Are Computer Labs Obsolete?

**YES**

Traditional computer labs are obsolete in terms of digital age teaching and learning as well as notions of good design. Labs are relics of a 20th-century method for skill-based learning that views the student as an isolated individual attempting to master specific tools for future factory-based employment.

During its best days, computer labs were a one-size-fits-all approach to mastering basic skills: typing up an assignment, creating a presentation, practicing QWERTY keyboarding, or researching a topic.

During its worst days, the lab was either a barren dust bowl with outdated and rarely functioning hardware or a fun-filled reprieve from the classroom—an easy method of babysitting that kept kids occupied with frivolous work and the shiny glare of the computer screen.

The outdated design of a computer lab harks back to a time when computers were large and unmovable, so technology had to be contained in one room. This design assumes that students are working by themselves rather than engaged in a collaborative inquiry or project. It also assumes that the teacher is walking around the lab, monitoring students and making sure they are on task. Pedagogical practice in most instances did not change in a computer lab.

Our modern technology, in contrast, has allowed our learning opportunities to take place anywhere, anytime. Some of the main benefits of today's computer hardware are its portability, wireless nature, and ability to be integrated into a classroom setting, as blended learning demonstrates. With these advancements in technology, we are finally able—and have the responsibility—to create fluid spaces for students and teachers to foster a community of learning.

Learning is interactive and socially dependent. We need to design...
learning spaces that promote engagement, foster creativity and collaboration, and support peer-based learning and knowledge creation. This redesigned space should be flexible, intuitive, comfortable, and user-oriented, shifting the focus from individuals sitting in front of screens to a more inspired environment dedicated to teaching and learning. Let’s revolutionize our relationship with educational technology and metaphorically blow up the anachronistic computer lab!

—Jessica K. Parker is an assistant professor in the School of Education at Sonoma State University in Rohnert Park, California, USA. She is the author of Teaching Tech Savvy Kids: Bringing Digital Media into the Classroom.

…the topic, they see that it is important knowledge. Eliminating the lab experience would dilute this message. The ever-expanding presence of technology reinforces our responsibility to make sure our students graduate with the knowledge to use it confidently wherever their lives lead them. Our task is not to dismantle computer labs but to make sure our lab practices give students the support, skills, and knowledge they need, enhancing the use of technology in all classrooms.

—A former classroom teacher and middle school teacher, Tim Telep is currently a computer teacher at Bayfield Elementary School in Bayfield, Colorado, USA. Visit his computer lab wiki at http://beskid.pbworks.com.

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**Readers Respond**

Here’s what other L&L readers had to say about this topic. Participate in our reader poll at iste.org/LL.

**Uninterrupted Access**

At Beijing BISS International School, we closed our remaining computer lab last year. We are a one-to-one school in grades 3–12 and support this with wireless connectivity, online learning portals, web 2.0 tools, and a customized approach to learning. Access to information and tools to connect with others and co-create products should be available in the classroom and ubiquitous to the needs of individual learning. A lab approach just cannot support this and never did support it effectively for all learners.

Julie Lindsey, E-Learning Coordinator
Beijing, China

**The Right Head Space**

I have found that “going to computer lab” puts my K–6 students in a different frame of mind. They are more focused on instruction. And most computer labs are set up for instruction, with a projector, screen or interactive whiteboard, classroom management software, and teacher station. All of these are a big help when introducing something new.

Theresa Pierce, Staff Development
New Castle, Indiana, USA

**It’s Not All About the Technology**

The technology is only a small part of why the lab concept is obsolete; far more important is the role pedagogy plays in enhancing teaching and learning. Parking students in front of screens and away from the rich experiences more flexible deployments can provide borders on unethical. We need to focus on workplace readiness skills, such as collaboration, creativity, and communication. These require human contact—and our classrooms require designs that enable it.

John Hendron, Instructional Technology Supervisor
Richmond, Virginia, USA

**Show Me the Money**

To say that computer labs are obsolete is to be ignorant of the current state of education funding in most U.S. school districts. The physical tech lab is a financially practical solution to obtaining full access to powerful computers with a reliable power source and consistent network connection.

Michelle Band, Library Media Specialist
Stewartsville, New Jersey, USA

**Beyond Time and Space**

Schools should look beyond time and space to maximize access to digital resources for students. Many schools use their computer lab budgets to implement one-to-one programs, laptop carts, or tablet pools, where students bring technology when it is needed. Learning is freed from constraints of the computer lab as access becomes immediate. And with advances in technology, any resource that would be available in the lab is available in the classroom.

Matt Harris, Head of Learning Resources
Singapore

**We’re Just Not Ready**

Computer labs are not obsolete, or won’t be for at least the next seven years. The cloud market is not mature, the school infrastructure is not equipped, and the teachers are not prepared enough for BYOD to take off.

Bill Pickett, CIO
Elliott City, Maryland, USA

**Labs Don’t Work for Students**

My experience is that students bring netbooks and tablets both to lessons and labs. They feel more comfortable having their own set of programs, tools, utilities, and data. Another reason is mobility. Students can easily continue in the lab the work started at home and then move with it. Last but not least are new communication opportunities. Our university is almost entirely covered by stickers with QR codes. Desktops are useless for this technology.

Igor Bessmertny, Associate Professor
St. Petersburg, Russian Federation

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**Letters**

Send comments to letters@iste.org.

**L&L Makes a Difference**

Thank you for the great ideas in L&L. The issues you choose to debate, and each L&L issue, are interesting, helpful, and readable. I like the idea of different contributors and information from many people. Keep up your good work. It makes a difference!

-Susy Ogden, Retired Computer Teacher
New York, New York, USA

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To contribute to this and future discussions, visit www.iste-community.org/groups/L&L.

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