Keep using day-to-day tools in the classroom

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Abstract

• We are in a networked world, where computers and its applications and other digital facilities take part of most human activities.

• Considering the use of electronic email or taking advantage of search engines and services as Google, it render to be almost impossible to not interact with any of such digital applyances each day of our lifes.

• If this is a reality to many of us, that born before the availablility of computers and networks, for the millennials and the youngters, even the most basic interaction between them are been made using mobile devices and other advanced communications and media systems.

• The impact on how such new advanced users experience the world as yet not reached most of the traditional schools, and higher education in particular whose needed to deal with huge challenges to cope with such a digital world.

• This sets the classroom as a strong candidate to suffer innovative approaches in order to keep its main role in the educational system.
The millennials

• Those of born within a digital based world and evolved with the Internet
  • Mainly between 1982 to 2004
  • They have between 13 and 35 years old

• Based on Pew Research:
  • 50% of Millennials consider themselves politically unaffiliated
  • 29% consider themselves religiously unaffiliated
  • They have the highest average number of Facebook friends and Facebook presence
  • 55% have posted a selfie or more to social media sites
  • Only 19% of Millennials said that, generally, others can be trusted
  • Millennials are the last generation born in the 20th century
  • 20% have at least one immigrant parent
We are already living in a world influenced by them.

**MILLENIALS ARE LOOKING PRETTY GROWN UP**

- 52% are homeowners
- 49% live as a couple (both married and unmarried)
- 47% are parents
- 36% earn a HHI of $75k

Source: 2014 U.S. Yankelovich MONITOR

https://www.slideshare.net/futuresco/the-millennials-have-left-the-building-41957904
Higher education needs to target them...

https://astrosync.net/2014/04/12/plutoinscorpiogen_millennials/
Mostly because soon they will be major part of the workforce

**Millennials and Tech**

- 75% of Millennials will make up 75% of the global workforce by 2025.
- 2/3 of companies already account for 2/3 of the employee base.
- 38% of Millennials think outdated collaboration processes hinder company innovation.
- 66% of Millennials think their bosses could learn a lot from them about technology.

https://www.smartsheet.com/blog/recruiting-and-retaining-millenials-how-technology-makes-difference
Challenges?

• “The millennials are the first generation that has not needed an authority figure to access information”
  http://coachingforleaders.com/podcast/158/
  • They also assume that everything is negotiable
  • Millennials are relationship oriented
  • Give feedback in a way that’s not formal
  • Maintain the strength of the relationship
  • Feedback must be timely
  • Have a conversation with them instead of a conversation about them
How millennials learn?
The millennial student attributes

http://www.niu.edu/facdev/_pdf/guide/students/millennials_our_newest_generation_in_higher_education.pdf

• **Computers are not technology:** Computers, the Internet, and the WWW are as much a part of Millennials’ lives as telephones and television are to previous generations.

• **Reality is no longer real:** Original images can easily be changed using digital technology and receiving email from an address may not come from the owner of that address.

• **Doing is more important than knowing:** Knowledge is no longer perceived to be the ultimate goal (the half-life of information is so short). Results and actions are considered more important than the accumulation of facts.

• **Learning more closely resembles a game than logic:** The (video)games symbolizes a trial-and-error approach to solving problems; losing is the fastest way to mastering a game because losing represents learning.

• **Multitasking is a way of life:** Students are comfortable engaging in several activities simultaneously. Working on homework with music in the background while talking or texting on their cell phone is typical of how Millennials get through the day.

• **There is zero tolerance for delays:** Millennials were raised in a just-in-time, service-oriented culture. They expect and demand quick turn around in today’s 24x7 culture and do not easily accept delays.

• **Consumer and creator are blurring:** In a file-sharing, cut-and-paste world, distinctions between creator, owner, and consumer of information are fading. The operative assumption is often that if something is digital, it is everyone’s property.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Characteristic Development</th>
<th>Classroom Application</th>
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<tbody>
<tr>
<td>Special</td>
<td>- Rewards for participation</td>
<td>Provide rewards for individual and group work; Provide feedback; Teach to self-reward</td>
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<tr>
<td>Sheltered</td>
<td>- Structured</td>
<td>Learning centered syllabus; Clear instructions and expectations of assignments; Course calendar with test and assignment dates; Daily lesson learning outcomes</td>
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<tr>
<td></td>
<td>- Enforcement of rules and regulations</td>
<td></td>
</tr>
<tr>
<td>Team Oriented</td>
<td>- Works well in groups</td>
<td>Collaborative learning; Cooperative learning; Interactive learning; Opportunities for in and out of class social learning activities</td>
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<tr>
<td></td>
<td>- Socially active</td>
<td></td>
</tr>
<tr>
<td>Confident</td>
<td>- High level of optimism</td>
<td>Provide clear definitions and paths to success in class; Include variety of technology in teaching and assignments; Provide feedback</td>
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<td></td>
<td>- Technologically savvy</td>
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<td></td>
<td>- Want to assist in creating own knowledge</td>
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<tr>
<td>Pressured</td>
<td>- Perform when being judged</td>
<td>Link content to “real life” applications; Provide feedback in various forms including technological means; Timely feedback; Simulations and case work through technology and non-technology instructional delivery</td>
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<tr>
<td></td>
<td>- Immediate and continual feedback on progress</td>
<td></td>
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<tr>
<td>Achieving</td>
<td>- Challenges grades and testing methods</td>
<td>Develop well defined grade appeals policy Integrate a variety of valid evaluation methods</td>
</tr>
<tr>
<td>Conventional</td>
<td>- Respect for cultural differences</td>
<td>Utilize problem solving by integrating sociological situations from a variety of cultures</td>
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The proposal

• Working strategies
  • Freed activity and transfer initiative to students
    • DIY (Do it Yourself)
    • BYOD / BYOA (Bring Your Own Device / Bring Your Own Application)
  • Flipped Classroom (use the time together, to work and resolve instead of lecture and transfer knowledge)
  • Project and problem based learning, whenever possible

• The space issue
  • Turn the classroom into a flexible space, as a changeable place where there are alternative places that coexist, to use, to work, to play, for leisure, and even rest

• The tech issue
  • Allow for a high connectivity environment with gadgets that enhance students own gadgets (most of them, mobile devices)

• The time issue
  • Not be restricted to predetermined or rigid time slots, considering instead the use of a bank of hours that can be fulfilled along the working period to be used
## A game oriented strategy

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<tr>
<th>Requirements</th>
<th>Video-game design</th>
<th>Learning design</th>
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<tbody>
<tr>
<td>Well-defined goals</td>
<td>Players understand the desired outcome of a game and how to play</td>
<td>Learning objectives are clear</td>
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<tr>
<td>Patience</td>
<td>Players may perform tasks repeatedly if necessary</td>
<td>Students may redo assignments repeatedly if necessary</td>
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<tr>
<td>Team play</td>
<td>Players work together to win</td>
<td>Groups of students work together to complete and review tasks</td>
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<tr>
<td>Tracking</td>
<td>Games are organized in levels, and point values of accomplishments are known</td>
<td>Students see progress at every level and as a whole</td>
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<td>Change</td>
<td>Games keep moving, and players keep progressing</td>
<td>Students divide large tasks to learn time management and to progress toward goal achievement</td>
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<tr>
<td>Immediate</td>
<td>Players see impacts of actions immediately</td>
<td>Teachers provide immediate/useful feedback and meaningful, formative and diagnostic assessments</td>
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<tr>
<td>consequences</td>
<td></td>
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<tr>
<td>Personalization</td>
<td>Players customize each game experience by playing as different characters; they enjoy a different experience every time they play</td>
<td>Students explore different roles, which are shaped by their interests, to discover strengths and achieve goals</td>
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<tr>
<td>Patterns</td>
<td>Players experience success because the game design is predictable</td>
<td>The learning environment makes sense</td>
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