## Introductory Statistics with Corequsite Support Survey Results Fall 2018 through Spring 2020

Beginning in fall 2018, Citrus College made changes to transfer-level math courses under the implementation of AB705 with the purpose of increasing completion of transfer-level math within a one-year timeframe. These changes included students' placement in the math course sequence, classroom redesign, and pedagogy. To better understand the student experience as a result of these modifications, students were surveyed about their experience in the newly redesigned Introductory Statistics with Corequsite support (MATH165 + 065) from fall 2018 through spring 2020. The following is a summary of the survey results.

Comparing MATH065/165 Survey Results	Fall 2018 Total N=346	Spring 2019 Total N=351	<b>Fall 2019</b> Total N=574	Spring 2020 Total N=306
2. How would you rate the helpfulness of each of the following teaching methods and materials used in this course before the campus closed?	% that rated it moderately or very helpful			
2a. Instructor's lectures	81.5%	92.0%	94.6%	94.4%
2b. Working in groups	82.6%	91.8%	94.4%	82.7%
2c. <b>Quality of materials provided</b> (e.g. worksheets, PowerPoint presentations, etc.)	83.3%	91.7%	97.9%	96.7%
2d. Diversity of format for the content delivered (e.g. video, audio, online, etc.)	71.4%	82.9%	81.4%	89.5%
2e. Workbook	50.6%	50.4%	61.5%	61.8%
2f. Textbook	-	-	65.9%	66.0%
2g. Calculator	96.2%	98.0%	98.8%	95.4%
2h. <b>Manipulatives</b> (e.g. dice, coins, cards, etc.)	76.3%	83.2%	83.6%	72.2%
2i. Whiteboard	88.7%	92.3%	95.8%	86.3%
2j. Movable furniture	72.6%	78.1%	84.0%	72.9%
2k. Counselor Visit	-	-	66.4%	57.8%
2l. STEM Center Visit (in class)	-	-	-	69.3%
3. How would you rate the helpfulness of each of the following teaching methods and materials used in this course after the campus closed?	% that rated it moderately or very helpful			
3a. Working in groups (Zoom breakout rooms)	-	-	-	63.4%

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3b. <b>Diversity of format</b> for the content delivered in Zoom (e.g. class activity, project, video, audio, online, etc.)	-	-	-	82.4%
4. During this semester, how often did you use:	% that used it at least once			
4a. <b>Virtual Instructor Office Hours</b> (including via email, WebAssign, Connect, MyOpenMath, MyMathLab)	-	-	36.8%	64.1%
4b. Virtual STEM Center tutor (one-on-one)	57.6%	55.9%	48.1%	24.5%
4c. Virtual STEM Center tutor (study group)	50.8%	45.3%	45.6%	19.0%
5. How would you rate the helpfulness of:	% that rated it moderately or very helpful			
5a. <b>In-class tutor</b> (before the campus closed)	-	-	80.3%	68.6%
5b. Virtual STEM Center tutor ( <b>one-on-one</b> )	46.5%	48.7%	46.2%	36.3%
5c. Virtual STEM Center tutor (study group)	47.1%	45.0%	48.3%	33.7%
6. How much do you agree or disagree with the following statements (in the online environment)?	% that rated agree or strongly agree			
6a. The <b>instructor's lectures</b> were effective in helping me learn in the online environment.	83.2%	91.4%	93.9%	88.2%
6b. <b>Diversity of content</b> (e.g. class activity, project, video, audio, etc.) were effective in helping me learn in the online environment.	-	-	-	84.3%
6c. My instructor helped me succeed in the online environment by <b>reviewing foundations skills</b> right before we tackled more complex problems.	87.0%	90.5%	92.5%	86.3%
6d. <b>Group work</b> (i.e. working with peers in Zoom breakout rooms) was effective in helping me learn in the online environment.	89.9%	93.4%	95.5%	60.8%
6e. Working in the <b>Canvas Discussion Boards</b> with my peers was effective in helping me learn in the online environment.	-	-	-	63.1%
6f. Working with <b>the Zoom share screen and Zoom whiteboard</b> with my peers was effective in helping me learn in the online environment.	-	-	90.2%	73.2%
6g. The <b>collaborative learning environment</b> is one reason I participated in Zoom sessions and breakout rooms.	80.4%	84.1%	89.4%	67.0%
6h. Having <b>tables arranged in groups</b> was effective in helping me learn (before the campus closed).	-	-	93.5%	80.7%
6i. I gained a sense of <b>community</b> by being in the online environment.	86.4%	91.2%	91.5%	66.3%
6j. I gained a sense of <b>responsibility</b> by being in the online environment.	88.5%	90.1%	92.5%	77.5%

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6k. I gained a sense of <b>belonging</b> to my class as a learning community in the online environment.	-	-	83.6%	68.6%
7. Which of the following best captures your feeling about this course?	% that chose each answer (% that were successful in the course)			
7a.This course is <b>too easy</b> for me.	4.6% (91%)	3.4% (86%)	3.7% (100%)	2.6% (100%)
7b. This course is the <b>right level</b> for me.	72.5% (90%)	79.5% ( <mark>92%)</mark>	77.9% (8 <mark>7%</mark> )	79.7% (95%)
7c. This course is <b>too difficult</b> for me.	22.0% (64%)	17.1% (63%)	18.3% (54%)	10.8% (67%)
8. When offered, how often did you participate in the Zoom meetings?	% that chose each answer			
8a. Always	-	-	-	55.2%
8b. Sometimes	-	-	-	29.4%
8c. Never	-	-	-	6.9%
8d. Not offered in these courses	-	-	-	1.6%
9. Which type of remote learning environment do you prefer?	% that chose each answer			
9a. Asynchronous instruction	-	-	-	12.1%
9b. Synchronous instruction	-	-	-	25.5%
9c. Combination instruction	-	-	-	53.9%