



## FREQUENTLY ASKED QUESTIONS

### WHAT IS THE INNOVATIONS FOR LEARNING INITIATIVE?

The Innovations For Learning Initiative is Ontario Christian Schools' focused effort to equip our students with the specifically 21st century skills they will need to be leaders in their homes, communities, and places of work in service to God's kingdom.

We see this initiative as the next logical step in a progression that has been taking place at Ontario Christian for the last several years, but we will be specifically leveraging technology to help us reach this goal in new and exciting ways.

One way that technology helps in this is by providing the opportunity to customize learning so that each student is at the same time supported and challenged to learn in the unique way that God has created them.

### WHAT TECHNOLOGICAL PROGRESSION HAS OCCURRED AT OC TO BRING IT TO THIS POINT?

Ontario Christian Schools has taken steps in the last ten years especially to integrate technology into the curriculum in meaningful ways. For example, our faculty has laptops, the classrooms all have projectors and document cameras, and we have multiple computer labs (both stationary and mobile) that are being used heavily on both campuses to integrate technology into the curriculum.

One of the major commitments that we made as a school was a contract with a consulting company called Beyond Technology in Education. During the 3 year contract, they provided assessment of our faculty's comfort level and competence with technology, extensive teacher training and professional development, and direct integration of technology into the curriculum.

### WHAT ARE THE INITIATIVE'S GOALS?

The initiative has lofty, but attainable goals such as increased student engagement, comfort level with utilizing technology as a meaningful educational tool, discernment of technology resources, higher order thinking, as well as improved problem-solving skills, and an increase in project-based learning. Technology helps by providing a more efficient platform for delivering information, thereby allowing for more time and opportunity for greater depth of learning.

### WHAT STEPS ARE YOU TAKING TO MEET THESE GOALS?

Ontario Christian is actively pursuing a plan to provide netbook computers to each student in grades 7-12 (for use at school AND at home) during the school year. The goal is to have this program in place by Fall 2012. The steps we will be taking to meet this goal include teacher training and ongoing support, fundraising to kick off the program, and two-way communications opportunities for the entire community. The faculty and staff will be involved in making policy and procedure-related decisions.

### HOW WILL A 1-TO-1 LAPTOP PROGRAM HELP IMPROVE A STUDENT'S ABILITY TO THINK CRITICALLY?

One main way is by making the dissemination of information more efficient. This has already been a work in progress, because the days are over of the teacher standing in the front of the classroom writing down on the chalkboard everything the students need to know with the students copying it in their notebook. We have been working toward using class time for more discussion, problem-solving, and project-based learning. Every student having the tools for digital communication (through our internet-based learning management system) will help to standardize this process.



### WHAT RESEARCH OF 1-TO-1 LAPTOP PROGRAMS HAS BEEN DONE?

The past three years, we have specifically researched this solution, often referred to as a “1:1 laptop program.” This research has included analysis of case studies from journals of education and site visits to and conversations with schools that currently have this type of program in place. The results of this research are very exciting, and we believe the potential is even greater as the technology improves.

### WHAT RESULTS HAVE YOU OBSERVED IN YOUR RESEARCH OF 1-TO-1 LAPTOP PROGRAMS?

The recurring themes from well-implemented 1:1 programs include such benefits as increased student engagement and motivation, improved writing skills and critical thinking, improved attendance, and increased collaboration among students. In certain cases, there were further benefits that were likely a result of specific goals for individual school systems, but these were the most pervasive results.

### WHY NETBOOKS SPECIFICALLY?

While we recognize that there are many technology tools available, each with their unique benefits and challenges, at this point, we believe netbooks provide us the best combination of computing power and versatility, portability, low cost, and long battery life. All of these factors put together help us achieve the maximum positive impact on education, while mitigating some of the issues associated with such a huge undertaking.

1. Netbooks offer the following advantages over full-sized laptops: a. Lower cost; b. Longer battery life; c. Smaller form factor and weight
2. Netbooks offer the following advantages over tablets (such as the iPad): a. Lower cost; b. Keyboards for typing notes, papers, etc.; c. Currently more robust computing power and speed, allowing for more complex applications

### CAN'T WE JUST BUY OUR OWN COMPUTER? WHAT BENEFIT IS THERE TO HAVING THE SCHOOL BUY IT?

1. When the school has a financial stake in the computer, we are allowed to put software on the machines at steep discounts. For example, Microsoft Windows 7 Pro and Microsoft Office 2010 are necessities, and it would cost over \$300 per copy. As a school, we can get both for under \$10 per computer. The total software package we are putting on the machines would cost over \$3000 per machine to purchase individual copies.

2. Because we own the computers, we can keep spare parts on hand and repair minor hardware problems on-site. If each student could supply their own machine, we would not have the storage space or the funds to keep such a large supply of parts.

3. This is an educational tool. Therefore, we need to be in control of the machine's usage. We need to own the computers so that we can put web filter and classroom management software on the machines. This allows the teachers to be in completely control of what students do on the computers during the school day, and it gives parents the peace of mind that the internet access will be filtered.

4. While much of the computing world is moving toward “cloud-based” internet access to files, there are still issues of compatibility among platforms. Because we own the hardware and software, we can standardize the software so that these compatibility issues are minimized.

### HOW WILL OC ENSURE THAT THE COMPUTERS ARE USED FOR EDUCATIONAL PURPOSES IN THE CLASSROOM?

1. We have been using classroom management software from DyKnow. There are two programs, Monitor and Vision. Monitor is already being used by teachers at OC, and it allows such things as: a. Total control over what programs students are using. For example, in a math class, if students will be using only Microsoft Excel for a class period, the teacher can shut off the ability for students to open any other program.



b. The ability to see and share student screens without looking over their shoulder.

c. Vision is being used at several schools with 1:1 laptop programs to deliver instruction. It uses slides, similar to PowerPoint, but allows students to add their own notes to the slides, since it becomes their own “stack” of slides.

d. Teachers can ask poll questions and gain immediate feedback from students to gauge comprehension. The teacher can privately know which students answered a given question correctly, and display a graph of the class results with student identity hidden. This helps teachers by allowing them to revisit concepts that students do not comprehend.

e. Teachers can send students to a website or program en masse. Rather than having to read an entire web address and waiting for every student to correctly type the URL, teachers can type it once and it populates to the computers of all of the students in their class at the time.

#### WHAT ARE STUDENTS GOING TO DO ON THESE COMPUTERS?

1. Interact – teachers will be able to send students to websites that allow them to use simulations and other multimedia to learn information in a way that makes sense to them, by trial-and-error.

2. Research – teachers no longer have to wait until their students get home (or even to the library) to research a question or problem.

3. Collaborate – teachers can assign groups to work together. This collaboration is facilitated by teachers via email (each student 13 or older will have his own managed, filtered account), social networking (we use a closed system called Edmodo), and through DyKnow (students can be allowed to share notes and resources).

4. Organize – students can take notes and access course calendars that are specific to their needs.

#### HOW WILL YOU HELP US MANAGE COMPUTER AND INTERNET USAGE AT HOME?

Our plan is to provide an internet filtering service that manages student access no matter where they are in the world. Of course, no technology is impervious to a very techno-savvy student, so there is no substitute for parental supervision and clear rules in the home. We are planning to provide parents with various options of access/blocking for their child – even when their child is at home.

#### WHAT TYPES OF ASSESSMENT TOOLS WILL YOU BE USING TO DETERMINE IF THIS INITIATIVE IS BENEFITTING OUR STUDENT'S LEARNING?

Because the goals of our program do not lend themselves to objective measurement, we will be using assessment tools such as surveys (of parents, students, and faculty) all along the process. These goals include (but are not limited to) increased student interest and engagement, a greater comfort level with technology as a tool, proper priorities and stewardship of one's time, improved time management, improved higher-order thinking skills and improved communication among students, teachers, and parents.

#### WHY ARE WE DOING THIS NOW?

At Ontario Christian we are Growing Christian Leaders. Leadership in today's world requires a fluency and comfort level with technology.

Students will be entering a highly technical workforce where technology will be utilized in virtually every career, and we believe it is our responsibility to prepare them accordingly.