

ED591 Curriculum and Instruction

Capstone

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“When it comes to technology integration, proponents and critics, alike, search for proof that technology in the classroom can make learning more meaningful, engaged, and sustained.” (NCREL) I believe that this lesson proves that technology can be used to integrate core curriculum into a meaningful and exciting activity for Middle School students. I feel fortunate to be in a position to use my passion for technology in the classroom. The way students gravitate toward computers, integrating technology into core curriculum seems to be a natural and logical progression.

THE LESSON

Please see attached file for actual lesson plan and rubric.

The lesson I chose to teach involved integrating elements of Social Studies, English and Technology. “Students become excited with technology. They progress faster, are not afraid of it, and receive immediate feedback.” (Snead) Because of this, students are more able to absorb other disciplines that are riding on the coattails of technology.

In this mini-lesson, which is phase one of a larger unit that includes a culminating presentation and speech, students are to choose any date in the year. Most students choose a meaningful date, such as their birthday. They will then research that date on the Internet. “Today in History” web sites will allow students to enter a date and then be linked to many facts that occurred on that date. Once facts are found, the student will transfer that information to Microsoft Word. The students will then share the information that they found in a group setting. By sharing information and peer coaching, students will learn different sources of information that they can use for their research. My hope is to channel 7th grade social energy into something productive for all students.

INSTRUCTIONAL DESIGN

By examining the two models of instructional design (ISD and CID), I believe that my lesson more closely aligns with ISD. “The purpose of designed instruction is to initiate and provide support for the learning of the student.” (Merickel) By using a specific rubric, students were aware of the expectations and goals of this lesson. To develop this lesson, I determined what skills needed to be taught and carefully considered the technical competency that they currently had. Because “Instructional systems design places a high level of importance on the selection and development of learning materials,” (Merickel) I felt that it was valuable to use a PowerPoint presentation as an introduction to the learning objectives of this lesson and to develop a student guide and rubric assessment.

ASSESSMENT

In this lesson, I used formative and summative assessments to record how well students accomplished learning goals. I informally observed students through each step of the lesson and encouraged each of them to interact and assist each other. I feel that by giving immediate verbal feedback, students were more focused on their tasks and clearly understood the goals of the lesson. I believe that this is a good example of Zeta assessment from the ISD model because it “involves continuous assessment and evaluation in which regular feedback is used to monitor and make corrective changes if necessary.” (Merickel)

I developed a rubric that focused on five specific technical and communication skills. They were selecting a date, gathering facts, transferring information, sharing information, and assisting others. This was the first rubric I developed and I feel that it makes assessment much easier and consistent. At the beginning of the lesson, I handed out the rubric so the students could actually see what was expected of them. During the course of the lesson, I noticed several students referring to the rubric to make sure they accomplished their goals. The expectations were clear and the students’ performance was surprisingly high, even for some of the low learners.

At the end of the lesson, I asked the students to use the same rubric to grade themselves. I initially was unsure how objective the students would be in their self-assessment but I was pleasantly surprised at how honest they were. Some students were actually harder on themselves than necessary but most were about the same as my assessment. I think that by providing specific and clear goals in the form of a rubric and by providing immediate feedback and assistance, the students were led to be objective about their own performance.

REFLECTION

Overall, I believe the execution of this lesson was successful. I do feel, however, that some modification would improve the flow and structure as well as streamline the tasks required. The rubric had the students collect facts and graphics to transfer to Word. During phase one of the complete unit, it isn’t necessary to get graphics. In phase two, students will begin to research information on specific facts and therefore should collect them at that time.

In the Transferring Information section of the rubric, I had the students use different methods of moving information to Word. One was to copy and paste text and the other way had students save a page into a text format. Unfortunately, the sites that the students used did not save well in a text format due to frames and embedded code. Because of this, I rescinded that part of the rubric.

From the general responses of the students and especially by observing their interactions with each other, the idea of integration seemed to succeed. The students compared notes with each other and acquired knowledge in the areas of Social Studies, English, Communication and Research. Dr. Barnett Sturm, Cairo-Durham superintendent, says, “In the information age, it is the schools that motivate students with interesting and real instruction that will achieve the highest levels of success. Schools will rely more on technology to challenge students’ thinking and to provide multiple modes of learning and restructure our schools as modern organizations.” (Sturm)

REFERENCES

North Central Regional Educational Laboratory.
<http://www.ncrel.org/info/curriculum/>

Dr. David Snead
Curriculum Administrator Magazine, Dec. 1999
Article: Tech-Ed for the 21st Century
by Marcia H. Tress

Dr. Barnett Sturm
Curriculum Administrator Magazine, Dec. 1999
Article: Tech-Ed for the 21st Century
by Marcia H. Tress

Integration of the Disciplines, Instructional Systems Design.
Dr. Mark L. Merickel v4.0, 1998.

This Day in History

Lesson by
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Subject Area: Technology/Computer Applications

Grade Level: 7 - 8

Topics/Disciplines Covered:

- Social Studies
- English
- Word Processing
- Communication
- Research and Internet Search Skills

Materials Required:

Technology

- Internet Access
- Internet Explorer or Netscape
- Microsoft Word
- CD-ROM and Internet based encyclopedias

Printed

- Student Guide
- Teacher Guide

Lesson Summary

In this project, students will choose a date and, using search engines on the Internet, locate several "Today in History" sites. The student will then research facts (text and graphics) about their date and save the information to disk and/or copy and paste it into Microsoft Word. Students will also share and collaborate on facts and assist each other with technical issues. This mini-lesson is the introduction to a larger unit that will include more research on the Internet, working with Microsoft Word and creating a PowerPoint presentation.

Rationale

Since this lesson will be taught in Technology/Computer Applications class, the emphasis will be on how efficiently students use concepts learned in the Internet and Word Processing strands of the curriculum. By providing a cross-curricular activity, students will have a better appreciation of how technology can be used as a tool to make core classes more meaningful.

This project can be used as the culmination of the Internet and Word Processing units used in Technology/Computer Applications class.

Benchmarks/Standards

The following 8th Grade standards are addressed:

English

- Locate information and clarify meaning by using tables of contents, glossaries, indexes, headings, graphs, charts, diagrams, and/or tables.
- Convey clear, focused main ideas supported by details and examples in ways appropriate to topic, audience, and purpose.
- Communicate supported ideas using oral, visual, written, and multi-media forms in ways appropriate to topic, context, audience, and purpose. (English Communication Common Curriculum Goal)

Social Sciences

- Represent and interpret data and chronological relationships from history, using timelines and narratives.
- Clarify key aspects of an event, issue, or problem through inquiry and research.
- Gather, interpret, use, and document information from multiple sources, distinguishing facts from opinions and recognizing points of view.

Technology (Common Curriculum Goals)

- Demonstrate understanding of technological concepts and processes, and their relationship to and impact on other disciplines.
- Apply technological concepts and processes to solve practical problems and extend human capabilities.

Additional benchmarks will be addressed in next two phases of this lesson. They include:

- Use correct spelling, grammar, punctuation, capitalization, paragraphing, and citations.
- Recognize and explain causes and effects of significant events in history, and identify patterns of change and continuity over time.
- Represent and interpret the general chronology of world history, using timelines and narratives.

Lesson Goals

During the course of this lesson, students will learn to appreciate the importance of Internet research skills. They will also understand how to transfer information off of the Internet to Microsoft Word.

Learning Objectives

As a result of this lesson, students will successfully be able to:

- Select a date and locate web sites that contain “Today in History” information.
- Gather facts and graphics off of web sites about their selected date.
- Save information from web sites to Microsoft Word AND copy and paste text and graphics for a web browser to Microsoft Word.
- Work together to help troubleshoot any questions or concerns throughout the lesson.

Lesson Introduction/Anticipatory Set

To introduce this lesson to the class, a PowerPoint presentation will be shown explaining in detail the requirements for the lesson. This lesson acts as a springboard in that the students are gathering facts in anticipation of future lessons that will involve more fact research and ultimately a PowerPoint presentation.

Learning Activities

1. Student selects date for research.
2. Student locates web sites containing “Today in History” information.
 - Use several search engines to locate sites.
 - Sample search sites are located in Teacher and Student Guide.
 - Place words “Today in History” in quotations.
3. Student will transfer information to Microsoft Word.
 - Copy and Paste text and graphics from Web Browser to Word.
 - Save web sites as text file and open in Word.
4. Students will work together for sharing/troubleshooting.
 - Students will orally share information with the class.
 - Students will be assigned to assist others in the class.

Assessment and Evaluation

Formative Assessment – Teacher will informally check students’ progress to make sure that they are meeting lesson objectives (i.e. selecting date, gathering facts, saving information, sharing fact information orally).

Summative Assessment

| | 4 | 3 | 2 | 1 |
|---------------------------------|---|---|---|---|
| Selecting Date | Student selects date on their own initiative. | Student seeks assistance from class peers or teacher. | Student has difficulty selecting date but eventually does. | Student has to be assigned date by teacher. |
| Gathering Facts | Student uses 4 or more web sources and gathers more than 8 facts and 5 relevant graphics. | Student uses up to 3 web sources and gathers up to 8 facts and up to 5 relevant graphics. | Student uses up to 2 web sources and gathers up to 5 facts and up to 3 relevant graphics. | Student uses only one source and gathers less than 5 facts. Graphics are not relevant to project. |
| Transferring Information | Student uses copy/paste and text file saving off a web site. | Student uses text file saving off a web site to transfer information. | Student uses copy and paste method to transfer information. | Student manually types information into Word. |
| Sharing Information | Student enthusiastically gives oral report of their facts in a clear, organized manner. | Student gives oral report with adequate organization and facts. | Student has difficulty giving oral report but provides adequate organization and facts. | Student has difficulty giving oral report and provides little organization and few facts. |
| Assisting Others | Student enthusiastically assists others in a meaningful and constructive way. | Student is willing to assist others and provides adequate help. | Student has difficulty assisting others and needs encouragement to do so. | Student does not assist others. |

This Day in History

Student Guide

This Day in History -Part One

Select any day of the year to research.

You may choose:

- ✓ your birthday
- ✓ a historic date
- ✓ a date that you know will contain many facts
- ✓ or any day you wish

Use several search engines to locate “Today in History” web sites.

AltaVista – www.altavista.com

Excite – www.excite.com

Yahooligans – www.yahooligans.com

Searchopolis – www.searchopolis.com

HotBot – www.hotbot.com

InfoSeek – www.infoseek.com

DogPile – www.dogpile.com

Yahoo – www.yahoo.com

Some “Today in History Sites include:

- ✓ This Day in History
www.historychannel.com/thisday/
- ✓ Today in History
www.amomentintime.com/today.html
- ✓ Yahoo Today in History
www.yahoo.com/Arts/Humanities/History/Today_in_History/

Use two methods to transfer information to Word.

- ✓ Save the information found at each site to your folder on the hard disk.
- ✓ Copy/Paste information (text and graphics) from Internet Explorer to Word.

This Day in History -Part Two

Based on your findings, organize your facts into categories. Consider using categories such as:

- ✓ American History
- ✓ World History
- ✓ Science
- ✓ Sports
- ✓ Inventions
- ✓ Human Interest
- ✓ Birthdays
- ✓ Hit Songs

Using the Internet, World Book Online, and other multimedia sources, research each fact.

Some Facts about Facts

- ✓ Include where the person lived, their nationality, and where they lived.
- ✓ What was their accomplishment? Include Internet links if you wish.
- ✓ What impact did their accomplishment have?
- ✓ In the same field of study.
- ✓ In our “quality of life”.
- ✓ Include graphics where appropriate.