

AE21 Distributed Education

Distance Learning With a Personal Twist

Adventists increasingly face challenges in educating our youth. We wonder if we are keeping up with advances in technology. We struggle with financial challenges. We question whether we are implementing the latest educational theories while encouraging creativity. We want our students to form lifelong Christian friendships that will tie them to the church. We want them to be mentored and taught by Adventist role models. We strive to imbue every student with a value system that includes a focus on service, hoping that will help them become the leaders that our church so needs in the 21st century. All of us as educators want that for all of our students. Can we come up with a technology-rich, innovative, creative, affordable, distinctively Adventist, service-oriented method of educating our young people?

By Shelley A. Bacon

There's good news! AE21 (Adventist Education for the 21st Century) Distributed Education, now in its sixth year of operation, bringing a distinctly Seventh-day Adventist distance-learning program to Adventist schools across the United States. But what is this program like? Can it incorporate technology, creativity, innovation, service, and particularly connectivity into its curriculum? To answer these questions, let's look at a typical AE21 school day to see how teachers and students function using this educational method.

Mrs. T and Scott Begin Their Day

Mrs. T* begins work on Monday morning by logging onto the Internet and checking her E-mail.



AE21 students learn to be proficient with many different forms of technology.

* People and places referred to in this article are mostly composites. Where real people are used, their names have been changed to protect their privacy.

(For additional information on the role of an AE21 teacher see <http://avln.org/jae/>.) She sends a quick message to the four humanities students who will be debating today and posts a general note to all her students on Edline (the student-accessible Web site <http://www.Edline.net>, where daily work, notes, and grades are posted for students, parents, and facilitators), reminding them about the activities they can expect during the remainder of the week. She has 45 minutes before her first camera session, so she does some Web research for next week's work before gathering and organizing her materials for "class."

Upon arriving at Pleasantville Adventist Junior Academy* that day, Scott,* a 15-year-old sophomore, checks in



Shelley Bacon, sophomore humanities teacher and author of this article, works with her AE21 students during a videoconferencing session.

with Ms. P*, his site facilitator, who has already downloaded the day's work for each of her students. (For additional information on the role and responsibilities of an on-site coordinator, see <http://www.avln.org/jae/>.) After participating in some local school events such as worship and assembly, Scott checks his E-mail and the Edline for messages from his teachers, and then begins Web-based research on his assigned project.

Several minutes before class is to begin, Mrs. T organizes her materials in front of the Polycom, the video-conferencing camera that will carry her class session live to students across the U.S. The "bridge" (equipment that connects all the videoconferencing sites) begins dialing all the locations with sophomore students. She readies her timer, her list of students, and her rubric for assessing the day's activity—debate—and be-

gins roll call.

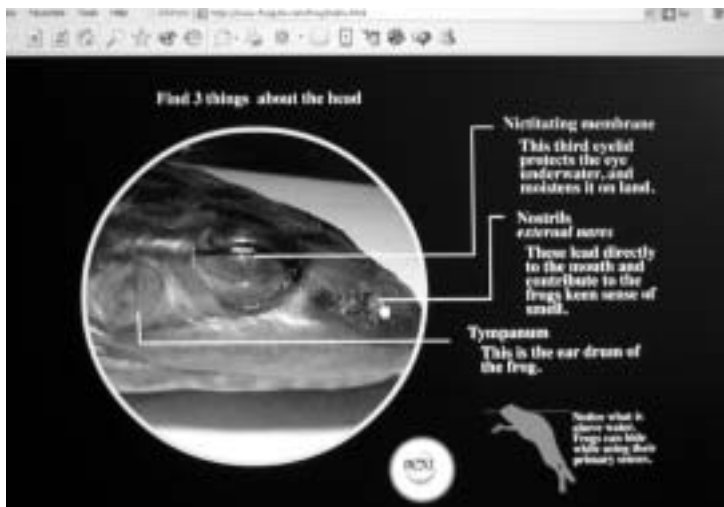
It's 9:15 and time for Scott's first "class," or camera session. He and his classmates bring their notebooks to the videoconferencing camera and begin listening as Mrs. T takes roll and begins the day's session. Today, the students are debating the methods and machines of World War II. Scott has researched hand grenades and will defend his conclusion that using them changed the outcome of the war. Gary*, his opponent, has researched the use of land mines in World War II warfare and will argue that they were a major factor in the outcome of the war. Scott has the first 60 seconds for his opening argument, which he presents as the students from the other sites watch. Next, Gary, at another site, delivers his opening statement. Members of the class make notes on Scott's and Gary's poise and form. Each boy gets 30 seconds for rebuttal following the opening statements, and then the class spontaneously begins to discuss the human toll of hand grenades and land mines, and to informally debate whether the United States should sign an international treaty banning the stockpiling and use of land mines. These debates, along with skits and other presentations, help the students become informed citizens and future leaders in the community and the church.

Class over, Mrs. T gathers up her things so the science teacher can set up his materials for the next session. She heads back to her computer and begins filing the E-mailed assignments her students have submitted during the past 12 hours. She spends the next two hours assessing their work, being interrupted on a regular basis by students asking questions using Instant Messenger (IM), an online service provided by Yahoo (<http://www.messenger.yahoo.com>). The students click on her name in their "Yahoo friends" list and type



In one of the AE21 classrooms, students do Web searches for an assignment in social studies.

a message in a box that appears on their computer. They hit “Enter,” and the message immediately shows up in a similar box on Mrs. T’s screen, where she can respond immediately. Mrs. T next calls a facilitator to check on a student’s progress and records the call on her call log.



AE21 students and their science teacher work on a Web site that allows them to do a “virtual dissection” of a frog.

More Classes

After humanities—an integrated class of history, English, and Bible—Scott has 25 minutes to finish his Spanish assignment before the next camera session. During this session, Scott listens to his classmates and Mr. H* before pronouncing the assigned phrases. Near the end of the session, the class takes time to plan a fiesta for the following week.

Biology class is next. Mr. C* introduces dissection of the bullfrog by going to the demonstration site on the Internet (<http://www.froguts.com>). Using his computer, connected to both the Internet and the Polycom, he guides the students through a virtual dissection. Next, Mr. C opens a specimen bucket, removes a preserved frog, and places it on a dissection tray, using the document camera (“Elmo”) and the Videolab camera, he demonstrates the beginning steps of frog dissection. The students at each site will complete the dissection exercise as outlined on Edline, returning to the site to practice as needed. At each step, they document their progress by using a Web or digital camera. They send Mr. C the written report and pictures as an E-mail attachment. He grades their work and returns it to them.

Attending to Assessment

While the other teachers attend to their on-camera sched-

All About AE21

How, why, and when did AE21 begin? Is it fulfilling its original goals? Where is it headed—and how does it plan to get there?

In 1993, a curriculum initiative from the Potomac Conference (whose territory is the Mid-Atlantic area of the United States) asked some fundamental questions about what should be expected from Seventh-day Adventist education. “How can we prepare our students for the 21st century in a uniquely Seventh-day Adventist setting?” was one of the driving questions. While Potomac’s curriculum committee concentrated on elementary-level issues, the North American Division began to study ways that secondary-level education could better prepare students for the job market. The “Futures Commission” issued a FACT21 document articulating the goals, philosophy, and essential elements of the curriculum in K-12 Adventist schools.

As an outgrowth of these two curriculum initiatives, AE21 Distributed Education was born. Leadership, service, and outreach are cornerstones of the integrated curriculum, and cutting-edge educational technology creates cords of community that bind together teacher, student, and quality education. An education gained through use of the AE21 curriculum provides students with leadership training, an emphasis on lifelong service, and the technological skills that will give them an edge in today’s competitive job market.

AE21 Distributed Education, sponsored by the Florida Conference of Seventh-day Adventists, was created to meet the needs of 5th-to-12th grade students in small schools across the country. “Program 56” and “Program 78” are designed for 5th-to-8th graders in small schools or home schools. It operates in a consortium arrangement with the Florida Conference Education Department, Home Study International, and the Southern Union Conference. AE21 provides a complete, fully accredited curriculum for grades 9-12, including four years of English, Bible, and history, up to four years of physical education, foreign languages, math, and sciences (including lab sciences), as well as a number of one-year or one-semester courses like art appreciation. Credits can be issued through Forest Lake Academy (and potentially other academies) and are recognized by Home Study International, as well as schools throughout the U.S. For more information, see the AE21 Web site (<http://www.ae21.org>), send an E-mail to info@ae21.org, or call (407) 618-0270.

AE21 is not an exclusive program. One of the goals of any worthwhile educational venture should be to replicate itself when necessary. The principles, programs, and curricula currently being developed could be adapted and replicated virtually anywhere as needed, enabling students around the globe to receive a quality Seventh-day Adventist education. AE21 keeps our youth connected to the church and to Adventist education and encourages more Adventist high school graduates to seek church-sponsored higher education.

ules, Mrs. T grabs a quick lunch and launches into assessment, turning off her Yahoo IM for a short time in order to concentrate on updating the grades and posting the most current assessments on Edline. That task completed, she begins writing the assignments for the next week, which will consume many more hours during the next two days. She searches the Web for some teaching sites that deal with dangling and misplaced modifiers, and finds an online quiz she can use. She adds the link to the weekly work and writes instructions (similar to a class lecture) about dangling modifiers.

She includes directions for not only locating the necessary resources, but also for completing the online quiz.

As she decides which activities to include each week, she keeps in mind the national and North American Division standards for history, English, and Bible. She has only 35 minutes of

less. This is part of a unit about social programs that began during the Depression of the 1930s. The students will hold a seminar for the community at the conclusion of their service project. Soon, they will begin work on a PowerPoint show to describe their project's impact on the homeless, on them, and on their community.

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AE21 students work collaboratively on an assignment.

actual “class time” four days a week, so the curriculum must be augmented by written instruction, Web research, textbooks, and additional resources such as NetTutor, an online whiteboard the teacher and one or more students can access and see at the same time to discuss new concepts, edit papers, and view documents.

Scott's Service Project

At lunchtime, Scott has an appointment to interview a local businessman about a service project. Scott has been searching for resources for a food drive, which is scheduled for the end of the month. He has prepared a flyer to leave with the businessman and will follow up with a phone call next week. Through this activity, Scott and his classmates across the country are collaborating to make a difference in the lives of the home-

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While Scott works on his service project, Mrs. T begins making phone calls to arrange for student service projects during the upcoming mission trip to Orlando, Florida. While she is on hold with a service coordinator, she begins making a list of student performers for the talent show during the mission trip.

Math is the last “class” on Scott's daily schedule. After doing his homework, he had some questions about sine and cosine, so he got on Instant Messenger with Dr. B*, the AE21



Helping at the Ronald McDonald House (a facility that provides a place for gravely ill children and their families to stay and to enjoy a vacation in Orlando, Florida) was one project in which AE21 students participated during their October mission trip.



Jack Carey, AE21 science and math teacher, presents a lesson. Live video of the local site can be seen in the small window in the lower right corner of the TV screen.



Fiona Ghosn, like all AE21 teachers, spends the majority of her day at her laptop, working one-on-one with local site coordinators and students.

math instructor, who used the online whiteboard at NetTutor (<http://www.link-systems.com>) to explain the concepts. During class, Dr. B uses her document camera as an overhead projector to draw triangles, angles, and perpendicular lines. Scott is able to complete the assignment successfully because of the teacher's one-on-one instruction earlier in the day.

For the remainder of the day, Scott works on a project with some of his classmates. The group (consisting of students from across the U.S.) has been assigned a cooperative Bible project to present on camera next week. After a conference on IM, they share their proposals by E-mail. Scott takes some time out to do his physical education (PE) exercises and records them on his PE log to send to his teacher via E-mail. Just before he heads home, he double checks to make sure all the activities he has completed that day have been E-mailed to his teachers.

During the rest of her day, Mrs. T downloads E-mail for the umpteenth time, uses NetTutor to help a student edit a thesis statement for his composition and answers multiple IM messages. Before she goes home, she has to create a schedule for the mission trip, deciding when the picnic, class night, and banquet can be worked in around the other activities. Tomorrow, she will begin her routine again, with slight variations, trying to incorporate the latest educational theory, create interesting ways to teach long-distance, and build close relationships with her students.

AE21 Mission Trip

Scott has to hurry home from school to get ready for tonight's fundraiser for the upcoming AE21 mission trip. While on the trip, all of the students will participate in several

days of community service, doing such diverse things as packing food baskets, helping clean a shelter for battered women, assisting at a facility for the developmentally delayed, putting on a program for a nursing home, and volunteering at a community park.

This is Scott's first year in AE21, so he has not gone on such a trip before; however, he is looking forward to it because of what the other students have told him. In fact, he has already picked out the girl he intends to ask to the banquet. He needs new running shoes for the picnic and must dig through his closet to find work clothes for the service projects. He has even packed some extra things for class night, when one of the teachers will lead him and his fellow sophomores from all the sites in a competition against the freshmen, juniors, and seniors. They will see who can complete various tasks (such as building a human pyramid or doing a handstand) or produce assorted items (such as a toothbrush, school planner, or a purple sock) first, creating an environment of camaraderie between classmates from diverse locations.

Scott looks forward to each new day, filled with surprises, creative approaches to learning, a variety of service and leadership opportunities, use of various forms of technology, and most of all, connecting with other Adventist students. ✍



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