## 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 <br> Total N=346 | $\text { Spring } 2019$ Total N=351 | Fall 2019 <br> Total $N=574$ | $\text { Spring } 2020$ 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? |  | rated it mod | tely or very | lpful |
| 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. Quality of materials provided (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. Manipulatives (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\% |
| 21. 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. Diversity of format 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. Virtual Instructor Office Hours (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. In-class tutor (before the campus closed) | - | - | 80.3\% | 68.6\% |
| 5b. Virtual STEM Center tutor (one-on-one) | 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 instructor's lectures were effective in helping me learn in the online environment. | 83.2\% | 91.4\% | 93.9\% | 88.2\% |
| 6b. Diversity of content (e.g. class activity, project, video, audio, etc.) were effective in helping me learn in the online environment. | - | - | - | 84.3\% |
| 6 c . My instructor helped me succeed in the online environment by reviewing foundations skills right before we tackled more complex problems. | 87.0\% | 90.5\% | 92.5\% | 86.3\% |
| 6d. Group work (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 Canvas Discussion Boards with my peers was effective in helping me learn in the online environment. | - | - | - | 63.1\% |
| 6f. Working with the Zoom share screen and Zoom whiteboard with my peers was effective in helping me learn in the online environment. | - | - | 90.2\% | 73.2\% |
| 6 g . The collaborative learning environment is one reason I participated in Zoom sessions and breakout rooms. | 80.4\% | 84.1\% | 89.4\% | 67.0\% |
| 6 h . Having tables arranged in groups was effective in helping me learn (before the campus closed). | - | - | 93.5\% | 80.7\% |
| 6i. I gained a sense of community by being in the online environment. | 86.4\% | 91.2\% | 91.5\% | 66.3\% |
| 6 j . I gained a sense of responsibility by being in the online environment. | 88.5\% | 90.1\% | 92.5\% | 77.5\% |


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| 6 k . I gained a sense of belonging 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 too easy for me. | $\begin{aligned} & \hline 4.6 \% \\ & (91 \%) \end{aligned}$ | $\begin{aligned} & \hline 3.4 \% \\ & (86 \%) \end{aligned}$ | $\begin{gathered} \hline 3.7 \% \\ (100 \%) \end{gathered}$ | $\begin{gathered} \hline 2.6 \% \\ (100 \%) \end{gathered}$ |
| 7b. This course is the right level for me. | $\begin{aligned} & \hline 72.5 \% \\ & (90 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 79.5 \% \\ & (92 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 77.9 \% \\ & (87 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 79.7 \% \\ & (95 \%) \\ & \hline \end{aligned}$ |
| 7c. This course is too difficult for me. | $\begin{aligned} & \hline 22.0 \% \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & \hline 17.1 \% \\ & (63 \%) \end{aligned}$ | $\begin{aligned} & \text { 18.3\% } \\ & \text { (54\%) } \end{aligned}$ | $\begin{aligned} & 10.8 \% \\ & (67 \%) \end{aligned}$ |
| 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\% |
| 9 c . Combination instruction | - | - | - | 53.9\% |

