

# **IUPUI Online Mathematics Academy Summer 2014 Student Questionnaire Report**

Indiana University Purdue University, Indianapolis (IUPUI)

Report Completed by:  
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October, 2014



## IUPUI Online Mathematics Academy Summer 2014

The Online Mathematics Academy (OMA) was implemented at IUPUI in the summer of 2014. Seventy eight students completed the program. The program allowed students to work through ALEKS (Assessment and LEarning in Knowledge Spaces) online math modules with the personalized support of virtual mentoring sessions. Students were required to check in with their mentor twice weekly for tutoring and peer-to-peer support. Of the 78 students who participated in the program, 37 completed an anonymous satisfaction and evaluation questionnaire at the end of the program.

### Program Strengths

The OMA student questionnaire results suggested that the mentors helped to support student engagement with the modules and that students understood the goals of the program. The results show that students felt positive about their mentors' support: 48% strongly agreed that their mentor helped support their engagement with the modules, and another 37 % agreed (figure 1). The results also show that the goals of the Online Math Academy were met: 63% agreed that the goals of the program were well communicated. Another 20% strongly agreed (figure 1). Showing an overall rating of program success, 89% of students would recommend the Online Mathematics Academy to other students.

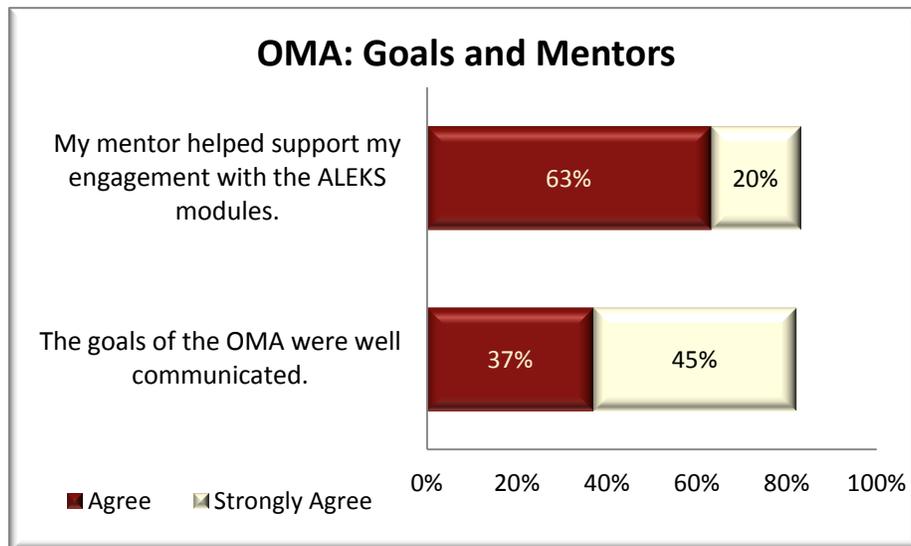


Figure 1

### ALEKS Modules

In ratings of the ALEKS modules, the average response for how easy the ALEKS modules were to use was 3.80 on the 5-point scale. Forty-nine percent agreed that they were easy to use while only 11% disagreed or strongly disagreed. More than 80% of students agreed (54%) or strongly agreed (29%) that they found them useful in that the ALEKS modules helped them develop their math skills (figure 2). Sixty-six percent of students agreed that the ALEKS modules provided useful feedback to improve their learning of math skills (figure 2). The average response was 3.89 on the 5-point scale. In considering the ALEKS modules overall, 23% of students were neutral to the item that the ALEKS modules made them feel ready to perform well in college math courses. While 54% agreed that the modules made them feel ready, more than 10% disagreed (figure 3).

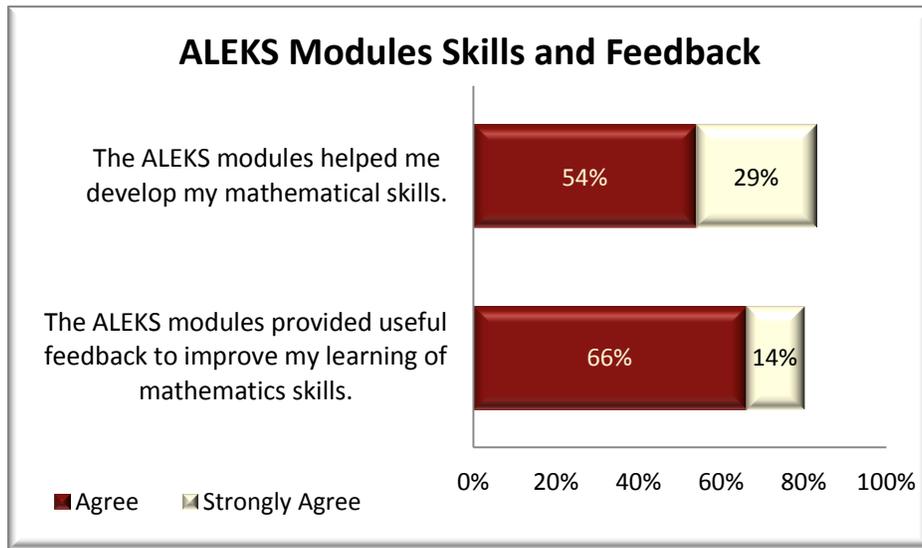


Figure 2

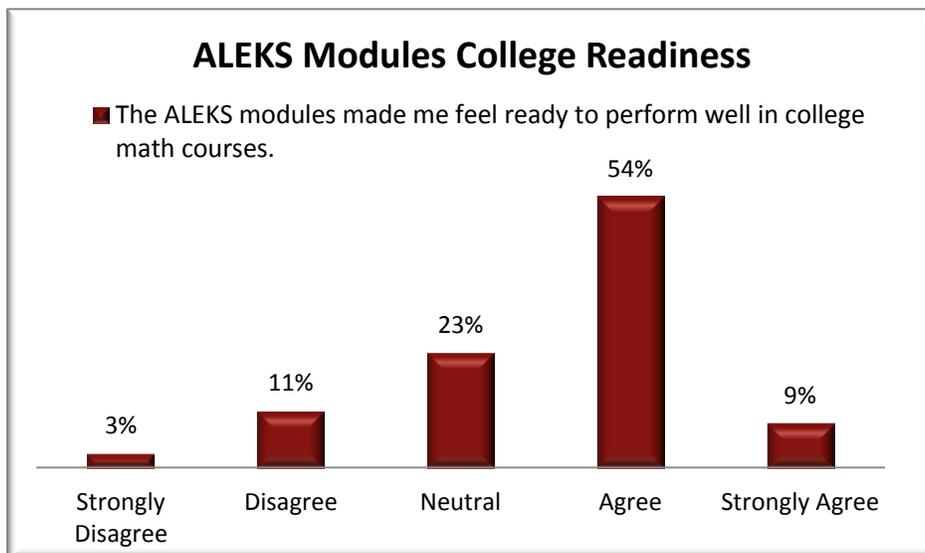


Figure 3  
Confidence and Engagement

Although nearly 60% of students agreed and 6% strongly agreed that they were confident about excelling in college math courses, 31% of students were neutral about this level of confidence (figure 4). The results are similar for confidence about how to study for exams: more than 50% agreed and 3% strongly agreed, but 31% were neutral. While more than 60% of students strongly agreed or agreed that they know about campus resources available to help them with math, 26% answered neutral to this item. It is important to note that many students may not have spent sufficient time working on the modules: 38% responded with neutral while only 9% responded with strongly agree. However, 47% did agree that they devoted sufficient time (figure 5).

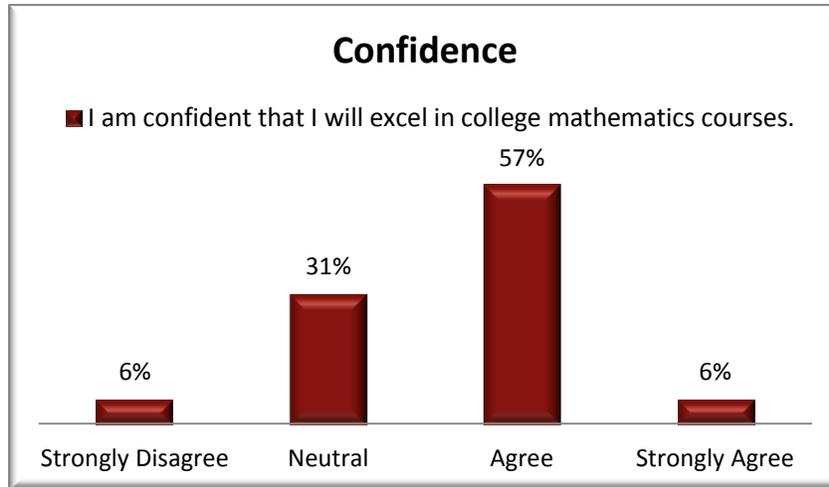


Figure 4

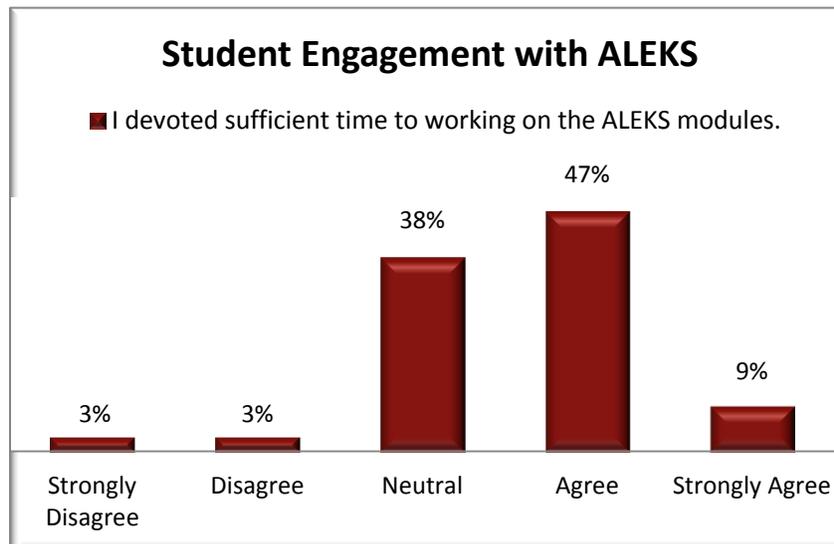


Figure 5

**Strong Outcomes**

The most positive results are connected to the specific outcome regarding test scores and overall satisfaction. The majority of students felt that the Online Mathematics Academy helped them improve their placement test scores: 23% strongly agreed and 49% agreed (figure 6). Only 6% disagreed or strongly disagreed. A total of 31% of students strongly agreed that overall they were satisfied that the Online Mathematics Academy provided them with the skills and resources needed to help them succeed in college math courses. In addition, 40% agreed (figure 6).

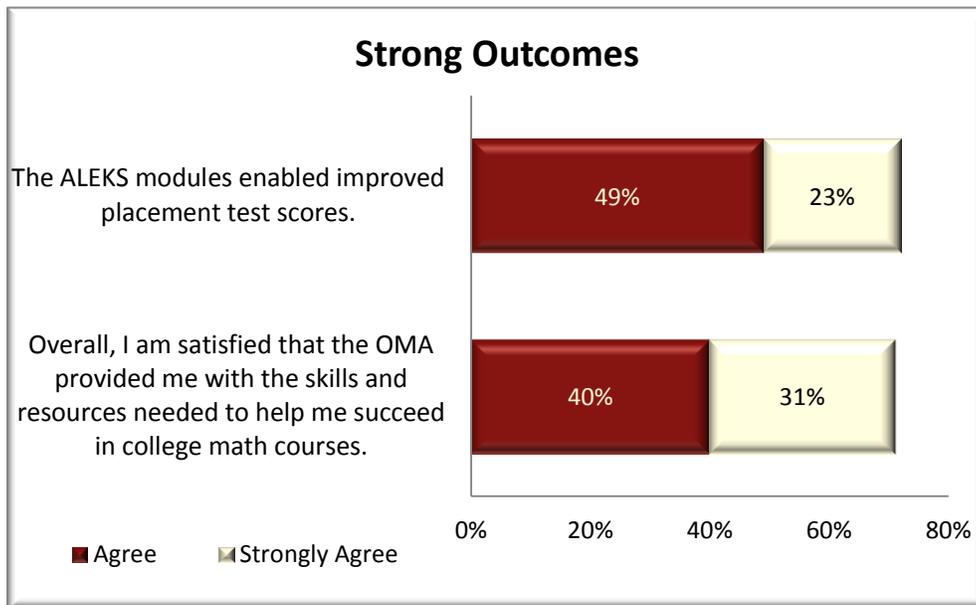


Figure 6

### Summary of Student Feedback

Survey responses to the open-ended questions asked what students found most valuable and least valuable. The results indicate that students found the modules and opportunities to improve their math skills as the most valuable aspects of the program. The answers regarding the least valuable aspect were numerous and varied. The most prevalent response was “nothing” or “N/A” which suggests that students generally felt positive about the program. A few students noted that the Pie Chart feature\* was the least valuable aspect, while a few others noted that for various reasons including the lack of feedback and difficult content, the tests were the least valuable.

A third open-ended question asked students to identify any suggestions they may have for program improvements. As with the least valuable item, the responses were numerous and varied. Suggestions included using a chat room feature, conveying clearer instructions, changing the time frame (either shorten or lengthen), and providing more interaction with the mentors.

\*The Pie Chart feature shows data about learning rates and topics mastered, not mastered, and ready for learning. It includes modes that show Current Learning, Most Recent Assessment, and Initial Assessment.

**Table 1: Most Valuable**

Please describe what you found most valuable about the Online Math Academy:

Most Valuable Aspect	N	%	Examples of Actual Student Comments
Modules	9	28%	<ul style="list-style-type: none"> <li>• “The modules were great in between tests because it explained how to do the different problems and helped me really fully understand them before my next test.”</li> <li>• “The amount of topics on the ALEKS modules”</li> <li>• “The modules were valuable because they showed me how to do the problem and I had to do each type of problem multiple times to get the credit which was really helpful in making sure I understood how to do the problem.”</li> <li>• “I found that what you didn't do so well on the placement test, you could really focus on with the modules.”</li> </ul>
Helped Improve Math Skills	6	19%	<ul style="list-style-type: none"> <li>• “It helped me improve some of my math skills.”</li> <li>• “The chance to learn and re learn mathematics that I previously struggled with.”</li> <li>• “It helped you understand math and not just formulas.”</li> <li>• “It helped me understand certain math topics in another way.”</li> </ul>
Mentors	4	13%	<ul style="list-style-type: none"> <li>• “The mentors are willing to use any way to get ahold of you including texting if that's easier for you.”</li> <li>• “The mentor was very helpful.”</li> <li>• “The fact that a mentor was available to guide me along the way.”</li> </ul>

**Table 2: Least Valuable**

Please describe what you found least valuable about the Online Math Academy:

Least Valuable Aspect	N	%	Examples of Actual Student Comments
Variety of issues with tests	5	16%	<ul style="list-style-type: none"> <li>• “Not being able to see what I did wrong on placement tests.”</li> <li>• “The thing that I disliked the most was that I couldn't go back and see exactly what mistakes I made on the tests.”</li> <li>• “... some concepts on the placement tests didn't appear on the modules I was having to study.”</li> <li>• “People end their math progress at all different levels in high school, so I think these tests should only cover the material you have learned because if you're getting quizzed over higher level material and do not know it, it badly affects your final score.”</li> </ul>

**Table 3: Suggestions for Improvement**

What specific suggestions do you have for improving the Online Math Academy? Please describe:

Suggestion	N	%	Examples of Actual Student Comments
Chat Room Feature	2	6%	<ul style="list-style-type: none"> <li>• "Online chat rooms"</li> <li>• " Chat rooms with mentors"</li> </ul>
Clearer Instructions	2	6%	<ul style="list-style-type: none"> <li>• "Make it clear exactly what you are to do."</li> <li>• "At the beginning of the academy, provide clearer information on what exactly to do. I was lost until I talked to my mentor."</li> </ul>
Content: Modules and Test	1	3%	<ul style="list-style-type: none"> <li>• "Having the content of the modules closer to what's on the placement tests. Also, more things found in the modules should appear on the placement tests."</li> </ul>