The Class Size Debate by Nicole Campbell

The debate over the benefits of class size reduction has been going on for over 50 years. Numerous studies have been done to research the effects of class size on student learning and engagement. In a study by Blachford, Bassett, and Brown, they state, “An observational study involving nearly 700 students in 49 schools in the UK finds that in both the early and later grades, smaller classes leads to students receiving more individual attention from their teachers and having more positive interactions with them. Classroom engagement decreases in larger classes, and this is particularly marked for struggling students at the secondary level. Students are engaged in active interactions with their teachers two to three times more often in a class of 15 compared to class of 30, and for low achievers at secondary level there is more than twice as much off task behavior in classes of 30 compared to 15. A five student increase in class size is associated with the odds of off task behavior increasing by 40% for this group.”(Learning and Instruction, 21) The effects of this difference were found to be significant in a article by JD Finn. He writes, “For all students combined, 4 years of a small class in K–3 were associated with a significant increase in the likelihood of graduating from high school; the odds of graduating after having attended small classes for 4 years were increased by about 80.0%.”(Finn, 2005) Even though there is research showing that smaller class sizes equal improved student learning and participation, there is also research showing little to no change. “The Student/Teacher Achievement Ratio (STAR) project compared academic achievement in small classes of 13 to 17 low-income students with that of students in classes that had 22 to 25 students. The experiment found modest but lasting gains for impoverished African-American students in the much smaller classes in kindergarten and first grade”, however, nothing more. (USAToday, 2010) ‘Dan Goldhaber of the Center on Reinventing Public Education at the University of Washington-Bothell says that "the effects of class-size reduction are pretty marginal," except in the early grades for disadvantaged students’ and that research shows that the marginal effect is not worth the drastic amount of money it costs to fund this program. (USAtoday, 2010) (Goldhaber, 2009) Even with research showing either a small or large increase in student improvement, in recent years many schools have turned from a student learning focus to cost vs effectiveness. When Florida amended their constitution to mandate to reduce class size, it was estimated to cost the state an additional $353 million in 2002, adding to the $16 billion that the state had already to meet requirements. (USAToday, 2010) Even with new federal grants and funding programs, schools are struggling to make ends meet. Many schools are finding the easiest way to cut spending is larger class sizes and fewer teachers. Goldhaber believes it may be more important for students at this time to focus less on class size and more on how effective the teachers are schools are able to keep. (Goldhaber, 2010)

My opinion is class size can make a difference. Research shows that smaller class sizes provide more time for review, classroom management, and one-one attention. Miliesi research showed that “…if class size increases from 20 to 40, the largest reallocations of time would be a 3% decrease in time devoted to review and a 2.5% percent increase in time devoted to disciplining students.”(Miliesi, 291) However, in Bloom’s study, he states that time for review and one on one support makes a difference of 18%. In education an 18% gain is worth it. A 2.5% increase in discipline is 2 minutes less of instruction per hour and 3 percent can add up to 20 minutes less time for review than in smaller classrooms. As a teacher 2-3 minutes can make all the difference. I have seen the effects of one to one tutoring or small group instruction. Elementary research continues to suggest that the best instruction is individualized, differentiated instruction for each child in your classroom. This is much easier and effective in a classroom of 20 than 30. Time that should be spent correcting and reviewing is spent disciplining and managing. The Institute of Research Sciences stated “There are only 4 educational reforms that have been proven to narrow the achievement gap and one of them is class size reduction.” (CNN, 2011) Also, in a recent survey done by Stanford University, teachers around the country were asked “what was one way that would improve their effectiveness”; the number one answer was class size reduction. ( CNN, 2012) Micheal Kirst from Stanford University says” school districts are facing "a very dangerous period. We are increasing class size to extremely high levels. "I don't worry about going from 20 to 25 students that much, or 15 to 20," he says. "But when you go from 20 to 35 in a year or two, I don't think we don't know the effects of that." (USAToday, 2010) We do not know the effects of what the new policies will have on the education of our students. We do know that class size reduction increases time for one- to –one instruction, decreases disciplinary distractions, and closes the achievement gap for low socio-economic and special education/at-risk students. Isn’t that enough research to prove that it is worth the investment? I would like to see a study that shows how much does the drop-out rate increase and educational interventions cost the state every year compared to the cost of class size reduction.

The final question to ask is what can we do to help the student learning experience in a larger class size and make it more personal. One way I believe we can do this is by the implementation of technology in the classroom. With technology, we can produce effective ways to help our students receive a more direct, individualized education. Classroom teachers can use reading program software that allows students to choose and read books at their level and at their own pace then answer a variety of comprehension questions. Teachers can then assess the students learning online at a different time that is more convenient for them. Another way to help improve student instruction through technology is online projects or portfolios. While students are working on their project, they are engaged and focused as the teacher is then given time to work with individuals or small groups that may need more in depth instruction. Then, as students finish their work, they are able to share with others and enter a critical thinking skill discussion and reflect on their own and others work. Finally, they share their work with the teacher who is then able to critic, direct, and instruct the student any time, any place. With review games and online resources, teachers are able to easily and quickly differentiate their instruction to meet each student’s needs with very little cost. The use of technology can be used to help support students no matter what the class size or budge is.

The first thing we need to do to make this is possible is implement a Bring Your Own Device (BYOD) policy. Once a policy is developed, the need for the district to purchase every student will be less of a problem. The policy should :

* State what kind of device will be acceptable for student use,
* implement parent and student contracts of use of devices at school,
* define acceptable uses of the device as well as unacceptable uses
* spell out the consequences for unacceptable use such as lost privilege to bring your own device to school,
* and specify which classes will be using the devices.

This policy will be more appropriate in upper grades and where resources are more accessible. Once students are bringing their own devices, teachers can have students use free apps, programs, and websites to help supplement and manage classroom instruction. Students who do not own their own devices or have parents who will not allow them to be brought to school, will need to use school provided devices. These can be purchased using grant or donations. The school can fundraise for the money or have a committee write grants to help support the cost of new technology (if needed). For the younger grades, where students may not own appropriate devices, the school will need to look into purchasing technology. There are numerous grants and company programs (such as pilot programs) to help purchase classroom sets or a small group set of computers/tablets. Many schools have started with a computer/tablet cart that can move from classroom to classroom and then slowly add more to each class as money is available. After there are devices available, the school needs to provide professional development for teachers as well as training for students and parents. Professional Development should not only focus on how to use the classroom/student devices and programs but also ways to use them to help with management, support, differentiation, and intervention. Training should also focus on how to teach students to use them effectively and how to manage them within each classroom with grade level appropriate strategies. Student and Parent training will need to focus on how to use the devices and programs to help support their education and how to support critical thinking skills and depth of knowledge. After we have provide devices for each classroom (even if shared) and professional development, the last thing we need to implement is a way for teachers to assess effectiveness, evaluate how technology is being used, and reflect on what improvements could be made. This will need to be researched and developed by grade level teams or professional learning committees. It should be something that changes and evolves as technology is implemented and used. Administrators should be in charge of advising staff on what and how often they expect teams to discuss this and help by providing extended training and meeting times for teachers to focus on plans and assessments that include technology. School staff will need to remember implementing technology is a process and will take work, time, and effort. However, the end goal is to provide students with a tool to help them become more independent and involved in their education, andto help teachers provide a more personal education for each individual student.