**ED 524-Problem of Teaching Arithmetic**

1. There are many examples of common errors in elementary school mathematics. How would you approach diagnosing and re-teaching the child for the following errors?
   1. Lacks mastery of basic subtraction combination.
   2. Lacks mastery of basic multiplication combinations.
   3. Lacks mastery of basic division combinations.
   4. Subtracts incorrectly within division combination
   5. Fails to complete division; stops at the first partial quotient.
   6. Confuses role of zero in subtraction with the role of zero in multiplication.
   7. Omits zero in quotient
   8. Carries wrong number
2. Before learning to count in any system, three concepts must be mastered: Sequence of the symbols, symbols used, and the value of symbols. Discuss your order of presentation when working with a student who is learning to count in the Hindu-Arabic system.
3. Describe an activity that relates primary (grades K-30 and also upper elementary (grades 4-6) students’ everyday experiences to a lesson on the value of learning mathematics.
4. What mathematical thinking processes do the National Council of Mathematics Teachers (NCTM) Publications “Principles and Standards and Curriculum Focus Points,” recommend be taught through mathematics instruction to all students, including those are struggling with mathematics?
5. Why is mathematics important in the primary (grades K-3) and upper elementary (grades 4-6)? Provide an activity to illustrate your point for each grade level.
6. What mathematical thinking processes do the National Council of Mathematic Teachers (NCTM) Publications “Principles and Standards and Curriculum focus Points,” recommend be taught through mathematics instruction to all students, including those who are struggling with mathematics?
7. Define & discuss the following terms: conceptual and procedural errors.

**ED 525-Teaching Reading**

1. Reading is viewed as having sets of basic sub-skills; list several. Explain how each of the basic sub skills that you listed “fit” as a developmental factor of reading maturity of the student.
2. List several different kinds of standardized reading test and indicate their strengths, weakness, and outline typical classroom applications for each.
3. What is the transactional theory of reading?  How is it different from the bottom-up theory or reading?  Provide examples.
4. How are basals used for instruction?  What is an individualized reading program?
5. Discuss the importance of Literacy Instruction in all Content Areas?
6. Discuss Mississippi’s Third Grade Reading Gate. Explain its impact on Students, Parents & Teachers.
7. What is the transactional theory of reading? How is it different from the bottom-up theory of reading? Provide examples.
8. How are basals used for instruction? What is an individualized reading program?
9. How can a teacher prepare a context for successful early learning experiences? How can a teacher effective talking and listening activities?
10. What role should phonics play in beginning reading instruction? What are exemplary phonic instructions?

**ED 527- Evaluation Measurement**

1. Write a short essay describing evaluation and measurement. In the evaluation description indicate what the general or typical format should include. In the measurement description include the typical concept or measurement tools that are generally employed or utilized. Your charge is to convince the reader that you understand these two concepts and how they should work and be used together.
2. Explain the purpose of measurement and evaluation for teachers and educators. Outline the relationship among sound classroom educational decision making, problem solving, measurement and evaluation.
3. Discuss the effects of testing on students. Within your discussion, provide an example of how you can identify those effects in your classroom. What are the consequences of not testing?
4. Define norm-reference and criterion-reference tests. What are the similarities between each test? What are the differences? Provide a situation in which a criterion-reference test would be more suitable to use, with students, as compared to using a norm-reference test.
5. Discuss reliability. Include in your discussion the methods of estimating reliability as well as a detailed description of each. What effects will increasing the number of tasks have on reliability? What effect would removing ambiguous test items have on reliability? What effect would changing test items from multiple-choice to an essay type test have on reliability?
6. Discuss validity. Include in your discussion the major considerations in assessment validation and explain each one. Identify five (5) factors that influence validity and provide a detailed example of each.
7. What are published tests? What steps should be taken when administering published tests? Identify three (3) ways that published test results can be used in an educational setting. Identify three (3) ways that published test results should not be used in an educational setting. Provide a rationale

**ED 516-Problems and Trends in Elementary Science**

1. Describe at least four sources from which social studies teachers can gather “content” ideas and materials.
2. Discuss in detail, how social studies can contribute to the attainment of the Central Purpose of Education as stated by the Educational Policies Commission.
3. Explain why values and character education be taught in schools today, provide real world examples and experiences? (at least one page minimal for question)
4. List and explain the four goals of social studies? (one paragraph must be written for each of the four goals)

**(Questions 3 and 4 must be answered as a pair)**

**3**. What is a lesson plan?

**4.**  Create a Lesson Plan for an elementary social studies classroom (select one grade level 2nd- 5th). The following components must be incorporated in the lesson plan:

a. Date

b. Objective/standard

c. Materials/resources

d. Initiating activity/interest building

e. Procedures/teaching strategies/lesson development

f. Assessment

g. Possible follow-up/expansion/integration

The lesson plan explained in depth which will give the audience/reader a visual picture of how the lesson will be delivered.

5. List some classroom management skills and strategies that teachers can use to ensure a calm climate when students are engaged in debating.

6. List some strategies that teacher can use to defuse potential arguments.

7. How can social studies teachers cover in depth materials without relying on lectures and whole group discussions? (Hint: explore bloom’s taxonomy to use various levels)

8. How can social studies teachers make connections to student’s lives and connect it to world events around the globe?

9. How can social studies teachers get away from relying solely on the textbook?

**ED 526-Problems and Tends in Elementary Science**

1. Name and describe at least four ways that you can personalize the science instruction for your students.
2. Science education reformers have recommended inquiry as the preferred instructional method for elementary science classes because it directly engages students' thinking about a problem, usually in the form of a scientific investigation. The buzz phrase “hands on, minds-on” science encapsulates the philosophy of many science educators who want to move classroom practice beyond the isolated use of science textbooks or predigested verification labs. Explain science as inquiry to one of the content standard categories for K-4 of the National Science Education Standards.
3. Inquiry is seen as a way of teaching and learning about science that reflects how science itself is performed by scientist every day.  The 5E model describes an effective way to promote inquiry in the classroom.  The “Indicators for Inquiry,” include Engage, Explore, Explain, Elaborate, and Evaluate.  Explain each in the context of a teacher delivering a lesson to a science classroom.
4. Identify ways that a field trip can be planned to incorporate three phases of learning-input of data, processing of data and application of data.
5. Explain & discuss how each of the following 5E modes (Indicators for Inquiry) are used to deliver a science lesson: Engage, Explore, Explain, Elaborate, and Evaluate.
6. Discuss the three phases of learning (input, processing and the application of data). Identify how each of these phases can be incorporated into a class activity?
7. Discuss the term: developmental appropriate practice. Describe at least four

instructional practices that are considered developmental appropriate for teaching

science to all K-8 students and explain why these practices are developmentally

appropriate.