ED 423 818   IR 018 952

AUTHOR   Burton, Larry D.
TITLE   Embracing the World: Linking K-16 Students through
              Technology.
PUB DATE   1998-04-09
NOTE   67p.
PUB TYPE   Reports - Descriptive (141)
EDRS PRICE   MF01/PC03 Plus Postage.
DESCRIPTORS   *Computer Mediated Communication; *Cooperative Programs;
              *Elementary Secondary Education; *Higher Education;
              Instructional Innovation; Instructional Materials; Learning
              Activities; Program Development; Program Implementation
IDENTIFIERS   *Andrews University MI

ABSTRACT
        This document includes materials that accompanied a
presentation focused on sharing with educators the "Intel-ebration" program.
The Intel-ebration program is designed to connect K-16 students in a
collaborative educational adventure. Each year the developer of the program
collaborates with an academic department at Andrews University (Michigan) in
an effort to offer K-12 students the opportunity to accompany college
students on a virtual academic tour. A curriculum team is lead to develop
learning materials that prepare the elementary and secondary students for the
academic tour. The presentation briefly outlined the entire Intel-ebration
program including the collaboration between different departments on the
campus. The major portion of the presentation concerned the curriculum
development process used in making the learning activities for students. The
curriculum team used a non-linear curriculum development process. This
presentation described the shape and motion of the Intel-ebration program and
allowed the opportunity for participants to analyze the curriculum and its
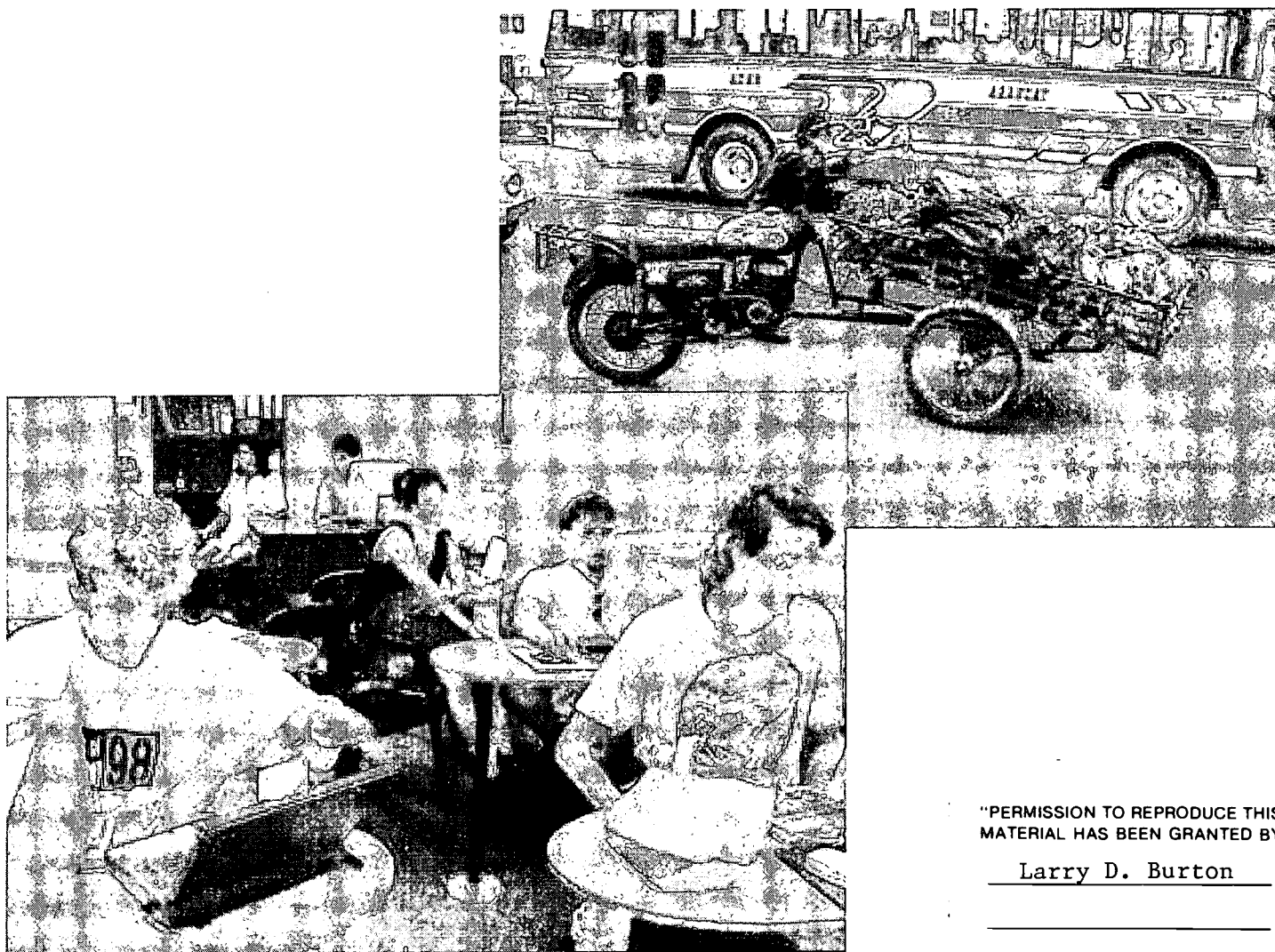components to see if it was true to its defined shape and motion. (AEF)

Embracing the World

Linking K-16 Students Through Technology

Presenter
Larry D. Burton

Phi Delta Kappa
Andrews University Area Chapter
April 9, 1998

Embracing the World: Linking K-16 Students Through Technology

Presentation by Larry D. Burton

Narrative Description

This presentation was given at a local meeting of the Andrews University area chapter of Phi Delta Kappa. The purpose of my presentation was to share with local educators the Intel-ebration program which I developed.

The Intel-ebration program is designed to connect K.-16 students in a collaborative educational adventure. Each year I collaborate with an academic department at Andrews University to in an effort to offer K-12 students the opportunity to accompany college students on a virtual academic tour. I lead a curriculum team to develop learning materials that prepare the elementary and secondary students for the academic tour.

My presentation briefly outlined the entire Intel-ebration program including the collaboration between different departments on the campus. The major portion of the presentation concerned the curriculum development process used in a making the learning activities for the students. The curriculum team uses a non-linear curriculum development process. In a non-linear curriculum development process, curriculum developers focus on both the shape and the motion of the curriculum. This presentation described the shape and motion of the Intel-ebration program and allowed the opportunity for participants to analyze the curriculum and its components to see if it was true to its defined shape and motion.

Note-taking Guides
Embracing the World

Embracing the World

Linking K-16 Students Through Technology

Intel-ebration Expedition

Program Components

- The curriculum
- The expedition
- The connection

The Curriculum

The Brain of Intel-ebration Expeditions

- A unique development process

- A unique "shape"

- A unique "motion"

Non-linear Curriculum Development

"Order Will Emerge"

The non-linear process followed by the Intel-ebration curriculum development team is based on the idea that the creation of curriculum relies on a constant interaction of curricular "ideals" and "components" throughout the development process.

12

The Idea of Non-linear Processes

Ideas from the Sciences

■ Fractals are developed through repeated iterations of a few equations. Initially fractal development can almost appear chaotic, yet "after countless iterations, their tracks materialize into form. . . . Everywhere in this minutely detailed fractal landscape, there is self-similarity."

■ Wheatley, 1994

Fractal Qualities

Of a Non-linear Curriculum

- The shape of a non-linear curriculum is identifiable and stays within the parameters of its strange attractor

- The shape of a non-linear curriculum exhibits self-similarity (the whole is identifiable in the part)
  - © Larry Burton, 1998

15

16

Fractal Qualities
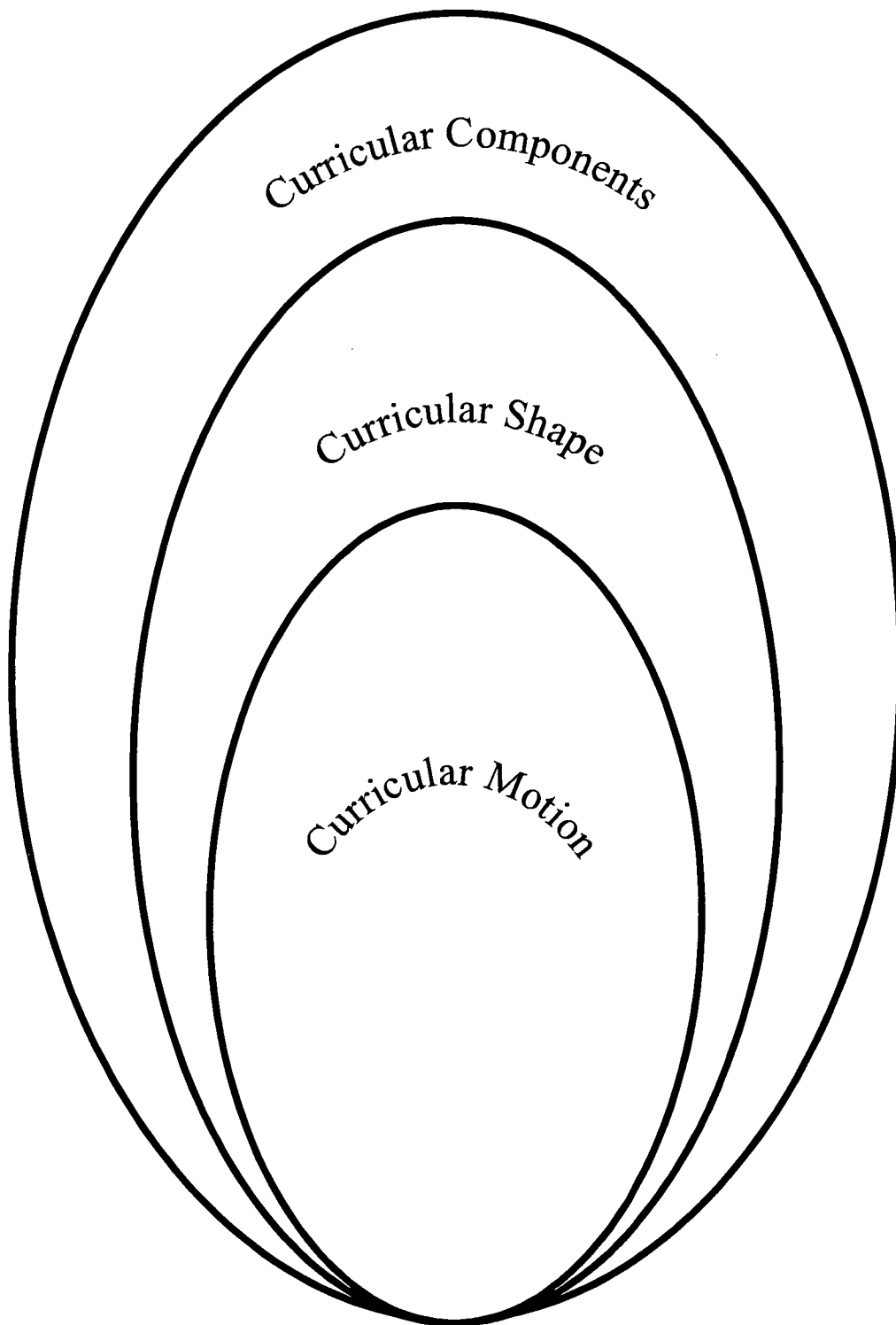
Of a Non-linear Curriculum

■ The motion of a non-linear curriculum is established through the process of successive iteration.

■ The motion of a non-linear curriculum is exhibited through the documented change and development that occurs over time

 — © Larry Burton, 1998

17

18

Curricular Interaction

Curricular Components

Curricular Shape

Curricular Motion

Team Interaction

Non-linear Curriculum Development
Creating the Environment

- Team interaction
  - ▲ Creation of synergy
  - ▲ Establish team culture
- Curriculum interaction
  - ▲ Check for self-similarity
  - ▲ Successive iteration
    - © Larry Burton, 1998

20

To achieve a specific curriculum motion:

- A curriculum development team with membership based on expertise

- A commitment to the non-linear process
  - © Larry Burton, 1998

- Action precedes planning
  - Wheatley, 1994

22

23

To achieve an identifiable curriculum shape:

- A shared instructional framework
- A shared curriculum design
  - © Larry Burton, 1998

25

The Strange Attractor

IE's Instructional Framework

- ■ Dimensions of Learning
- ■ Cooperative Learning
- ■ Instructional Technology
- ■ Project-based Learning

27

26

The Strange Attractor

IE's Curriculum Design

- Multiple Intelligence Theory

- Multi-age Design

- Thematic Instruction

The Search for Self-similarity

Activity Pause

- Study the two sample activities provided in your handout

- Find evidence that each activity falls within the boundaries of the strange attractor

31

The Expedition

The Heart of Intel-ebration Expeditions

- African Safari
  - ▲ 1996-97 Photo Tour
  - ▶ Don May, Tour Coordinator
- Inca Expedition
  - ▲ 1997-98 Anthropology Tour
  - ▲ Sten LaBianca, Tour Coordinator
- Galapagos!
  - ▲ 1998-99 Photo Tour
  - ▶ Don May, Tour Coordinator

What Happens

On the Expedition?

- College students work on course requirements

- Intel-ebration technology coordinator receives questions from K-12 students

- Expedition members answer questions

- Expedition members write field journals

- Technology coordinator posts photos, answers to questions, and field journals

34

35

What happens

In K-12 Classrooms?

■ Completion of activites (before the expedition begins)

■ Visiting the web site during the expedition

■ Asking questions during the expedition

■ Conducting an Intel-ebration (Open House display of student projects)

37

36

The Technological Connection

The Nervous System of Intel-ebration Expeditions

- Remote Satellite Uplink or Sat Phone
- Web Site(s)
- Digital Camera(s)
- Computers
- Digital Video

33

The Intel-ebration Web Presence

Organization of Web Sites

Intel-ebration Expeditions

Safari

Inca Expedition

Galapagos

40

41

Pause for Web Site

Those Who Developed the Sites

- Sharon Prest-Ullom
- Chris Wilson
- Paul Davis
- Larry Burton
- Andy McConnell

Web Addresses

For the Intel-ebration Expedition Sites

- http://harper.educ.andrews.edu:81/intelebration
- http://www.peru.andrews.edu
- http://www.COT.andrews.edu/safari

Opportunities

For you to get involved

- Activity creation
- Curriculum development
- Implementation research

47

46

Adios :-)

43

43

Sample Activities
from *Intel-ebration Expedition* '98

Inca Expedition

People & Language of Peru

Activity Purpose(s):
To introduce students to the culture of Peru, particularly the people and language groups.

Learning Activity Goal(s):
The student will summarize an informational reading selection.
The students will teach peers.

Learning Activity Objective(s):
Reads and summarizes information
Represents information visually
Teaches peers important information

National Standards Addressed:

Language Arts: Reading
7. Demonstrates competence in the general skills and strategies for reading information
9. Demonstrates competence in applying the reading process to specific types of informational texts
10. Demonstrates competence in using different information sources, including those of a technical nature, to accomplish specific tasks

Language Arts: Listening and Speaking
11. Demonstrates competence in speaking and listening as tools for learning

Life Skills: Working with Others
1. Contributes to the overall effort of a group
4. Displays effective interpersonal communication skills
5. Demonstrates leadership skills

Life Skills: Life Work
8. Displays reliability and a basic work ethic

Technology Integrated:
- CD or on-line encyclopedias (optional)

Resources Needed:
- Information handouts for the Jigsaw
- Blank paper for visual representations
- Markers and other drawing supplies for visual representations

51

People of Peru Step-by-Step	Time allotment 45 minutes
1. Use the **Expert Jigsaw** structure. Distribute on set of the information sheets to each cooperative team.	1 min
2. Teams divide the information, giving one information sheet to each team member.	1 min
3. Students form expert groups. All students with information sheet #1 form an expert group, all students with information sheet #2 form an expert group, and so on.	2 min
4. Expert groups prepare. Individual students read the information sheets and decide on the most important information it contains. Expert groups then discuss these important facts and comes to consensus on the most important facts (5 - 7 facts is ideal).	10 min
5. Each expert group creates a visual representation to aid in teaching their information. (Note: while the group will discuss ways to do this, each individual MUST create his/her own visual aid. All of the aids may look alike or they may all look different. What is important is that the expert group discusses ways to visually represent the important facts.)	20 min
6. Experts teach home teams using their visual aids. (Allow ~2 min per student)	10 min

Quechua or Quichua, (#1)

group of indigenous South American tribes, comprising the Quechumaran linguistic stock and residing principally in Peru, Ecuador, and Bolivia. The Quechua are culturally and linguistically related to the Aymara, who inhabit the same regions of South America. The Quechua tribes, who appear originally to have lived in a small area of the southern highlands of Peru, became the most powerful element in the Incan Empire (see Inca). Quechua was the official language of the Inca, and as the empire expanded, use of the language spread over a large area of South America.

Quechuan culture was one of the most advanced in the western hemisphere before the coming of European conquerors in the 16th century. Many artistic and scientific achievements were inherited from the pre-Incan cultures of the Aymara, Nazca, and Yunca peoples, but under the Incan Empire major advances were made in social organization, architecture, engineering, and military science. After the Spanish conquest of Peru, Quechua remained the major language, and Spanish missionaries used it to teach Christianity in western South America. Since the 16th century the descendants of the original Quechua people have remained largely pure-blooded. They have retained many elements of their culture and have accepted few European customs. The Quechua language prevails even today. In 1975 it was recognized as an official language of Peru (alongside Spanish), one of the few indigenous languages of the Americas to receive official recognition. It is spoken by several million people in Peru, Bolivia, Ecuador, Chile, and northwest Argentina in many dialects, including the Cuzqueño of southern Peru and the Quiteño of Ecuador

The People of Peru (#2)

Quechua Indians are the largest ethnic group in Peru, encompassing almost half of the total population; mestizos make up nearly a third of the total and are followed by whites and Aymara Indians. There are minority populations of blacks and Asians (particularly Japanese). The Spanish, Quechua, and Aymara languages have official status. As much as nine-tenths of the population speaks Spanish, while more than nine-tenths is Roman Catholic.

Large-scale migration to coastal urban areas has restricted the development of second- and third-order urban centres farther inland. Lima, the capital, has the largest population, followed by Arequipa in the southern Sierra and Callao, which adjoins Lima. Trujillo and Chiclayo are the major cities of the northern Costa. About 70 percent of the population is urban.

About two-fifths of Peru's population is younger than 15 years of age. The extraordinarily high birth rate maintained by Peru's young population applies great pressure on all of the nation's resources and reduces gains made in social or economic areas. In an effort to reduce this high population growth, measures were introduced in 1976 to bring greater numbers of women into the labour force. Mortality rates are high, especially in rural areas. Life expectancy is a relatively low 63 years for men and 67 years for women.

Language and Religion (#3)

Spanish, spoken by some 70 percent of the people, was the sole official language of Peru until 1975, when Quechua, one of the principal languages of the Native Americans, also was made an official language. English and Aymará, another Native American language, are also spoken.

More than 90 percent of Peruvians adhere to the Roman Catholic religion. In accordance with a law passed in 1915, Roman Catholicism is the established religion of the country. Other religions are permitted and tolerated, and small numbers of Protestants, Jews, and Muslims live in Peru.

"Peru," *Microsoft® Encarta® 96 Encyclopedia.* © 1993-1995 Microsoft Corporation. All rights reserved. © Funk & Wagnalls Corporation. All rights reserved.

Spanish Language, member of the Romance group in the Italic subfamily of the Indo-European language family, spoken chiefly in the Iberian peninsula and in Latin America. The Spanish language was carried by Spanish colonists to the Canary Islands, the Antilles, the Philippines, southern North America, the greater part of South America, and the coast of Africa. In the Iberian peninsula the Spanish-language area does not coincide exactly with the political boundaries of Spain. Spain contains three non-Spanish-speaking regions: Galicia, in the northwest, where Gallegan (technically a dialect of Portuguese) is spoken; the Basque provinces, in the north, where Basque, a unique agglutinative language, is spoken; and Catalonia, along the east coast, where Catalan, also a Romance language, is spoken. Catalan is also spoken in the Balearic Islands; in France, in the Pyrénées-Orientales; and in parts of Cuba and Argentina.

"Spanish Language," *Microsoft® Encarta® 96 Encyclopedia.* © 1993-1995 Microsoft Corporation. All rights reserved. © Funk & Wagnalls Corporation. All rights reserved.

Population (#4)

About 45 percent of Peru's inhabitants are Native Americans, some of whom are descended from the Inca who established a great civilization in the region by the 15th century. Some 37 percent of the country's people are mestizos, persons of mixed white (mainly Spanish) and Native American background. About 15 percent of Peruvians are of unmixed white descent, and many of the remainder are of black African, Japanese, or Chinese ancestry. About 72 percent of the people live in urban areas.

Population Characteristics

The population of Peru (1995 estimate) is about 23,854,000, giving the country an estimated overall population density of about 18 persons per sq km (about 48 per sq mi). The distribution, however, is uneven, with about 50 percent of the people inhabiting the sierra region and about 40 percent inhabiting the coastal plain.

Political Divisions

For administrative purposes, Peru is divided into 25 departmental capital councils.

Fauna of Peru

Activity Purpose(s):
To introduce students to the bio-diversity of Peru and South America.

Learning Activity Goal(s):
The student will complete a mini-project about a Peruvian (or South American) animal

Learning Activity Objective(s):
Plans research
Conducts research on Peruvian animals
Creates product(s) for presentation to the class

National Standards Addressed:
Language Arts: Writing
4.   Effectively gathers and uses information for research purposes
Science: Life Science
1.   Knows about the diversity and unity that characterize life.
7.   Understands how species depend on one another and on the environment for survival
Life Skills: Life Work
8.   Displays reliability and a basic work ethic
Life Skills: Working with Others
1.   Contributes to the overall effort of a group
4.   Displays effective interpersonal communication skills
5.   Demonstrates leadership skills
Life Skills: Self-Regulation
1.   Sets and manages goals

Technology Integrated:
- CD Encyclopedias (if available)
- World Wide Web (if available)
- Word processing and/or graphics programs

Resources Needed:
- Reference works
- CD Encyclopedias (if available)
- World Wide Web (if available)
- Word processing and/or graphics programs
- *Exploring the Animals of Peru* handout (1 per student)
- *Animal Research Task Sheet* handout (1 per student)
- *Planning My Research* handout (1 per student)
- *Sample Final Product List* handout (1 per student)

Fauna of Peru Step-by-Step	Time allotment 45 minutes
1. Assign animal groups to each cooperative team. Each team will investigate a different category of animals. Suggested categories: Winged Wonders (birds) Slither Sliders (cold bloods) Rugged Rovers (camel cousins) Jungle Jaws (carnivores) Curious Critters (warm bloods) Hoot and Howl (monkeys)	2-3 min
2. Give students the research assignment handouts (*Exploring the Animals of Peru, Animal Research Task Sheet, Planning My Research, and Sample Final Product List.*) Within each cooperative team, individuals select the specific animal which they will research.	5 min
3. Students begin searching for the required information. (This may require from one to three class periods. I have scheduled one day of research as Inca Activity 12.)	35-40 min

Assessment:
Rubric for self-assessment of project planning and presentation
Rubric for teacher assessment of project planning
(These are included in Inca Activity 15)

Exploring the Animals of Peru

There is great variation among the animal population in Peru. One way of looking at the animals living in this country is through the seven groupings listed on this page.

Winged Wonders
(birds)
Humboldt Penguin
Guanay Cormorant
Peregrine Falcon
Giant Hummingbird
Mountain Parakeet
Peruvian Pelican
Chilean Flamingo

Curious Critters
(warm bloods)
Paca
Vizcacha
Capybara
Tapir
Chinchilla
South American Otter
Sloth

Jungle Jaws
(carnivores)
Jaguar
Spectacled Bear
Pampas Cat
Grison
Puma
Coati

Hoot & Howl
(monkeys)
Sakis
Night Monkey
Dusky Titi
Emperor Tamarin
Woolly Monkey

Slither Sliders
(Cold Bloods)
Crocodile
Boa Constrictor
Anaconda
Iguana
Piranha

Animal Research Task Sheet

1. As a group, your team must decide which individual is researching which animal. Use the animal list to provide ideas. If you want to research an animal that is not on the list, get your teacher's permission before beginning your work.

2. As a minimum requirement you must report the following information for your animal:
   1. Common name
   2. Scientific name
   3. Habitat (where in South America)
   4. Physical description:
      legs, arms, wings, limbs, etc.
      height and/or length
      weight
      body covering
   5, Life span
   6. Gestation Period
   7. Is the animal an endangered species?
   8. Illustration, picture, sculpture, or drawing

3. Your "report" should demonstrate your competence in at least three intelligences. You may decide to include a graph (mathematical and visual intelligence), a labeled drawing (visual and linguistic intelligence); a written summary (linguistic intelligence); a rap featuring what you have learned (linguistic and musical intelligence); an interpretation of your animals movement (bodily intelligence); or something entirely different. Be sure to think ahead and look at how your project will be evaluated. Complete the research planning sheet, discuss your plans with your teacher, and give your teacher a copy of your plan.

Planning My Research

1. Topic: (Animal Name) _____

2. What kinds of information do I need?

3. Where can I get that kind of information? (Places and people can be resources, too. What about computer sources?)

4. What would I like my final product(s) to be? (See the sample product listing.)

5. What intelligences will this project require?

6. List the major things that must be done to complete the project.

7. Now estimate how much time each of the events in #6 will require.

8. Decide the order in which you will complete them.

Sample Final Product List

These are ideas of products you may want to consider. This list does not include *everything* possible. As you look at this list add any ideas of your own that are not on the list.

Advertisement
Advertising Brochure
Annotated Bibliography
Big Book
Biography
Board Game
Bulletin Board
Choral Reading
Collection
Comic Strip
Crossword Puzzle
Diorama
Drawing (any medium)
Editorial
Elegy
Essays
Eulogy
Fable
Glossary
Graphs
Hyper Stack
Interpretive Dance
Journal
Labeled Drawing
Letter (any type)
Letter to the Editor
Lyrics for a song (any tune)
Map
Mime
Mobile
Museum Exhibit
Oral Report

Original Musical Composition
Painting (any medium)
Photo Essay
Picture Dictionary
Play (comedy, tragedy, etc.)
Poem (any form)
Poster
Pottery
Puppet Show
Puppets
Rap
Relief Map
Sculpture
Short Story
Skit song
Stitchery
T.V. Program
Time Line
Travel Brochure
Video Recording
Web page
Word find Puzzle
Written Report

Connecting the Curriculum
with National **Standards**
and **Benchmarks**

Connections to National Standards and Benchmarks

This appendix lists the national standards each of the Inca Activities addresses. Benchmarks are included to give you an idea of specific ways the standard could be assessed. These standards and benchmarks were compiled from original sources by Kendall and Marzano [Kendall, J. S. and Marzano, R. J. (1996). *Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education*, Aurora, CO: Mid-continent Regional Educational Library.]

People and Language of Peru, Inca Activity 4

Language Arts: Reading
7.   Demonstrates competence in the general skills and strategies for reading information
     Grades K-2
     •   Comprehends the main idea of simple expository information
     Grades 6-8
     •   Seeks peer help to understand information
     •   Reads for a variety of purposes including to answer a specific question, to form an opinion, to skim for facts
     •   Seeks peer help to understand information
     Grades 9-12
     •   Uses discussions with peers as a way of understanding information
9.   Demonstrates competence in applying the reading process to specific types of informational texts
     Grades 3-5
     •   Independently applies the reading process and strategies to passages about social studies that are relatively short (i.e., 250 to 800 words in length), developmentally appropriate with regard to complexity of topic(s) and hierarchical structure   (e.g., chronology, problem/solution), and conceptually appropriate(in terms of number of concepts, familiarity, level of abstraction)
10 . Demonstrates competence in using different information sources, including those of a technical nature, to accomplish specific tasks
     Grades 3-5
     •   Applies the reading process and strategies to directions or procedures (e.g., for school activities, camping or scouting procedures, recipes, games, hobbies) that are relatively short (i.e., about one page in length) and developmentally appropriate with regard to the number of categories of information or directions and the familiarity of concepts and vocabulary
Language Arts: Listening and Speaking
11 . Demonstrates competence in speaking and listening as tools for learning
     Grades K-2
     •   When prompted, makes relevant contributions in class and group discussions
     Grades 3-5
     •   Actively contributes to group discussions   .
     •   Listens to classmates and adults without interrupting
     Grades 6-8
     •   Plays a variety of roles in group discussions (e.g., active listener, discussion leader, facilitator)
     •   Makes an effort to understand what others are saying and stays on the topic being discussed
     •   Has a clear main point when speaking to others
     •   Presents simple prepared reports to the class
     Grades 9-12
     •   Has a clear main point when speaking to others and adjusts the message wording and delivery to the particular audience and context
Life Skills: Working with Others

Grades K-12-
1.   Contributes to the overall effort of a group
     •   Demonstrates respect for others in the group
     •   Identifies and uses the strengths of others
     •   Takes initiative when needed
     •   Helps the group establish goals
     •   Engages in active listening
     •   Takes the initiative in interacting with others
     •   Evaluates the overall progress of a group toward a goal
     •   Contributes to the development of a supportive climate in groups
4.   Displays effective interpersonal communication skills
     •   Communicates in a clear manner during conversations
5.   Demonstrates leadership skills
     •   Occasionally serves as a leader in groups
     •   Occasionally serves as a follower in groups

Life Skills: Life Work
8.   Displays reliability and a basic work ethic
     •   Prepares, plans, and organizes job responsibilities (Grades 9-12)

Fauna of Peru, Inca Activity 5

Language Arts: Writing
4 . Effectively gathers and uses information for research purposes
     Grades 3-5
     •   Uses encyclopedias to gather information for research topics
     •   Uses dictionaries to gather information for research topics
     •   Uses key words, indexes, cross references, and letters on volumes to find information for research
            topics
     •   Uses multiple representations of information (e.g., maps, charts, photos) to find information for
            research topics
     Grades 6-8
     •   Gathers information for research topics using note taking
     •   Separates information gathered for a research topic into major components based on appropriate
            criteria
     •   Examines critical relationships between and among elements of a research topic
     •   Uses the card catalogue to locate books for research reports
     •   Uses the Reader's Guide to Periodical Literature and other indexes to gather information for research
            topics
     •   Uses a computer catalog to gather information for research topics
     •   Uses magazines, newspapers, dictionaries, schedules, and journals to gather information for research
            topics
     •   Makes limited but effective use of primary sources when researching topics
     Grades 9-12
     •   Uses cross referencing while gathering information for a research topic
     •   Writes basic descriptions of events to record information for research purposes
     •   Uses almanacs to gather information for research purposes
     •   Uses government publications to gather information for research purposes
     •   Uses microfiche to gather information for research purposes
     •   Uses a variety of news sources to gather information for research purposes (e.g., newspapers, news
            magazines, TV, radio, videotapes, artifacts)
     •   Uses public library telephone information services to gather information for research purposes
Science: Life Science

1. Knows about the diversity and unity that characterize life.
Grades K-2
   - Knows that plants and animals have external features that help them thrive in different environments
   Grades 3-5
   - Knows that living things can be sorted into groups in many ways using various properties to decide which things belong to which group; features used for grouping depend on the purpose of the grouping
   - Knows that plants and animals have life cycles which include birth, growth and development, reproduction, and death; the details of this life cycle are different for different organisms
7. Understands how species depend on one another and on the environment for survival

   Grades K-2
   - Knows that living things are found almost everywhere in the world; different types of plants and animals live in different places
   Grades 6-8
   - Knows that all organisms must be able to obtain and use resources, grow, reproduce, and maintain a relatively stable internal environment while living in a constantly changing external environment; regulation of an organism's internal environment involves sensing external changes and changing physiological activities to keep within the range required to survive

Life Skills: Life Work
8. Displays reliability and a basic work ethic
   Grades 9-12
   - Prepares, plans, and organizes job responsibilities
   - Completes tasks on time

Life Skills: Working with Others
   Grades K-12-
1. Contributes to the overall effort of a group
   - Demonstrates respect for others in the group
   - Identifies and uses the strengths of others
   - Takes initiative when needed
   - Helps the group establish goals
   - Engages in active listening
   - Takes the initiative in interacting with others
   - Evaluates the overall progress of a group toward a goal
   - Contributes to the development of a supportive climate in groups
4. Displays effective interpersonal communication skills
   - Communicates in a clear manner during conversations
5. Demonstrates leadership skills
   - Occasionally serves as a leader in groups
   - Occasionally serves as a follower in groups

Life Skills: Self-Regulation
1. Sets and manages goals
   Grades K-12
   - Prepares and follows a schedule for carrying out options
   - Identifies resources necessary to complete a goal
   - Makes a cumulative evaluation of goal

Activity Pause
The Search for Self-similarity

Look at the two sample activities from the Inca curriculum and analyze them for evidence of self-similarity. Do they lie within the defined "shape" of the Intel-ebration curriculum?

Curricular Shape

Instructional & Design Framework	Activity 4	Activity 5
Dimensions of Learning		
Cooperative Learning		
Instructional Technology		
Project-based Learning		
Multiple Intelligence Theory		
Multi-age Design		
Thematic Instruction		

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)
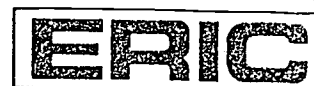
REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Embracing the World: Linking K-16 Students Through Technology

Author(s): Larry D. Burton

Corporate Source: Andrews University

Publication Date: April 9, 1998

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all **Level 1** documents	The sample sticker shown below will be affixed to all **Level 2** documents	
[X] **Check here** **For Level 1 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) *and* paper copy.	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY ——— Sample ——— TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY ——— Sample ——— TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
	Level 1	**Level 2**

[ ] **Check here** **For Level 2 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here→ please

Signature:

Printed Name/Position/Title: Larry D. Burton Ph.D.

Organization/Address: Andrews University Bell Hall Suite 014 Berrien Springs, MI 49104-0114

Telephone: 616-471-6674

FAX: 616-471-6374

E-Mail Address: burton@andrews.edu

Date: 4-14-98