**Evaluation of Adaptive Learning in Statistics**  
**Survey Instrument Appendix**

**Student Baseline Survey**

**PART I:**

Q1 Thank you for taking this survey. Please provide your first and last name.  
*This information will not be connected to your responses on this survey.*

- First Name ________________________________________________
- Last Name __________________________________________

Q2 What is the name of your college or university?  
College/University Name:  
In which class section are you currently enrolled?  
▼ Anne Arundel Community College ... Wor-Wic Community College

Q3 What is your student ID number?  
*This information will not be connected to your responses on this survey.*

**PART II:**

The Urban Institute is working with $\{e://Field\text{/college}\}$ and ITHAKA to improve introductory math courses. We are asking all students in this course to take this survey. The survey includes a pre-assessment of statistics knowledge and a few questions about you and your background. It’s okay if you have not taken statistics before – please just give your best answers. Your individual responses will not be shared with your instructors and will not affect your grade. If you are not comfortable answering one or more of the questions, you may select “prefer not to answer.” However, we hope that you will answer all of the questions honestly so that we can improve the course for you and for other students in the future.

All of your personal information recorded in the survey will be de-identified (kept confidential) before it is sent securely to the research team. This survey should be taken independently—please do not discuss the questions with others. This survey will take no more than 40 minutes to complete. Clicking “Continue to Survey” means that you are at least 18 years old, you agree to participate in the survey and that you grant the research team permission to receive the results. (If you are under 18, please click “continue” and you can indicate this on the next page.) The research team will not know your name or other identifying information about you. You may save or print a copy of this consent form for your records.

*Display This Question:*

If college = University of Maryland, College Park

This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects. If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:

University of Maryland College Park  
Institutional Review Board Office  
1204 Marie Mount Hall  
College Park, Maryland, 20742

Fielded Spring 2018
Q4 I have read and understand the explanation provided to me and have been given a copy of this consent form. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

Display This Question:
If pilot = 1

Q5 Questions?
Check out the frequently asked questions here or you can email MathAssessment@urban.org.

Display This Question:
If pilot = 0

Q6 Questions?
Check out the frequently asked questions here or you can email MathAssessment@urban.org.

Q7 Please choose if you will continue to the survey and click "Next Question".

- Continue to Survey
- Decline to Take Survey

Skip To: End of Survey If Consent = Decline to Take Survey

Q8 Are you at least 18 years old?

- Yes
- No
- Prefer not to answer

Skip To: End of Survey If Age Check = No
Skip To: End of Survey If Age Check = Prefer not to answer

Q9 These next few questions ask about what you already know and think about math and probability.

Q10 Please indicate how strongly you agree or disagree with the following statements concerning beliefs or attitudes about probability, statistics, and mathematics.

If you strongly agree with a particular statement, choose the number 5 on the scale. If you strongly disagree with the statement, choose the number 1.
<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>Neutral</th>
<th>3</th>
<th>4</th>
<th>Strongly agree</th>
<th>5</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often use statistical information in forming my opinions or making decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>To be an intelligent consumer, it is necessary to know something about statistics.</td>
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<tr>
<td>Because it is easy to lie with statistics, I don't trust them at all.</td>
<td></td>
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</tr>
<tr>
<td>Understanding probability and statistics is becoming increasingly important in our society, and may become as essential as being able to add and subtract.</td>
<td></td>
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</tr>
</tbody>
</table>
Q11 Please indicate how strongly you agree or disagree with the following statements concerning beliefs or attitudes about probability, statistics, and mathematics. 
*If you strongly agree with a particular statement, choose the number 5 on the scale. If you strongly disagree with the statement, choose the number 1.*

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>Neutral</th>
<th>4</th>
<th>Strongly agree</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given the chance, I would like to learn more about probability and statistics.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>You must be good at mathematics to understand basic statistical concepts.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Statements about probability (such as the odds of rolling doubles on a pair of dice) seem very clear to me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I can understand almost all of the statistical terms that I encounter in newspapers or on television.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q12 Please answer the next six math questions as best you can. You do not need to use a calculator.

Q13 You visit a zoo where there are 29 bears. You ask about the age of the first 5 you see, and their ages are: 8, 16, 8, 14, 4. Based on this sample, calculate the average age of the 5 bears.

- Age (years): ________________________________

Q14 Each student in the 11th grade recorded the time they spent doing afterschool activities and the time they spent on the computer for one week. The resulting data are summarized in the scatterplot below.

Which of the following statements best summarizes the relationship between time spent on afterschool activities and time spent on the computer?

- The amount of time spent on the computer does not seem to be related to the amount of time students spend on afterschool activities.

- Because students can spend time on other activities, such as watching television, you cannot summarize the relationship based on these data.

- Generally, the more time students spend on afterschool activities, the more time they tend to spend on the computer.

- Generally, the more time students spend on afterschool activities, the less time they tend to spend on the computer.
Q15 An experiment was conducted to investigate whether baby mice grow larger in warm or cold temperatures. One hundred mice were included in an experiment, with 50 put in colder cages and 50 put in warmer cages. What should be recorded as the outcome (result)?

- The number of siblings each mouse has
- The weight and size of the baby mice at the end of the experiment
- The temperatures of the cages
- The length of the experiment
Peggy listens to ten songs on her way to class every morning. She sets the music player to select at random. The boxplots summarize song lengths for Monday, Tuesday, and Wednesday of that week.

**Which of the following statements is true?**

- **On Thursday, song lengths will have a greater median and less variability than song lengths on Wednesday.**
- **The variation in song length was about the same on Monday and Wednesday.**
- **The song length on Monday was longer than the average song length on Wednesday.**
- **The song lengths varied less on Wednesday than the song lengths on Monday or Tuesday.**
Q17 Consider the four pairs of dot plots. Each dot plot represents a set of measurements. For which pairing is the variation in the dot plot on the right greater than the dot plot on the left?
Q18 A class of students took turns trying to toss beach balls into a basket on the floor 20 feet away. The number of successful tosses out of 10 total for each student is recorded below.

Which of the following statements is true?

- All of the students had about the same number of successes.
- Out of their ten tosses, students were more likely to have successful than unsuccessful tosses.
- On average, students had 3 successful tosses, but some students had more than that.
- On average, a student had about 5 successful tosses, but some students had more than that.
Q19 Now we have some questions about you.

Q20 Please rate the following statements.
If you strongly agree with a particular statement, choose the number 5 on the scale. If you strongly disagree with the statement, choose the number 1.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>2</th>
<th>Neutral</th>
<th>4</th>
<th>Strongly agree</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can understand math better than most people.</td>
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</tr>
<tr>
<td>I can figure out how to solve many different math problems without being told which approach to use.</td>
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</tr>
<tr>
<td>I am confident in my knowledge of statistics.</td>
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</tr>
<tr>
<td>Students need to master basic statistical rules, formulas, or procedures before tackling complex problems.</td>
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<td>○</td>
</tr>
</tbody>
</table>
Q21 Which type of classroom experience would best help you learn math?
Please rank the following options from 1 to 4, with 1 being the experience that helps you learn best.

_____ Instructor gives lectures in class and I can practice in a lab/discussion session or outside of class.
_____ I do self-paced work on a computer in class and the instructor is available to answer my questions as needed.
_____ I learn content on a computer outside of class and participate in activities in class that apply the concepts.
_____ I learn content from a hard-copy textbook outside of class and participate in activities in class that apply the concepts.

Q22 How often do you expect to meet or talk with your instructor one-on-one during the semester?

☐ Never
☐ Once or twice
☐ Monthly
☐ Weekly
☐ More frequently than weekly
☐ Prefer not to answer

Q23 In prior math courses, when you had a question or needed additional help solving a problem, what resource did you most frequently turn to?

Please rank the following options from 1 to 4, with 1 being the most frequently used resource.

_____ Peers in class
_____ Instructor
_____ Course materials (personal notes, class hand-outs, textbook, etc.)
_____ Internet resources

Q24 Which of the following best describes your experience with statistics?

☐ I have never taken a course in statistics.
☐ I learned a little about statistics as part of another course.
☐ I have taken a whole course on statistics in high school but nothing in college.
☐ I have taken a whole college-level course in statistics.
☐ Other (please specify) _________________________________
☐ Prefer not to answer
Q25 Do you own a device with access to internet?

Please choose all that apply.

☐ No

☐ Yes, a desktop computer

☐ Yes, a laptop computer

☐ Yes, a tablet

☐ Yes, a smartphone

☐ Prefer not to answer

Q26 Do you have reliable internet access where you live?

☐ Yes

☐ No

☐ Prefer not to answer

Display This Question:
If Internet Access = No
Or Internet Access = Prefer not to answer

Q27 Is there another location where you can easily access reliable internet at any time of day (for example, on campus, a library, or a cafe)?

☐ Yes

☐ No

☐ Prefer not to answer
Q28 How many prior math courses have you taken in high school or college that have used a computer program to complete coursework or homework assignments?

- None
- One or two classes
- Three or four classes
- More than four classes
- Prefer not to answer

Display This Question:
If Use Computer for Math = One or two classes
Or Use Computer for Math = Three or four classes
Or Use Computer for Math = More than four classes

Q29 When you used a computer program for a math class, how much did you like using the computer program?

- Strongly disliked it
- Neither liked nor disliked it
- Strongly liked it
- Prefer not to answer
Q30 Overall, how much time do you expect to spend on course work EACH week for THIS course outside of class?

- None
- Less than 1 hour
- 1-5 hours
- 6-10 hours
- 11-15 hours
- 16-20 hours
- Over 20 hours
- Prefer not to answer

Q31 Overall, how much time do you expect to spend on course work EACH week for ALL of your courses outside of class?

- None
- Less than 1 hour
- 1-5 hours
- 6-10 hours
- 11-15 hours
- 16-20 hours
- Over 20 hours
- Prefer not to answer
Q32 How difficult do you expect this course to be?
- Very easy
- Moderate
- Very difficult
- Prefer not to answer

Q33 How many hours do you plan to work at a job (either on-campus or off-campus) this semester?
- I do not plan to work
- I plan to work 1-9 hours each week
- I plan to work 10-19 hours each week
- I plan to work 20-29 hours each week
- I plan to work 30-39 hours each week
- I plan to work 40 or more hours each week
- Prefer not to answer

Q34 Where do you live?
Please choose one answer that best describes your living situation.
- I live with parent(s) or other guardian(s)
- I live independently without my parent(s) or other guardian(s) (with my own family, alone, or with roommates)
- Prefer not to answer

Display This Question:
If Living Situation = I live with parent(s) or other guardian(s)
Q35 What is the approximate combined income of your parents before taxes?

- $0 to $49,999
- $50,000 to $99,999
- $100,000 to $199,999
- $200,000 or more
- Don't know
- Prefer not to answer

Display This Question:
If Living Situation = I live independently without my parent(s) or other guardian(s) (with my own family, alone, or with roommates)
Or Living Situation = Prefer not to answer

Q36 What is the approximate combined income of your household before taxes?

- $0 to $49,999
- $50,000 to $99,999
- $100,000 to $199,999
- $200,000 or more
- Don't know
- Prefer not to answer
Q37 What is the highest level of education you expect to complete in the future?

- Complete some college classes (less than a certificate)
- Complete a certificate program (less than an Associate's degree)
- Complete an Associate's degree
- Complete a Bachelor's degree
- Complete a Master's degree or equivalent
- Complete a Ph.D., M.D., J.D., or other advanced or professional degree
- Don't know
- Prefer not to answer

Q38 Please indicate the highest level of education completed by your:

<table>
<thead>
<tr>
<th>Did not complete high school</th>
<th>High school diploma or equivalent (for example, GED)</th>
<th>Some college (less than Associate's)</th>
<th>Associate's degree</th>
<th>Bachelor's or four-year degree</th>
<th>Graduate or professional degree</th>
<th>Don't know</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father (or parent/guardian #1):</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Mother (or parent/guardian #2):</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q39 Are you married?

- Yes
- No
- Prefer not to answer
Q40 Do you have children or other dependents?
- Yes
- No
- Prefer not to answer

Q41 What language do you know best?
- English
- English and another language about the same (please specify) __________________________
- Another language (please specify) __________________________
- Prefer not to answer

Q42 Were you born in the United States or its territories?
- Yes
- No
- Prefer not to answer

Q43 What month were you born?


- January ... Prefer not to answer

Q44 What year were you born?
- Year (please specify) __________________________
- Prefer not to answer
**Student End-of-Semester Survey**

**PART I:**

Q1 Thank you for taking this survey. Please provide your first and last name.

*This information will not be connected to your responses on this survey.*

- First Name ________________________________
- Last Name ________________________________

Q2 What is the name of your college or university?

College/University Name:

In which class section are you currently enrolled?

- Anne Arundel Community College ...
- Wor-Wic Community College

Q3 What is your student ID number?

*This information will not be connected to your responses on this survey.*

Q4 Are you at least 18 years old?

- Yes
- No
- Prefer not to answer

**PART II:**

Q1 The Urban Institute is working with $\text{Field/college}$ and ITHAKA to improve introductory math courses. We are asking all students in $\text{Field/coursename}$ to take this survey. The survey asks about your experiences in the course and your plans for the future. Your individual responses will not be shared with your instructors and will not affect your grade. If you are not comfortable answering one or more of the questions, you may select “prefer not to answer.” However, we hope that you will answer all of the questions honestly so that the course can be improved for you and for other students in the future. All of your personal information recorded in the survey will be de-identified (kept confidential) before it is sent securely to the research team. This survey should be taken independently—please do not discuss the questions with others. This survey will likely no more than 20 minutes to complete. Clicking “Continue to Survey” means that you are at least 18 years old, agree to participate in the survey and that you grant the research team permission to receive the results. The research team will not know your name or other identifying information about you. You may save or print a copy of this consent form for your records.

Questions? Please email MathAssessment@urban.org.

**Display This Question:**

- If course = UMCP1
- Or course = UMCP2

Q2 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects. If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:

  - University of Maryland College Park
  - Institutional Review Board Office

Fielded Spring 2018
Q3 Please choose if you will continue to the survey.

☐ Continue to survey

☐ Decline to take survey

Skip To: End of Survey If Consent = Decline to take survey

Q4 We want to understand your experiences in $[e://Field/coursename].

Q5 Is this your first time taking a college-level statistics course?

☐ Yes

☐ No

☐ Prefer not to answer

Q6 Overall, how would you rate your experiences in $[e://Field/coursename] relative to other introductory-level college courses?

☐ Much worse 1

☐ 2

☐ About the same 3

☐ 4

☐ Much better 5

☐ Not applicable

☐ Prefer not to answer
Q7 We want to know how this class compares with other introductory-level college classes. Please answer the following questions using the rating scale below:

<table>
<thead>
<tr>
<th></th>
<th>Far below average</th>
<th>2</th>
<th>About average</th>
<th>4</th>
<th>Far above average</th>
<th>Not applicable</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much did you learn?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>How engaging was the class?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>How available was your instructor to answer questions?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q8 Did $\text{[e://Field/coursename]}$ increase or decrease your interest in statistics? Please choose one of the following:

- Decreased interest a lot (1)
- 2
- No change (3)
- 4
- Increased interest a lot (5)
- Prefer not to answer
Q9 How likely are you to take more math classes?
   Please choose one of the following:
   - Definitely will not 1
   - 2
   - Not sure 3
   - 4
   - Definitely will 5
   - Prefer not to answer

Q10 How difficult did you find $\text{coursename}$?
   Please choose one of the following:
   - Extremely easy 1
   - 2
   - Moderate 3
   - 4
   - Extremely difficult 5
   - Prefer not to answer

Q11 On average, how many hours per week did you spend on coursework for $\text{coursename}$ outside of required class meetings?
Coursework includes watching video lectures, attending supplemental discussions or labs not required for the course, reading, practice problems, homework assignments, and studying for exams.

Display This Question:
   If course != CCBC23500
   Or course != CCBC20233
   Or course != CCBC20034
   Or course != CCBC20455
   Or course != CCBC21002
   Or
   college != Towson University
   And pilot != 0

Q12 Approximately what portion of $\text{coursename}$ assignments that your instructors assigned in $\text{tool}$ did you complete?
Please choose one of the following:
   - None 1
   - 2
Q13 Approximately what portion of $[e://Field/coursename]$ homework assignments did you complete? Please choose one of the following:

- None 1
- 2
- About half 3
- 4
- All 5
- Prefer not to answer

Q14 Approximately what portion of $[e://Field/coursename]$ course meetings/lectures did you attend, either in-person or online? Please choose one of the following:

- None 1
- 2
- About half 3
- 4
- All 5
- Prefer not to answer
Q15 Approximately what portion of \$\{e://Field/coursename\} discussions/labs did you attend?
Please choose one of the following:

- None 1
- 2
- About half 3
- All 5
- Prefer not to answer
Q16 How would you rate the quality of the course meetings/lectures?
*Please choose one of the following:*
- Terrible 1
- 2
- Okay 3
- 4
- Excellent 5
- Prefer not to answer

Q17 How would you rate the quality of the discussion/lab?
*Please choose one of the following:*
- Terrible 1
- 2
- Okay 3
- 4
- Excellent 5
- Prefer not to answer

Q18 How often did you meet or talk with your instructor one-on-one during the semester, either in-person or online (via virtual office hours or web-based meetings)?
*Please choose one of the following:*
- Never
- Once or twice
- Monthly
- Weekly
- More frequently than weekly
- Prefer not to answer

Display This Question:
*If course = UMCP1
Or course = UMCP2*
Q19 How often did you meet or talk with your TA one-on-one during the semester, either in-person or online (via virtual office hours or web-based meetings)?
Please choose one of the following:

○ Never
○ Once or twice
○ Monthly
○ Weekly
○ More frequently than weekly
○ Prefer not to answer

Q20 What percentage of your in-class time was spent on the following activities each week?
Percentages should sum to 100.
The instructor gave prepared lecture on the material: ______
I completed assessments, including quizzes, tests, and/or clicker questions: ______
The instructor led a class discussion or review of the material: ______
I did activities on the computer in the $[e://Field/tool] tool: ______
I did activities on the computer outside the $[e://Field/tool] tool: ______
I did activities on paper, in groups or individually: ______
I discussed or reviewed the material with my peers: ______
Other (specify): ______
Total: ______
<table>
<thead>
<tr>
<th>Q21 Please rate the following statements using the scale below. In-class activities refers to all activities conducted in class.</th>
<th>Strongly disagree</th>
<th>2</th>
<th>Neutral</th>
<th>3</th>
<th>Strongly agree</th>
<th>5</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The in-class activities helped me understand course concepts</td>
<td>[ ]</td>
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<td>[ ]</td>
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<td>[ ]</td>
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</tr>
<tr>
<td>The in-class activities were engaging</td>
<td>[ ]</td>
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<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>The in-class activities involved group work</td>
<td>[ ]</td>
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<tr>
<td>The in-class activities involved active learning (e.g. collaborative note-taking, hands-on activities, writing summaries)</td>
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<td>[ ]</td>
</tr>
<tr>
<td>The in-class activities were easy to complete</td>
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</table>

**Q22 Where do you typically first engage with new statistics concepts?**

*Percentages must sum to 100.*

In the classroom - I am assigned reading/practice on new content after in-class lecture, activities, and discussion on those concepts: _____

Outside of the classroom - I am assigned to read about new content outside of class, then offered prepared lecture, activities, and/or discussions on that content in class: _____

Total: _______
Q23 Which of the following statements was true about your course this semester?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance was part of my grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completing assignments in $\texttt{{e://Field/tool}} was part of my grade</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q24 We want to understand your experiences with \$\texttt{\{e://Field/tool\}}.

Q25 Overall, how would you rate your experience with \$\texttt{\{e://Field/tool\}} relative to other computer-based tools you have used in the past?

- Much worse 1
- 2
- About the same 3
- 4
- Much better 5
- Not applicable - I have never used another tool
- Prefer not to answer

Q26 Please rate the following statements using the scale below:
<table>
<thead>
<tr>
<th>The content on $[e://Field/tool]$ was aligned with material outlined in the syllabus.</th>
<th>Strongly disagree 1</th>
<th>2</th>
<th>Neutral 3</th>
<th>4</th>
<th>Strongly agree 5</th>
<th>Not applicable</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$[e://Field/tool]$ built on the content taught during class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructors centered their lesson plans around $[e://Field/tool]$.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructors used $[e://Field/tool]$ in a way that helped me understand statistics better.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$[e://Field/tool]$ adjusted to my learning needs in real time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quizzes on $[e://Field/tool]$ gave me a good understanding of how much course material I knew.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using $[e://Field/tool]$ helped me easily identify the concepts I needed to work on.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, $[e://Field/tool]$ helped me learn course material.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q27 How would you evaluate the following technical aspects of $[e://Field/tool]$?

Please rate the following using the rating scale below:
<table>
<thead>
<tr>
<th>Feature</th>
<th>Terrible</th>
<th>2</th>
<th>Okay</th>
<th>4</th>
<th>Excellent</th>
<th>Not applicable</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logging in to the tool</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigating through the assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of graphics and multimedia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completeness of content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of finding specific information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of inputting and submitting answers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical support when difficulties arise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of accessing grades on assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility with my device (laptop, phone, tablet, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Display This Question:
If pilot = 1
Q28 Please rate the helpfulness of each of the following features of the Acrobatiq tool using the scale below:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Not at all helpful 1</th>
<th>2</th>
<th>Somewhat helpful 3</th>
<th>4</th>
<th>Extremely helpful 5</th>
<th>Do not use/Do not recognize</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Ready - Unit 1 Prerequisite Knowledge Test</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>StatTutor</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Apply What You Know Activities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Quizzes/Checkpoints</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Before You Continues</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Videos</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Q29 How often did you have serious technical difficulties with $e://Field/tool$ that were severe enough to prevent you from progressing through a module or assessment (e.g., page would not load repeatedly, quiz would not work, a graphic was missing, correct answers were marked incorrect, etc.)? Please choose one of the following:

- Never
- Once or twice during the semester
- Every few weeks
- Once a week
- More than once a week
- Prefer not to answer

Display This Question:
If Frequency of technical difficulties = Once or twice during the semester
Or Frequency of technical difficulties = Every few weeks
Or Frequency of technical difficulties = Once a week
Or Frequency of technical difficulties = More than once a week

Q30 Did the technical problems with the software improve over the course of the semester?

- Yes
- Somewhat
- No
- Don’t know
- Prefer not to answer
Q31 Did $\text{[e://Field/tool]}$ provide explanations about why your answers were incorrect?

- Yes
- Sometimes
- No
- Don't know
- Prefer not to answer

Display This Question:
If Explanations = Yes
Or Explanations = Sometimes

Q32 Were the explanations helpful?

- Yes
- Somewhat
- No
- Prefer not to answer

Q33 Did $\text{[e://Field/tool]}$ offer the option to get help solving a difficult problem?

- Yes
- Sometimes
- No
- Don't know
- Prefer not to answer

Display This Question:
If Hints = Yes
Or Hints = Sometimes

Q34 Was the help useful?

- Yes
- Somewhat
- No
- Prefer not to answer
Q35 What was your favorite feature of $e://Field/tool$?
Please choose at least 1 and no more than 3 of the following:

☐ Adaptibility to my skill level

☐ Ability to navigate to and search for specific content

☐ Clarity of written material

☐ Consistency between platform content and in-class lecture

☐ Ease of use, including accessibility and picking up where you left off

☐ Explanations of incorrect answers

☐ Help when answering questions

☐ Homework and practice problems

☐ Length of content

☐ Multiple attempts to get the correct answer

☐ Self-pacing

☐ Tracking assignments & grades

☐ Videos and graphics

☐ Other (please specify): __________________________________________

☐ ⊗ None
Q36 What feature of $e://Field/tool$ do you think needs to be most improved?
Please choose at least 1 and no more than 3 of the following:

- Adaptibility to my skill level
- Ability to navigate to and search for specific content
- Clarity of written material
- Consistency between platform content and in-class lecture
- Ease of use, including accessibility and picking up where you left off
- Explanations of incorrect answers
- Help when answering questions
- Homework and practice problems
- Length of content
- Multiple attempts to get the correct answer
- Self-pacing
- Tracking assignments & grades
- Videos and graphics
Other (please specify): ________________________________

- None
- Don't know
- Prefer not to answer
Q37 Now we want to know more about you.

Q38 Please rate the following statements using the scale below:

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>2</th>
<th>Neutral 3</th>
<th>4</th>
<th>Strongly agree</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often use statistical information in forming my opinions or making decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be an intelligent consumer, it is necessary to know something about statistics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because it is easy to lie with statistics, I don't trust them at all.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding probability and statistics is becoming increasingly important in our society, and may become as essential as being able to add and subtract.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Given the chance, I would like to learn more about probability and statistics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q39 Please rate the following statements using the scale below:
<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly disagree</th>
<th>2</th>
<th>Neutral 3</th>
<th>4</th>
<th>Strongly agree</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students need to master basic statistical rules, formulas, or procedures before tackling complex problems.</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Statements about probability (such as the odds of rolling doubles on a pair of dice) seem very clear to me.</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>I can understand almost all of the statistical terms that I encounter in newspapers or on television.</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>I can understand math better than most people.</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>I can figure out how to solve many different math problems without being told which approach to use.</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>
I am confident in my knowledge of statistics.

Display This Question:
If college = UMBC

Q40 Have you ever taken or are you currently taking Math 104 (Quantitative Literacy), Math 106 (Algebra and Elementary Functions), or a math course in Learning Resource Center (LRC) at UMBC?

- Yes
- No
- Don’t know
- Prefer not to answer

Q41 Which of the following best describes your living situation?

- On campus in college-owned living quarters for students (such as dormitories, residence halls, or school-owned apartments)
- With parents/other relatives (“Other relatives” does not include your spouse or children)
- Off campus in non-college-owned housing, but not with your parents or other relatives
- Prefer not to answer

Q42 Have you ever qualified for or received a Pell Grant to help you pay for school?

- Yes
- No
- Don’t know
- Prefer not to answer

Q43 Please enter any other comments about the course here.

________________________________________________________________
________________________________________________________________
________________________________________________________________

Fielded Spring 2018
Instructor Survey

Q1 Thank you for taking this survey! What is the name of your college or university?

College/University Name: 
In which of your class sections are you currently using Acrobatiq?

Anne Arundel Community College ...

Q2 The Urban Institute is working with $[e://Field/college]$ and ITHAKA to assess if the Acrobatiq tool combined with the ALiS pedagogical approach improves introductory statistics courses. We are asking all instructors teaching an Acrobatiq pilot course to take this survey. The survey asks questions about your background, experience teaching the course, and level of effort teaching the course this semester. While we do not intend to identify you by name with any particular statement, there is the potential due to your role that information could be associated with you, since we will be reporting back to ITHAKA about activities at particular colleges. Because of this, we are not offering you a higher-level promise of "confidentiality." Please keep this in mind as you respond to these questions. We do not think there are any risks to you of completing this survey, since we are trying to determine effective strategies to improve statistics education overall. The main benefit is that the information we collect may help your institution or others improve their course offerings and student outcomes. We expect this survey to take no more than 40 minutes to complete. Clicking "Continue to Survey" means that you agree to participate in the survey and that you grant the research team permission to receive the results. You may save or print a copy of this consent form for your records.

Q3 Please choose if you will continue to the survey.

- Continue to survey
- Decline to take survey

Q4 Please provide your first and last name.

- First Name: ______________________________
- Last Name: ______________________________

Q5 Please provide your official title within $[e://Field/college]$.

- Title: ______________________________

Q6 To verify, are you an instructor for at least one section of $[e://Field/course]$ at $[e://Field/college]$ that uses the Acrobatiq tool?

- Yes
- No
Q7 We would like to learn more about your background.

Q8 Number of years you have been an instructor of mathematics/statistics at the college level (at any institution):

☐ Years: ________________________________________________

Q9 Number of years you have been an instructor of ${e://Field/course}$ at ${e://Field/college}$:

☐ Years: ________________________________________________

Display This Question:
If Role verification = Yes

Q10 What is your status at ${e://Field/college}$?

☐ Full-time regular faculty member/lecturer

☐ Part-time regular faculty member/lecturer

☐ Full-time adjunct faculty member/lecturer

☐ Part-time adjunct faculty member/lecturer

☐ Other (specify): ________________________________

Display This Question:
If Role verification = Yes

Q11 Are you the designated lead instructor of an Acrobatiq section of ${e://Field/course}$?

☐ Yes

☐ No

Q12 Is this your first semester using Acrobatiq to teach ${e://Field/course}$ at ${e://Field/college}$?

☐ Yes

☐ No

Display This Question:
If First time teaching pilot = Yes

Fielded Spring 2018
Q13 How much time did you have before the semester started to become familiar with the Acrobatiq platform for $\{e://Field/course\}$?

- Two months or more
- One month to less than two months
- Two weeks to less than one month
- Less than two weeks

Display This Question:
If First time teaching pilot = Yes

Q14 Did you feel like you had adequate time before the semester started to become familiar with the Acrobatiq platform for $\{e://Field/course\}$?

- Yes
- No (please explain): ________________________________
- Prefer not to answer

Q15 The next few questions ask about the structure of the sections of $\{e://Field/course\}$ in which you are using Acrobatiq this semester.

Q16 How many sections of $\{e://Field/course\}$ did you teach using the Acrobatiq platform this semester?

- One
- Two

Q17 Did you teach a traditional section of $\{e://Field/course\}$ this semester?

- Yes
- No

Q19 Does your Acrobatiq section of $\{e://Field/course\}$ have a lab/discussion section or other supplement to the lecture portion of the course?

- Yes
- No
- Other (describe): ________________________________
Q20 Please describe your "Other" response.

________________________________________________________________
________________________________________________________________
________________________________________________________________

Q21 How much of your students' in-class time in your Acrobatiq section was spent in a computer lab or computer-enabled classroom this semester?

- 0%
- 1-24%
- 25-49%
- 50-74%
- 75-99%
- 100%

Q22 The next few questions relate to your teaching style this semester.

Q23 On average, what percentage of your in-class time was spent on the following activities each week during the semester in your Acrobatiq section?

Percentages should sum to 100.
I gave prepared lectures on the material: ______
I administered assessments, including quizzes, tests, and/or clicker questions: ______
I led a class discussion/review of the material: ______
Students did activities on the computer in the Acrobatiq tool: ______
Students did activities on the computer outside the Acrobatiq tool: ______
Students did activities on paper, in groups or individually: ______
Students led a class discussion/review of the material with their peers: ______
Specify other activity: ______
Specify other activity: ______
Total: ______
Q24 Please rate the following statements using the scale below.

*In-class activities refers to all activities conducted in class, whether created by you, another instructor, or shared by Ithaka/another source.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree 1</th>
<th>2</th>
<th>Neutral 3</th>
<th>4</th>
<th>Strongly agree 5</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The in-class activities helped students understand course concepts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The in-class activities were engaging for students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The in-class activities involved group work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The in-class activities involved active learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The in-class activities were easy to administer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q25 What is your overall impression of the in-class activities shared by the project team and created using the Ithaka student sample data survey?

- [ ] Very negative 1
- [ ] 2
- [ ] Neutral 3
- [ ] 4
- [ ] Very positive 5
- [ ] Prefer not to answer
Q26 Please feel free to explain your response.
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
Q27 Where do students in your Acrobatq section first engage with new statistics concepts?

Percentages must sum to 100.
In the classroom—Students are assigned reading/practice on new content after in-class lecture, activities, and/or discussions on those concepts: ______
Outside of the classroom—Students are assigned to read about new content outside of class, then offered prepared lecture, activities, and/or discussions on that content in class: ______
Total: ______

Q28 Do you consider your Acrobatq section to be a flipped classroom?
Ithaka defines a flipped classroom as an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering the majority of instructional content online, outside of the classroom. The majority of the in-class face-to-face time is spent on targeted instruction and active learning. However, please feel free to share your definition.

☐ Yes (please explain) ________________________________________________
☐ No (please explain) ________________________________________________
☐ Partially (please explain) __________________________________________

**Display This Question:**
If Flipped - one section = Yes (please explain)
Or Flipped - section 1 = Yes (please explain)
Or Flipped - section 2 = Yes (please explain)

Q29 How much experience do you have teaching a flipped or a partially flipped classroom in a college-level course?

☐ This is my first semester teaching a flipped classroom
☐ 2-3 semesters (including this semester)
☐ 4 semesters or more (including this semester)

**Display This Question:**
If Flipped - one section = No (please explain)
Or If
Flipped - section 1 = No (please explain)
And Flipped - section 2 = No (please explain)
Q30 Have you ever taught a flipped classroom in a college-level course prior to this semester before?

- Yes
- No
- Partially (please explain) ________________________________

Q31 On average, how many hours per week do you estimate students need to spend per week on coursework for your Acrobatiq section outside of class? 
*Coursework includes watching video lectures, attending supplemental discussions or labs not required for the course, reading, practice problems, homework assignments, and studying for exams.*

- Hours: ________________________________

Q32 Which supplemental resources listed below are available to students in your [e://Field/coursename] course if they need additional help? 
Select all that apply.

- Recorded lectures
- Designated time for supplemental instruction or tutoring provided by myself or a teaching assistant
- Instructor office hours
- Supplemental instruction or tutoring provided by math department, student success center, or math lab on campus
- Other (please specify) ________________________________

- None of the above
Q33 To what portion of students did you provide the following types of feedback one-on-one this semester in your Acrobatiq section?

<table>
<thead>
<tr>
<th></th>
<th>Fewer than a quarter of students</th>
<th>At least a quarter of students</th>
<th>At least half of students</th>
<th>At least three-quarters of students</th>
<th>All students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student performance on a past quiz or test</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>How to improve on a specific skill/learning objective</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Student performance on the Acrobatiq platform</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>How to improve overall grade in the class</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Q34 How often did you provide the following types of descriptive feedback to students as a whole class in your Acrobatiq section this semester?

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Never</th>
<th>Once or twice during the semester</th>
<th>At least once a month</th>
<th>At least once a week</th>
<th>For every or almost every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class performance on a past quiz or test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to improve on a specific skill/learning objective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class performance on the Acrobatiq platform</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to improve overall grade in the class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q35 The following questions ask about how you used Acrobatiq this semester.

Q36 Which of the following elements of the Acrobatiq modules are students required to complete as part of their course grade?

*Select all that apply.*
Q37 What incentives do students have for engaging with and completing Acrobatiq material in the course? Select all that apply.

- Assigned percentage of overall course grade for completing Acrobatiq material (specify %)  
- Extra credit/extra points (specify maximum)
- Graded class assignments and quizzes created from content assigned in tool
- Other (please specify)
- None

Q38 Please feel free to enter other comments about how students are held accountable for engaging with and completing Acrobatiq material in the course.

Q39 Please indicate how often you used the Acrobatiq platform in the following ways this semester.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Once or twice during the semester</th>
<th>At least once a month</th>
<th>At least once a week</th>
<th>For every or almost every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>I used the platform to guide the overall scope and sequence of the course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the platform to assign homework (e.g. reading, assignments, quizzes, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the platform to facilitate collaboration and group work in class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the platform to work through examples during class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I fielded questions from students during class about content they encountered in the platform</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I met with students outside of class about content they encountered in the platform</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used content from the platform to create/provide supplemental materials for the course (e.g. class worksheets, projects, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used content from the platform to create summative assessments for the course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (describe or type N/A):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q40 Please indicate how often you used the Acrobatiq [dashboard](#) in the following ways this semester.
<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once or twice during the semester</th>
<th>At least once a month</th>
<th>At least once a week</th>
<th>For every or almost every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>I used the dashboard to track student progress in the course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the dashboard outside of class (e.g. office hours) to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide targeted feedback to students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the dashboard in class as a way to engage students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the dashboard data to make decisions about what areas to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>elaborate or focus on during class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I used the dashboard data to intervene with students in the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>class who were falling behind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (describe or type N/A):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Display This Question:
  If Usages of dashboard - one section = I used the dashboard data to intervene with students in the class who were falling behind [ Never ]
  Or Usages of dashboard - one section = I used the dashboard data to intervene with students in the class who were falling behind [ Once or twice during the semester ]
  Or Usages of dashboard - one section = I used the dashboard data to intervene with students in the class who were falling behind [ At least once a month ]
  Or Usages of dashboard - one section = I used the dashboard data to intervene with students in the class who were falling behind [ At least once a week ]

Q41 Please describe how you have intervened with students who were falling behind in the class:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Q42 Please describe in one to three sentences how you used the information on student progress from Acrobatiq to inform your teaching, grading, or other activities in the course:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Q43 How would you rate your overall satisfaction with the Acrobatiq tool?

○ Very dissatisfied 1
○ 2
○ Neutral 3
○ 4
○ Very satisfied 5
○ Prefer not to answer

Q44 How would you evaluate the following technical aspects of Acrobatiq?
Please rate each feature on a scale from 1 (terrible) to 5 (excellent).
<table>
<thead>
<tr>
<th></th>
<th>Terrible</th>
<th>2</th>
<th>Okay</th>
<th>4</th>
<th>Excellent</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logging in to the tool</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of graphics and multimedia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completeness of content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of navigating to specific content in the tool</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of using the dashboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical support when difficulties arise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of inputting and tracking grades on assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility with my device (laptop, phone, tablet, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q45 Please rate the helpfulness of each of the following features of the Acrobatiq tool on a scale of 1 to 5, where 5 is the best rating.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Not at all helpful</th>
<th>2</th>
<th>Somewhat helpful</th>
<th>4</th>
<th>Extremely helpful</th>
<th>Did not use/Do not recognize</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Ready - Unit 1 Prerequisite Knowledge Test</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>StatTutor</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Apply What You Know Activities</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Quizzes/Checkpoints</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Before You Continue</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Videos</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q46 Please indicate whether you agree or disagree with the following statements about your experience teaching the course this semester.

*Please rate the following statements on a scale from 1 (strongly disagree) to 5 (strongly agree).*
<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>2</th>
<th>Neutral 3</th>
<th>4</th>
<th>Strongly agree</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is easy to integrate the tool into my lecture/lab</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There are drawbacks to using the tool to teach this course</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have had technical difficulties with the tool this semester</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I would recommend this tool to colleagues who have a similar teaching style</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I would enjoy teaching with the tool again using a similar course format</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Significant changes to the course format would be needed before teaching this again</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q47 We would like to ask a few questions about your experience this semester.
Q48 How many hours before the semester started did you spend engaging with Acrobatiq and/or preparing materials for the course to align with Acrobatiq?

- Hours: ________________________________

Q49 On average, did preparing for each class meeting this semester take more, less, or the same amount of time as preparing for a course taught with a new textbook?

- Much less time
- 2
- About the same amount of time
- 4
- Much more time
- Not applicable – Have never taught a course with a new textbook

**Display This Question:**
If Relative time spent on prep = **Much less time**
Or Relative time spent on prep = **2**

Q50 How many more minutes did it take to prepare for each class meeting, on average?

- Minutes: ________________________________

**Display This Question:**
If Relative time spent on prep = **4**
Or Relative time spent on prep = **Much more time**

Q51 How many fewer minutes did it take to prepare for each class meeting, on average?

- Minutes: ________________________________

Q52 For your pilot section, how much did each student need to pay for required supplies (including access to Acrobatiq and any other software packages, such as StatCrunch)?
*If you do not know, please estimate.*

- Dollars ($): ________________________________

Q53 For a traditional section, how much would each student need to pay for textbooks or required supplies (including access to any online learning tools) on average?

- Dollars ($): ________________________________
- Don’t know

Fielded Spring 2018
Q54 If Acrobatiq had never been introduced as a new curriculum/learning tool this semester, how would you otherwise characterize your enthusiasm for teaching a traditional section of $\{\text{Field/course}\}$ at $\{\text{Field/college}\}$?

- Very unenthusiastic 1
- 
- 2
- Neutral 3
- 4
- Very enthusiastic 5

Q55 Considering your overall experience to date, does the Acrobatiq tool make you feel more, less, or similarly enthusiastic about teaching this course?

- Much less enthusiastic 1
- 
- 2
- About the same level of enthusiasm 3
- 4
- Much more enthusiastic 5

Q56 We have a few questions about how you feel about the Adaptive Learning in Statistics (ALiS) Virtual Learning Community.

Q57 This semester, have there been communication mechanisms (e.g. BaseCamp channels, email, phone calls, meetings) for faculty to discuss their experiences within your college?

- Yes
- 
- No

Display This Question:
If Internal comm = Yes

Q58 Please describe the communication mechanisms within your college that were used and whether or not they were helpful.

_________________________________________
_________________________________________
_________________________________________
_________________________________________
Q59 This semester, have there been communication mechanisms (e.g. BaseCamp channels, email, phone calls, meetings) for faculty to discuss their experiences across different colleges?

- Yes
- No

Display This Question:
If External communication = Yes

Q60 Have these communication mechanisms been useful?

- Yes
- No

Display This Question:
If External comm useful = Yes

Q61 Please describe why communication mechanisms for faculty to discuss their experiences across different colleges was useful.

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Display This Question:
If External comm useful = No

Q62 Please describe why communication mechanisms for faculty to discuss their experiences across different colleges was not useful.

________________________________________________________________
________________________________________________________________
________________________________________________________________
Q63 What is your overall impression of the Virtual Learning Community around the Acrobatiq pilot?

- Very negative 1
- 2
- Neutral 3
- 4
- Very positive 5

Q64 Please feel free to provide any feedback related to each of the following aspects of the Virtual Learning Community on BaseCamp. Your feedback will help improve this effort in the future.

- Resources (e.g. syllabus, pacing guide, in-class hands-on activities)
- Events and follow-up resources (e.g. webinar recordings)

Q65 We want to end with a few short-answer questions to summarize your impression of how the Acrobatiq tool might affect student learning outcomes.

Q66 List 3 things you find most promising about your experience teaching this course using the ALiS approach this semester:

The ALiS approach characterizes the pedagogical model plus Acrobatiq.

________________________________________________________________
________________________________________________________________
________________________________________________________________

Q67 List 3 things you find most challenging about your experience teaching this course using the ALiS approach this semester:

The ALiS approach characterizes the pedagogical model plus Acrobatiq.

________________________________________________________________
________________________________________________________________
________________________________________________________________

Q68 Please provide any recommendations you might have for improving the course in the future. These might relate to the platform, pedagogy, or other considerations.

________________________________________________________________
________________________________________________________________
________________________________________________________________
Q69 Please feel free to share any reflections you have about how your experience using Acrobatiq has changed over time, if applicable.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Q70 Based on your overall experience teaching the course this semester, how would you expect Acrobatiq to affect student outcomes relative to a traditional section of $[e://Field/course]$ at $[e://Field/college]$, and would you expect the ALiS approach to improve outcomes for some groups of students more than others? Please describe.
Learning outcomes may include pass rate, grade, comprehension of the material, interest in statistics, etc. Groups of students might include students who are more/less technology savvy, first-generation/legacy college students, students who are more/less committed to the material, etc.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Q71 Please feel free to enter anything else you would like to share about your experience with the pilot this semester. Your feedback will help improve this effort in the future.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________