

# One-to-One Technology



Our mission is to ensure that we strengthen the God-given capabilities of each child in a loving Catholic

community, so students experience an environment that is gospel-centered and service oriented. We also recognize that our role is to thoroughly prepare our students to be successful in a world that is quickly becoming technology centric.

The exciting launch of Christ the King Catholic School's one-to-one technology program is the culmination of widespread research and numerous deep and rich discussions among faculty and staff, parents, community members and outside educators and professionals. We believe strongly that our students will benefit from having greater access to technology on a daily basis.

The Parish School Council has voted to implement a one-to-one technology model in three phases:

Phase 1 - Fall 2012 - grades 6-8

Phase 2 - Spring 2013 - grades 3-5

Phase 3 - Fall 2013 - grades K-3

Phase 1 also includes purchasing an iPad for every teacher, staff training, and upgrading our wireless network this summer. By starting in middle school, we will be able to take a thoughtful approach and address any lessons learned before implementation at the lower grades.

We have generated a list of frequently asked questions below that we hope will answer many questions. In addition, we will be hosting a parent information night on Tuesday, May 1st - more details about the evening will follow in the Family Envelope over the next several weeks.

## Frequently Asked Questions

1. **What is a one-to-one model?** One-to-one computing means putting a computer -- in this case an iPad -- into the hands of every student.
2. **What are the advantages of every student having a device?**
  - a. *Increases student engagement* - Many educators say that attendance and student interest improves in classrooms using one-to-one technology. Certainly, a present and engaged student is the best type of student to have!
  - b. *Complements project-based learning classroom* - One-to-one technology is at its best in classrooms in which learning is driven by projects requiring research, collaboration, and production of a final product (a slide show, video, or Web page).
  - c. *Broadens learning beyond the classroom* - Time and distance no longer create barriers when students can access the world around them in an instant. Students can view locations around the world and get real-time local data, investigating, questioning, and extending the activity with information and tools not available to them in other situations.
  - d. *Takes advantage of the teachable moment* - Many of the advantages of one-to-one classroom computing also can apply to computers in a lab or at a small classroom computer center. However, capitalizing on a student's intriguing question or on an unexpected discussion is much harder when a teacher has to schedule computer time. In a one-to-one computing classroom, a topic arises and teacher and students immediately are online, investigating, questioning, and extending the conversation with information and tools not available to them in other situations.
  - e. *Prepares for tomorrow's workplace* - When a student's only exposure to a computer is in a lab at the end of the hall, technology can be seen as a fragmented skill unrelated to daily life or a future career. As we know, however, computers are essential for almost any job -- doctors record patient notes on computers; small businesses order supplies online; farmers check the Internet for the latest weather conditions. One-to-one computing ensures that all students have the skills and confidence to integrate technology into their future, as well as their present.
3. **Will the devices stay at school or will students be allowed to take them home?** Each student will be assigned a specific iPad that they can customize (within limits set by the school) and that will travel with them during the school day. The iPads will be left in the classroom in a secure, locking, cart overnight. This is certainly one area that we will continue to evaluate during the Phase 1 implementation.
4. **What do we need to be careful of when implementing one-to-one?** This is an exciting change in our academic program, but we need to keep several things in mind:
  - a. Teacher training and time to learn how to use iPads in class is critical. We have a very talented and passionate staff and it is important to give them time to adapt to this change in their classes.
  - b. It is important to remember that the iPads are one of the many tools that the teachers will be using in class. While the iPad is incredibly powerful and versatile, it does not replace the teacher and good instruction.

5. **What does the educational research suggest?** It is important to keep in mind the difficulty of isolating one variable (such as technology) in such a complex and hard-to-quantify concept as student achievement. However, recent educational research includes the following significant points:
- Research conducted by the Canby School District over the past three years suggests significantly higher academic achievement gains for those classes using iPads and iPod Touches versus those classes without these devices.
  - A recent study of fourth and fifth grade students and their teachers in Dallas, Texas, indicated consistent and highly positive findings of one-to-one computing program in terms of student math and reading achievement, differentiation in teaching and learning, higher student attendance, and decreased disciplinary actions, suggesting a range of possible educational benefits that can be achieved through a comprehensive one-to-one computing educational environment.
  - Increased quality and quantity in writing: Some preliminary studies suggest that students not only write more, but write better, when using digital devices rather than pen and paper.
  - Greater student collaboration: The Center for Applied Research in Education Technology (CARET) provides a variety of research that suggests that students improve interpersonal abilities and teamwork skills through collaboration using laptops and handhelds.
  - Greater teacher awareness of student progress: CARET also cites research that seems to demonstrate that teachers can better monitor, or can monitor in more varied ways, student understanding and application of skills and concepts through one-to-one technology.
6. **Will students be allowed to download applications?** While each student is assigned a specific iPad that they can customize, they will not be allowed to download applications. All the student iPads will be managed by the classroom teacher, who will be selecting and installing all the applications.
7. **Will the students be using the device to access the Internet?** Phase 1 of the implementation will include upgrading our wireless network to allow greater, easier, and more consistent access to the Internet. While students may be accessing the Internet during class, the content is filtered through the school's filter.

8. **What is the cost of this program?**

<b>PHASE 1</b>			
<b>Description of item</b>	<b>#</b>	<b>Cost/Item</b>	<b>Total Cost</b>
Student iPad - bundle of 10	9	3,800	34,200
Staff iPad - bundle of 10	2	3,800	7,600
Mobile cart for storage	3	1,500	4,500
Software allowance/device	110	15	1,650
Protective case	110	15	1,650
Upgrade wireless access points	10	250	2,500
Upgrade firewall/content filter	1	250	250
AppleTV + adapter (wireless display)	13	175	2,275
Contingency	1	2,000	2,000
<b>Total Cost of Phase 1</b>			<b>56,625</b>

<b>PHASE 2</b>			
Approximate cost/class (3rd-5th)	3	14,500	43,500
<b>PHASE 3</b>			
Approximate cost/class (K-2nd)	3	14,500	43,500

- a. Our goal is to raise \$30,000 through this year’s jog-a-thon. This money will be used as a down payment on the devices and the remaining amount (approximately \$27,000) will be financed through a three-year lease. The school’s Budget Committee set aside \$15,000 in next year’s budget for a technology lease payment. The goal over the next several years is to increase the budgeted yearly lease payment so that in two to three years, the cost of the current technology, plus future technology, is built into the school’s annual budget and major fundraisers are no longer needed. The requirements for technology will not impact staffing or other general operating needs.
9. **Where will the money to pay for this program come from?** We intend to aggressively fund raise through the jog-a-thon this year, the jog-a-thon next year, and next year’s auction. The more generous the school community is the less we will need to rely on any tuition increase. It is our intention to fund this project through fundraisers and the general school budget, without the need to increase tuition.
10. **Does the one-to-one implementation change our technology paddle bid from this year’s auction?** No, there is no change in our plans to replace the aging computer lab with a mobile computer lab and convert that space into a multi-purpose/science lab. The mobile computer lab will be used by students for technology classes and as a supplement to classroom activities - projects, research, video editing, etc.

Interested in seeing what iPads can do for schools? This link has a few examples of iPads in Education:  
<http://www.apple.com/education/ipad/>