Intel-ebration: A Celebration of Human Intelligence

Larry D. Burton
Department of Teaching, Learning, and Administration
Andrews University
e-mail: burton@andrews.edu

Note: This craft paper was originally formatted as a portfolio with specific artifacts displayed. In converting the portfolio to a simple, word-processed format, graphics and the creative layout were eliminated. In most cases, URLs are listed for sites which now display those photos and/or graphics.

1. Introduction
   A. Overview
   B. Timeline
   C. Funding Sources
   D. The Intel-ebration Home Page

2. Recruiting Participants
   A. Teacher Packets
   B. e-mail Recruitment
   C. Letter to Principals
   D. List of Registered Participants

3. In-Class Study of Themes
   A. Sample e-mail Feedback
   B. Speaker’s Bureau

4. The Virtual Safari
   A. Safari Itinerary
   B. Temporary Web Page
   C. Typical Questions to the Photographers
   D. Other e-mail Interaction
   E. Photos
   F. Media Coverage

5. Student Project Development
   A. Simple Student Projects
   B. A Class Web Site
   C. Format for Submitting Projects for Web Display

6. Safari Teacher’s Guide (included only in the original document submitted to MSSI-TER; available from the author for $15)
1. Introduction

Artifact 1A: Overview of the Intel-ebration Program

Intel-ebration is the result of my efforts to integrate into an instructional system what I knew or believed to be true about effective instruction. I used Dimensions of Learning (Marzano, et al., 1992) as the organizing framework to integrate the following instructional practices:
- thematic instruction
- multiple intelligence instruction
- cooperative learning
- project-based learning
- instructional technology.

See pages 2 — 20 of the Teacher’s Guide for a brief introduction to each of these practices.

Intel-ebration consists of three primary phases:
1. In-class study of selected scientific themes
2. Participation in a virtual safari
3. Completion of student-directed projects.

Each phase will be explained in more detail later in this paper.

Artifact 1B: Timeline 1996-1997

- June — September: Recruitment of Participants
- August — September: Training at Selected Sites
- November — December: In-class Study of Themes
- December: Virtual Safari (fieldtrip)
- December — January: Development of Student Projects
- February: Local Display of Student Projects
- February — March: Uploading of Projects to WWW

Artifact 1C: Funding Sources

The Upton Foundation in support of service learning

Andrews University Office of Scholarly Research in support of creative, scholarly endeavor

Andrews University School of Education in support of curriculum development and the educational use of technology
2. Recruitment of Participants

Recruitment of participants was done by personally contacting teachers and by letters to educational administrators. When a teacher expressed interest in the program I sent a packet of basic information (Artifact 1 in this section) which included official "Teacher Application to Join the Intel-ebration Team." When I received a completed application or a verbal commitment from a teacher, I sent a copy of the complete Safari Teacher’s Guide.

Artifact 2A:
Teacher Information Packets

Information Sheet Page 1

Intele-What?
Intel-ebration!

Welcome to a celebration of human intelligence and creativity. The Intel-ebration! Program integrates Howard Gardner’s multiple intelligence theory, cooperative learning, integrated thematic teaching, and project-based learning. SAFARI is the overall theme for our first Intel-ebration during the 1996-97 school year.

The program consists of several phases:
- recruitment and training of teachers;
- in-class study of SAFARI through three sub-themes: Exploration, Variation, and Growth. This series of lessons prepares students for project work and the virtual photo safari.
- participation in a virtual photo safari to Kenya, East Africa. Students will interact with an Andrews University graduate student and “guide” her during the safari
- preparation of projects by students that are related to the themes studied and involve more than one intelligence;
- a local Intel-ebration, a display of these projects, hosted by individual schools or classrooms; and
- the virtual Intel-ebration. Photos and written summaries of the projects will be submitted on computer disks or via e-mail and up-loaded onto specially created World Wide Web pages for the world to enjoy.
Minimum technology requirements for participation in Intel-ebration: SAFARI:

- access to a 35mm camera
- e-mail capability (computer connected to a service or the Internet)
- a word processor that will save text files in either WordPerfect or ASCII format.

Preferred technology requirements for participation in Intel-ebration: SAFARI:

- at least one computer at the school that will handle the word processing and has a 28.8 modem
- e-mail and chat capability (maybe through CompuServe or a local educational network)
- access to the Internet/World Wide Web (perhaps through a local educational network or may require subscription to a service like Delphi)

Since I anticipate very few schools having access to the World Wide Web, it may be necessary for the teacher to schedule a field trip to a local college, public school, or library that does have internet access. This will enable the students to “surf the net” and visit their project after it is uploaded.

What I will do during the Intel-ebration program:

- provide initial training (if funding allows)
- provide materials/lessons for approximately 4-6 weeks of in-class study of the program themes
- provide materials to guide students & teachers during the project development phase of Intel-ebration
- coordinate on-line support for teachers/students
- distribute electronic newsletters to participating classrooms
- upload your students’ projects onto the World Wide Web

What I expect you to do during the Intel-ebration program:

- lead your students in the exploration of the themes through the lessons provided and/or lessons you develop
- guide students in the development of a self-directed project
- stay in touch with fellow teachers on the Intel-ebration team (via e-mail)
- encourage students to communicate with students in other classrooms on the Intel-ebration team
- coordinate a local Intel-ebration display (with the assistance of parents and other volunteers)
- arrange for the photographing of student projects & presentations
- submit students’ electronic project reports on a computer disk or via e-mail
- submit clearly labeled photographs of student projects
- participate in a post-Intel-ebration discussion session
- arrange for your students to visit the virtual Intel-ebration site on the World Wide Web
**Artifact 2B:**
e-mail Recruitment

Subject: Africa  
Date: Thu, 12 Sep 1996 11:46:32 -0700  
From: "Jacqueline M. Wallace" <WALLACJM@mail.milwaukee.k12.wi.us>  
Organization: Milwaukee Public Schools  
To: burton@andrews.edu

My name is Jacqueline Wallace. I am the Technology Assistant at Garfield Elementary School in Milwaukee, Wisconsin. Jeanne Grant, who is a second grade teacher is participating in your project to Africa. Another teacher, Angela Stinson, would also like to participate in your project.

If it is at all possible, could you send 3 more manuals on the project to:

Garfield Avenue School  
Attn: Jacqueline Wallace  
2215 N. 4th St.  
Milwaukee, WI. 53212.

We are looking forward to getting started!

Thank you,

Jacqueline M. Wallace

________________

Subject: responding  
Date: Fri, 18 Oct 1996 14:32:44 -0500  
From: Joan Fos <joanfos@specent.com>  
To: burton@andrews.edu

Dear Larry,

I enjoyed very much your presentation at teachers convention. It was a help to see it in action for me. It will make it easier to implement. I am looking forward to this very much and plan to begin within two weeks.

Thanks again and I appreciated your comments on Saxon math as well. We all appreciated your courage in expressing your views.(:-)JF

________________

Subject: Re: Intel-ebration: Safari  
Date: Fri, 1 Nov 1996 14:52:06 -0500  
From: "H.A.S." <jacko_c@wvlink.mpl.com>  
To: burton@andrews.edu
Dear Larry:

I have been out of town most of the past several weeks at Union meetings, etc., and was appalled to have missed your E-Mail message of early October. I would love to participate in this project, but realize I am now late for the beginning date. Is it too late? Please say no! If I can get going now, please sign me up and send out materials. If not, I understand. Thanks for this innovation and keep me on your list for future projects, please. Pat and I are on the cutting edge of technology. (That was a joke.) Well, at least we are trying not to let our students get too far ahead of us!

Hope to hear from you with a positive answer real soon.

Cheryl Jacko

Subject: intel-ebration
Date: Wed, 11 Dec 1996 19:39:38 -0800
From: Annette Postelli <apostell@remc11.k12.mi.us>
To: burton@andrews.edu

Dear Larry,

I am a fifth grade teacher at North School in Watervliet. Please send me information on how to become a school involved in The Kenya Safari on-line.

Annette

Artifact 2C:
Letter To Administrators

Dear FIELD(name):

I would like to invite teachers in your school to participate in Intel-ebration: SAFARI, an exciting project for the 1996-97 school year. Intel-ebration is sponsored by the Andrews University School of Education and has received funding from Andrews University and the Upton Foundation.

Intel-ebration uses multiple intelligence theory and cooperative learning to guide students in the exploration of scientific themes. The curriculum materials are developed for middle school or junior high levels but are easily adapted up or down. Intel-ebration has the following purposes:

2. Train teachers and students in the theory of multiple intelligences.
3. Create a sense of community among teachers and students who participate in the project.
4. Promote active, student-directed learning through the development of projects for the Intel-ebration.
5. Provide opportunities for authentic assessment of student learning based on multiple intelligence theory.
I have included sheets with basic information about the *Intel-ebration* program. If you are interested in supporting some of your teachers in their participation in this project, I am willing to provide the following services to those teachers (at no cost to you other than teacher release time).

- Present initial training in Multiple Intelligence (MI) theory and basic cooperative learning structures. This would be an awareness session of approximately two hours conducted on the campus of Andrews University. (Tentatively planned for mid to late August)
- Present two, two-hour sessions on the practical use of MI theory and thematic instruction. (One session in September, one session in October, both on the campus of Andrews University.)
- Possibly one additional session in December focusing on the development of individual student projects.
- Serve as a communications facilitator and trouble-shooter during student project development. I hope to include the use of a variety of communications techniques including e-mail, electronic publishing, standard mail, listservs, on-line chat room sessions, and press release statements for local and regional newspapers. I will schedule regular interaction and debriefing sessions throughout the project development phase.
- Operate a “speakers bureau” composed of undergraduate methods students who develop supplementary lessons based on the *Intel-ebration* themes. These students will be available to visit schools as guest presenters.
- I plan to have my undergraduate methods students serve as consultants while local K-12 students are developing projects.

After local *Intel-ebration* displays are completed
- Present a one-day in-service, debriefing from the current experience and planning for the next year. (Early February on the Andrews campus)
- Upload student project summaries and pictures onto Web pages
- Continue open communication between students and teachers
- Share successes (press releases) -- regional papers, professional journals, local newspapers, school newsletters, (perhaps TV coverage), and presentations at professional conferences.

My initial thinking is that I would like to limit participation this first year to approximately 30 teachers in Berrien County. Teachers will have to apply directly to me for inclusion in the program. If you would like teachers in your school to have the opportunity to participate in this project, call me and we can work out the details for distributing the applications and basic information to your teachers.

If you have any questions about this project, please contact me:
  e-mail    burton@andrews.edu
  phone     616-471-6674
  mail      Bell Hall, Suite 014
            Andrews University
            Berrien Springs, MI 49104-0114
<table>
<thead>
<tr>
<th>Registered Teachers</th>
<th>School Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Withrow</td>
<td>Sylvester Elementary School</td>
<td>Berrien Springs, MI</td>
</tr>
<tr>
<td>Amy Bender</td>
<td>Buchanan Middle School</td>
<td>Buchanan, MI</td>
</tr>
<tr>
<td>Angela Stinson</td>
<td>Garfield Avenue School</td>
<td>Milwaukee, WI</td>
</tr>
<tr>
<td>Barbara Martz</td>
<td>Ruth Murdoch Elementary School</td>
<td>Berrien Springs, MI</td>
</tr>
<tr>
<td>Dan Gilbert</td>
<td>North Shore Jr. Academy</td>
<td>Chicago, IL</td>
</tr>
<tr>
<td>Eunice Murphy</td>
<td>Capitol City SDA</td>
<td>Indianapolis, IN</td>
</tr>
<tr>
<td>Faith Laughlin</td>
<td>White Memorial Adventist School</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Florence Lilly</td>
<td>Boynton Montessori Magnet School</td>
<td>Benton Harbor, MI</td>
</tr>
<tr>
<td>Frances Foust</td>
<td>Peterson Warren Academy</td>
<td>Inkster, MI</td>
</tr>
<tr>
<td>Gary Davenport</td>
<td>Champaign SDA School</td>
<td>Champaign, IL</td>
</tr>
<tr>
<td>Greg Rood</td>
<td>McCord Renaissance Center</td>
<td>Benton Harbor, MI</td>
</tr>
<tr>
<td>H. Earle Greenidge</td>
<td>Capitol City SDA</td>
<td>Indianapolis, IN</td>
</tr>
<tr>
<td>Henrietta Arvidson</td>
<td>Ruth Murdoch Elementary School</td>
<td>Berrien Springs, MI</td>
</tr>
<tr>
<td>Ingrid Eklund</td>
<td>Ruth Murdoch Elementary School</td>
<td>Berrien Springs, MI</td>
</tr>
<tr>
<td>Irene Alexander</td>
<td>Rolla SDA School</td>
<td>Rolla, MO</td>
</tr>
<tr>
<td>Jacqueline Wallace</td>
<td>Garfield Avenue School</td>
<td>Milwaukee, WI</td>
</tr>
<tr>
<td>Jan Ella Schnep</td>
<td>Slidell SDA Education Center</td>
<td>Slidell, LA</td>
</tr>
<tr>
<td>Jan Manly</td>
<td>Pine Bluff SDA School</td>
<td>Pine Bluff, AR</td>
</tr>
<tr>
<td>Jan Wright</td>
<td>Sylvester Elementary School</td>
<td>Berrien Springs, MI</td>
</tr>
<tr>
<td>Jane Markel</td>
<td>Sylvester Elementary School</td>
<td>Berrien Springs, MI</td>
</tr>
<tr>
<td>Jeanne Grant</td>
<td>Garfield Avenue School</td>
<td>Milwaukee, WI</td>
</tr>
<tr>
<td>Name</td>
<td>School</td>
<td>County</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Jess Swackhammer</td>
<td>Andrews University</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Joan Fos</td>
<td>Bentonville SDA School</td>
<td>Bentonville</td>
</tr>
<tr>
<td>Julia Aitken</td>
<td>Andrews University</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Julie Robinson</td>
<td>Marion SDA School</td>
<td>Marion</td>
</tr>
<tr>
<td>Kay Walker</td>
<td>Berrien Springs Middle School</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Ken McHenry</td>
<td>Noble Adventist Elementary</td>
<td>Noble</td>
</tr>
<tr>
<td>Linda Fuchs</td>
<td>Ruth Murdoch Elementary School</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Linda Rosen</td>
<td>SDA Elementary School</td>
<td>Clear Lake</td>
</tr>
<tr>
<td>Lynn Paul</td>
<td>Rockford Adventist School</td>
<td>Rockford</td>
</tr>
<tr>
<td>Neal Boger</td>
<td>Ruth Murdoch Elementary School</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Nettie Gray</td>
<td>Peterson-Warren Academy</td>
<td>Inkster</td>
</tr>
<tr>
<td>Norman Usher, Sr.</td>
<td>Calvin Center School</td>
<td>Cassopolis</td>
</tr>
<tr>
<td>Pamela Britton</td>
<td>Peterson Warren Academy</td>
<td>Inkster</td>
</tr>
<tr>
<td>Patricia Hall</td>
<td>Bentonville SDA School</td>
<td>Bentonville</td>
</tr>
<tr>
<td>Paul Bryant</td>
<td>FairPlain Northeast Elementary</td>
<td>Benton Harbor</td>
</tr>
<tr>
<td>Priscilla Tucker</td>
<td>Tucker Home School</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Ron Robertus</td>
<td>SDA Christian School of Lake County</td>
<td>Gurnee</td>
</tr>
<tr>
<td>Rose Graham</td>
<td>Ruth Murdoch Elementary School</td>
<td>Berrien Springs</td>
</tr>
<tr>
<td>Sharon Smith</td>
<td>Clinton SDA School</td>
<td>Clinton</td>
</tr>
<tr>
<td>Shirley Fuquay</td>
<td>Peterson Warren Academy</td>
<td>Inkster</td>
</tr>
<tr>
<td>Sondra Sheppard</td>
<td>Fair Plain Northeast Elementary</td>
<td>Benton Harbor</td>
</tr>
<tr>
<td>Stephen Burton</td>
<td>Ozark Elementary School</td>
<td>Gentry</td>
</tr>
</tbody>
</table>
3. **In-class Study of Themes**

The overarching Intel-ebration theme, Safari, was chosen to coordinate with the virtual field experience portion of the program. Under this large theme, instructional activities were developed around three subthemes: Exploration, Variation, and Growth.

The chart on pages 23 and 24 of the Safari Teacher’s Guide correlate activities and themes. This chart also indicates which traditional subject areas are integrated into each activity.

**Artifact 3A:**

**Typical Learning Activity e-mail Interaction**

Subject: intele-what?
Date: Wed, 23 Oct 1996 19:46:04 -0400
From: <Kayter@aol.com>
To: burton@andrews.edu

Dear Larry,

We just wanted you to know that Theresa McEachrane and I started our Intel-ebration this Monday 10/21/96. We teach hearing impaired and special ed students at the 8th grade level. We have only dealt with the first activity (Intele-what?). It has taken us much longer than your guide because our students had no prior knowledge or vocabulary of the multiple intelligences. We have gone slowly adding activities to help
solidify the concepts. We borrowed from Carolyn Chapman's book "If the shoe fits" but used different hats instead of shoes to represent the different intelligences. Often the visual/spatial area is much stronger in a special needs student. It has really helped them grasp the concepts. Now I can ask them what hat they are wearing while they do some task and they are able to tell me. We asked them to draw the hats and write a description of each in their own words. Earlier they drew a head and divided it into seven parts representing the intelligences. The size of the parts depended on how much they thought they learned using that intelligence. For example if they thought they learn best by looking at a picture or seeing the actual object their visual/spatial area would be large. If they had trouble in math or solving puzzles, the logical/math area would be smaller. We put all of these assignment into their journals.

Now we are working on the team building exercises. We should be finished with the logos and team symbols by Monday Oct 28th. We will start the Safari activity right after that. Could you give me a date when Sharon will be sending her first virtual photo session and will we access this on your home page? Any feedback in regards to what we are doing would be appreciated.

Sincerely,

Kay Walker
Berrien Springs Middle School

**Artifact 3B:**
**The Intel-ebration Speakers' Bureau**

Dear Berrien County *Intel-ebration* Teachers,

My students at Andrews University have established a “Speakers’ Bureau,” as a service to you. Each student has developed lessons which are connected to the *Intel-ebration* themes (exploration, variation, & growth). Look over the list and see which lessons you would be interested in having presented to your class. Each student will be limited to a total of two presentations, so get your requests back to me ASAP. You can call 471-6674 and leave a voice mail message for me, or you can send me an e-mail request.

In order to help the students find time in the midst of their busy schedules to fulfill their speaking engagements, I have scheduled my class time to free them on the following days:

- Monday, November 25
- Monday, December 2
- Wednesday, December 4.

On each of these days the students will be available between ~12:45 and 2:15 pm. If you would like a speaker to come to your class on a different day or time, submit your request and I will try to work out the details with the student. *I think you could also request the guest*
speaker to present one of the activities from the Safari teacher’s guide you are using for Intel-
ebration rather than one of the lessons they have developed.

When the guest “speaker” visits your classroom, I would encourage you to stay in the
classroom and assist with the behavior management since these students will not have
expertise in classroom discipline. It would be nice if your students wore name tags or had their
names on their desks during the presentation.

I would also encourage you to start sending any questions your students are generating about
the safari (or questions related to the classroom activities) to me via e-mail and I will forward
them on to the photographers or some of my students who will respond to your students.

<table>
<thead>
<tr>
<th>Presenter’s Name</th>
<th>Lesson Topic</th>
<th>Lesson Type</th>
<th>Theme</th>
<th>Grade Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rich Chapko</td>
<td>The sea &amp; rivers</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>The Bill of Rights</td>
<td>Cooperative</td>
<td>Growth</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td>Great Ships</td>
<td>??</td>
<td>Exploration</td>
<td>3-5</td>
</tr>
<tr>
<td>Lori Hahn</td>
<td>Webbed-feet</td>
<td>Concept Attainment</td>
<td>Exploration</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>Photography/ Cameras</td>
<td>??</td>
<td>Exploration</td>
<td>1-4</td>
</tr>
<tr>
<td>Meghan Titcomb</td>
<td>Animals of Africa</td>
<td>Concept Formation</td>
<td>Exploration/ Variation</td>
<td>2-5</td>
</tr>
<tr>
<td></td>
<td>African Food Preparation</td>
<td>Concept Attainment</td>
<td>Exploration/ Variation</td>
<td>4-6</td>
</tr>
<tr>
<td></td>
<td>African Theme</td>
<td>Inquiry</td>
<td>Exploration/ Variation</td>
<td>3-5</td>
</tr>
<tr>
<td>Lilian Han</td>
<td>Coins</td>
<td>Concept Formation</td>
<td>Variation/ Exploration</td>
<td>K-6</td>
</tr>
<tr>
<td></td>
<td>Countries of South America</td>
<td>Concept Attainment</td>
<td>Exploration</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>Incas of Peru</td>
<td>Inquiry</td>
<td>Exploration/ Variation</td>
<td>1-4</td>
</tr>
<tr>
<td>Presenter's Name</td>
<td>Lesson Topic</td>
<td>Lesson Type</td>
<td>Theme</td>
<td>Grade Levels</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------</td>
<td>------------------------</td>
<td>-----------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Marianne Peters</td>
<td>Products of the Forest</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>2-4 (for a small class)</td>
</tr>
<tr>
<td></td>
<td>Logging</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td>Sean Maycock</td>
<td>Types of Forests</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>5-6</td>
</tr>
<tr>
<td></td>
<td>Culture</td>
<td>Concept Attainment</td>
<td>Exploration</td>
<td>5-6</td>
</tr>
<tr>
<td>Jeannie Sanpaki</td>
<td>Rocks</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>Animals</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>1-4</td>
</tr>
<tr>
<td>Janelle Scheuneman</td>
<td>Birds of the Rain Forest</td>
<td>Concept Formation</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>Types of Forests</td>
<td>Concept Formation</td>
<td>Variation</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>Coniferous Trees</td>
<td>Concept Attainment</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>Usefulness of Trees</td>
<td>Cooperative</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>??</td>
<td>Inquiry</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td>Marlene Esdaille</td>
<td>Native American Uses of the Forest</td>
<td>Cooperative</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>Rain Forest Trees and Plants</td>
<td>Concept Attainment</td>
<td>Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>??</td>
<td>Inquiry</td>
<td>Variation</td>
<td>2-4</td>
</tr>
</tbody>
</table>
4. **The Virtual Safari**

The Virtual Safari to Kenya, East Africa, was a cooperative effort between two separate entities of Andrews University: the School of Education and the College of Technology. The Photography Department was planning a photo safari to Kenya and I was creating a curriculum which used interactive technology. The match was perfect.

Sharon Prest, one of the photo safari team members, worked closely with me on curriculum development and acted as the technology coordinator for Intel-ebration. Her job in Kenya — carry a 60 pound satellite uplink around for fun. Sharon was responsible for all satellite up-down-link connections. When the satellite connection worked, Sharon served as the photo team “question coordinator.” As questions poured in from students in the participating classrooms, Sharon downloaded them and distributed them among the photo team members.

 Artifact 4A:
   **The Safari Itinerary**

Subject: safari itinerary  
Date: Tue, 19 Nov 1996 13:55:35 -0500  
From: Larry Burton <burton@andrews.edu>  
Reply-To: safari@andrews.edu  
To: safari-send@andrews.edu

Here is a listing of the complete safari itinerary. Print it out and post it for your students.

DECEMBER 1 (Sunday)

Leave Chicago for Amsterdam on KLM
DECEMBER 2

Arrive in Amsterdam. Day free until the evening flight. We should probably book one or two day rooms at the airport hotel for you to store your stuff and clean up.

DECEMBER 3

Morning arrival in Nairobi. Afternoon at Nairobi National Park.

Nairobi/Nairobi National Park

We'll arrive in the morning and will be taken to our hotel. You'll have the rest of the morning at leisure. After lunch, we'll take our first game drive to Nairobi National Park for an introduction to African wildlife and bird life. Although the park is only a few miles town, you'll be able to observe a wide variety of plains and forest animals, such as impala, waterbuck, hartebeest, wildebeest, ostrich, giraffe, and zebra. Lion, cheetah, and rhino are also commonly seen in the park. Birds are abundant and include turacos, mouse birds, ostrich, vultures, Secretary Birds, and many other species. You'll also be able to leave your vehicle and walk at Hippo Pool, located along the Athi River. In the evening, you return to your hotel. Overnight at the HOTEL BOULEVARD.

DECEMBER 4-5 - Amboseli National Park

Amboseli National Park We leave Nairobi and drive south toward the base of Mt. Kilimanjaro, the highest mountain in Africa and the fourth-largest volcano in the world. Its perpetual glaciers tower above the flat plains of Amboseli, the home of a wide variety of plains animals that migrate into the central game-viewing area in search of water. The special beauty of Amboseli, the abundance of wildlife, and Mt. Kilimanjaro as a backdrop, make this area an ideal place for photography. We'll have extensive game drives through Amboseli National Park for the next two days, and we'll have opportunities to see lion, cheetah, elephant, buffalo, and perhaps a rhino and leopard. Overnights at AMBOSELI LODGE.

DECEMBER 6-7

Delamere Camp at Lake Elmenteita in the rift Valley. Day trip to Lake Nakuru, to photograph flamingoes and other bird life. (December 7 is a Saturday).

Lake Naivasha - Great Rift Valley

We will start the day with our own Sabbath activities and in the afternoon descend into the Great Rift Valley, and immense geological fault in the earth's surface that stretches from Jordan to southern Africa. Our destination is Lake Elmenteita, perhaps the most beautiful of the Rift Valley Lakes. Exceptional photographic opportunities at our new Delamere Camp. The camp has hides close to Lake Elmenteita for photographing flamingos and pelicans, hides for photographing leopards, plus night game drives and...
nature walks.

DECEMBER 8-12- Maasai Mara. Overnights at Mara River Camp.

Maasai Mara Reserve
This is Kenya's most-favored game viewing area. We'll chance upon herds of zebra and gazelle, along with the resident lion and cheetah population. This is the country of the Maasai tribe, cattle herders who still maintain many of their traditional ways. Game viewing in the Mara using the Mara River Camp, a deluxe tented lodge, as your base.

DECEMBER 13

Morning flight to Nairobi to connect with a flight to Lamu, arrive in the afternoon. Overnight at Island House.

DECEMBER 14-15

Full days to explore Lamu. (December 14 is a Saturday)

Lamu
From Nairobi, we will fly to Manda Island on the Indian Ocean coast, where there is an airstrip. From here, we will take a dory (a small, flat bottomed fishing boat with high sides) across the channel to our hotel, located on Lamu Island.

Lamu Island is part of the Lamu Archipelago, a group of islands that lie on the Indian Ocean coast in northern Kenya. The area is at the heart of the old Swahili culture, a civilization that grew and thrived before Europeans arrived.

The earliest contacts with the Kenyan coast were for trading purposes. Ships laden with ivory, tortoise shell, and other commodities caught the northeastern monsoon winds and made their way to India and Persia. A Greek traveler from Alexandria wrote a book about that commerce entitled The Periplus of the Erythraean Sea. A Periplus is a guidebook used by seamen that describes ports, trade, peoples, and navigational hazards. That description of the old Arab trade was written in AD 120; not until the fourteenth century would such books come into use in Europe. The book not only stands as the world's first travel guide, but is also the first description we have of life along the East African coast.

After the arrival of Islam, Arab civilization surged with new energy. In the eighth century, trade expanded eastward to Ceylon, Southeast Asia, and southern China. In East Africa, permanent settlements were formed along the coast. Arabs and Africans mixed, and developed the distinctly new Swahili language and culture.

The Swahili population on the coast, and the cities the people founded, grew
dramatically over the next several centuries and formed one end of a vast oriental trade network. Trade expanded because of an increased world demand for ivory, gold, and iron, all of which were in plentiful supply in Africa. That external demand stimulated mining, hunting, and smelting in the interior of the continent.

The wealth of the coastal Swahili cities steadily grew, as did that of the entire African-Asian trade network. Lamu and the other cities became prosperous and well-developed. Their literature and poetry were highly acclaimed. They had a system of indoor plumbing well before Europe. Houses were elaborately furnished with a distinctive style of furniture.

Chinese ships are known to have landed on the East African coast on two separate occasions in the fifteenth century, once during the period 1417-18 and again in 1431-32. Those voyages were part of a series of seven major expeditions into the Indian Ocean area to stimulate trade. The first voyage had an additional reason. Three years earlier, the Swahili city of Malindi (just south of Lamu) had sent ambassadors to the emperor of China. The ambassadors had taken with them a most remarkable gift, a live giraffe. The impression it made on the Chinese emperor was, it seems, quite profound. Chinese custom dictated that foreign ambassadors be escorted home. And that, it appears, was the reason for the first voyage by the Chinese to East Africa. After the second Chinese voyage, there was no further direct contact. A little over a hundred years later, in one of the most astonishing events in history, the Chinese abruptly ended their ocean travels. In 1525 they systematically destroyed their entire fleet, the most advanced seagoing ships in the world.

Lamu today offers a way to glimpse into the past. There are still no vehicles on the island, and you can experience a way of life as it must have looked centuries ago. The town of Lamu is at the heart of the archipelago, with boats from India and Arabia still arriving. Old trading dories (wooden sailing ships) are still produced here with centuries old tools. At the small Lamu museum, you can see interiors of houses reconstructed. The area also offers some fine snorkeling off the many little islands that are found here.

DECEMBER 16

Morning in Lamu. Afternoon flight to Nairobi. Overnight at the BOULEVARD.

DECEMBER 17

Day to explore and shop. Farewell dinner. Evening transfer to the airport.
DECEMBER 18 (Wednesday)

Leave Amsterdam for Chicago.

**Artifact 4B:**
*The Safari Web Site*

http://www.andrews.edu/COT/safari/

**Artifact 4C:**
*Typical Questions from the Students*

Subject: Questions -- resend  
Date: Thu, 05 Dec 1996 09:13:07 -0500  
From: Larry Burton <burton@andrews.edu>  
Reply-To: safari@andrews.edu  
To: safari-send@andrews.edu

Here are the questions I have forwarded on to the photo team thus far. (I have two additional lists ready to send on. If you or your class has questions or messages for the photo team, send them to me at burton@andrews.edu and I will pass them on to the team.)

As you will notice from Mrs. Turner’s list, students can address their questions to specific photographers on the trip. Look on the Photo Safari home pages to find the photographers participating in the dialogue.

Questions from students in 5-6 T-Mrs. Turner

1. What is the leopard's gestation period? - Sara to Kevin  
2. How long is the gestation period of a hartebeest? - Ryan to Kevin  
3. Please send me a picture of a lions eating its prey. Bonard to Kevin  
4. How long have you been interested in photography? - Jolene to Kevin  
5. Could you send a description of a vervet monkey? Viviene to Chet  
6. Which animal is the most fierce in Kenya? Ashely to Chet  
7. What is the most abundant animal in Kenya? Erin to Chet  
8. How long does the Black Rhino live? Natalie to Chet  
9. What are some of the tribes of people called in Kenya? Danielle to Clarence  
10. Can you send me a picture of a colobus monkey? Julie to Clarence  
11. Could you get me a picture of a cheetah eating an animal, please? Stacey to Clarence  
12. What is the culture like in Kenya? Esther to Clarence
13. How long is the gestation period for a gazelle? Felix to Chet
14. Can you send me a picture of the black neck spitting cobra? Zach C. to Sharon
15. What is an elephant's life span? Vanessa to Sharon
16. Are there a lot of birds in Kenya? Jonathan to Kevin
17. Please send me a picture of a leopard, falcon, and hawk? Pharez to Jeff
18. Please send me a picture of a flamingo? Virgil to Jeff
19. Can you send me a picture of a warthog? Kyle to Kevin
20. Can you send me a picture of a sea turtle? Andrew to Clarence
21. Can you send me a picture of a vulture? Zach M. to Marc
22. Can you tell me something about Impalas? Michael to Dan
23. Can you send me a picture of a Nile Crocodile? Moses to Marc
24. What pictures of animals are you planning to take? Carissa to Sharon
25. Can you send me a picture of a lion eating something? Nichole to Chet
26. How big are the lions in Kenya? Bobby to Sharon
27. What type of transportation will you use to get around? Stephen to Sharon
28. Will you see any water buffalo? Alanna to Sharon

Faith A Laughlin wrote:

Here are the (uncensored) questions from my class:
29. Do they eat pizza in Kenya?
30. Where do you see snakes almost all the time?
31. Is there a freezer?
32. Will you swim with the hippos?
33. Do you like sports?
34. What animal is your favorite?
35. What is the altitude of Delemare Camp?
36. Are you going with a group?
37. Are there going to be safety stuff (safety precautions)?
38. Do you eat pasta?
39. Do you ever get bored? (While on safari)
40. Do any parks have fences? (In the game reserves)
41. Will you eat with the lions?
42. What do you do with free time?
43. What do you eat?
44. How many pictures did you take?
45. Do you travel between places in an airplane?
46. Do the animals ever attack you?
47. How old are you?

Some questions may seem redundant or silly but these are the questions that the class asked. (Gr. 1 - 4 White Memorial Adventist School) They are starting to get into this study theme now.

Artifact 4D:
Samples of Other e-mail Interaction

Subject: It's Happening!
Date: Mon, 02 Dec 1996 18:13:15 -0500
From: Larry Burton <burton@andrews.edu>
Reply-To: safari@andrews.edu
To: safari-send@andrews.edu

While I am typing this message, our photo team is in the air between Amsterdam and Nairobi. When you read this, they will probably already be in Kenya. This afternoon (Dec. 3) the photo team visits Nairobi National Park. We should get our first images and messages on Dec. 4.

If you have any messages or questions for the team, get them to me!

Dr. Burton

Subject: It Worked!!!!!!!
Date: Thu, 05 Dec 1996 13:22:10 -0500
From: Larry Burton <burton@andrews.edu>
Reply-To: safari@andrews.edu
To: safari-send@andrews.edu

We just received our first satellite transmission from Sharon and the photo team. Andy McConnel here at Andrews is busily working on getting the photos and text onto our web pages. You can view them at http://www.andrews.edu/COT/safari/itinerary/main.html.

I am including the text here for all of you.

Picture 1  Arrive in Nairobi.
Picture 2  Andrew McDonald, getting ready for first safari
Picture 3  Group shot in Ol Tukai Lodge in Amboseli.
Picture 4  Photographer (our waiter, in the center) views digital group shot that he took!
Picture 5  Jeremy Hildebrant takes first picture of sleeping lioness.
Picture 6  Photographers witness Masai tribal ceremonial dance in hotel lobby, prior to Masai talk with a Masai warrior pictured in image 4. (on left)

The Masai warrior is interested in “talking” to you tomorrow via satellite, have questions ready.

Things are great here!
Jambo (so what does that mean, we expect an answer so read up!)

Sharon & the Team

Subject: Daily Update December 9, 1996
Date: Mon, 09 Dec 1996 09:08:09 -0500
From: Larry Burton <burton@andrews.edu>
Reply-To: safari@andrews.edu
To: safari-send@andrews.edu

Yesterday our "eyes" (that means the photographers) travelled to Masai Mara, a fantastic wildlife viewing area. Our team will "settle down" in Mara for five days. The safari's grueling schedule has prevented our team from making their second satellite transmission as planned, but we are expecting to hear from them at any time.

Teachers: if you could send photos of your students working on Intel-eration activities or viewing Safari images on the web, we will try to upload them onto our web pages. Be sure to give the teachers name and students first names.

To see the complete safari itinerary go to http://www.andrews.edu/COT/safari/itinerary/schedule.html#top

Subject: Pictures
Date: Thu, 12 Dec 1996 19:51:08 -0800 (PST)
From: Dan Gilbert <danielag@earthlink.net>
To: burton@andrews.edu

Larry,
Is it possible we could have Sharon get us some specific Pic's? My class is wanting some for their fauna displays. Also do you have the Pic's taken so far in a format we can download?

Thanx,
Dan

BTW my Email will changing in Jan. to danielag@juno.com
Artifact 4E:  
*Photos from Kenya*

Photos from Kenya may be found on the Web site at the following URL:  
http://www.andrews.edu/COT/safari/

Artifact 4F:  
*Media Coverage*

The Intel-ebration program attracted moderate media coverage. The Photo Team and the Andrews University Public Relations Department created an press release kit for the virtual safari. The press release was picked up first by the Seventh-day Adventist (sponsors of Andrews University) denominational press. Next, a regional newspaper, the Herald-Paladium, gave section B, front-page coverage to the story. This attracted the attention of a regional television station which ran our story on two separate newscasts at 5:00 and 11:00 p.m.

29. Student Project Development

Intel-ebration represents a divergence from typical "virtual field trip" experiences in that it does not stop after an exciting virtual field trip. Instead students continue their study of the Intel-ebration themes through the development of student-directed projects. These projects must represent the use of at least three of Gardner’s multiple intelligences and be connected to one of the Intel-ebration themes. Other than those guidelines, the projects may take any form the student chooses. They can look like traditional science fair projects or they can look very different.

When completed the projects will be presented at a local Intel-ebration display in the school or classroom. The projects will be photographed and a summary of the project will be submitted to me along with the photo. These project abstracts will then be loaded onto Web pages at the Intel-ebration site (http://www.andrews.edu/COT/safari/) to create a virtual Intel-ebration display.

Artifact 5A:  
*Samples of simple student projects*

In the original craft paper I included photos of projects that had been submitted to me. Those projects and others can be viewed by visiting the following URLs:  
http://www.educ.andrews.edu/burton/sykes.htm  
http://www.educ.andrews.edu/sed/rmes/turner.htm  
http://www.andrews.edu/COT/safari/
Artifact 5B:
A Class Web Site Developed During Intel-ebration

Journey to the following URL to see a site developed as a result of involvement in Intel-ebration:
http://www.educ.andrews.edu/sed/imes/turner.htm

Artifact 5C:
e-mail Format for Submitting Student Projects

Subject: Submitting Summaries (Abstracts) of Student Projects
Date: Fri, 24 Jan 1997 00:06:38 -0500
From: "Larry D. Burton" <burton@andrews.edu>
Organization: Andrews University
To: safari-send

I would like to receive pictures and summaries of your students' projects to upload them onto the world wide web. The simplest way for this to work for me (so I don't have to type them all in) is to have your students reply to this message. In between the {brackets} you will find guidelines for the kind of information I would like to receive. Have them reply to this message on your e-mail program by typing their information between the brackets.

(Print one of these messages out for all students. While one set of students is responding on the computer, the others can be writing their summaries at their desks. I do not have to receive all of your classes responses at the same time.)

DON'T CHANGE ANY OF THE TEXT OUTSIDE OF THE BRACKETS. Inside the brackets put what you want to say.

This is the information I want:

{If you want to say anything about your photograph, type it over these words, but leave the brackets}

Project Title: {Type your title over these words}

Student Author(s): {List the students' first names here, no last names please}
Teacher: {Teacher's Name here}
School: {School's Name Here}

Intelligences Used in This Project: {List Intelligences here}
Intel-eration Theme(s) Guiding This Project: {Delete the ones you don't need Exploration, Variation, Growth}

Project Components: {List the products made for the project, for example: gameboard, illustration, diorama}

Project Description: {In no more than 2 paragraphs, describe what you did for your project}

Evaluation
Successes: {What are the best things about your project?}
Room for Improvement: {How can you improve if you do a project again?}

Contests or other displays you entered your project in: {If you entered or are planning on entering your Intel-eration project in another display or contest (such as Exploravision, list them here}

Note: No examples of complex projects are included in this paper as they are still in the development phase.

30. Safari Teacher’s Guide

The complete, field-test edition of the teacher’s guide was included in the craft paper submitted at MSSI-TER Winter Conference 1997. I have not included it in this electronic version of the paper as it is 180 pages in length. It is available for a $15 charge (contact me). The layout of the guide is as follows:

• An introduction to the instructional techniques of the program
• An overview of the instructional activities
• Specific learning activities with student materials
• Resources