 4: The acronym SQL stands for: A. Structured Query Language B. Sequential Query Language C. Structured Question Language D. Sequential Question Language Question 5: The following are functions of a relational database except: A. creating and processing forms B. creating databases C. rocessing data D. administrating databases Question 6: Which of the following databases implemented the CODASYL DBTG model? A. IDMS B. dBase-II C. DB2 D. R: base Question 7: All the following are database models except: A. Spreadsheet Model B. Relational Model C. Hierarchical Model D. Object-Oriented Model ||Question 8: Today's banking systems use this type of database: A. Analytic database B. Operational database C. Network database D. Hierarchical database Question 9: The term Relational Database Management System (RDMS) was coined during the: A. 1950s
B. 1960s C. 1970s D. 1980s Question 10: All of the following are popular database query languages except: A. SQL B. OQL C. XML D. MySQL TrueFalse Directions: For each of the following true-false questions, indicate a True response by circling the $T$ next to the question and a False response by circling the F next to the question being answered. Question 1: A database is called " self describing" because it contains a description of itself. T F Question 2: One of the reasons why OODBMS is no longer used for today's businesses is because OOP is obsolete. T F

Question 3: In an enterprise database system, users interact with database applications, which directly access the database data. T F Question 4: Microsoft Access is a database management system. T F Question 5: Prior to

1970, all data was stored in separate files, which were mostly stored on reels of magnetic tape. T F Question 6: SQL is an internationally recognized standard language that is understood by all database management system products worldwide. T F Question 7: Databases that contain historical and summarized information are usually called data warehouses. T F

Question 8: As legacy file-based systems and applications become candidates for reengineering, the trend is overwhelmingly in favor of replacing file-based systems and applications with database systems and applications. T F Question 9: A central focus of database theory is on understanding the complexity and power of query languages and their connection to logic. T F Question 10: The Object Oriented database model is best described by organizing data into a tree-like structure, implying a single upward link in each record to describe the nesting, and a sort field to keep the records in a particular order in each same-level list.

T F Short Answer Directions: For each question, hand write your answer below each question. If additional paper is needed, please ask the Assessment Administrator. 1. Briefly explain three of the twelve rules of E. F. Cobb's relational database theory. 2. Briefly explain the three views (schema) of a DBMS. 3. List two advantages and two disadvantages of using a DBMS. References AccessComputing. The Alliance for Access to Computing Careers. Retrieved September 9, 2012 from http://www. washington. edu/accesscomputing. Angelo, T. A. , \& Cross, K. P. (1993).

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