



MOVING YOUR SCHOOL THROUGH THE ONE-TO-ONE VALLEY OF GLOOM

Results of the 2014 JogNog Educational Technology Survey

By

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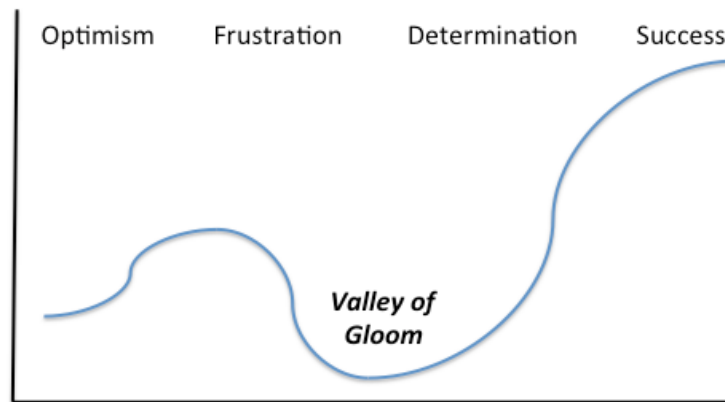
Results of the 2014 JogNog Educational Technology Survey

In the three years that have passed since JogNog last surveyed teachers, it at first seems like not much has changed. Bandwidth is still limited, teachers must still fight for computer lab time, and most schools don't even have a student information system (SIS) in place. Schools that have initiated one-to-one programs still seem plagued with technical, cultural, and political challenges. They have come down from the euphoric mountaintops of program initiation and now appear to be stuck in a one-to-one "valley of gloom." But beneath the surface of these high-level observations, we see significant progress being made. We can look to technology adoption in other industries to assure ourselves that Educational Technology (EdTech) is strongly marching ahead, providing teachers with more time to teach and students with better ways to learn. Slowly but surely, these pioneering schools are making their way out of the valley of gloom and onto the brighter and higher ground that one-to-one has promised.

One-to-one computing in schools has dominated the headlines in general media and in the educational press. In nearly every industry – from manufacturing to banking – future career opportunities will require a firm foundation in the use of computers and other devices. With U.S. schools anticipated to purchase 3.5 million tablets this year, classroom devices are starting to appear everywhere.

JogNog, a provider of EdTech systems that improve student achievement, has experienced multiple success stories with its customers. Although many schools are still struggling to develop and finance a complete vision of one-to-one devices in the classroom, some schools have already emerged and are successfully leveraging one-to-one technology.

In other industries, strategic thinkers have recognized four common phases of any new technology adoption, pictured below.



Technology Adoption Curve

We can look at these four phases and their impacts on technology adoption, in particular with reference to the one-to-one classroom:

1. **Optimism**, or more specifically, uninformed optimism. New devices have been purchased, and everyone is excited to start using them.
2. **Frustration**. Everything takes more time and effort than anticipated: keeping devices working and updated, sifting through thousands of possible apps and content, negotiating support contracts, ensuring privacy, managing user ids and passwords for both teachers and students.
3. **Determination**. Commitment to overcoming the barriers and learning from the success of others brings progress.
4. **Success**. Devices are fast and reliable, applications and content have been selected, and teachers embrace and own the infrastructure and begin to create powerful and novel learning opportunities for their students.

To understand this dynamic in schools, JogNog surveyed a random sample of over 175 educators in elementary, middle, and high school to learn about their use of digital devices. The results were surprising, showing that little progress has been made:

- A vast majority of students use limited computing resources on carts or in shared computer labs. However, only 18% of schools provide a tablet or other computing device to each student. At 11% of schools, students have no access to computer resources at all.
- By far, the biggest barrier to one-to-one computing is budget, and many of the other significant barriers such as hardware and software problems, poor internet access, and poor training can also be mapped back to budgetary restrictions.
- Because resources are inadequate, the ways tablets and other devices are used are quite limited. In-class projects and extra credit assignments are the most common applications. Nearly 60% of teachers don't use any learning or assessment apps.
- Administratively, schools are challenged in their use of technology, with almost 50% of schools not using any formal student information system.
- Finally, teachers lack the time and motivation to keep up on recent educational trends. We found that 35% do not track any educational publications, blogs, web sites, or social media.

This report will summarize the details of the survey results and will conclude with implications for teachers and administrators to make the most of the limited technology resources they have available. We hope that this survey of teachers can contribute to the public policy discussion about one-to-one learning, as well as inform decision makers about the challenges that teachers have experienced.

The future is bright and many schools that started early and suffered through the valley of gloom are now finding imaginative uses for the solutions that have been provided to them.

For instance, we've seen teachers using JogNog's online assessment and review system design novel and empowering variants of normal review and assessment such as "play for the grade you want" and "5th grade vs. 8th grade challenge" that make use of the new education technology and would not have been possible without a working one-to-one infrastructure.

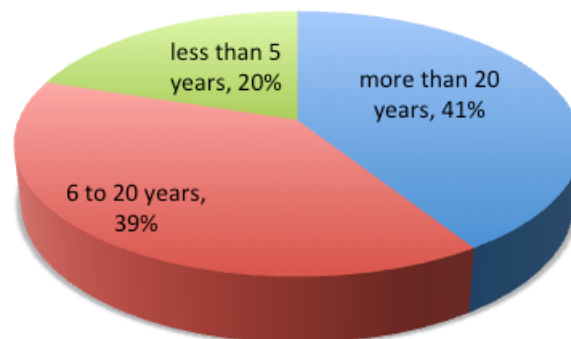
METHODOLOGY

This survey on one-to-one education was conducted online during August 2014. Invitations were sent to a random sample of teachers across the United States, with the responses coming from locations spread throughout the country, as illustrated in the map below.



Geographic Distribution of Survey Responses

Approximately 61% of the responses came from female teachers and 39% from male teachers, a slightly more male population than for teachers in general. Teachers who responded had a range of experience on the job, from recent hires to highly-experienced veterans, as illustrated in the chart below.



Years Teaching

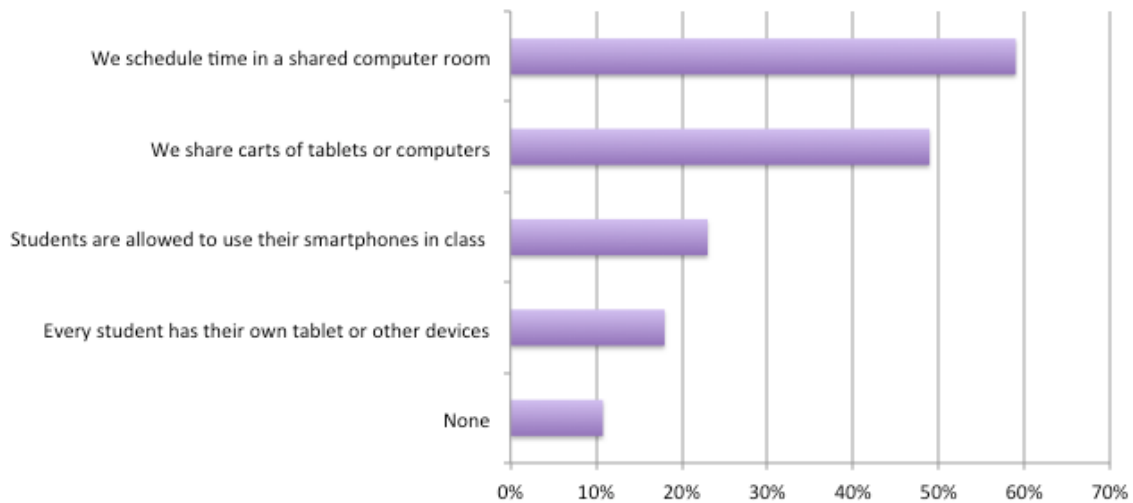
Approximately 80% of the respondents taught in public schools, 15% in private schools, and the remainder in homeschooling and other special programs.

SURVEY DETAILS

The following sections describe the results of key questions in the survey. A copy of the survey itself appears in the appendix.

1. One-to-One Classrooms Are Still Relatively Rare

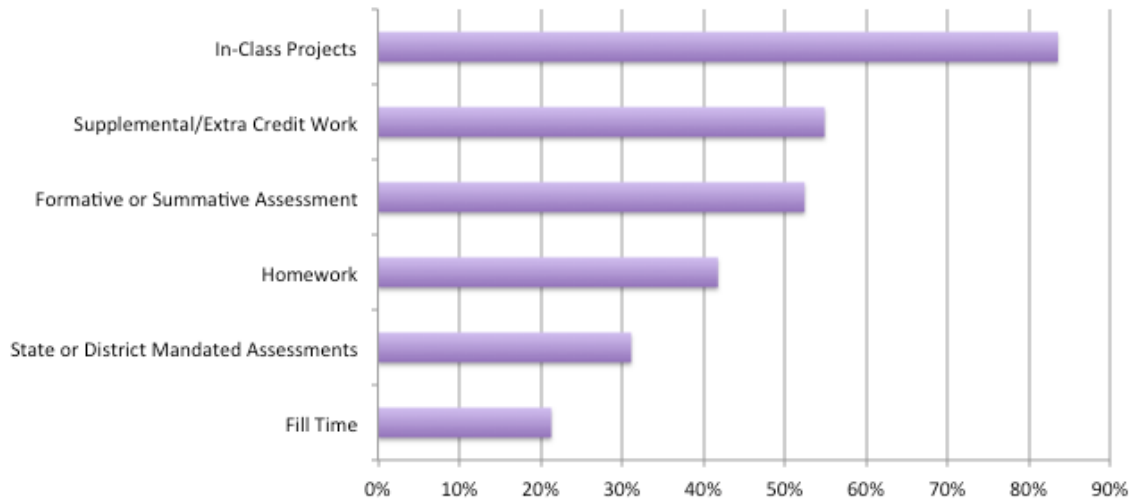
Only 18% of schools have one-to-one devices available for students. No computers or tablets were available for any students in 11% of schools. Most schools continue to share a limited number of computers in computer labs or on carts.



What computer or tablet resources do you have access to in your school?

2. One-to-One Technology Isn't Integrated with Teaching

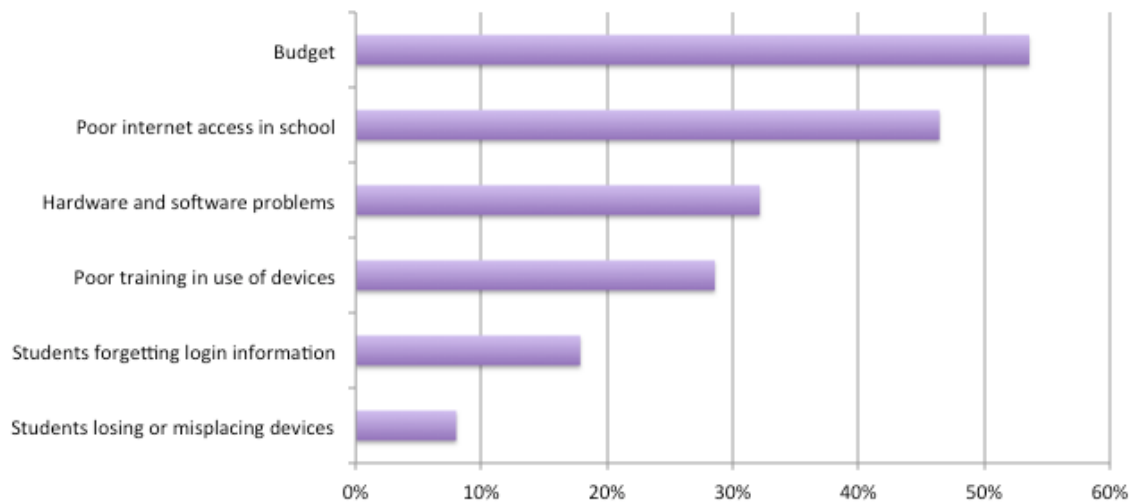
As exciting as the promise of these devices is for most teachers, they are only used on the periphery of the classroom. The primary uses of apps are for special projects and extra credit work – not integrated into day-to-day work.



How do you use computers or other devices in your classroom?

3. Barriers Abound

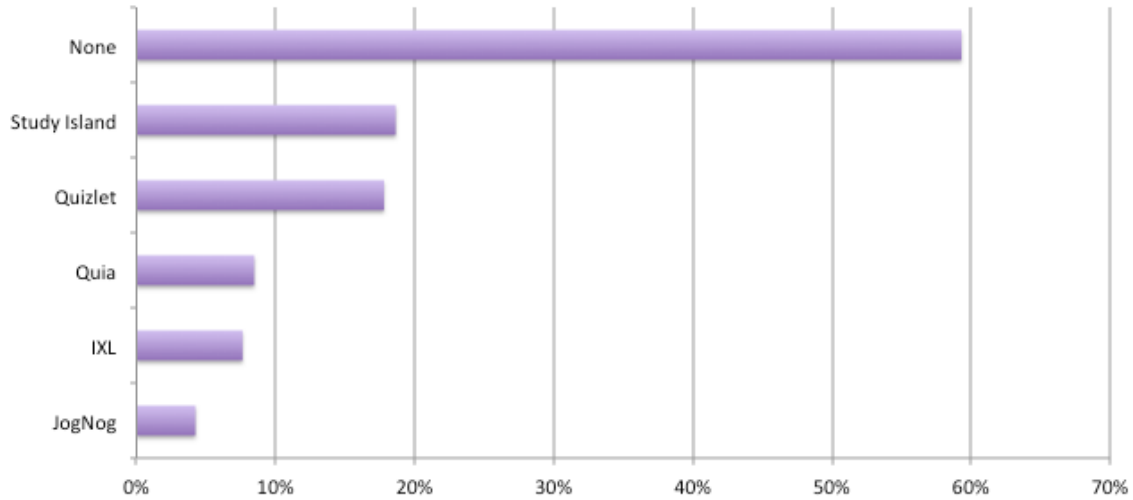
Although many teachers are experimenting, few schools are truly ready for one-to-one classrooms. Budget restrictions are an obvious problem, but many broader issues like internet access, training, and hardware and software issues hinder successful use of one-to-one technology.



What are the biggest barriers to using one-to-one devices in your classroom?

4. No Consensus on Apps for Learning and Assessment

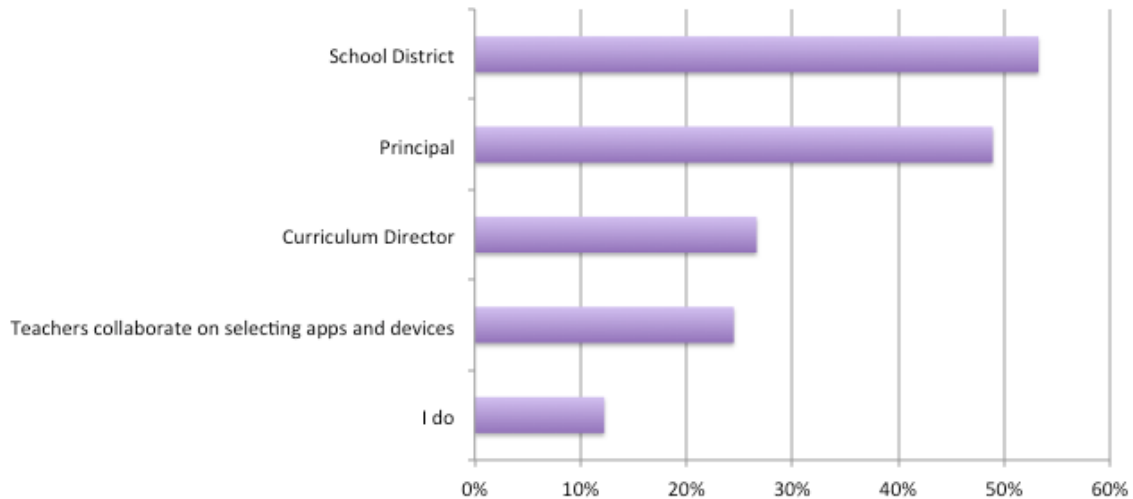
No products have made significant penetration into the market for learning and assessment apps. Indeed, more than half of the teachers surveyed did not use any software for learning and assessment in their classroom.



Which Learning and Assessment Apps Do You Use?

5. One-to-One Technology Decision Processes Vary

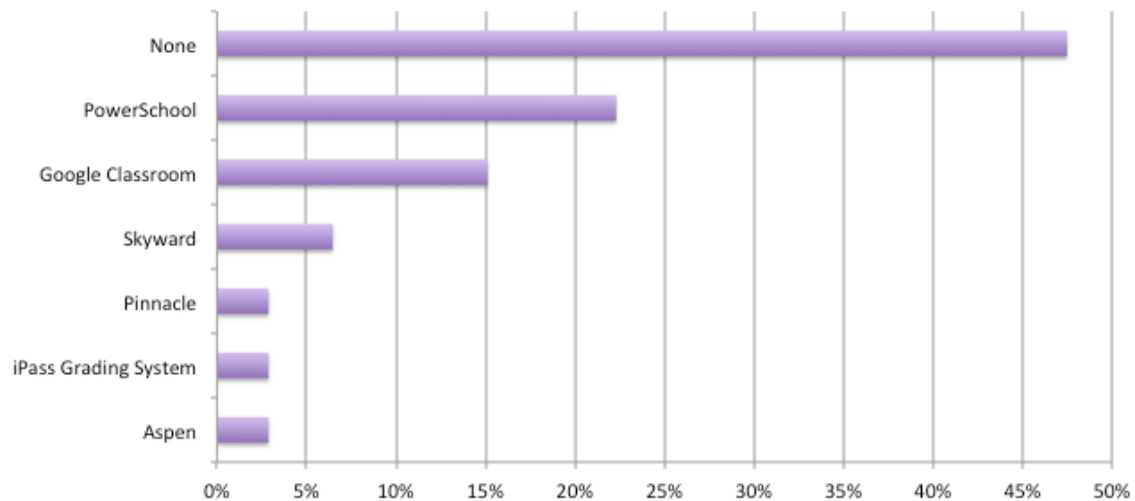
Schools vary widely in how they buy EdTech products. Roughly half of schools leave the decisions up to the school district, but many other combinations of decision makers occur across schools.



Who Makes Purchase Decisions for EdTech in your School?

6. School Administration is Still Low-Tech

Almost 50% of schools lack a student information system to manage student profiles, attendance, assignments, and grades.



Which Student Information System Does Your School Use?

THREE WAYS SCHOOLS CAN AVOID THE VALLEY OF GLOOM

Despite technology shortcomings, budget cuts, and bureaucratic challenges, teachers are excited about using technology in the classroom. Based on interviews with a number of teachers who have successfully navigated through the valley of gloom, JogNog has been able to identify three important strategies:

Measure Twice, Cut Once. Purchasing a large number of devices from a trusted vendor is straightforward. Planning the implementation and deployment in the context of adjacent issues like networking, curriculum integration, and training are where the larger challenges lie.

Look for Complete Solutions. Consider a vendor that provides comprehensive end-to-end solutions such as Amplify or CurriculumLoft. Their experience, support services, and teacher resources can help your school be more successful.

Keep Calm and Carry On. Pitfalls are bound to arise, but persistence, creativity and patience are necessary to achieve success.

ABOUT JOGNOG

JogNog provides a comprehensive system for formative and summative assessment that motivates students to learn in an engaging and fun way. Specifically designed to meet teachers' needs, JogNog delivers quizzes aligned to Common Core and state curriculum standards for grades 2 through 12. JogNog uses the latest in educational research to create competitive learning games that enhance student assessment and learning. It is available on the web, iPad, iPhone, Android, Kindle Fire, Windows Phone, and the educational tablets Amplify and Kuno. For more information about JogNog, visit <http://www.JogNog.com>.

APPENDIX: SURVEY QUESTIONS

1. What computer or tablet resources do you have access to:
2. How do you use tablets or other devices in your classroom?
3. Which student information system does your school use?
4. Which learning and assessment apps do you use?
5. What are the biggest barriers to using one-to-one devices in your classroom (check all that apply)?
6. What you type in a web search or app store search to find useful ed-tech apps?
7. What education-related blogs and magazines do you read?
8. Who makes the decision for edtech in your school?
9. How long have you been teaching?
10. What is the grade level of most of your students?
11. Please provide the zip code of your school: _____