Educational technology: hope or hype?

Scott Thornbury

October 27th, 2017

Two (Optimistic) Predictions for Learning in 2014

Holly Korbey | January 2, 2014 | 4 Comments

Getty

Self-Directed Learning Using Digital Tools Will Take Center Stage…

“The schools that will stand out in the year ahead are the ones creating space for multi-modal learning environments”

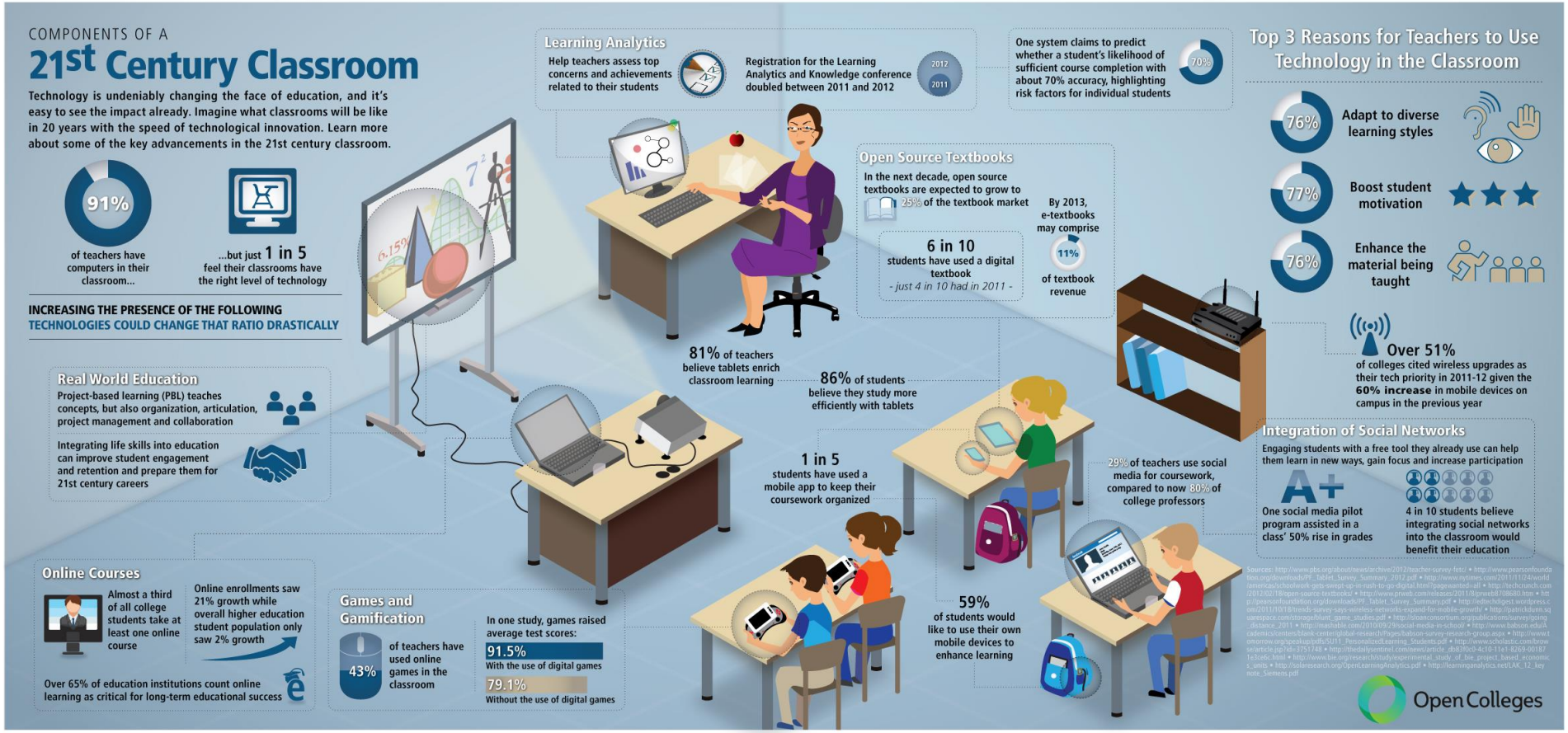
http://blogs.kqed.org/mindshift/2014/01/two-optimistic-predictions-for-learning-in-2014/

LEADERSHIP

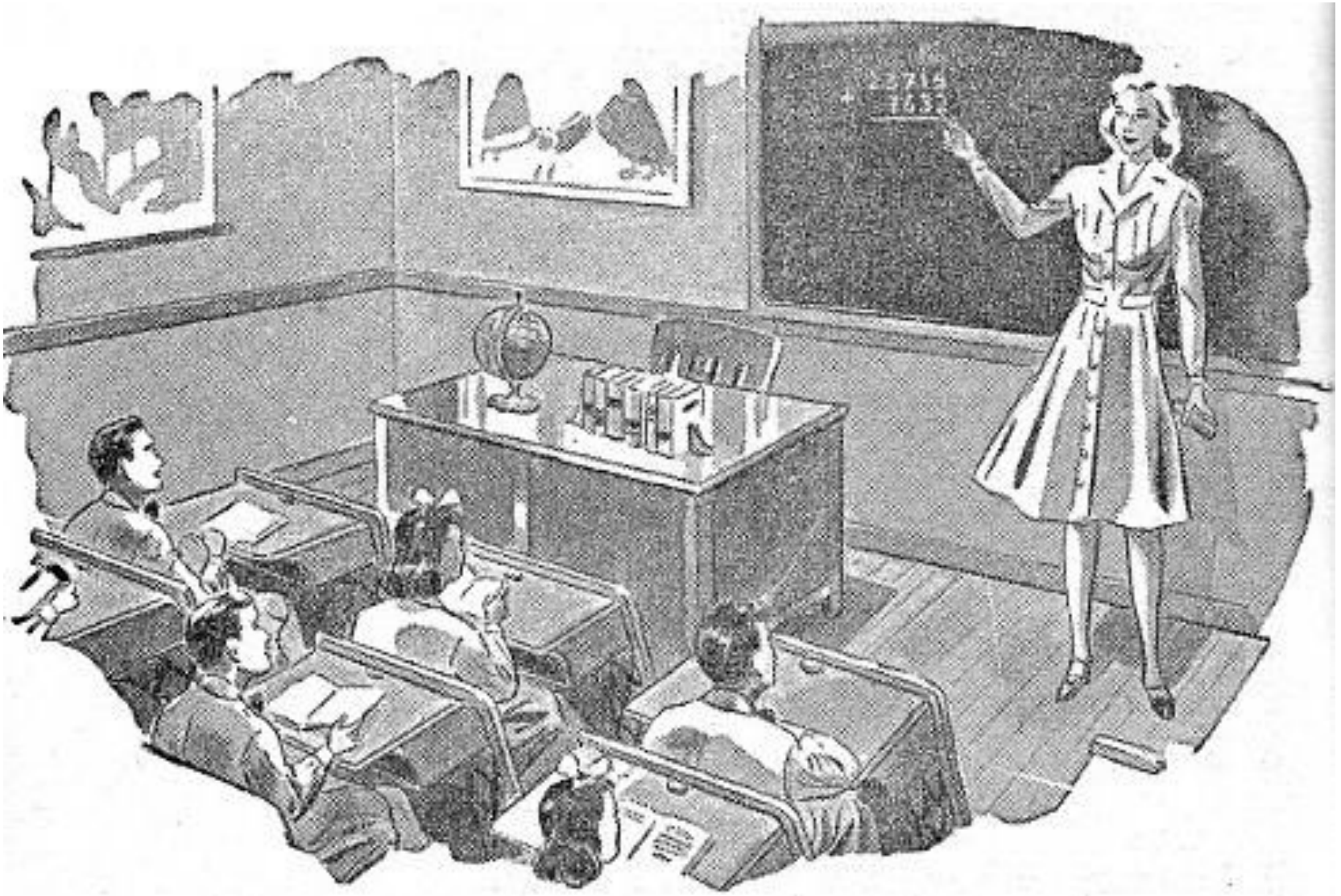
"Blended and online learning offers a new universe of content, opportunity and differentiated instruction, truly placing the student at the center of the learning experience."

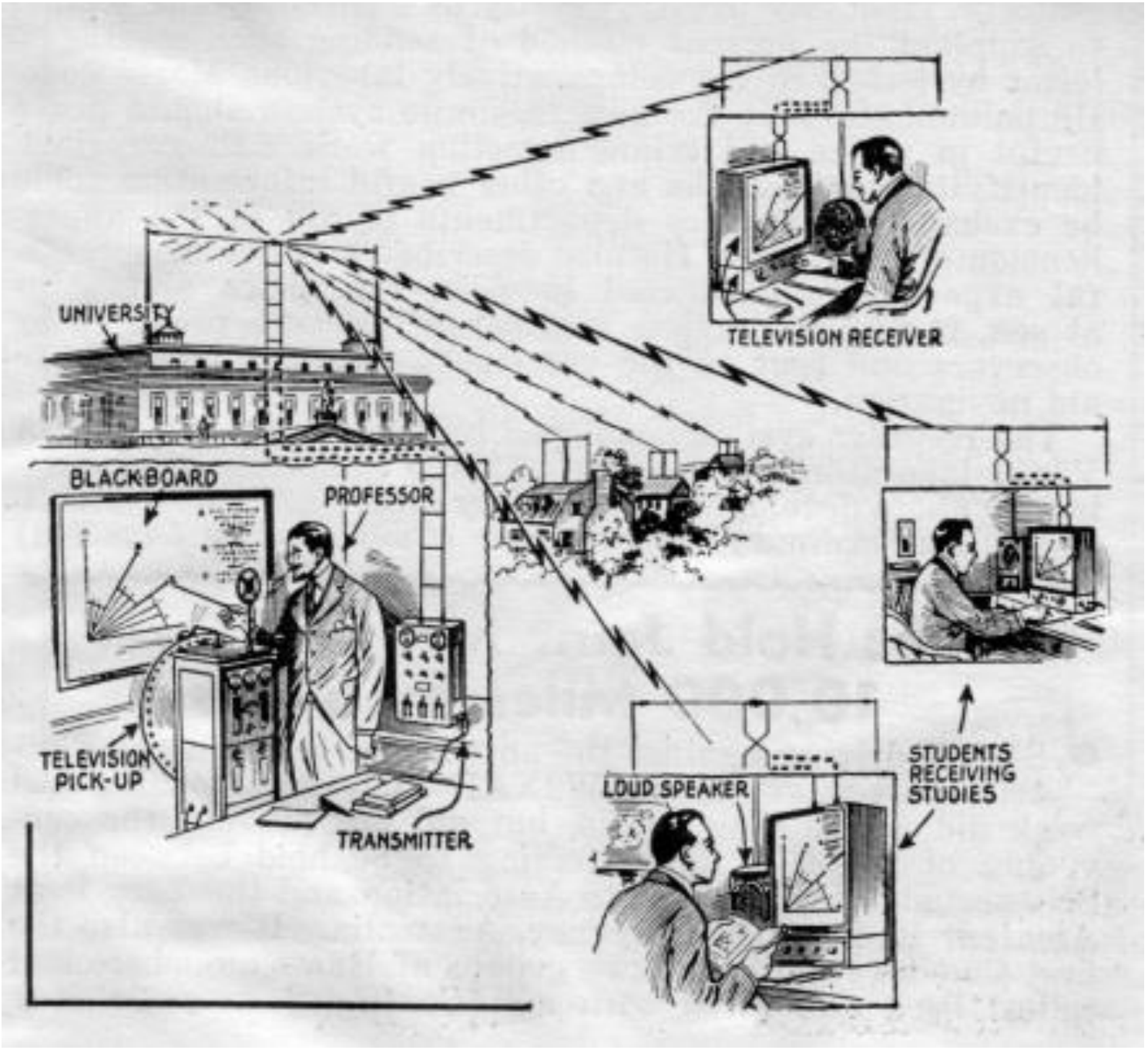
– Governor Jeb Bush

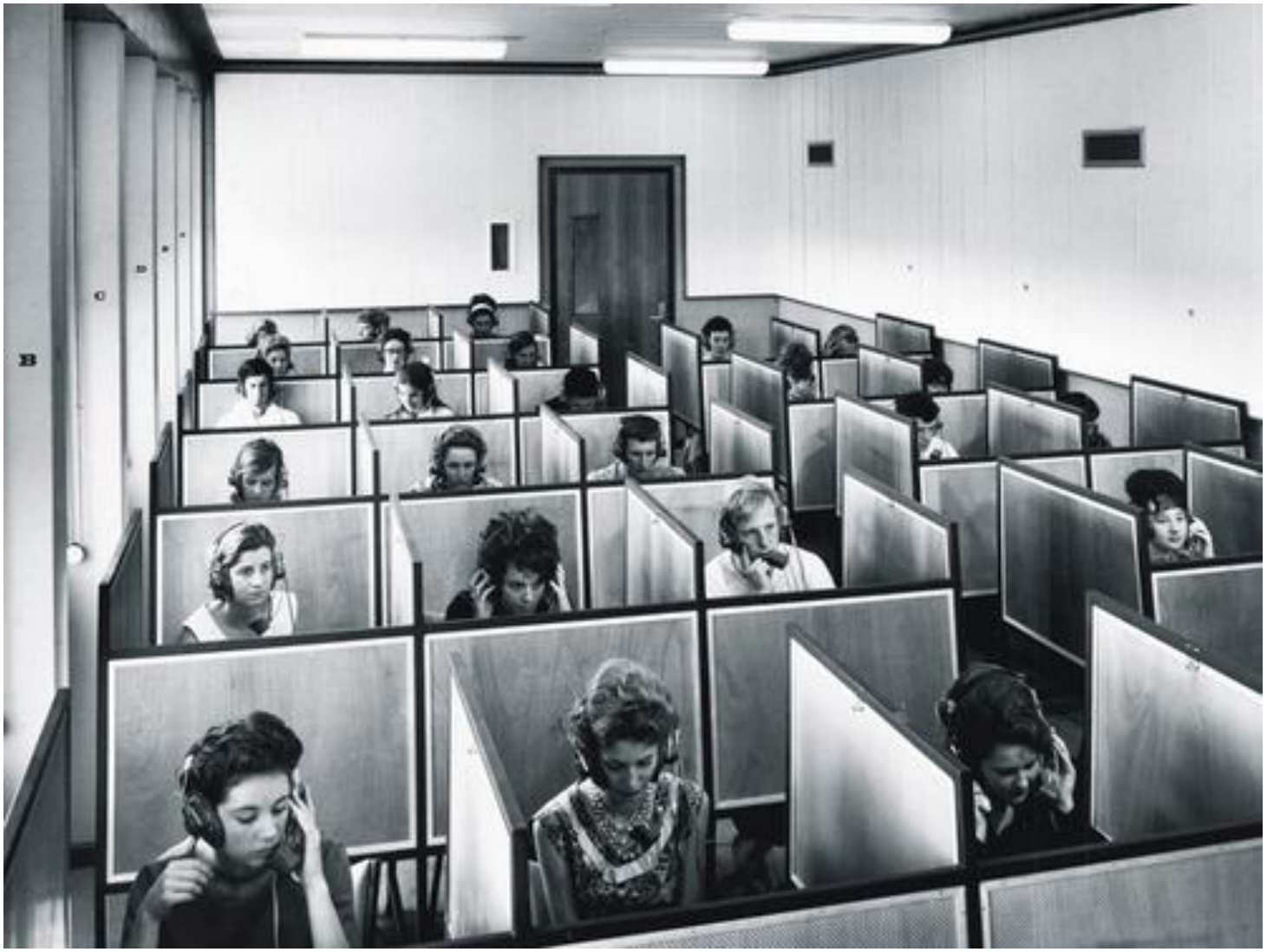
http://www.digitallearningnow.com/

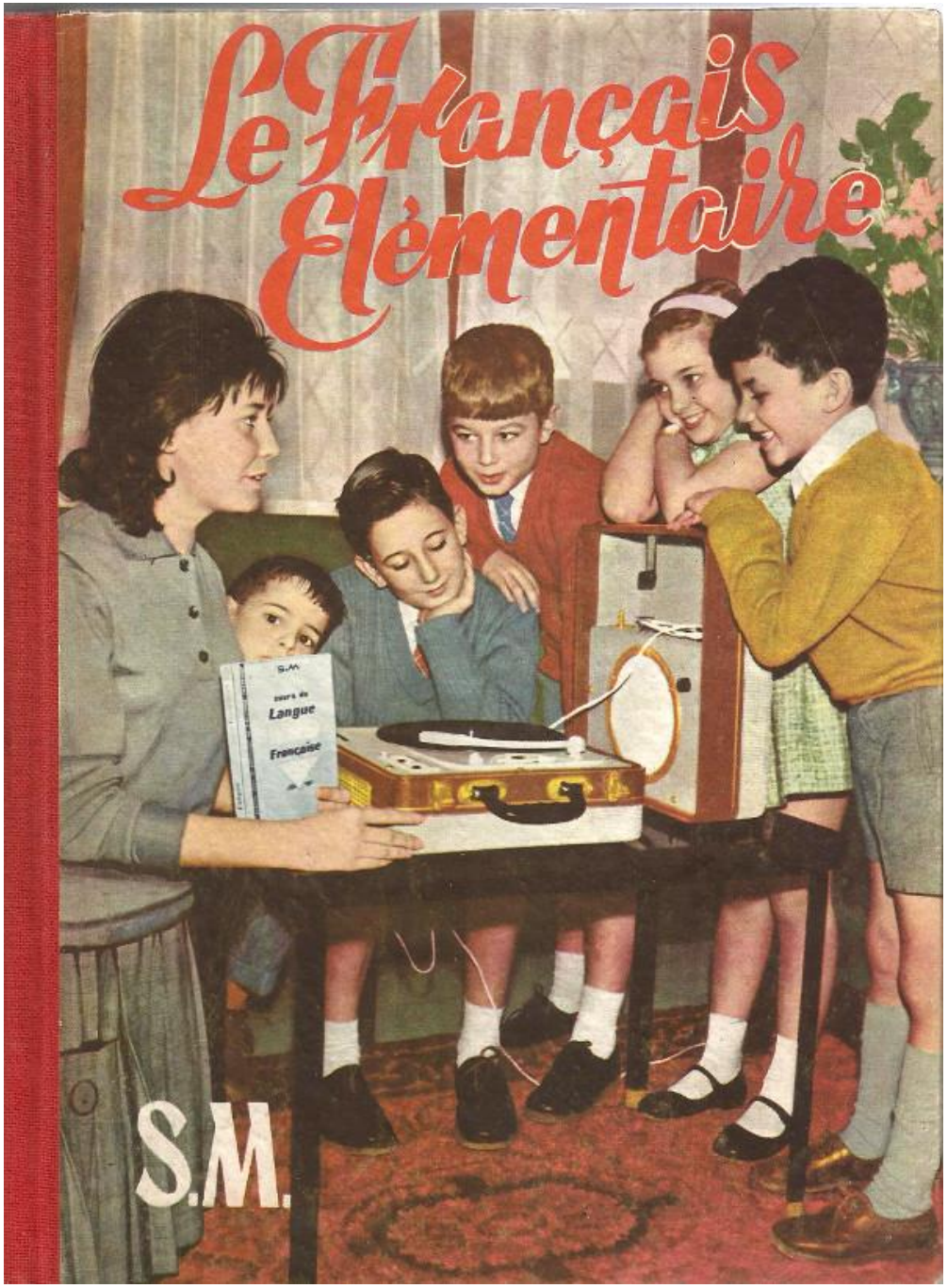


https://visual.ly/community/infographic/education/how-different-will-classrooms-future-be




UNIVERSITY
TELEVISION RECEIVER
BLACKBOARD
PROFESSOR
TELEVISION PICK-UP
TRANSMITTER
LOUD SPEAKER
STUDENTS RECEIVING STUDIES




Le Français Elémentaire
S.M.
Langue
Française
S.M.


Café
Speaking in a foreign tongue
iste
2009 SL Conference
March 27-29, 2009

‘This cycle of *hype, hope* and *disappointment* is perhaps the biggest lesson to be learned from the 20th century.’

Selwyn, N. (2011) *Education and Technology: Key Issues and Debates,* London: Continuum, p. 59.

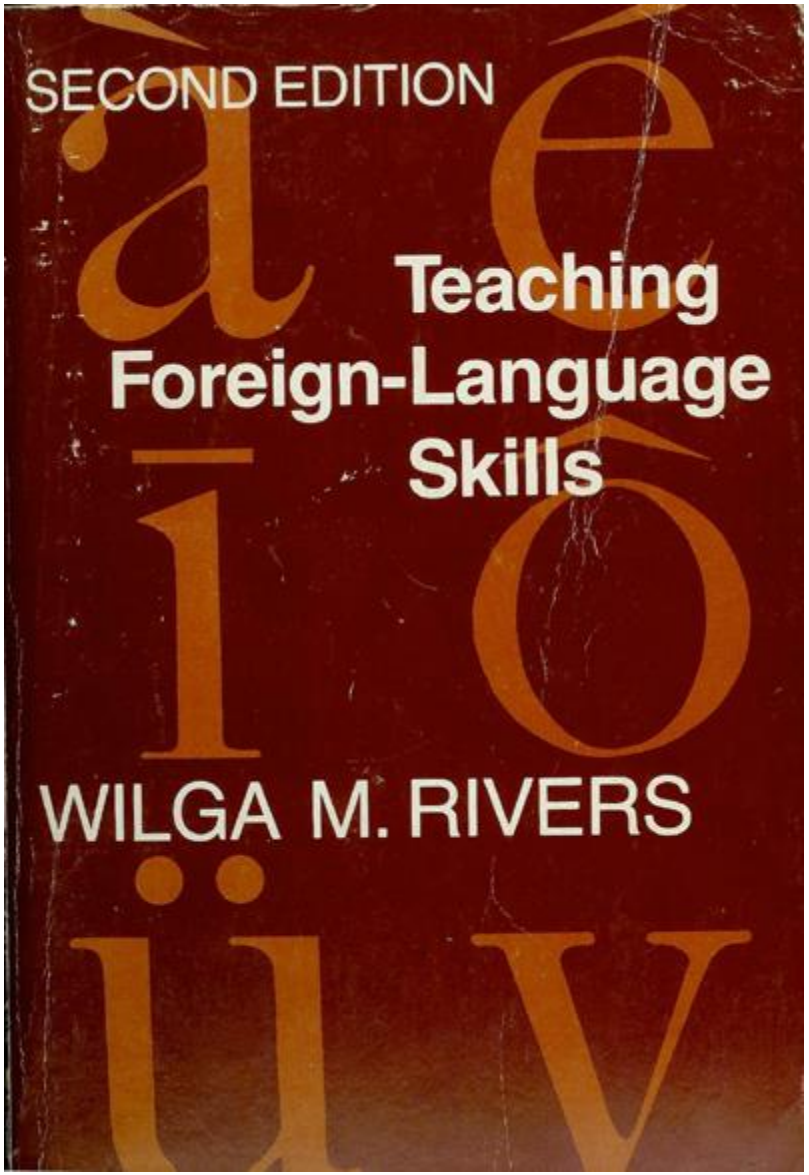
Techno-fundamentalism: 'a straightforward enchantment with technology and desire to benefit from continued technological progress.'

Selwyn, N. (2014) *Distrusting educational technology: Critical questions for changing times*, London: Routledge, p. 37.

NEW
MODERN
HIGH
ADVANCED
DIGITAL
MEDICAL
NUCLEAR
ASSISTIVE
EDUCATIONAL
LATEST
MILITARY
CHIEF
CURRENT

‘The use of mechanical aids in the classroom is justified only if they can do something which the teacher unaided cannot do, or can do less effectively.’

Pit Corder, S. 1966. *The Visual Element in Language Teaching.* London: Longman, p. 69.


SECOND EDITION
Teaching Foreign-Language Skills
WILGA M. RIVERS

‘Has the Language Learning Laboratory Failed?’ In Wilga M. Rivers, 1981. *Teaching Foreign Language Skills,* 2nd edn.

“Before requesting or rejecting expensive equipment teachers should analyze what the expensive equipment does which makes it effective as an aid to language learning and then study less costly ways of doing the same thing.”

“Above all, we must be able to demonstrate in a convincing way, through improved student learning, that the cost of the equipment... is justified.”

‘Americans alone discard 100 million computers, cell phones and related devices every year, at a rate of 136,000 per day.…

It takes roughly 1.8 tons of raw material… to manufacture one PC and its monitor.’

Crowther, H. 2010. One hundred fears of solitude: The greatest generation gap. In *Granta*, 111, p. 115.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Web Images Places News more
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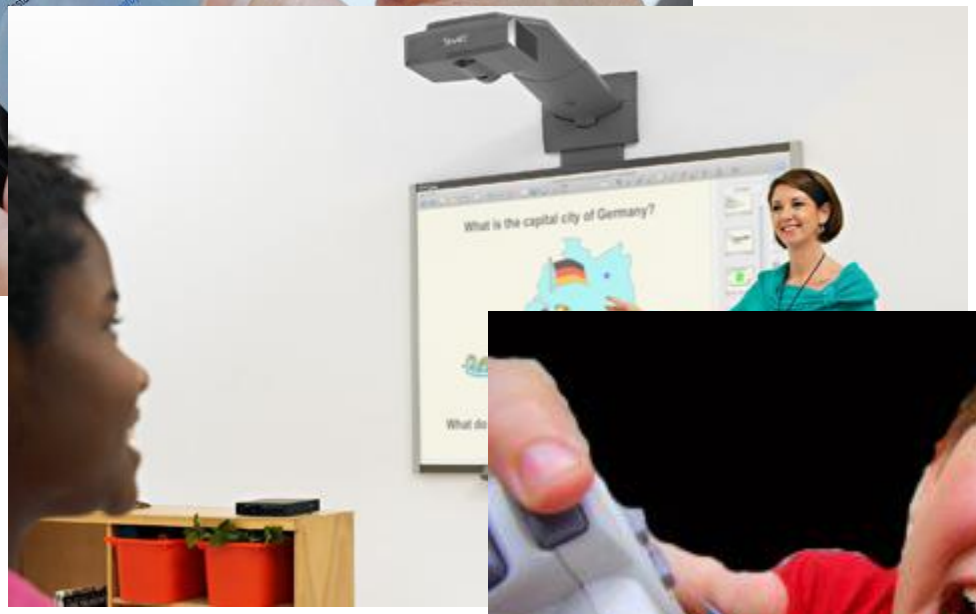
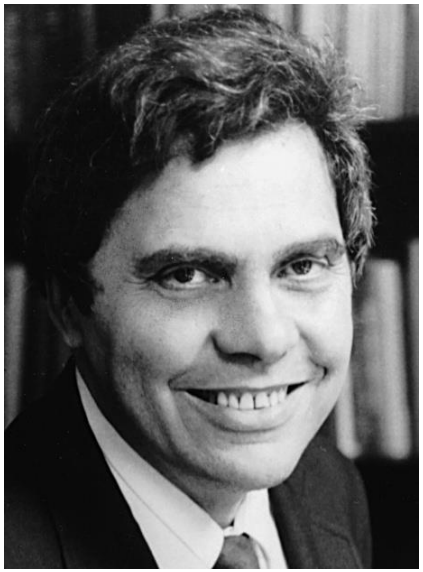

What is the capital city of Germany?



Neil Postman

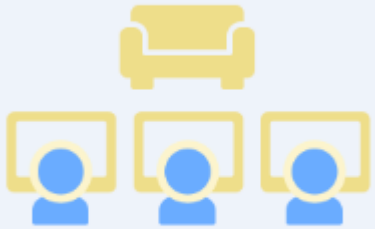
1931 - 2003

“What is the problem to which this technology is the solution?”

Home: Online Instruction and Content

School

School: Face-to-face Supplementation



Learning Lab

School

1. The input problem
2. The output problem
3. The interaction problem
4. The feedback problem

ellllo

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Brothers and Sisters

This week Sorie and Mark talk about big families (**#1337**) and brothers and sisters (**#1338**).

Recommended

Arranged Marriage

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Do you want a big family?

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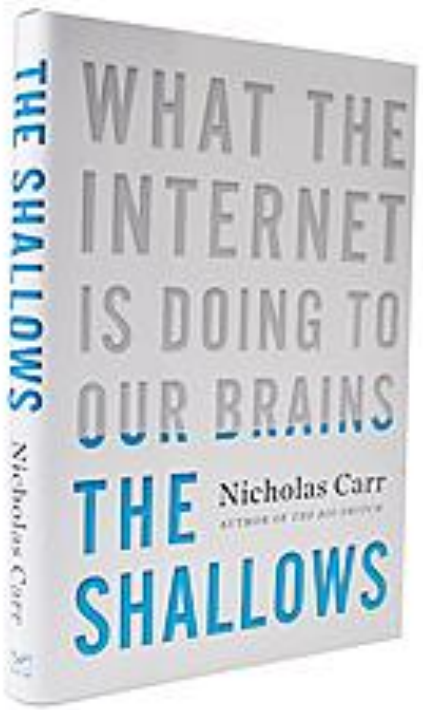
Elllo is created by Todd Beuckens, an English teacher based in Japan. Feel free to **contact him** at the address listed for feedback, requests, or point out one of those annoying typos!

www.ello.org



Digital media offer massive input but at a low level of engagement:

“The Web is a technology of forgetfulness”

“When we go online and, we enter an environment that promotes cursory reading, hurried and distracted thinking, and superficial learning.

It is possible to think deeply while surfing the Net, just as it’s possible to think shallowly while reading a book, but that’s not the type of thinking the technology encourages and rewards.”

Carr, N. 2010. *The Shallows: how the Internet is changing the way we think, read and remember.* London: Atlantic Books, p. 115-116.

1. The input problem
2. The output problem
3. The interaction problem
4. The feedback problem

Language Lab.
Make any classroom task easier

Communication and control

easyLAB provides the computer classroom with the tools which allow the teacher and students to communicate with each other orally. The headsets and microphones guarantee communication between everyone in the class.

And that's not all. At all times, the teacher is in complete control over what happens in the classroom thanks to an extensive set of supervision and computer management tools.

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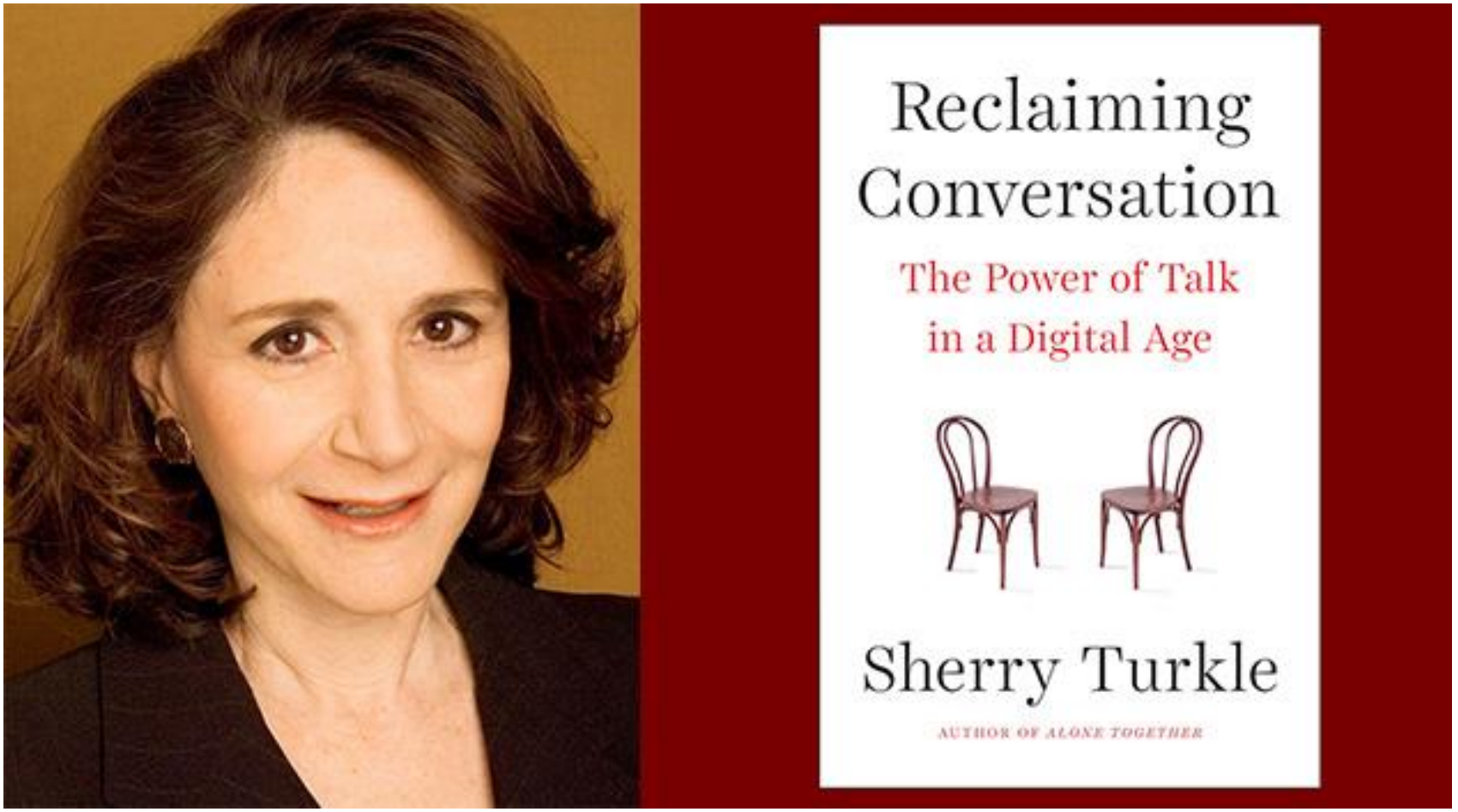
1. The input problem
2. The output problem
3. The interaction problem
4. The feedback problem

‘Technological interactivity is meager compared to human interaction…

Technological interactivity does not guarantee an educational encounter.’

McPake, J. & Plowman, L. (2013) ‘Seven myths about young children and technology’, *Childhood Education,* 89/1

_.pdfhttp://strathprints.strath.ac.uk/42463/1/Plowman_McPake_2013_seven_myths_about_young_children_and_technology



‘I am not anti-technology: I am pro-conversation.’

‘In conversation, things go best if you pay close attention and learn how to put yourself in someone else’s shoes. This is easier to do without your phone in hand. Conversation is the most human and humanizing thing that we do.’

Turkle, S. (2015) *Reclaiming Conversation: The Power of Talk in a Digital Age.* New York: Penguin.

1. The input problem
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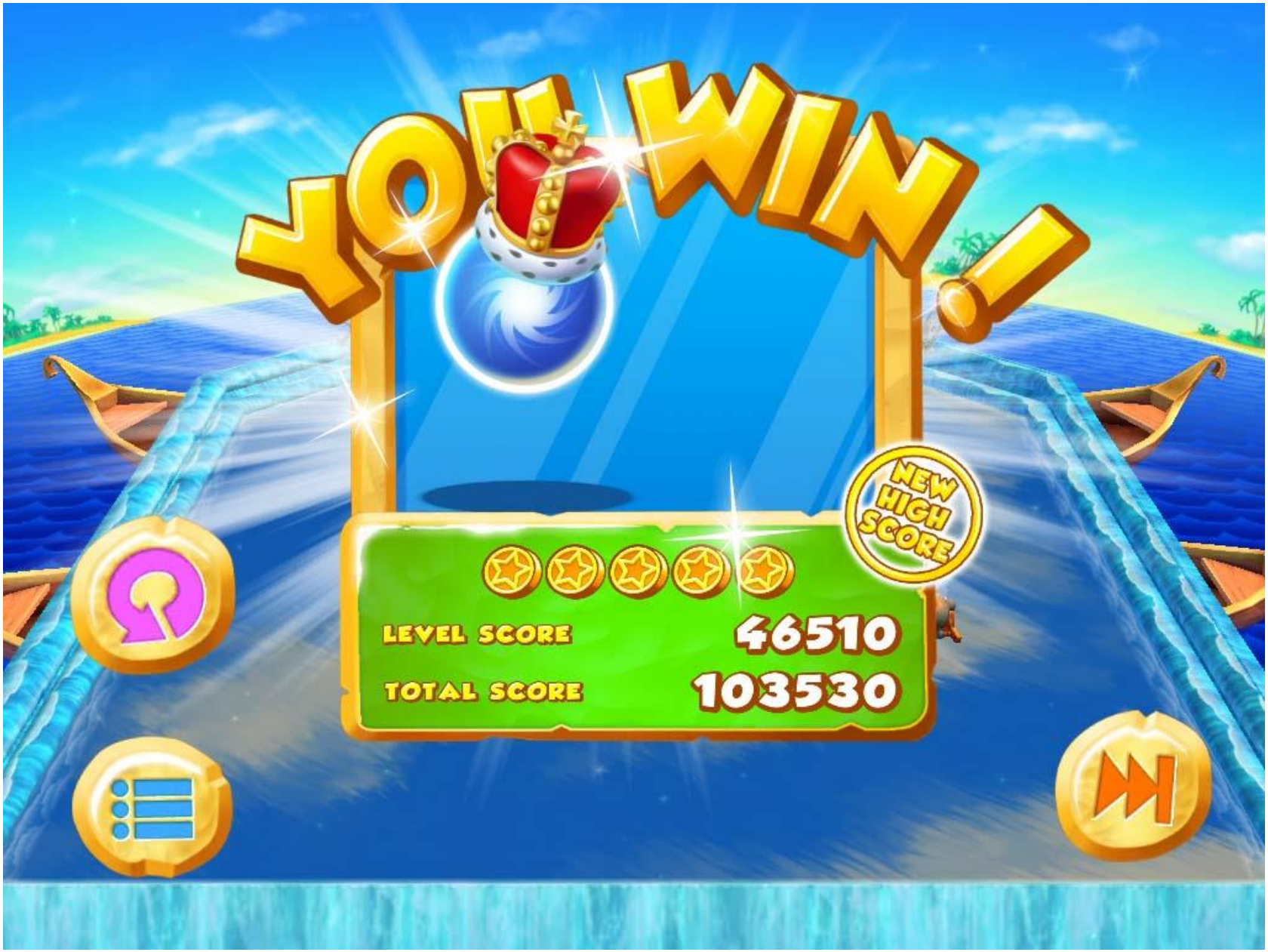
YOU WIN!
NEW HIGH SCORE
LEVEL SCORE
46510
TOTAL SCORE
103530

1. The input problem
2. The output problem
3. The interaction problem
4. The feedback problem
5. The motivation problem

‘It is becoming apparent that wired students use technology less to learn than to distract themselves from learning.’

Crowther, H. 2010. One hundred fears of solitude: The greatest generation gap. In *Granta*, 111, p. 108.

THE CHRONICLE OF HIGHER EDUCATION
January 17, 2014

Technology

July 20, 2009

When Computers Leave Classrooms, So Does Boredom

By Jeffrey R. Young

College leaders usually brag about their tech-filled "smart" classrooms, but a dean at Southern Methodist University is proudly removing computers from lecture halls. José A. Bowen, dean of the Meadows School of the Arts, has challenged his

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Across Many Fields

‘Performance on laboratory tests of attention gets worse if a cellphone is merely visible nearby…’

Willingham, D.T (2015) ‘Smart phones don’t make us dumb’ *New York Times*: http://www.nytimes.com/2015/01/21/opinion/smartphones-dont-make-us-dumb.html?smid=tw-share&_r=1

‘It is revealing that many of these younger technologists are weaning themselves off their own products, sending their children to elite Silicon Valley schools where iPhones, iPads and even laptops are banned.’

‘The most seductive design … exploits the same psychological susceptibility that makes gambling so compulsive: variable rewards. When we tap those apps with red icons, we don’t know whether we’ll discover an interesting email, an avalanche of “likes”, or nothing at all. It is the possibility of disappointment that makes it so compulsive.’

https://www.theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia?CMP=share_btn_fb

What are the Biggest Mistakes Teachers Make When Integrating Technology into the Classroom?

March 17, 2015 - Featured Carousel, Tech Integration - Tagged: The Global Search For Education

Technology seen as the solution to motivate and engage students

It is a reality that more and more students seem unmotivated and disengaged in our schools. Assuming that the use of technology is the solution to this phenomenon is a mistake. While students might initially be motivated by the use of shiny devices, this quickly dissipates. Engagement does not equal learning when the use of technology is not supported by strong objectives and goals as the foundation of its use.

http://langwitches.org/blog/2015/03/17/what-are-the-biggest-mistakes-teachers-make-when-integrating-technology-into-the-classroom/

1. The input problem
2. The output problem
3. The interaction problem
4. The feedback problem
5. The motivation problem
6. The data problem

‘Digital technologies are perhaps more commonly used as an “information tool” than as a “learning tool”.’

Selwyn, N. (2011) *Education and Technology: Key Issues and Debates,* London: Continuum, p. 80.

‘Education is not the transmission of information or ideas. Education is the training needed to make use of information and ideas.’

Hieronymi, P. (2012) Don't Confuse Technology With College Teaching, *The Chronicle of Higher Education*, Aug 13, 2012.

‘Language learning is intrinsically related to face-to-face communication and immersion in the target culture, in 'real' (physical) rather than 'virtual' settings…’

Study on the Impact of Information and Communications Technology (ICT) and New Media on Language Learning. EACEA 2007/09. European Commission.

‘While other classes in the curriculum activate mostly the brain, the language class engages the whole body, its emotions, feelings, desires, and projections.’

Kramsch, C. 2009. *The Multilingual Subject,* Oxford: Oxford University Press, p. 191 and p. 210.

http://webpc.com.uy/educacion/ceibal-se-gana-de-a-poco-a-los-privados

‘Interestingly, on our project in Uruguay, the one thing we hear time and time again from the students when we ask them if there's anything we can do to make the experience better, they always say the same thing: they would prefer the teacher in the room with them physically.’

Graham Stanley, British Council (blog comment).

A second-order meta-analysis of 25 meta-analyses encompassing over 1,000 studies and 40 years of research on technology and classroom learning found that the use of technology in the classrooms shows **a small to moderate positive effect** on student learning, as compared to technology-free traditional instruction. Using technology to support knowledge formation had a greater effect than using technology for the presentation of content. Teacher effectiveness and fidelity of technology implementation may have a greater effect on student learning than the nature of the technology intervention.

Tamim, R.M., Bernard, R.M., Borokhovski, E., Abrami, P.C., Schmid, R. F. (2011). What Forty Years of Research Says About the Impact of Technology on Learning: A Second-Order Meta-Analysis and Validation Study. *Review of Educational Research, 81*(1), 4-28. .

Education & Family

Computers 'do not improve' pupil results, says OECD

By Sean Coughlan
Education correspondent

15 September 2015 | Education & Family | Share

The report from the Organisation for Economic Co-operation and Development examines the impact of school technology on international test results, such as the Pisa tests taken in more than 70 countries and tests measuring digital skills.

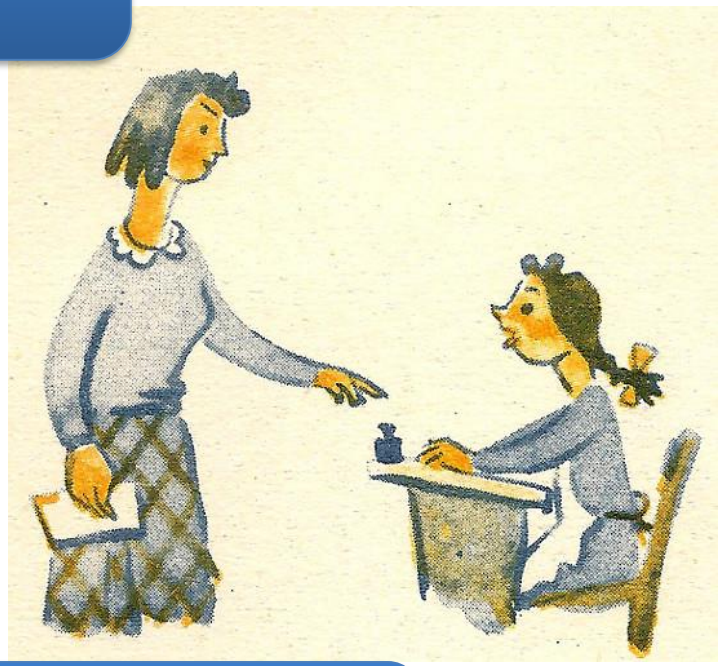
It says education systems which have invested heavily in information and communications technology have seen "no noticeable improvement" in Pisa test results for reading, mathematics or science.

The report says:

- Students who use computers very frequently at school get worse results
- Students who use computers moderately at school, such as once or twice a week, have "somewhat better learning outcomes" than students who use computers rarely
- The results show "no appreciable improvements" in reading, mathematics or science in the countries that had invested heavily in information technology
- High achieving school systems such as South Korea and Shanghai in China have lower levels of computer use in school
- Singapore, with only a moderate use of technology in school, is top for digital skills

input

output



data

feedback

motivation

interaction