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Dominant Narrative

- 1. All students are digital learners.*
- 2. Digital content, instructional materials, and online and blended learning courses are high quality.*
- 3. Digital instruction and teachers are high quality.*
- 4. All students should have access to high quality digital content and online courses.*

Students **ARE** Digital Learners

Digital Natives

- Native to technology
- No systematic research
- Makes unfounded assumptions about access to digital technology

Prensky, M. (2001). Digital Natives, Digital Immigrants – Part II: Do They Really Think Differently? *On the Horizon*, 9(6).

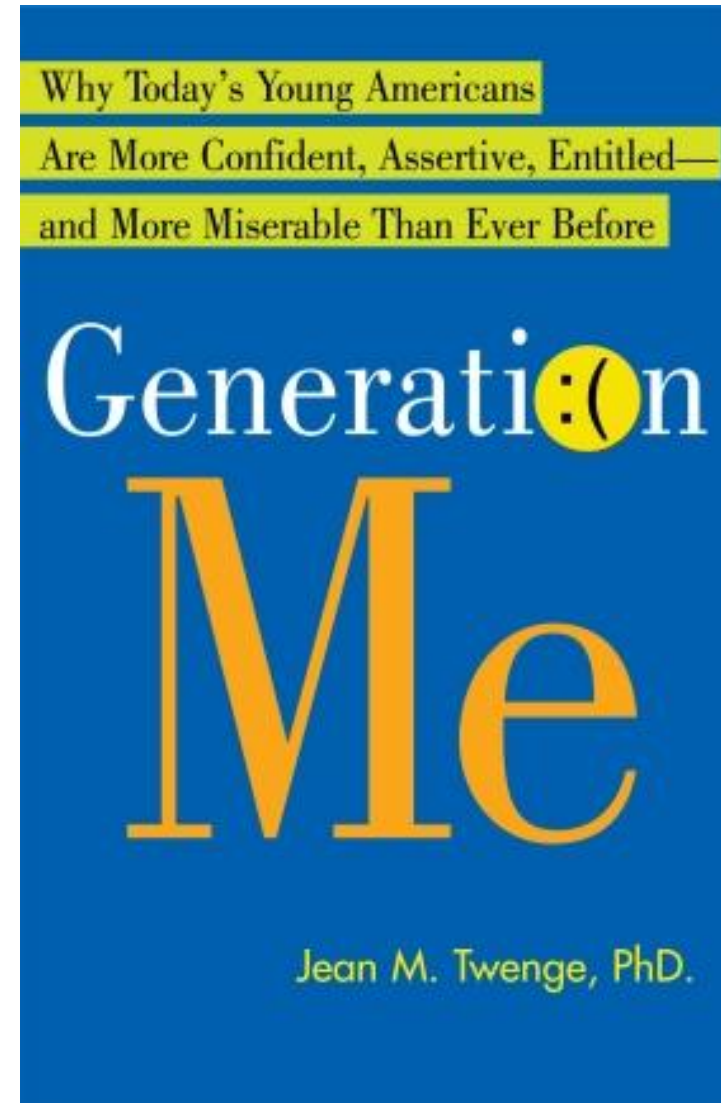
Digital Generation

- Digital technology has had a profound impact on their personalities
- Based on research circulated on social media sites

Tapscott, D. (1997). *Growing up digital: The rise of the net generation*. New York: McGraw Hill.

Students **ARE** Digital Learners

- In the 1950s, only 12% of young teens agreed with the statement “I am an important person” whereas by the late 1980s, 80% claimed they were important. (p. 69)
- In 2004, 48% of American college freshmen reported earning an A average in high school whereas in 1968 only 18% of freshmen reported being an A student in high school. (p. 63)
- In 1967, 86% of incoming college students said that “developing a meaningful philosophy of life” was an essential life goal whereas in 2004 only 42% of GenMe freshmen agreed. (p. 48)



Digital Learning is High Quality

Cavanaugh et al. (2005)	FLVS students performed better on a non-mandatory assessment tool than students from the traditional classroom
McLeod et al. (2005)	FLVS students performed better on an assessment of algebraic understanding than their classroom counterparts
Barbour & Mulcahy (2008)	little difference in the overall performance of students based upon delivery model
Barbour & Mulcahy (2009a)	no difference in student performance based upon method of course delivery

Digital Learning is High Quality

Cavanaugh et al., 2005	FLVS students performed better on a non-mandatory assessment tool than students from the traditional classroom	speculated that the virtual school students who did take the assessment may have been more academically motivated and naturally higher achieving students
McLeod et al., 2005	FLVS students performed better on an assessment of algebraic understanding than their classroom counterparts	results of the student performance were due to the high dropout rate in virtual school courses

Digital Learning is High Quality

Kozma et al. (1998)	vast majority of online students were planning to attend a four-year college
Espinoza et al. (1999)	students enrolled are mostly college bound
Haughey & Muirhead (1999)	preferred characteristics include the highly motivated, self-directed, self-disciplined, independent learner who could read and write well, and who also had a strong interest in or ability with technology
Roblyer & Elbaum (2000)	only students with a high need to control and structure their own learning may choose distance formats freely
Clark et al. (2002)	online students were highly motivated, high achieving, self-directed and/or who liked to work independently
Mills (2003)	typical online student was an A or B student

Digital Learning is High Quality

- “Online student **scores in math, reading, & writing have been lower** than scores for students statewide over the last 3 years.” (Colorado, 2006)
- “Online student scores on statewide achievement tests are consistently **14 to 26 percentage points below state averages** for reading, writing and math over the past four years.” (Colorado, 2011)
- “Virtual charter school pupils’ median scores on the mathematics section of the Wisconsin Knowledge and Concepts Examination were **almost always lower than statewide medians** during the 2005-06 and 2006-07 school years.” (Wisconsin, 2010)
- “Compared with all students statewide, **full-time online students had significantly lower proficiency rates on the math.**” (Minnesota, 2011)
- During both years [2008-09 & 2009-10], **full-time online students enrolled in grades 4-8 made about half as much progress in math**, on average, as other students in the same grade. (Minnesota, 2011)

What We Know From The Research?

- 1. Today's students are not as digitally savvy as they are made out to be.*
- 2. Supplemental online learning works for higher ability students.*
- 3. Full-time online learning works for very few students.*

What Else Do We Know?

- 1. Local support is critical to student success.*
- 2. Smaller, targeted programs have shown best results.*
- 3. Managed growth has prevented academic missteps.*

Potential Useful Models

- 1. Requirement to target at-risk or dropped out students. (Michigan)*
- 2. Tying funding to completion and performance. (Arizona)*
- 3. Limiting growth. (Multiple states)*
- 4. Funding full-time K-12 online learning at lower rates. (Multiple states)*



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