Millennials: Who Are They? How Do They Use Technology?

Randy Oldham
roldham@uoguelph.ca
The Plan, Stan

- Who I am
- About the University of Guelph
- About the McLaughlin Library
- What’s a MILLENNIAL?
- About the Library survey
- Why are we here?
- What’s ECAR?
- Results/comparison
- Take home messages
Who am I?

- Randy Oldham
- Web Development Librarian
- On the job since Oct 2009
- Work the reference desk
- Responsible for Library web presences & user interfaces
- Member of TUG PRIMO team
About the University of Guelph

- 20,991 full-time students
- ~ 5000 students in residence
- Research intensive, learner-centred university

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About the McLaughlin Library

- Single campus Library & Learning Commons
- 12,000 visitors daily…1 million annually
- 6.2 million acquisition budget
- 136 staff & +100 student workers & peer helpers
- Proud member of ARL, CARL, OCUL, CRKN and TUG
What’s a MILLENNIAL?

- For an academic library, they are OUR STUDENTS
- Many sweeping generalizations in the literature
- A generation raised on technology
- Assumptions

Main Entry: millennial generation
Part of Speech: n
Definition: a term used to refer to the generation, born from 1980 onward, brought up using digital technology and mass media; the children of Baby Boomers; also called Generation Y

Etymology: 1991
Usage: also millennial (adj., n.)

Dictionary.com's 21st Century Lexicon
Copyright © 2003-2011 Dictionary.com, LLC
Library Survey

- Keep finger on pulse of student use of technology
- Inform internal integrated planning
- Inform Library decisions/policies
- Surveys completed in 2007, 2010
- Online survey
- Mass email from the Office of the CIO
- Prize: iPod Touch
Why are we here?

- Share statistics from 2010 survey
- Compare some with 2007 survey data
- Compare few with ECAR survey results
- Highlight importance of local surveys
What is ECAR?

- Compare stats with Annual ECAR survey

- ECAR = Educause Center for Applied Research

- “The ECAR Study of Undergraduate Students and Information Technology, 2010 – Smith and Caruso”
The Respondents
2010 Total Respondents

Total Respondents

- 20,991 Total # of Students
- 1,808 # of Respondents

8.6% Response Rate

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2010 Respondent Gender

2010 Respondent Gender

71.3%

28.5%

*This ratio mimics our campus population

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Hardware Ownership
## Computer Ownership Comparison

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
<th>ECAR 2010</th>
<th>ECAR DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laptop</td>
<td>66%</td>
<td>90%</td>
<td>+24%</td>
<td>83.8%</td>
<td>-6.2%</td>
</tr>
<tr>
<td>Desktop</td>
<td>51%</td>
<td>22%</td>
<td>-29%</td>
<td>45.9%</td>
<td>+23.9%</td>
</tr>
<tr>
<td>Tablet</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

* checkboxes

**What happened?**

- Portability
- Cheaper

“…desktop ownership seems to be stabilizing.”

- ECAR – Key Findings 2010 pg 3
What operating system(s) are on the computer(s) that you own and regularly use?

- **Windows**: 92%
- **MAC**: 21%
- **Linux**: 4%

* checkboxes

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2007 – Own a cellphone

Do you own a cellphone?

- Yes: 69%
- No: 31%
Do you own a cellphone or smartphone such as a Blackberry or iPhone?

- Cellphone: 72%
- Smartphone: 21%
- Neither: 7%
Comparison

Cellphone Ownership Comparison

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>69%</td>
<td>93%</td>
<td>24%</td>
</tr>
<tr>
<td>No</td>
<td>31%</td>
<td>7%</td>
<td>-24%</td>
</tr>
</tbody>
</table>

What happened?

<table>
<thead>
<tr>
<th>iPhone</th>
<th>June 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone 3G</td>
<td>July 2008</td>
</tr>
<tr>
<td>iPhone 3Gs</td>
<td>June 2009</td>
</tr>
<tr>
<td>iPhone 4</td>
<td>June 2010</td>
</tr>
</tbody>
</table>
2007 – Cellphone feature usage

How often do you use your cellphone to do the following?

- Browse Internet: 32%
- Take Photos: 69%
- View Video: 6%
- Text Message: 79%

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2010 – Cellphone feature usage

How often do you use your cellphone to do the following?

- **Browse Internet:** 26%
- **Take Photos:** 80%
- **View Video:** 11%
- **Text Message:** 98%
- **Email:** 24%
## Cellphone Feature Usage Comparison

<table>
<thead>
<tr>
<th>Feature</th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browse Internet</td>
<td>32%</td>
<td>26%</td>
<td>-6%</td>
</tr>
<tr>
<td>Take Photos</td>
<td>69%</td>
<td>80%</td>
<td>11%</td>
</tr>
<tr>
<td>View Video</td>
<td>6%</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>Text</td>
<td>79%</td>
<td>98%</td>
<td>19%</td>
</tr>
</tbody>
</table>

**What happened?**

Decrease in internet browsing
Increase in photo & texting
Distance Ed/Hybrid Courses
2007 – Taken a DE Course

Have you taken a distance education (Open Learning) course at the University of Guelph?

- Yes: 63%
- No: 37%

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2010 – Taken a DE Course

Have you taken a distance education (Open Learning) course at the University of Guelph?

- Yes: 61%
- No: 36%
- N/A: 3%

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Do you prefer DE courses to in-class courses?

- 43% Preferred to in-class
- 24% Did NOT prefer to in-class
- 23% Not Sure
- 10% N/A

2007 – DE Preference

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2010 – DE Preference

Do you prefer DE courses to in-class courses?

- 68% Preferred to in-class
- 19% Did NOT prefer to in-class
- 13% Not Sure

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# DE Preference Comparison

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer to in class</td>
<td>10%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>Do NOT prefer to in class</td>
<td>43%</td>
<td>68%</td>
<td>25%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>23%</td>
<td>19%</td>
<td>-4%</td>
</tr>
</tbody>
</table>

## What happened?

- Students are LESS fond of DE courses
- Students became MORE sure of it
2007 - Hybrid Courses

Have you Taken an in Class Course with a WebCT/D2L Component?

- Yes: 91%
- No: 8%
- Other: 1%

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2010 – Hybrid Courses

Have you ever taken an in-class course at the University of Guelph that included an online component such as Desire2Learn/Courselink?

- Yes: 93%
- No: 6%
- Not Sure: 1%

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## Comparison

### Have you Taken a Hybrid Course?

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
<th>ECAR 2010</th>
<th>ECAR DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91%</td>
<td>93%</td>
<td>2%</td>
<td>66.5%</td>
<td>-26.5%</td>
</tr>
<tr>
<td>No</td>
<td>8%</td>
<td>6%</td>
<td>-2%</td>
<td>33.5%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>--------</td>
<td>--------</td>
</tr>
</tbody>
</table>

### What happened?

- Not a whole lot…pretty stable…
- What’s ECAR got to say?
- The point: Very different numbers…

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Do you prefer in-class courses that include an online component over courses that are only in-class?

- 74% Preferred to In-class only
- 12% Did NOT prefer to In-class only
- 6% Not Sure
- 8% N/A
Do you prefer in-class courses that include an online component over courses that are only in-class?

- 63% Prefered to In-class
- 20% Did NOT prefer to inclass
- 17% N/A

2010 Hybrid Course Preference

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## Hybrid Course Preference Comparison

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer to in class</td>
<td>74%</td>
<td>63%</td>
<td>-11%</td>
</tr>
<tr>
<td>Do NOT prefer to in class</td>
<td>8%</td>
<td>20%</td>
<td>12%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>12%</td>
<td>17%</td>
<td>5%</td>
</tr>
</tbody>
</table>

### What happened?

- Students are slightly LESS fond of hybrid courses
- We changed from Blackboard to D2L…reluctance to change?
2010 Chat for Academic Work

Chat Use For Academic Work

- Never: 14%
- Once a Month or Less: 21%
- Several Times a Month: 24%
- Several Times a Week: 32%
- Several Times Per Day: 9%

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## Chat Use for Academic Work

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>5%</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Once a Month</td>
<td>13%</td>
<td>21%</td>
<td>8%</td>
</tr>
<tr>
<td>Several Times a month</td>
<td>20%</td>
<td>24%</td>
<td>4%</td>
</tr>
<tr>
<td>Several Times a Week</td>
<td>36%</td>
<td>32%</td>
<td>-4%</td>
</tr>
<tr>
<td>Several Times Per Day</td>
<td>25%</td>
<td>9%</td>
<td>-16%</td>
</tr>
</tbody>
</table>

### What happened?

Students are using chat less often for academic work.
2007 S.S. for Academic Use

Social Software Use For Academic Work

- Never: 50%
- Few Projects: 35%
- Most Projects: 11%
- Every Project: 3%

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Social Software Use For Academic Work

- Never: 37%
- Few Projects: 42%
- Most Projects: 16%
- Every Project: 5%

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### Social Software Use for Academic Work

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>50%</td>
<td>37%</td>
<td>-13%</td>
</tr>
<tr>
<td>On Few Projects</td>
<td>35%</td>
<td>42%</td>
<td>7%</td>
</tr>
<tr>
<td>On Most Projects</td>
<td>11%</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>On Every Project</td>
<td>3%</td>
<td>5%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**What happened?**

Students are using social software more often for academic work

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2007 – Research Tools & Services

Frequency of Use of Research Tools & Services

- Google: 73%
- Journal Indexes: 66%
- Trellis (OPAC): 64%
- Google Scholar: 41%
- Research Help Desk: 11%

% of Always & Frequent Use

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2010 – Research Tools & Services

Frequency of Use of Research Tools & Services

- Journal Indexes: 75%
- Google: 71%
- Google Scholar: 60%
- Trellis/Primo (OPAC): 60%
- Wikipedia: 37%
- Research Help Desk: 7%

% of Always & Frequent Use

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## Research Tools & Services

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>73%</td>
<td>71%</td>
<td>-2%</td>
</tr>
<tr>
<td>Journal Indexes</td>
<td>66%</td>
<td>75%</td>
<td>9%</td>
</tr>
<tr>
<td>OPAC</td>
<td>64%</td>
<td>60%</td>
<td>-4%</td>
</tr>
<tr>
<td>Google Scholar</td>
<td>41%</td>
<td>60%</td>
<td>19%</td>
</tr>
<tr>
<td>Research Help Desk</td>
<td>11%</td>
<td>7%</td>
<td>-4%</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>-----</td>
<td>37%</td>
<td>----</td>
</tr>
</tbody>
</table>

### What happened?

- Google Scholar is on the rise.
- Students are hitting Journal Indexes directly more often
QUESTION

- For this set of questions, think of all of the research assignments you have done for school, and think of who you communicated with about them.

- For each of the individuals listed, check all methods that you have used to contact them for help on your research assignments.
2010 – Contact Methods

Whom & How Respondents Ask for Research Help

- In Person
- Email
- Course Online Discussion
- Phone
- Chat

Course Instructor: 70%
TA: 80%
Library Staff: 40%
Family Member: 30%
Friend/Classmate: 90%

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Library Public Computers & Laptops
Mix of Laptops & desktop computers

125 laptops (two hour reserve) [since 2003]

260 Desktops
2010 Library-owned Computer Usage

Frequency of Library-owned computer/laptop usage

- Several times a day: 5 (Computer), 1 (Laptop)
- Several times a week: 15 (Computer), 6 (Laptop)
- Several times a month: 20 (Computer), 10 (Laptop)
- Once a month or less: 36 (Computer), 22 (Laptop)
- Never: 25 (Computer), 61 (Laptop)

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2010 - Ideal Laptop Loan Period

2 Hours: 14%
3 Hours: 39%
4 Hours: 36%
8 Hours: 7%
Other: 4%

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Library Computer Type Preference

Prefer to use Library-owned laptop or desktop?

- 39% prefer to use a Desktop
- 38% prefer to use Either
- 23% prefer to use a Laptop

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2010 – Laptop to CLASS

Frequency laptop/tablet brought to CLASS

- Never: 26%
- Once a Month or Less: 18%
- Several Times Per Month: 13%
- Several Times Per Week: 21%
- Daily: 22%

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2010 – Laptop to LIBRARY

Frequency laptop/tablet brought to LIBRARY

- Never: 16%
- Once a Month or Less: 26%
- Several Times Per Month: 25%
- Several Times Per Week: 25%
- Daily: 8%

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2010 – Online Gaming

Frequency of Online Gaming

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>95%</td>
</tr>
<tr>
<td>Once a Month or Less</td>
<td>78%</td>
</tr>
<tr>
<td>Several Times a Month</td>
<td>9%</td>
</tr>
<tr>
<td>Several Times a Week</td>
<td>6%</td>
</tr>
<tr>
<td>Several Times Per Day</td>
<td>5%</td>
</tr>
</tbody>
</table>

Legend:
- Blue: Online gaming
- Purple: Online gaming for money

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2010 – Online Gaming by Gender

Frequency of Online Gaming by Gender

- **Never**: Male (23%) vs. Female (77%)
- **Several Times Per Month**: Male (43%) vs. Female (57%)
- **Several Times Per Week**: Male (44%) vs. Female (56%)
- **Several Times Per Day**: Male (62%) vs. Female (38%)

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Participation in Online Virtual Worlds Such as Second Life

96% Yes
4% No

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2010 – Online Shopping

Frequency of Online Shopping

- Never: 38%
- Once a Month or Less: 46%
- Several Times a Month: 14%
- Several Times a Week: 2%
- Several Times Per Day: 0.3%

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2010 – Music & Videos

How often do you...

- Download music
- Download videos

Several times a day: 4% (music), 5% (videos)
Several times a week: 21% (music), 18% (videos)
Several times a month: 31% (music), 22% (videos)
Once a month or less: 26% (music), 21% (videos)
Never: 35% (music), 19% (videos)

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2010 – Post Stuff

How often do you...

- Post to sites
- Post to blogs

Several times a day: 22%
Several times a week: 31%
Several times a month: 17%
Once a month or less: 13%
Never: 17%

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Take Home Messages

- Institutional differences can drastically affect local statistics
  - Breadth of programs (medical school)
  - Socioeconomics of student population (Harvard vs not-Harvard)
  - Institutional policies (LMS use enforcement)

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Resources

- ECAR 2010 Full Report
- ECAR 2010 Key Findings
- ECAR 2010 Survey Instrument
- U of G Survey Results, Report, Survey Instrument and this presentation:
  - Check the **Atrium** @ the University of Guelph Library
- Research Team Members:
  - Pascal Lupien
  - Randy Oldham
  - Maryann Kope
Questions?

Randy Oldham

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