

REPORT SUMMARY

Educators, Technology and 21st Century Skills

Dispelling Five Myths

The more K–12 teachers use technology, the more they recognize and value its strong positive effects on student learning and engagement and its connection to 21st century skills.

This is one of the key findings of a study of more than 1,000 K–12 teachers, principals and assistant principals from Walden University’s Richard W. Riley College of Education and Leadership.

Our commitment to educating educators with high-caliber programs led us to commission this study, which sheds light on the debates and the intersections

of technology and 21st century skills from the underexplored vantage point of school-based educators. The study addresses five myths about technology use in education—particularly by teachers—and educators’ perceptions about the effects of technology use on student learning, behaviors and skills.

The findings suggest that teachers have a vital role to play at the intersection of technology and 21st century expertise—modeling their confidence with technology, guiding young minds toward constructive educational purposes and teaching

students the tried and new skills for college and career readiness in a competitive world.

This study has broad implications for classroom instruction, for teacher preparation, training and professional development programs, and for those who support classroom teachers. The findings, implications and recommendations are especially relevant to:

- K–12 teachers
- K–12 administrators
- Postsecondary educators
- Local, state and national policymakers



Dispelling the Myths

Myth 1

Teachers who are newer to the profession and teachers who have greater access to technology are more likely to use technology frequently for instruction than other teachers. In reality, veteran teachers are just as likely as newer teachers to use technology to support learning. Newer teachers might very well use technology more in their personal lives, but when it comes to frequency of technology use in classrooms, they don't seem to have any edge over veteran teachers.

And lack of access to technology does not appear to be the main reason that teachers do not use technology. The survey results indicate that simply providing teachers with access to technology is no guarantee that they will use it.

Myth 2

Only high-achieving students benefit from using technology. In reality, both teachers and administrators believe that technology helps them engage

many different types of students, including high-achieving students, students with academic needs and English language learners.

Myth 3

Given that students today are comfortable with technology, teachers' use of technology is less important to student learning. In reality, teachers' use of technology matters a great deal. Teachers who are frequent technology users report greater benefits to student learning, engagement and skills from technology than teachers who spend less time using technology to support learning, as shown in the figure on the next page.

Teachers who are frequent technology users put more emphasis on 21st century skills, including accountability, collaboration, communication, creativity, critical thinking, ethics, global awareness, innovation, leadership, problem solving, productivity and self-direction.

Myth 4

Teachers and administrators have shared understandings about classroom technology use and 21st century skills. In reality, there are disparities between teachers' and administrators' perceptions of classroom technology use and emphasis on 21st century skills. Administrators believe that teachers are using technology to support learning more than teachers report that they actually do. Administrators also seem to have stronger perceptions than teachers do about the positive impact of technology use on student outcomes.

Myth 5

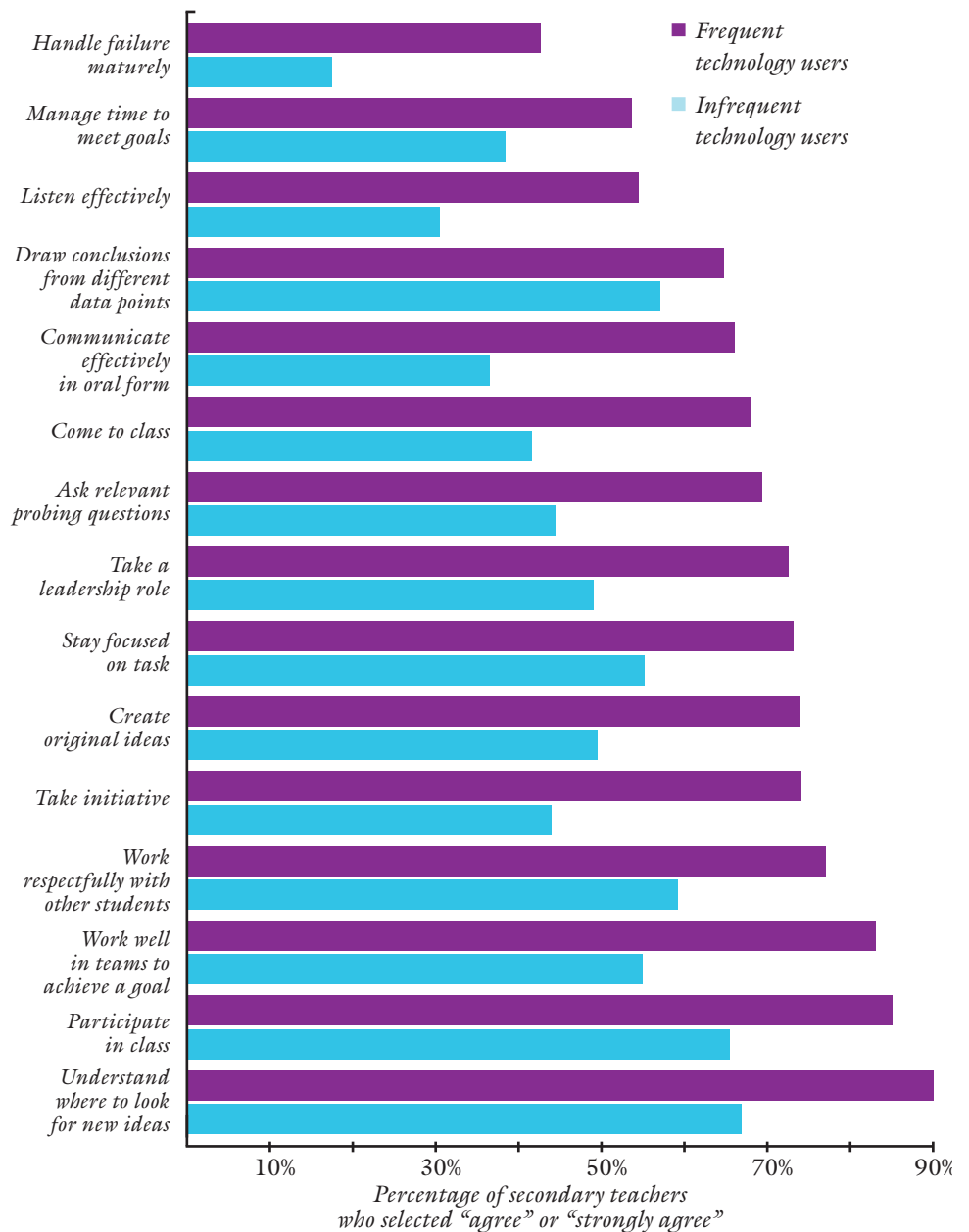
Teachers feel well prepared by their initial teacher preparation programs to effectively incorporate technology into classroom instruction and to foster 21st century skills. In reality, most teachers do not believe that their pre-service programs prepared them well in either technology or 21st century skills. Teachers place more value on advanced training programs.



The findings suggest that technology training for teachers may focus on how to operate new equipment, but not on how to incorporate it effectively into instruction. Education, training, professional development and leadership support make a difference in teachers' use of technology and in their emphasis on 21st century skills.

Survey question:
Please indicate your level of agreement with the following statements: Incorporation of technology in the classroom has improved our students' ability or inclination to ...

Frequent Technology Users See More Impact on Behaviors Associated with 21st Century Skills Than Infrequent Users Do





Read the full report at
www.WaldenU.edu/fivemyths



Recommendations

To increase educational benefits from technology use and emphasis of 21st century skills, our study offers these recommendations for K–12 teachers and administrators, postsecondary educators, and policymakers:

Recommendations for K–12 teachers

- Be as fearless as your students in trying new technologies.
- Seek out or create opportunities to collaborate and learn from your peers.
- Evaluate continuing education opportunities.
- Communicate with parents.

Recommendations for K–12 administrators

- “Talk the talk and walk the walk” by spending time in classrooms to better understand how teachers are actually using technology and developing 21st century skills.
- Provide teachers with sustained, job-embedded professional development in the use of technology and in teaching 21st century skills.

- Involve parents and the community in plans to use technology and develop 21st century skills.

Recommendations for postsecondary educators

- Help pre-service teachers learn how to integrate technology and 21st century skills into classroom instruction.
- Collaborate with schools to further evaluate the impact of connecting technology and 21st century skills in K–12 education.

Recommendations for local, state and national policymakers

- Signal support for integrating technology and 21st century skills into K–12 education. Require teacher preparation programs to develop future teachers’ proficiency in integrating technology into their work.
- Create a balanced assessment system that incorporates the use of technology and measures 21st century skills.

About The Richard W. Riley College of Education and Leadership

Named for the former U.S. Secretary of Education, the Richard W. Riley College of Education and Leadership at Walden University fosters a dynamic and diverse network of educational leaders who seek to support learners globally by leveraging the power of teaching and technology and who are committed to the pursuit of positive social change through education.

The college is the choice of more than 44,000 education students and alumni. In May 2010, for the fourth year in a row, Walden was identified as having the No. 1 largest online graduate program in education by enrollment, according to *U.S. News & World Report*.

About the Study

Study findings are based on a 2009 survey of more than 1,000 U.S. educators. The public report of the findings was prepared by Grunwald Associates LLC, based on research conducted by Eduventures, Inc. Vockley•Lang provided writing and design services.