Online learning and digital media use in the lives of the young: Some policy recommendations for K-12 leaders

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The issue being investigated:

- K-12 teachers use very little digital technology in the classroom and utilize online learning option minimally.
- Students (8-18 years old) spend at least 7 hours per day on digital technology and new media content (but only 2% is education-related).
- Formal learning is disconnected from students' media use, digital tech habits, and information processing patterns.

Fact: Study commissioned by U.S. Dept. of Education (2009) found that "students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction." (Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies)

K-12 students are heavy consumers of digital media…

Media Use Over Time

Among all 8-to 18-year-olds, average amount of time spent with each medium in a typical day:			
	2009	**2004**	**1999**
TV content	4:29	3:51	3:47
Music/audio	2:31	1:44	1:48
Computer	1:29	1:02	:27
Video games	1:13	:49	:26
Print	:38	:43	:43
Movies	:25	:25	:18
TOTAL MEDIA EXPOSURE	10:45	8:33	7:29
Multitasking proportion	29%	26%	16%
TOTAL MEDIA USE	7:38	6:21	6:19

Source: Media use in the lives of the young (Kaiser Foundation 2010 Study)

Media Ownership, Over Time

Among all 8-to 18-year olds, percent who own each platform

Percent of all 8- to 18-year-olds who own each device

■ 2004   ■ 2009
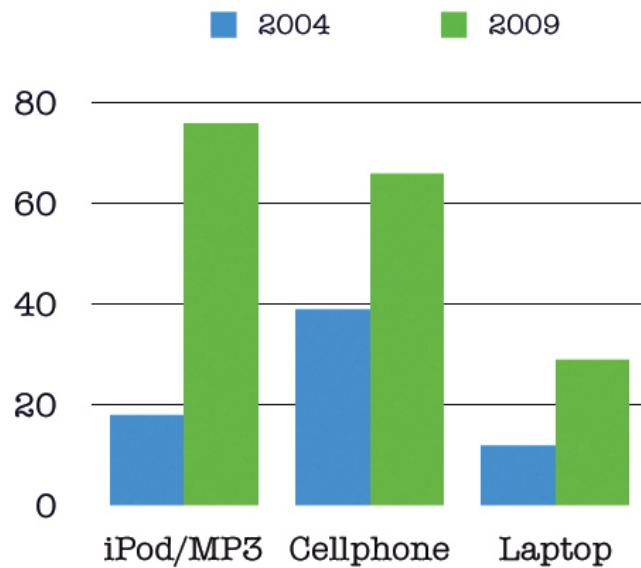
Source: Media use in the lives of the young (Kaiser Foundation 2010 Study)

K-12 teachers use very little digital tech (especially in class)…

**Frequency of class use among K-12 teachers (N=3,159)**

Device	Never	Rarely	Sometimes	Often
a. LCD or DLP projector	10%	13%	18%	43%
b. Videoconference Unit	12%	7%	2%	1%
c. Interactive whiteboard (smart board)	11%	10%	9%	20%
d. Classroom response system	10%	8%	7%	3%
e. Digital camera (still or video)	14%	25%	27%	10%
f. MP3 player/iPod	7%	8%	5%	2%
g. Document camera	9%	8%	7%	14%
h. Handheld device (iPhone, Blackberry)	3%	2%	3%	2%

Frequency of teacher use of tech for classroom prep, instruction, or admin task (N=3,159)

	Never	Rarely	Sometimes	Often
a. Word processing software	2%	2%	13%	83%
b. Database mgmt software (e.g Access)	32%	24%	23%	19%
c. Spreadsheets and graph programs	13%	25%	36%	25%
d. Software for manage student records	11%	9%	18%	61%
e. Desktop publishing software	25%	22%	28%	23%
f. Graphics software (e.g. Photoshop)	31%	30%	26%	12%
g. Presentation software (PPT or Keynote)	14%	21%	30%	32%
h. Software for administering tests	32%	23%	25%	18%
i. Simulation/visualization programs	42%	24%	21%	12%
j. Drill/practice/tutorial programs	27%	23%	31%	18%
k. Subject specific programs	22%	19%	33%	24%
l. The Internet	1%	5%	24%	68%
m. Blogs and/or wikis	62%	22%	12%	5%
n. Social networking websites	78%	14%	6%	2%

Frequency of students perform class activities using digital tech (N=3,159)
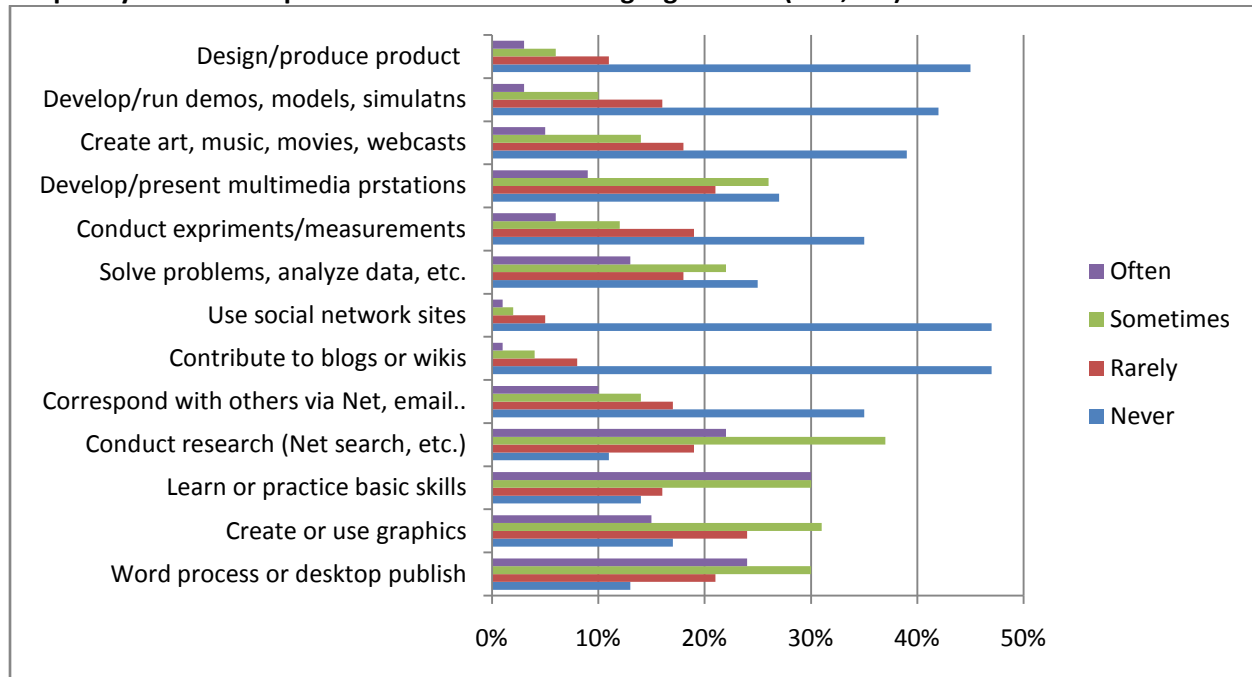
Conclusion:

There's a disparity in the level of digital tech use between K-12 students and their teachers. Students are heavy users of technology and media content but this awareness is not put to good use in the learning process. Out of the 7 hours students spend per day consuming media content only a tiny fraction of that (2 percent) is education-related. Learning effectively in the 21st century requires the proper use of digital technology both in the classroom and outside through online learning (at least blended learning).

Recommendations for Education Policy Makers:

1. Significant investment must be devoted to teacher training in the use of digital media technology (social media and the like) and integration of digital technology into the classroom. Experiment with new pedagogical approaches in light of the massive growth of digital and online learning.
2. Online learning should be added as an important component for K-12 students overall educational experience. Studies have shown students process information in bits and pieces and learn a great deal online through their peers.
3. Deploy inexpensive or free technology from wikis, social networking sites, content management system, to supplement student learning.
4. Apply lessons learned from successful open learning ventures.
5. Recruit part-time teachers capable of teaching online and at least supplementing K-12 learning.
6. Emphasize student engagement both inside and outside classroom – high interaction correlates with course completion and satisfaction.
7. Educational policies should catch up with the reality that online learning is growing exponentially and existing policies (state level) are mostly geared toward face-to-face learning.

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