

### **Action Plan**

The researchers think that future researchers should address the difference in opinions between teachers and students. The data collected showed that teachers were more pro-CC, while students leaned more toward disliking the CC. Future researchers should find out why this is and how the opinions of teacher and students could become more similar.

The researchers would like to see this project be used to amend the CC. Future research needs to delve deeper into the nitty-gritty specifics that have teachers and students on opposite sides of the CC spectrum. How can the CC be tweaked so it can be more likeable for both parties? This way the students and teachers could end up having the same or similar perspectives. Doing so would help improve how both groups perform. This means that teachers could teach more effectively and students could learn more effectively. If teachers and students could learn and teach more effectively and efficiently, then this would help both groups function better together. As it stands, the more and more teachers advocate the CC or use the CPM method, they run the risk of students digging in their heels and refusing to embrace the changes.

In reviewing the research question, which stated: *“To what degree do students and math teachers at Westerville North High School understand and accept the new math Common Core State Standards?”*, the researchers feel they were extremely successful in drawing the conclusion that the Math Department knows a lot about the CC and likes it. Students, on the other hand, are confused by the CC and, in the end, dislike it. Future research that broke down student opinions by age, race, gender, grade level, and math class would be fascinating and could really pinpoint what subgroups of people like or dislike the CC.

Additional research needs to be conducted concerning the CPM method. There was a lot of confusion displayed by the students on their surveys about the difference between CC and

CPM. Over half of respondents claimed they were not in a class that used CPM, but their answers indicated that they actually were. The same percentages held true for those that said their class did not follow the CC when, in fact, it did. As such, the researchers could not confirm whether or not the students' negative view toward the CC was at the actual new math curriculum (in terms of what was being taught) or if it was toward the way in which it was being taught (via the CPM).

The researchers would also like to see their project replicated on a much larger scale. While their C.A.R. project examined one high school in Westerville, there are still two other high schools in the city. And this is just one suburb of Columbus. What if you were to survey students in every high school in Ohio? What if you did this for every high school in the U.S.? States that have fully implemented the CC could be compared to states that have gotten rid of the CC or who have not adopted it. Future research should compare test results from two different states, one with CC and one with the "old" curriculum. They should also compare this on a global scale to see if the U.S. is still falling behind mathematically compared to other countries.

Overall, the researchers would like to see whether the CC is really effective. They would also like to see if the opinions between teachers and students could change to become more similar. If the CC was proven ineffective, then the researchers would like to see if the CC could be improved in any way to make up for its shortcomings. The researchers would also like to see what impact the CC/CPM has on college readiness. Are students that go through a CC curriculum more or less prepared for college math? How many have to take remedial courses after arriving on campus? How do college professors view CC-prepped students compared to ones they have had in the past? What about students that become accustomed to "group work" math classes thanks to the CPM? How do they function when they get to college? In continuing

the examination of scores, what impact does the CC have on standardized test scores compared to the “old” curriculum? What impact does it have on individual classroom scores? They would like to compare the results between a class using CC/CPM with a class learning through traditional standards.

With future researchers finding the answers and the data to these proposed extensions of this C.A.R. project, then action should be taken to create a better math curriculum if the CC/CPM proves to be ineffective. If it proves effective then the states that dropped the CC should change their curriculum back to the CC, and all other states should adopt it. Of course, the gathering of such a magnitude of data is time consuming, tedious, and exhausting. Getting classified test grades from other states and countries could be problematic. Also, getting accurate (and fair) scores between states might prove difficult if the CC/CPM was not implemented on or around the same time.

In the end, this was just one project conducted in one high school in one state. While the results were very conclusive – and a lot of stock can (and should) be taken from the Data Analysis – there is certainly room for expansion. Additional research into the opinions of the CC and CPM by students should be broken down by age, race, gender, grade level, and math class. The impact of the CC/CPM on standardized tests, on college math readiness/performance, and on the growing rift between students and teachers needs to be examined further. Only then can there be a definitive endorsement – or damnation – of the CC. In the meantime, let us hope our nation does not get lost in the labyrinth that is the Common Core.