



ECA LAPTOP PROGRAM OVERVIEW 2009-10

ECA Laptop Program Overview & Philosophy

Educational research proves that learning occurs most effectively when students are presented with a variety of learning options. In any secondary classroom, we believe opportunities for creative, higher-level problem solving, and hands-on experiences are important for global citizens of the 21st century. Technology is one of the best learning tools available to meet these needs. Our experience proves that, if handled properly, the computer can be an effective catalyst and tool for learning in the classroom and at home.

The goal of the 1:1 laptop project is to evaluate the impact of dedicated computer access on learning and teaching practices. The objectives of the project include the following:

- To enrich teaching and learning practices to support the skills required to succeed in the global knowledge economy;
- To improve both teacher and student technology related competencies;
- To impact positively on student motivation and achievement;
- To increase parental and community involvement in education and lifelong learning.

What is the 1:1 laptop program at ECA?

The 1:1 laptop pilot project is designed to determine if providing a laptop computer for each student is an effective way to increase student achievement and engagement. The study will also examine teaching practices that promote learning in a technology-rich environment.

Who is involved with the project?

In the first two years of the project, all 9th and 10th grade students and their teachers participated. In this third year of the project, the 11th grade will be added. The project is managed by Win Lowman, the HS Principal and Aland Russell, IT Director. A teacher from each of the grade level is responsible for organizing the day-to-day classroom aspects.

Why undertake this project?

No one would expect a person working with technology in their career to limit their computer access to an occasional trip to the company's computer lab. We must do everything possible to educate our students for their future, not ours. This initiative is the next logical step in improving learning by integrating technology into the curriculum and pedagogy at ECA.

What research supports a program of this type?

Research suggests that today's young people are "digital natives" who learn about the world in different ways than "digital immigrants" who did not have easy access to personal computers. Recent brain research has shown that young people process information and learn differently

than previous generations and suggests that new instructional methods will be required to reach this generation. Results of similar 1:1 computing initiatives have shown:

- Improved writing skills
- Increased student motivation and interest in school
- Students more engaged in their learning
- Teachers increasingly utilizing project-based and hands-on curriculum and teaching methods.
- Children born since 1980 process information differently than children born before 1980. They learn best with multi-sensory input.

How will the project be evaluated?

ECA will interview teachers, students, and administrators about their experiences in the project, collect relevant information, and present an unbiased evaluation to the ECA Board of Directors. Five key areas will be evaluated:

- How does the introduction of technology affect student achievement and other indicators of student engagement in learning?
- How do teachers teach differently when students and teachers have full-time access to technology?
- How is the relationship between a school and its community affected by the introduction of the laptops?
- What professional development practices best support technology-rich teaching and learning?
- How is the availability of assistive technology and application of universal design principles affected by the introduction of technology?

Will this project be expanded?

The 2009-10 school year will be year three of the pilot. The School Board will decide on the future of the program in consultation with the program participants and the outside evaluators.

Are there other school districts that have attempted a project like this?

Five districts have been consulted in the ECA laptop project: Hopkins, Stillwater, Minneapolis, MN, Indianapolis, IN, and Schaumburg, IL. Stillwater has received full support by its current school board for this initiative and has shown significant changes in student engagement and use of technology in classrooms by students and teachers. Schaumburg implemented a 1:1 laptop program to address specific writing needs of students in 4th through 8th grades. This district also has shown significant changes in engagement. Minneapolis implemented an initiative at an isolated site and found success in student engagement and a decrease in behavior referrals. Indianapolis implemented an initiative called the Key Laptop Project in which all participants and elementary building principals got laptops in the summer of 2004. In these districts, common qualitative evidence from visits with students and staff include

- Low incidence of computer repair and theft.
- Increased flexibility for teachers and students to integrate technology into instruction and learning.
- Increased technology access to all students and teachers rather than responding to isolated requests for technology from a limited number of technology users.

- Observations that students solve problems and perform more intuitively as digital natives in classrooms with 1:1 laptop programs.
- Increased engagement by parents in their child's learning.

How are the teachers being trained to utilize this technology?

ECA teachers, IT Director, and high school principal received intensive training from a laptop instructional facilitator in August 2007. As the program has developed and matured, veteran teachers of the program train and guide the new teachers. Over the past few years, the teachers have developed technology rich curriculum that fully utilize the laptops to enhance student learning.

How are technical support needs addressed?

The ECA technology department has a team of highly-trained full-time technicians to ensure that the computers and other hardware are working properly and it is the primary line of support for the laptops. Questions and problems should be referred to them first. If a laptop cannot be returned to working order within a very brief time, the Technology Department will loan a laptop to the student.

Will the students have Internet access at home?

Home internet access is the responsibility of each family.

What kind of computers will the students be getting?

The make, model, and software configuration of the laptop is determined annually by the Director of Technology with advice from the classroom teacher and school administration.

The Dell Vostro 1500 was selected from a number of brands and configurations with particular emphasis on battery life. It has served us well in the past two years and we expect to order a similar machine for 2009-10.

What other equipment is included in the project?

The ECA Technology Department completed a wireless network upgrade at the end of September 2007. This means that students are able to use their laptops and get full network access wherever they go in the school building and teachers can plan learning activities that go outside of the classroom. The school supplies a laptop sleeve for protection. The sleeve is meant to be carried inside a case or backpack, parents are responsible for providing cases or backpacks for transporting the laptop to and from school and class.

Orientation for New Users

Students and/or parent/guardian of students receiving a laptop computer are required to attend an orientation program before receiving the laptop. Instructions for, handling, maintenance and procedures will be provided during the orientation.

Eligibility

All ECA 9th, 10th and 11th grade high school students will be issued a laptop. Eligible students are those 9th, 10th and 11th grade students officially registered at ECA. The student and parent/guardian will sign an agreement statement prior to laptop checkout. The student user is responsible for the safe return of the assigned laptop. Should the project prove a success, this process will be repeated with high school students in upcoming years.

Duration of Computer Loan

Laptops will be checked out for the school year. Laptops will be collected from students at the end of the school year.

Withdrawing Students:

If a student withdraws from school after a machine has been assigned, the student is responsible for ensuring the return of the laptop before his/her last day in the school.

New Students:

If a new eligible grade student arrives after laptops have been distributed, contact the IT Director as soon as possible to arrange obtaining a laptop. A laptop will be assigned once the student and parents/guardians attend an orientation and sign the agreement.

Ownership of Machines

The laptops are the property of ECA and are being provided for the exclusive use of ECA high school students as a tool for learning. The school will only assign Dell laptops to students. Due to insurance and liability issues, ECA will not lend machines to other institutions, groups or individuals.

Damage and Loss

Accidental damage that affects the computers operation is covered under the warranty. Damage that affects only the cosmetic look of the computer is not covered. ECA carries an insurance policy for loss or theft, however, the parent will be responsible for the deductible which is around \$350.

Internet Safety

You should be aware that ECA does not employ content filtering of the internet. However, all internet browsing is monitored and logged and the logs are reviewed periodically for inappropriate use. Internet use off campus is not logged on the ECA Server, however, spot checks are conducted periodically of the browser history.