

上海师范大学 2003 年硕士研究生入学考试试题

专业：教育技术学(040110)

考试科目：教学设计(426)

一、解释下列名词：（每题 5 分，共 30 分）

- (1) 教学设计：
- (2) e-Learning ：
- (3) 学习对象：
- (4) Portfolio ：
- (5) 教育信息化：
- (6) 课程与信息技术整合：

二、简答题：（每题 10 分，共 40 分）

- (1) 教学设计的肯普模式。
- (2) 英特尔未来教育的信息化教学设计模式。
- (3) WebQuest 的教学设计步骤。
- (4) 简述教学设计的由来和发展。

三、问答题：（每题 15 分，共 30 分）

- (1) 论述布鲁姆教学目标分类学认知学习领域目标分类及其对教学设计的意义。
- (2) 分析杜威学派的“设计教学法”及其对今天教学改革的意义。

四、设计题：（每题 25 分，共 50 分）

(1) 阅读下面的国外教案，分析和评价该教案的特点，参考该教案，设计一个自己的教案。

国外教案实例：

Unit Plan Title:

PONDAMANIA Students Exploring Pond Viability

Curriculum-Framing Questions:

Essential Question:

Why is water important?

Unit Questions:

1. Can we construct a pond that will function as a naturally occurring pond?
2. How does the water quality of a naturally occurring pond compare to the ponds of the world?
3. Is the water quality of Sewall Pond adequate enough to support a healthy environment of aquatic organisms and recreational activities, such as

swimming, fishing, and drinking water?

Unit Summary:

This interdisciplinary unit combines mathematics, science, and language arts skills to solve problems that involve the investigation of water quality in a town of Boylston pond and a student made pond.

The students will perform scientific tests on both ponds and produce lab reports. They will collect and enter data on the Internet database for the Global Water Project and submit a project based on their interpretations of the data. In addition, they will create charts and graphs. Students will create newsletters and post pictures and texts from their pond studies to the school-Web site. Students will create and present presentations to the class. As an enrichment extension, some students will present a special PowerPoint presentation to the Town Administrator highlighting their water quality conclusions with recommendations for Sewall Pond. They will also E-mail the results of their findings with the appropriate attachments to the Town Administrator of Boylston and will maintain a database of findings to keep a record of changes to Sewall Pond over time. All students will be creating a portfolio to show the progress of their work. Ultimately the students will answer the questions presented and developed during the project by giving concrete proof to support their conclusions.

Student Objectives/Learning Outcomes:

Students performs several tests on a natural pond and on a constructed pond in order to:

- Evaluate the physical, chemical and biological status of the water
- Compare data from the two environments and make conclusions based on these comparisons
- Identify macro and microorganisms in the water in both pond environments
- Evaluate usage criteria: aquatic life, swimming, boating, fishing, agricultural usage on Sewall Pond

Lesson Outcomes Include:

- Use the Scientific Method to solve the problem presented
- Use scientific equipment such as microscopes and slides
- Demonstrate mathematical ability to assess reasonableness of results, use estimation techniques, select appropriate measurement tools
- Use spreadsheet to organize and analyze data and to create charts and graphs that represent data relationships

- Prepare scale drawings
- Determine perimeter, area and volume using the metric system to solve problems
- Explore patterns and relationships between data, represent this data in multiple formats

Make conclusions supported with sound mathematical scientific reasoning

Procedures:

SEWALL POND: Students will be performing a variety of tests at this site.

The tests for this unit include: temperature, pH, Dissolved Oxygen, Nitrates, Turbidity, Plant Life, Animal Life (micro and macro organisms).

The procedures for the Water Quality Tests can be found in any water testing manual. This unit used the Water Quality Tests Manual produced by the Massachusetts Water Resources Authority (MWRA).

"ACE" POND: After construction students will perform the same tests performed at Sewall Pond.

Construction

1. Individual or small groups will design a scale model of the created pond.
2. A design will be selected and the "building" begins. Based on your design, construction will vary. We will be using a children's swimming pool but any garden supply center has pond set up instructions.

Testing: will occur in both sites once every 3 weeks

Testing Months: Fall-September, October, November, Spring-Late March, April, May

Kingdom Studies: Students will be using both sites throughout the school year to identify organisms from the Moneran, Protista, Fungi, Plant, and Animal Kingdoms.

Mathematics classes:

Spreadsheets and Graphs: Students will be taught Excel basics.

Pond Design: Students will work with scale drawings. Will also have an opportunity to observe a CAD class.

Surveys: Will use Data Explorer software.

Charts and Graphs: Study the use of graphs as communication. What type of graph to use for best results.

Journal: Students will use journals to explain the meaning of articles, graphs and to answer questions.

Measurement: Perimeter, Area and Volume will be taught in the curriculum.

Technology Skills:

The technology skills necessary to complete the project will be taught within various classes with the assistance of the media specialist.

Microsoft Excel: Taught in math classes

Internet: All classes with assistance from Media Specialist

Microsoft PowerPoint: Language Arts and Media Specialist

Microsoft Publisher: Language Arts and Media Specialist

Web site Construction: Math, Science and Language Arts classes

CD: Taught in Math, Science, and Library

Electronic Media: Taught in Library

Approximate Time Needed:

This project will continue throughout the school year. Water testing will be in the Fall and the Spring but other aspects such as research and microscope work will continue throughout. The mathematics and Language Arts lessons will correspond throughout the year as necessary to support the project.

Prerequisite Skills:

1. Basic Mathematics, Science and Language Arts Skills
2. Lab Safety Skills
3. Some Computer Literacy such as keyboarding, Word Processing and Internet inquiry

Accommodations for Differentiated Instruction:

Resource Student:

1. Alpha Smart for all journal writing, lab reports, and question sheets
2. E-reader for Encarta and other research material when available
3. Modified Lab reports and procedures
4. Modified Quizzes and Tests

Peer support and small group support during unit

Gifted Student:

1. PowerPoint presentation on the level of usage of Sewall Pond using the criteria of aquatic life, fishing, swimming, boating, recreational and agricultural use and comparing this to the U.S government survey on Lakes, Ponds, and Streams.
2. Create and maintain database information to be updated yearly and made available to the town administrator.

E-mail final report to Town Administrator on Sewall Pond.

Student Assessment:

1. Homework

2. Written quizzes and tests (see generic math rubric)
3. Oral responses
4. Language Arts Journal
5. Mathematics Journal
6. Science Lab Reports (see generic rubric)
7. Question Sheets (see Global Water Project Questions)
8. Report for Global Water Online Project
9. Vocabulary
10. Computer competence in PowerPoint (see rubric), Excel, Publisher, Web page production, general use of Internet, CD materials and disks to a level of competence that allows them to satisfactorily complete their work.
11. Use E-mail if applicable.

(2) 用自己的语言续写安徒生童话《皇帝的新装》，设计一个概念图说明故事的发展线索，然后以中学生的身份在故事板上设计演示文稿 PowerPoint 展示自己的创意。

附：参考资料 《皇帝的新装》故事的结尾：

这样，皇帝就在那个富丽的华盖下游行起来了。站在街上和窗子里的人们都说：“乖乖！皇上的新装真是漂亮！他上衣下面的后裙是多么美丽！这件衣服真令他的身材！”谁也不愿意让人知道自己什么也看不见，因为这样就会显出自己不称职，或是太愚蠢，皇帝所有的衣服从来没有获得过这样的称赞。

“可是他什么衣服也没穿呀！”一个小孩子最后叫了出来。

“上帝哟，你听这个天真的声音！”爸爸说。于是大家把这孩子讲的话私自低声地传播开来。

“他并没穿什么衣服！有一个小孩子说他并没穿什么衣服呀！”

“他实在没穿什么衣服呀！”最后所有的百姓都说。（皇上有点儿发抖，因为他觉得百姓们所说的话似乎是真的，不过他心里却这样想：“我必须把这游行大典举行完毕”因此他摆出一副更骄傲的神气。他的内臣们跟在他后面走，手中托着一条并不存在的后裙。