Appendix A: CNAQ pre-term technology use survey

Directions: This survey is to find out how you use technology. Nothing you say will change your mark. Your teacher will not know what you say until after the end of the course. We will match this survey with your course records. Researchers will know who you are but all information shared later will not have your name on it. You need about 15-20 minutes to do this survey. Thank you!

Section A: Technology Ownership

IMPORTANT:

These questions do not include the CNAQ iPad. Please tell us only about any iPad you used before the CNAQ iPad.

A1 Do you own a...

Check ☐ ☐ ☐ ☐ all

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. desktop computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. laptop computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. mobile phone with Internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. mobile computing device (netbook, iPad, Kindle, etc.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A2 If you have a desktop and a laptop, which computer [desktop or laptop] do you use most?

Check ☐ one only

☐ A. desktop
☐ B. laptop
☐ C. I use both equally
☐ D. I do not own a computer
IPADS IN THE CLASSROOM: TRIALS IN A TECHNICAL COLLEGE IN QATAR

A3 Which type of software is on your mobile phone?  
Note: if you own more than one, please answer for the phone you use the most.  
Check ☑ one only

A. Apple (iPhone)  
B. Blackberry  
C. a mobile that has an Android operating system  
D. other [Please explain] ____________________________________________  
E. I do not own a phone with Internet

A4 Which do you own?  
Check ☑ ☑ ☑ ☑ all

A. netbook  
B. iPad  
C. Kindle  
D. Nook  
E. other [Please explain] ____________________________________________  
F. I do not own a mobile computing device

A5 Which is the most important to your daily life? ☑

A. desktop computer  
B. laptop computer  
C. mobile phone  
D. mobile computer device  
E. other [Please specify] ____________________________________________  
F. don’t know
A6  When thinking about college, which is most important to you? ☑

- A. desktop computer
- B. laptop computer
- C. mobile phone
- D. mobile computer device
- E. other [Please specify] ________________________________
- F. don’t know

A7  Why?

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________
Section B: Technology Use

The questions below are about what you do every day. Before each question is a description of what is meant by each use of technology. If you do not understand please ask for help.

**Study Definition:** study and learning purposes
- Word, Excel, PowerPoint
- library search
- Internet to access materials and information online.

B1 During a college year, I use the technology above for study purposes...
Check ☑ one only

- A. every day
- B. one time a week
- C. less than one time a week
- D. never
- X. don’t know

B1a Which do you use most for study purposes? ☑
[If you answered A, B, or C to the question above, please answer this question]

- A. desktop computer
- B. laptop computer
- C. mobile phone
- D. mobile computing device
- E. other Please specify ________________________________
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**Communication Definition:** written and voice communication, for example:
- Skype
- email
- text messaging
- Facebook [to get or give news]

B2  
During a college year, I use technology for communication...✔

A. every day  ✔
B. one time a week  
C. less than one time a week  
D. never  
X. don’t know  

B2a  
Which do you use most for communication?
[If you answered A, B, or C to the question above, please answer this question] ✔

A. desktop computer  ✔
B. laptop computer  
C. mobile phone  
D. mobile computing device  
E. other [Please specify] __________________________

**Entertainment Definition:** for the purposes of entertainment, for example:
- online games
- YouTube, Vimeo
- Facebook [for fun]
During a college year, I use technology for entertainment ... ☑

A. every day
B. one time a week
C. less than one time a week
D. never
X. don’t know

Which do you use the most for entertainment?
[If you answered A, B, or C to the question above, please answer this question] ☑

A. desktop computer
B. laptop computer
C. mobile phone
D. mobile computing device
E. television
F. gaming or game devices [e.g. Xbox]
G. other [Please specify] __________________________________________

Information Gathering Definition (Web-browsing): to get information, for example:
- online shopping (clothing, textbooks)
- to find information (prices, store opening times, restaurant reviews or directions)

During a college year, I use technology to get information... ☑

A. every day
B. one time a week
C. less than one time a week
D. never
X. don’t know
IPADS IN THE CLASSROOM: TRIALS IN A TECHNICAL COLLEGE IN QATAR

B4a. Which do you use most to get information?
[If you answered A, B, or C to B.5, please answer this question] ✗

A. desktop computer
B. laptop computer
C. mobile phone
D. mobile computing device
E. other [Please specify] ________________________________

B5. I feel I accomplish [am able to do] more in my student life because of technology. ✗

A. strongly agree
B. agree
C. neither agree nor disagree
D. disagree
E. strongly disagree

B6. If I don’t use technology for a week, I feel angry or upset. ✗

A. strongly agree
B. agree
C. neither agree nor disagree
D. disagree
E. strongly disagree

B7. On average I feel I am a/an__________ technology user: ✗

A. expert
B. advanced
C. intermediate
D. basic
E. non-technology
Section C: Personal Information

C1 Name [first name + last name – e.g. Mohammed Al Marri]

__________________                          _________________

C2 Age: _____________

C4 Gender ☑

A. Male
B. Female
C. Unknown

C3 Teacher of this class: ____________________________

C5 What is your nationality? ☑

A. Qatari
B. Other: ____________________________

C7 Can you program in one or more computer languages [e.g. C, C++]? ☑

A. yes
B. no

C8 Do you have wireless Internet at home? ☑

A. yes
B. no
C. don’t know
How many years, in total, have you been at CNAQ?

- A. new to CNAQ this semester
- B. less than 1 year
- C. 1 year
- D. 2 years
- E. 3 years
- F. 4 years
- G. 5 years or more
## Appendix B: Classroom observation form

<table>
<thead>
<tr>
<th>Date:</th>
<th>Observer:</th>
<th>General Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor:</td>
<td>Class name:</td>
<td></td>
</tr>
<tr>
<td>Time:</td>
<td># of students (beginning):</td>
<td></td>
</tr>
<tr>
<td>iPad/Non-iPad</td>
<td># of students (ending):</td>
<td></td>
</tr>
</tbody>
</table>

### Phases of the class

<table>
<thead>
<tr>
<th>Phases of the class</th>
<th>Start Time</th>
<th>End Time</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

### Activity Description:

Activity Description: describe the activity, student reactions, professor reactions

<table>
<thead>
<tr>
<th># of Students in activity</th>
<th>Start Time</th>
<th>End Time</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

*Note: Add more rows as needed*
Appendix C: Technology follow-up survey

Directions: This survey is a follow-up to the technology use survey completed at the beginning of the term. It will help us to understand how the iPad was used over the term.

We need information so that we can compare this with your other study records throughout the course. Your answers will not affect grades and will not be shared with your instructor until after the term is over. The information will be known to researchers only. Any information shared with the public will have no identifying information.

This survey should take about 15 minutes to complete. Thank you for your help!

Section A: Technology Specific Questions

1. What other devices (not including the iPad) did you use during class for this course?

   [Check all that apply]
   - A. laptop computer
   - B. mobile phones
   - C. calculator
   - D. tablet (Galaxy Tab, Note, Nexus10, …)
   - E. desktop computer (in a computer lab)

2. How often did you use other devices (not including the iPad) during class for this course?

   - A. more than 90 % of class periods
   - B. 70 - 90 % of class periods
   - C. 50 - 70 % of class periods
   - D. less than 50 % of class periods
   - E. did not use computing devices during class in this course
   - F. don’t know

3. How did you use your devices (not including the iPad) during class for this course?

   [Check all that apply]
   - A. read
   - B. took notes
   - C. researched information on the Internet
   - D. did homework, quizzes, tests
   - E. presented materials to the class
   - F. showed information to one or more classmates
   - G. non-course related activities
   - H. other [Please specify]  ___________________________
4. What other devices (not including the iPad) did you use outside of class for this course?
   A. laptop computer
   B. mobile phones
   C. calculator
   D. tablet (Galaxy Tab, Note, Nexus10, ...)
   E. desktop computer in a computer lab or at home

5. How often did you use these devices (not including the iPad) outside of class for this course?
   A. more than 90 % of class periods
   B. 70 - 90 % of class periods
   C. 50 - 70 % of class periods
   D. less than 50 % of class periods
   E. did not use these devices outside of class for this course
   F. don't know

6. How did you use other devices (not including the iPad) outside of class for this course?
   [Check all that apply]
   A. read
   B. took notes
   C. researched information on the Internet
   D. did homework, quizzes, tests
   E. presented materials to the class
   F. showed information to one or more classmates
   G. non-course related activities
   H. other [Please specify]  ____________________________________________________________

7. In general, do you feel your use of other devices (not including the iPad) helped you to learn material for this course?
   A. yes
   B. no
   C. maybe
   D. don't know

---------------------------------------------------------------------------------------------------------------------------------------
Section B: iPad Specific Questions

1. How often did you use the iPad during class for this course?
   - A. more than 90% of the class periods
   - B. 70 - 90% of class periods
   - C. 50 - 70% of class periods
   - D. less than 50% of class periods
   - E. don’t know

2. How did you use the iPad during class for this course? [Check all that apply]
   - A. read materials on the iPad
   - B. took notes
   - C. researched information on the Internet
   - D. did homework, quizzes, tests
   - E. presented materials to the class
   - F. showed information to one or more classmates
   - G. non-course related activities
   - H. other [Please specify] ________________________________________

3. How often did you use the iPad outside of class for this course?
   - A. more than 90% of the time
   - B. 70 - 90% of the time
   - C. 50 - 70% of the time
   - D. less than 50% of the time
   - E. did not use iPad outside of class for this course
   - F. don’t know

4. How did you use the iPad outside of class for this course? [Check all that apply]
   - A. read materials on the iPad
   - B. took notes
   - C. researched information on the Internet
   - D. did homework, quizzes, tests
   - E. presented materials to the class
   - F. showed information to one or more classmates
   - G. non-course related activities
   - H. other [Please specify] ________________________________________

5. In general, do you feel your use of the iPad helped you learn material for this course?
   - A. yes
   - B. no
   - C. maybe
   - D. don’t know
6. How helpful was the iPad in the following situations: [Check one box for each]

<table>
<thead>
<tr>
<th></th>
<th>Very helpful (+2)</th>
<th>Slightly helpful (+1)</th>
<th>Neutral (0)</th>
<th>Slightly unhelpful (-1)</th>
<th>Very unhelpful (-2)</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>For use during group work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For learning new things</td>
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<tr>
<td>For learning the course material</td>
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<tr>
<td>For exploring additional material related to the topic</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For getting course information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For sharing information with others in class</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

7. How often did you use each of these iPad apps? [Check one box for each]

<table>
<thead>
<tr>
<th></th>
<th>More than one time a week</th>
<th>One time a week</th>
<th>One time a term</th>
<th>During the term</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socrative</td>
<td></td>
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<tr>
<td>Air Chalk Lite</td>
<td></td>
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<tr>
<td>Doceri</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other applications: (please list here)</td>
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</tr>
</tbody>
</table>

These apps were for the Mathematics class. Apps were changed appropriately for the Physics class survey.
8. Did you find other iPad apps to be helpful for this course that were not required? Please list and describe.

9. How well did you learn to use each of these iPad apps and their features? [Check one box for each]

<table>
<thead>
<tr>
<th>App</th>
<th>Expert</th>
<th>Very good</th>
<th>Good</th>
<th>Neutral</th>
<th>Poor</th>
<th>Very poor</th>
<th>Didn't use this app</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socrative</td>
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<tr>
<td>Air Chalk Lite</td>
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<td>Doceri</td>
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<tr>
<td>Other applications: (please list here)</td>
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</tr>
</tbody>
</table>

These apps were for the Mathematics class. Apps were changed appropriately for the Physics class survey.

10. I believe that using the iPad in class helped me to interact more with my classmates.

   A. Strongly agree
   B. Agree
   C. Neither agree nor disagree
   D. Disagree
   E. Strongly disagree

11. I believe that using the iPad in class helped me to interact more with online course materials for my class.

   A. Strongly agree
   B. Agree
   C. Neither agree nor disagree
   D. Disagree
   E. Strongly disagree
12. In the table below, mark the box for the apps that apply for each column. [If applicable, check more than one box for each app.]

<table>
<thead>
<tr>
<th>Apps</th>
<th>Helped me understand course material</th>
<th>Helped me learn course material</th>
<th>Made it easier for me to engage with classmates</th>
<th>Helped me find more information for this course</th>
<th>Helped me come up with new ideas</th>
<th>Did not apply to this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google+</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Socrative</td>
<td>[ ]</td>
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<tr>
<td>Air Chalk Lite</td>
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<tr>
<td>Doceri</td>
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<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
</tbody>
</table>
| Other applications: (please list here) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ]

These apps were for the Mathematics class. Apps were changed appropriately for the Physics class survey.

13. In general, do you feel the iPad for this course was useful?
- [ ] A. yes
- [ ] B. no
- [ ] C. maybe
- [ ] D. don't know

14. Please give 1 example of the iPad when it helped you in this course.

15. Please give 1 example of the iPad when it did not help you in this course.
Section C: Technology Use Questions

1. Overall, technology makes my life easier.
   - A. strongly agree
   - B. agree
   - C. neither agree nor disagree
   - D. disagree
   - E. strongly disagree

2. I feel I can do more in my student life because of technology.
   - A. strongly agree
   - B. agree
   - C. neither agree nor disagree
   - D. disagree
   - E. strongly disagree

3. If I don't use technology for a week, I feel unhappy.
   - A. strongly agree
   - B. agree
   - C. neither agree nor disagree
   - D. disagree
   - E. strongly disagree

4. On average I feel I am a(n) ____________ with the technologies I use.
   - A. expert user
   - B. advanced user
   - C. intermediate user
   - D. basic user
   - E. non-technology user
 Section D: Personal Information

1. Please print your first and last name on the line below.

________________________________
| First Name | Last Name |

2. Student ID number.

________________________________

3. Your Age.

________________________________

4. What is your gender?

[ ] A. Male
[ ] B. Female
[ ] C. Unknown