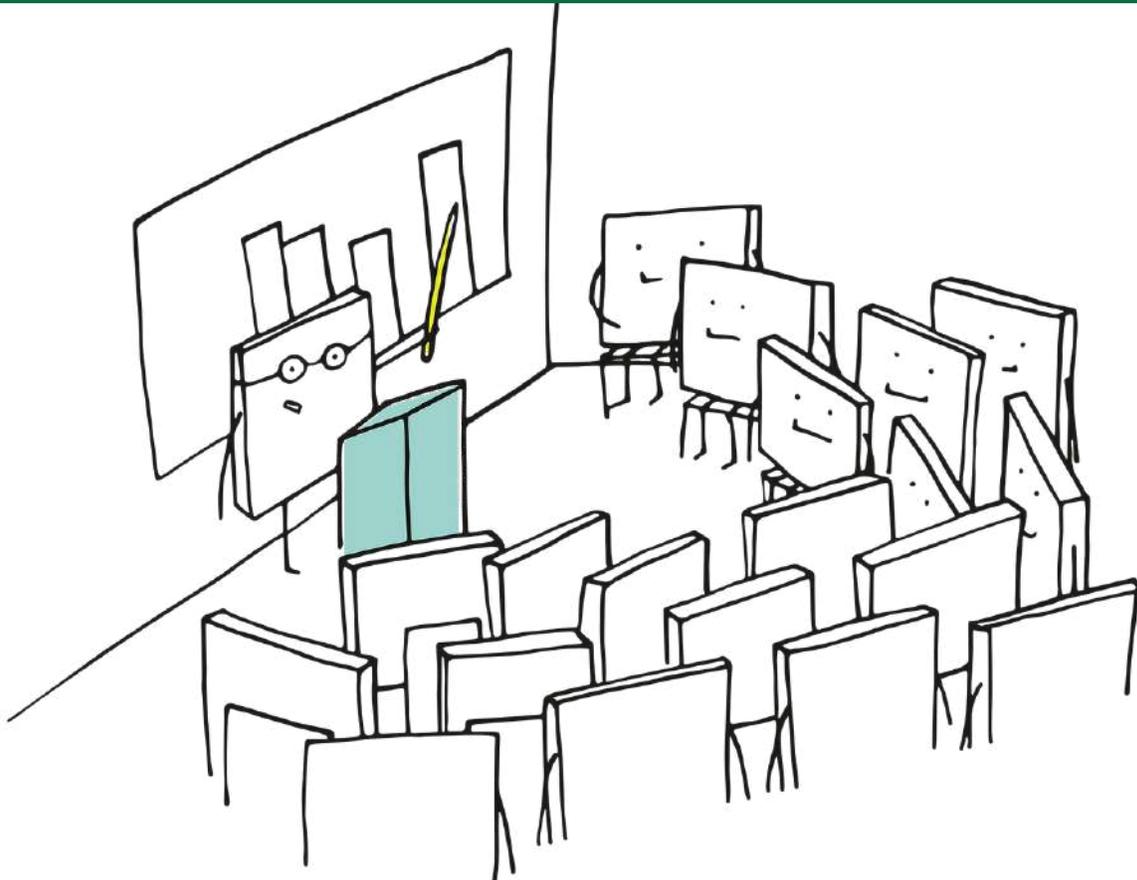




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# How Important is Class Size?



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## Introduction

For years, as teachers have brainstormed ways to better support their students and administrations have ceaselessly searched for better investments for their community, one standard of academic excellence has stood out in particular: Class size. Today, if you're applying to college, if you're a parent sending your child to a school, or if you're running an academic institution, you know that if you see (or are able to say) that class sizes are low, your student is likely in for a good experience - and increased academic outcomes.

The relationship between class size and academic outcomes seems obvious. With fewer students, teachers will naturally be able to provide a more catered education, which can have nothing but a good effect. However, recent studies have suggested that the link between class size and increased benefits to students may be correlative. For an investment as expensive as reduced class size, that's not the best finding. If there was a way to replicate the benefits of smaller class sizes without the painful costs, that could revolutionize school accessibility - particularly in countries that face a teacher shortage or in underdeveloped areas that cannot afford class size reductions.

In this course, we'll talk about the importance of class size, some of the research underlying the beliefs we now hold, and whether there are any ways to achieve some of the same increased learning outcomes in larger classrooms.

## Section 1: The Relationship Between Class Size and Academic Performance

Class size - or, more specifically, the number of students in each class - is a very popular buzz phrase in American academia. Whether the proposed benefits relate to teacher happiness or student outcomes, class size is certainly a topic that drives a great deal of academic decisions today at the administrative level.

Is this response proportionate to the actual benefits of class size? In this section, we'll delve into the relationship between class size and academic performance.

### Why does class size matter?

There are many reasons that class size matters - both to parents and to teachers. From the most pragmatic, logistical point of view, smaller class sizes are easier for teachers to maintain. This results in an increased amount of focus that each teacher naturally has for

each student. It may also result in more parent-teacher communications, more creative lessons, and lessened stress for teachers - among other benefits which result from the teacher having more time.

However, on a more nuanced level, there are those who believe that reduced class sizes correlate with improved learning outcomes and higher academic achievements for students. Whether this is true or false, enough people think that this is the case for class size reduction to be an incredibly popular demand in schools across the nation - at all levels of education.

### **What is the ideal student-teacher ratio for optimal class size?**

After completing extensive research on the subject - which we'll look closer at in a later section - researchers have come to an agreement that 18 students is the optimal class size. This class size assumes one teacher, resulting in an ideal student-teacher ratio of 18:1.

This lends a slight pall of inadequacy and frustration to any schools attempting to reduce class size from 'extra-large' to, simply 'large' ones - i.e., perhaps from 30 students in a class to 25. As researchers have really only begun to see the benefits of a smaller class size around that magical 18:1 ratio, class size reduction efforts that don't meet that end goal may not have the desired effects on academic performance.

To the extent that class sizes of 18 are improbable or even impossible, logistically and financially, for many of our nation's schools, this can be an immensely frustrating realization. In the third section of this course, we'll look at ways that some of the benefits of an ideal class size can be realized in larger classrooms (Kieschnick, 2018).

### **How does class size affect learning and academic performance?**

The first and most important discussion to have is simply this: Are there benefits of having smaller class sizes? We'll start with the typical claims made about the correlation between class size and achievement. After all, there may be ways to replicate those benefits. Those advantages may be disputed. There may also be negative aspects to having small class sizes. Regardless, it's important to start from a place of understanding regarding why so many people are working hard to reduce class sizes nationwide.

For decades, the question as to class sizes and their efficacy in affecting a child's educational experience has been argued. There is a general consensus that having

smaller class sizes is a net positive for the students in those classes. Why? The benefits seem very clear-cut and simple.

It's important to note, however, that it can be extremely difficult to isolate and measure the effects of simply reducing class size. It's also important to distinguish between causation and correlation. Does having smaller class sizes actually cause better outcomes for children? Or does reducing class sizes drive other factors that eventually lead to increased achievement? Whether or not the two can actually be linked is a topic that is being studied in droves at this time. There are significant costs associated with class size reduction, as well; whether the purported benefits outweigh the costs is a topic we'll delve into in a later section.

We'll start with the currently agreed-upon effects. Most people agree that there are some associated benefits of small class sizes, particularly for students in the younger grades (K-3rd or 4th grade; when many formative skills are being learned). What are they? Why are so many people willing to fight so hard for small class sizes?

## **The Benefits Associated with Small Class Sizes**

- 1. Small Classes Allow the Fostering of Better Student-Teacher Relationships:** One of the understated benefits of a focused, engaged educational experience is very simple: Direct, individual attention for each student from a talented teacher. In many cases, having this relationship between student and teacher can make the difference for students between their just coasting through their courses - and their developing skills which make a real difference in their lives.

With smaller class sizes, students stand a much greater chance of establishing this all-important personal bond with their teachers.

There are many prominent professors of education who believe that prioritizing the rigor of academics over the simple act of creating and maintaining a strong student-teacher relationship is analogous to putting the cart before the horse. Prioritizing those relationships - and the ability to do just that simple thing - is one large reason why many people believe that small class sizes are better. Those relationships make school much more effective for students and teachers alike - and having smaller classes is one way to cement just that initiative (TeachThought, 2020).

- 2. Having Smaller Class Sizes Enables More Personalized Instruction For Each Student:** Another way that having smaller classes can contribute to increased

learning outcomes is the fact that with smaller class sizes can come the opportunity for a customized education. Every student learns differently. If a teacher has the chance to gauge every student, find out the best way to help all students engage with a subject and hone their unique skill sets, and implement learning structures geared to help each specific student learn the best way possible - that would truly allow each student the highest chance of shining as brightly as possible.

In a smaller classroom setting, it's argued that a teacher has the simple bandwidth to do just that. Prioritizing a relationship, learning about a student's needs, and catering instruction to best unleash each student's capabilities - that takes time, effort, and energy. Asking a teacher to do this for a classroom of 50 is very different from asking the same for a classroom of 18. One is possible; the other may be less so. In this way, it could be said that decreasing class size allows teachers to maximize their own efficiency. They can spend increased amounts of time with each student, tailor their efforts to assist each child in the way most needed, and - generally, as a result - enjoy increased learning outcomes by the members of their classrooms (TeachThought, 2020).

- 3. Smaller Classrooms Tend to be More Collaborative Ones:** Learning does not have to be an individual journey - and, indeed, many experts believe that learning is much better and easier when many people feel like they're learning together. When many students are placed in a larger class, small groups or cliques tend to form because students will tend to reach out to and interact with those persons they already know.

When placed in a smaller class environment, students will find it much easier to form relationships with people they aren't already friends with (or, in any case, it's easier for a teacher to facilitate those relationships). As a result, the student body is strengthened, the academic community is more supportive, and each classroom feels more cohesive.

Not only is it good for the mental health of each student to have many different groups of friends, it's also good for the pursuit of learning. Students who are more comfortable around all of their peers (instead of their smaller clique) tend to be more relaxed. They'll ask more questions and engage more with the subject. As a result, classroom conversations will be more in-depth. Struggling students, too, will have more courage to reach out for help. This smaller class size can enable

more of a symbiotic, helpful relationship among classmates - just as much as it can facilitate stronger student-teacher bonds (TeachThought, 2020).

#### **4. In Small Classrooms, Teachers Can Explore Their Subjects in Greater Depth:**

Larger classes require that teachers spend a bulk of their time on classroom organization and student discipline. As a result, they have less time to spend on simple instruction of their subject. With a smaller classroom and fewer students, teachers have more time to explore their subject - often far beyond the basics that are routinely covered in standardized tests. Students who enjoy this type of education often walk away from their studies with a much more nuanced, complete understanding of their subjects. In addition, teachers may have time to explore topics that are of particular interest to their students after they cover the basics - which facilitates not only increased learning outcomes but also helps the student-teacher bond grow.

Having fewer students in a classroom increases the value of the time that students are in their classrooms, in some cases. In these smaller classrooms, some researchers have found that students are more focused and that they spend less time disengaged with their work. In these classrooms, more students tend to have the opportunity to express their interests, receive help if necessary, and ask any questions during the course of their class period (TeachThought, 2020).

#### **5. Small Class Sizes Enable Teachers to Stay Longer:** Simply put, teachers who manage small classrooms tend to be happier. These classrooms are more manageable, and teachers get more of a satisfying sense of pride in helping students when they're able to get to know each student on a more personal level. This satisfaction reduces the number of teachers who need to search for new job opportunities on a routine basis.

The fact that more teachers stick around longer in schools with smaller classrooms tend to give the involved students the double benefit of teachers who like their jobs - and have been doing them long enough to form real expertise. That means that the students in this situation will be much more likely to receive a high-quality education.

Studies have shown that one of the primary reasons that teachers leave their jobs is class sizes that were too large - suggesting that reducing class sizes may in fact be as good a move for teachers as it is for students, as long as other trade-offs don't reduce the appeal of small classrooms. There are those who believe that we

are on the horizon of a mass teacher shortage. Those schools that can keep class sizes down - and, therefore, teacher happiness high - may be in a better place to attract high-quality teachers even as the overall number of teachers shrinks (TeachThought, 2020).

These five primary benefits of smaller class sizes may reveal that it isn't necessarily smaller class sizes themselves that are attractive, but other benefits (such as increased teacher time and enthusiasm, student collaboration, and more bandwidth to delve deep into subjects of interest) that may necessarily be linked to smaller class sizes. There are those who see this as a good sign. As a potential teacher shortage looms, having ways to boost the benefits of a small class size when the numbers themselves aren't working out that way could allow creative school districts to keep their communities happy and their budgets neat at the same time.

As a beacon of hope, however, for teachers who may not be able to attain ideal class sizes or student-teacher ratios, there is research that suggests that small class size is not everything (Jackson, 2018).

Next, we'll discuss three truisms that complicate the general idea that smaller is better when it comes to class size.

### **Three Issues that Reveal that Class Size is a Nuanced Issue**

Teachers tend to like smaller class sizes; so do parents. However, it isn't always financially or logistically possible to cap classes at an ideal size. The following three issues show that working with a tiny class size does not always have to be the #1 priority for anyone in an academic community.

#### **1. Class Size Doesn't Matter as Much as Teacher Quality**

If parents have a choice between a large class with a really involved, dedicated, dynamic teacher and a smaller class with a teacher who's perhaps less experienced or innovative, parents should choose the large class, every time. As we'll discuss in a later session, the research supports the notion of increased academic outcomes that correlate with teacher quality over class size.

Of course, there is a sense of diminishing returns with increased numbers. If the class sizes are too large (over 50, for example), then even the most energetic of teachers simply won't have the time to dedicate meaningful moments to each and every child's care. However, for the most part, good teachers will be able to

brainstorm effective solutions for crowded classrooms. These strategies may include streamlining or varying the different types of instructional paradigms a teacher posits, investing in classroom management techniques, and spending time specifically working on student motivation (Jackson, 2018).

## **2. The Need for Small Class Sizes Varies from Student to Student**

There is an argument that all students will benefit from smaller class sizes. However, if you look at a more granular level at which students benefit from reduced class sizes more, you will find that the need for small class sizes is not equal from student to student. As smaller class sizes are more difficult to obtain and more expensive to maintain, it does serve academic institutions well to keep the differentiating need for smaller class sizes by student in mind.

Whether or not a specific child would benefit from a smaller class size - and how much - boils down to specific information about the child's performance and learning styles. Consider the following factors:

- Is the average level of student performance in your classroom approximately equal, or do you have a few outliers?
- Is there a student (or group of students) in your classroom who are experiencing undue emotional and/or social challenges at school?
- Do you have a student (or group of students) who have shown that they will require extra support in order to meet their academic challenges?

Students who tend to fit those criteria would likely benefit from a smaller class size. On the other hand, if your students exhibit fairly universal and steady performance factors, they seem to have a healthy and well-adjusted way to deal with the pressures of school, and the teacher leading the classroom is well-versed in ways to engage a full classroom of children, then the specific size of your class may matter less for those children (Jackson, 2018).

This dovetails quite nicely into the third issue to keep in mind:

## **3. Small Classes Have Increased Value for a Wide Range of Student Abilities**

When you consider the makeup of the typical American classroom, some relatively stark variabilities come to mind. For example, in the usual public school, every grade hosts students who are two years behind the grade level, as well as students

who are ahead - and every iteration of comprehension and performance in between. As a teacher, you already know that one of the hardest parts of your job is finding a way to effectively address that wide range of students in one efficient class period.

The wider this range of abilities gets, the harder the job facing the teacher.

Therefore, one proposed method of working toward smaller class sizes is taking on a teacher-centric, rather than (necessarily) a student-centric approach. In order to lessen the load on a teacher, classes should be reduced or subdivided to specify the range of abilities in each class. Of course, as a teacher is less stressed and has more opportunity to invest in interactive lessons for students, the students will benefit as well. It only goes to show that instead of parents insisting on arbitrarily small class sizes for their children, the school should reduce class sizes for the sake of the teacher, so the teacher is better able to offer a considered, valuable experience for the students (Jackson, 2018).

## **Section 1: Summary**

Class size reductions are a hot-button issue in modern academia. There are many commonsense benefits that often accompany smaller class sizes - including increased student-teacher relationships, more personalized education, and better student-student interactions. However, due to the expense associated with class size reductions, there are some who wonder if simply making classes smaller is truly an academic cure-all. Some research shows that the relationship between class size and increased academic outcomes may be more directly associated with downstream results of class size reductions - such as increased teacher engagement, for example.

In the next section, we'll explore some of the major studies that have driven current thought on class size, as well as some of the expenses that suggest class size reductions may be a more nuanced issue than is currently perceived.

## **Section 2: The Research Underlying Class Size Theory**

Parents and teachers as well as school administrators are all interested in the ramifications of class sizes. That one decision or limitation has a lot of impact on school budgets and interior dynamics - and sometimes, even though ever-smaller class sizes are expected of modern schools, logistical restraints like time and the number of classrooms make resizing classes extremely difficult.

In the past, promising reduced class sizes has been a surefire way to please parents and draw more attention to a school. However, funding the reduction of classes (or passing legislation limiting class sizes) has proven difficult. That money, time, talent, and other resources need to come from somewhere; and, often, in the name of reducing class sizes, school administrators have been forced to make cuts elsewhere - such as firing teachers who teach niche subjects, reducing course offerings, and other choices that make school communities nationwide confused and frustrated.

Instead of fixating on the necessity of ever-smaller class sizes, it may be more productive to look at the research that connects class size reductions to student achievement. Firstly, it's important to address whether class size reductions actually merit the focus they've received. Does science back up their importance as a priority for school administrators (and parents) to focus on?

Secondly, by learning what the specific advantages of downsized classes are to individual children, it may be possible for teachers to replicate the results of smaller classrooms in larger ones (or at least make strategic moves to begin to mimic the effect). This could have incredible ramifications for school districts that are unable to afford decreased class sizes.

Recent research - as well as modern views on more historical class size research - have driven updated findings regarding class size that may provide guidance for your school district. We will present those findings here.

- 1. Reducing class size does not always immediately result in improved outcomes for the involved students.** Even though class size reductions are popular and are usually correlated with more productive and enjoyable classroom experiences, this is not always the case. In any event, there are studies that make it clear that reducing class size alone does not always have the intended effect. Tennessee's Project STAR, launched in the 1980s, sought to delve into the impact of smaller class sizes for students in younger grades (kindergarten through third grade). The study was a randomized control trial, which generally produces the most trusted and reliable data in terms of research projects (Osborne, 2018).

In the state of Tennessee, a large population of students and teachers received a random assignment to three different types of sized classes: Small class sizes, regular class sizes, and regular class sizes plus additional staff so that the teachers in those classrooms had the support and designated aides. After allowing the students and teachers to complete a certain amount of time and go through a

certain amount of assessments under those conditions, the Project STAR analysts evaluated the data to see if they could find any correlation between the assigned class size or experience and each individual student's performance specifications (Osborne, 2018).

The initial analyses of the data showed that students in the smaller class sizes did outperform the students who studied in the larger 'regular' class sizes. Analysis of the data also revealed that whether or not the teacher had extra support or a designated aide did not seem to have any substantial effect on the performances of the students. The sizable and seemingly data-driven effect of increased performances for students who enjoyed smaller class sizes from this study is the main reason that - forty years later - most people tend to believe that smaller class sizes are unequivocally better for every member of an academic community (Osborne, 2018).

However, in those forty years, we have gotten a lot better at data analysis. We also tend to be better at determining the difference between correlation and causation. In other words: In the Project STAR study, did the smaller class sizes actually cause the heightened performance factors, or did some unknown factor actually drive that increase and simply make it look like class size was the key issue? Because class size was the only thing that the original Project STAR researchers were studying and manipulating, everyone at the time didn't even question that class size was responsible for the outcomes they saw (Osborne, 2018).

Other experimental studies that have been completed in the years after Tennessee's Project STAR have rebutted these results, often finding zero impact of class size on student achievement. For example, one Connecticut researcher took advantage of the fact that Connecticut has a maximum class size rule in order to learn more about the benefits of smaller class sizes for an inherently varied population. This researcher found that there was no difference in performance outcomes between students in smaller and larger studies (Osborne, 2018).

Similarly, in Florida, a 2002 constitutional amendment has capped class sizes not just for young students, but in all grades from K-12. However, the state introduced this requirement along a staggered timeline - resulting in equally varied student bodies having small, medium, and large class sizes all at the same time. Another researcher took advantage of this situation to learn about the impact of reduced

class sizing in Florida schools - only to find that there was no significant effect (Osborne, 2018).

None of this invalidates Tennessee's Project STAR and the data that it produced. However, it should make people wonder whether the easy takeaway regarding class size from that study was actually the correct finding - or whether there was more to be explored in that study.

- 2. Current theories about the success of Project STAR revert to the Hawthorne effect.** As stated above, the initial conclusion to Project STAR was simple: Smaller classrooms are inherently better. Further research has explored this issue more completely. Subsequent analyses initially supported the idea that it was likely something about Tennessee that produced such dramatic results regarding class size. As we mentioned above, a Connecticut and Florida study that looked at the same conditions as Project STAR found no correlation between class size and student outcomes. Yet, simply because of Project STAR, 25 states rushed to implement legislation that limits class sizes to smaller numbers. These states have had moderate success; certainly nothing so dramatic as what was seen in Project STAR (Osborne, 2018).

The hypothesis that it was something regarding Tennessee populations of students and academic communities in particular that drove the results in Project STAR was debunked as well, as the students in Project STAR were of similarly varied backgrounds as ones in the states which immediately tried to replicate the result. The current theory that purports to explain the effects observed in Project STAR devolves on the Hawthorne effect. The Hawthorne effect is a phenomenon that happens in classrooms and workplaces across the globe: the simple notion that individuals work harder and become more productive when they know that they are being watched (Osborne, 2018).

In Project STAR, the teachers who participated in the study were keenly aware that if the study showed that smaller class sizes increased student outcomes, states would be more incentivized to mandate smaller class sizes - which are also better for teacher quality of life. Simply knowing this fact could motivate teachers and administrators to show that smaller class sizes were more beneficial overall. The researchers behind the Florida and Connecticut studies argue that their findings are more inherently reliable because they obtained their data from classrooms not enrolled in active studies and therefore unaware that their performance would be

analyzed - so there could be no basis for the Hawthorne effect to skew the data (Osborne, 2018).

### 3. **Statewide legislation to control class size can actually have negative**

**consequences.** As a result of Project STAR, many states implemented laws to cap the class size of their public schools. These rules were carried out with the best of intentions - certainly with the end goal of increasing student outcomes and simultaneously upgrading the quality of life for statewide teachers. Unfortunately, the enacted policies regarding class sizes tended to have indirectly negative effects. For example, California was one of the states that decided to implement a mandate reducing class sizes from 30 to 20 as a result of Project STAR. Right out of the gate, this cost the state more than a billion dollars per year to institute. This was partially because of the incredibly large class size in California, and the logistical consequences of increasing the number of classes (to handle a reduced class size). Within the first two years after California's statewide class size reduction initiative, the state had to hire over 25,000 new teachers (Osborne, 2018).

This might seem like an added bonus of the mandate - added job security for teachers and more opportunity for young teachers to get a job right out of school - but demand for good teachers far outstripped supply. Researchers who followed California's activities over this period noted that many of the new teachers hired by the state were not certified by any educational standard. Others had no teaching experience. Even if they had the best of intentions, these unprepared teachers were ill-equipped to offer their students a good educational experience, regardless of class size (Osborne, 2018).

The increased demand for teachers had other effects. Teachers with demonstrated skill and experience felt that they had the opportunity to move to higher-paying jobs in more affluent areas, so they did - leaving the poorer schools in need of teachers. Those vacancies were filled with state-supplied inexperienced teachers, leaving those least qualified to teach the students who often had the greatest need for assistance. This only stood to widen the gap between the low and middle class - not exactly the outcome that the state of California was hoping for when they issued the directive to support small class sizes (Osborne, 2018).

Researchers analyzing the effects of this mandate did find that some children benefited from being in smaller classes, but the benefits were outweighed by the

negatives of a large influx of unqualified teachers coming in to support low-income schools.

In other areas, California school districts sought to meet the demands of the new legislation and support their students and staff financially by combining students from different grades into one class. The teachers who were saddled with these mixed-grade classrooms had an enormous job before them - to figure out a way to create cohesive lesson plans to support a wild variety of skills, interests, learning modalities, and experiences. This herculean task proved impossible in many ways, and the students in these mixed-grade classrooms tended to do poorly on standardized tests just because their teachers were completely overtaxed (Osborne, 2018).

- 4. Laws that govern class size can make a bigger difference by working to attract students currently matriculating in private schools.** Recently, a group of researchers published the results of a study based on the reduction of class sizes in California which introduces a new theory to explain what has happened. One result of California's initiative to reduce class sizes was simple: It signaled to California parents of school-aged students that the public schools around them were about to get much better, due to the deeply-ingrained belief that smaller classes are a marker of school and education quality. This made the parents begin to rethink their current choices. The reason that many of them were paying incredibly high tuition to private schools each year was simply to ensure smaller class sizes for their students (Osborne, 2018).

Simply because these parents were aware that public schools would reduce class sizes, many Californian parents decided to pull their children out of expensive private schools and enroll them in public school systems. As a result, shortly after California capped their class sizes, there was a large influx of wealthier students into the California public school system. This itself had a couple of important effects on the demographics and performance of the students in CA schools. Firstly, test scores went up. This happened for a few reasons. The affluent, previously-private-schooled students tended to be high-ability students when compared to their peers. Adding their test scores into the mix increased the overall performance of the school systems for just this reason. However, researchers discovered that the effect of having higher-ability students in public schools helped students of all levels perform better - so, not only were public

schools attracting higher-scorers for standardized tests, they were directly improving the scores of all of their students by association (Osborne, 2018).

The researchers studying this shift called it the 'general equilibrium effect,' and boiled it down to the following tenet: Having affluent students in the classroom can be an even more important marker of success than having smaller class sizes. Researchers have not exactly elucidated why this is the case. Perhaps more affluent students tend to have more pressure upon them to be driven, which itself stokes an atmosphere of productivity that affects all students. Perhaps higher-ability students in the classroom asked more engaging questions, thereby creating an overall improvement in classroom engagement for the entire classroom. Whatever the specific reason, the general equilibrium effect may constitute one underlying theory explaining why class size matters, in some cases. Of course, this also suggests a different way to increase outcomes for students when simply making classes smaller is not an option (Osborne, 2018).

5. **Most of the research suggesting that smaller class sizes are better is simply outdated.** When analysts track the first source of inspiration for the idea that many people have today - that small classes are better - most people are really thinking about the results of Project STAR, a study that took place several decades ago. Even attempts to replicate those results or refute its findings are mostly more than a decade old. At this point, many people accept the link between reduced class size and increased educational outcomes as a foregone conclusion, even though no one has been able to study the concept with refreshed data, materials, and study methods in a very long time (Osborne, 2018).

In many cases, the specific takeaways from studies like Project STAR would no longer even apply to modern classrooms. In the 21st century, we're seeing teachers explore a wide variety of innovative teaching techniques, such as 1:1 devices, project-based learning, virtual learning techniques and blended learning principles. Studying the effect of smaller class sizes with an updated take on teaching methods could yield entirely different results; however, since so many believe that it goes without saying that smaller class sizes are better, there isn't much incentive to study the phenomenon en masse (Osborne, 2018).

At the end of the day, it's important to remember that teacher quality goes much further than a small reduction in class size, it's entirely possible to replicate the benefits of a smaller class size even if an actual class size reduction is not possible, and updated teaching techniques are something that we have not studied in

specific reference to their effect on class size and student performance. Teachers working in modern classrooms simply need to do the best they can with the resources afforded them.

## **The Costs Associated with Reducing Class Sizes**

As with most things, the true driver of potential progress tends to be the financial cost of putting desired programs into place. In the previous paragraphs, we saw that the historical research promoting smaller class sizes may not be as clear-cut as many believe. However, people still push for small class sizes - and, in many cases, are willing to pay dearly for them.

This is a good thing because reducing class sizes inherently involves more investments and resources from the schools implementing those changes. From requiring more physical classrooms and needing to hire more teaching talent, there are real dollar amounts associated with reducing class sizes from large to recommended sizes. What are those investments? Do they correlate with the purported benefits that prompt them? Next, we'll focus on the financial aspects of reducing class sizes.

## **The Financial Impact of Class Size Reductions**

When a school decides to reduce class sizes for the betterment of the students (or to cater to popular demand), the money to fund that endeavor must come from somewhere. A study recently completed by the Organization for Economic Cooperation and Development, or the OECD, found that because of the resources required to reduce class sizes, lowering class size by just one student increases the cost per student (on average) by 300 dollars a year (OECD, 2020).

300 dollars may not seem like a lot, but when multiplied by the number of students in the average school or school district, this is easily an amount that could completely bankrupt an academic institution (or simply render the class size reduction an untenable option). Yet many schools opt to go for this upgrade anyway, often spending incredible amounts of money in the process (OECD, 2020).

Fundraising can supply some of the capital required for class size reduction programs, but in many cases, the schools need to gather the money themselves to bankroll these updates. In order to see where schools might find those funds, it's important to realize that many schools pay their teachers based on the number of students in the classes they teach. The OECD noted in their report that many school teacher's salaries are

simply the result of an equation involving instruction time, class size, and experience (OECD, 2020).

Because reducing class size requires hiring many new teachers straight out of school themselves (or with little to no experience), many of those new teachers may not realize how little they are being paid. However, for teachers already on staff who take direct pay cuts to fund class-size reductions while they're taking on more work, this change could easily be seen as a deal-breaker. As a result, many experienced teachers leave for better-paying jobs - and schools continue to have to hire new, less experienced teachers - which results in less rigorous experiences for the students in their classrooms (OECD, 2020).

To put numbers to these theories, the OECD study noted that the annual cut in teacher salaries to fund class-size reductions of one student could be (on average) anywhere from 800 USD to 5300 USD. As many teachers already don't make that much money, this could very well be a reduction that inspires an immediate search for a new job (OECD, 2020).

### **Trade-Offs Many Countries Consider to Alleviate the Costs of Reducing Class Sizes**

This stark fact has inspired many countries to consider creative strategies that would allow them to keep teacher salaries constant while reducing class size. One strategy involves manipulating the amount of instructional time required of each teacher to reduce the heightened need for new teaching staff. For example, schools could increase the number of hours per day (or week, or month) that their current teachers must spend teaching, in order to accommodate the increased number of classes required by class size reductions. Alternatively, a school could work with state legislation to reduce the amount of time required by each class - thereby reducing the overall number of hours that students need to receive active instruction. Whether these potential trade-offs, in terms of quality of life for teachers or quality of education for students, are acceptable for specific school districts can only be decided by the administrations in question (OECD, 2020).

Fortunately, countries around the world are also realizing that there are other investments they can make that will positively affect the learning experience for their students without necessarily racking up an insurmountable financial cost.

## Other Benefits Schools Can Consider Funding

As discussed above, one way to mimic the effect of class size reductions is simply to attract affluent students to your school. Class size reductions can achieve that; however, it isn't the only investment that can have that result.

For example, it has been shown in an OECD study that increasing teacher's salaries, providing opportunities for ongoing education, and making other allowances and investments in happy, relaxed, high-quality teaching has an incredible effect on the learning experiences of students. Prioritizing the well-being and caliber of teachers at your school can be a marketable investment that drives the matriculation of students expecting a top-tier education. Hiring teachers with terminal degrees, with extensive experience, or with extracurricular accomplishments (such as books written or contributions made to their fields) will attract students to your school. Of course, schools don't necessarily need to look elsewhere for potential staff with these types of accomplishments; allowing their current staff the resources and bandwidth to invest in their own careers would bring about the same effect in a much more cost-effective way (Kennedy, 2019).

Aside from specifically investing in teaching staff, schools can also consider investing in their own infrastructure and resources. Having a nice campus or specific specialty tools and resources will also drive students to enroll that may not have considered matriculation otherwise.

Finally - and, perhaps, especially, if a school does not have either the resources for managing teacher salaries and class sizes as they might wish, it's important to remember that there are other efficient, effective ways a school might use its funding.

Especially over the next decade, wherein schools all around the country (and worldwide) are facing reduced budgets and tough decisions, we need to consider creative, out-of-the-box options for giving our students the best experience possible. Many studies are showing that increased funding correlates with higher achievement. We also know that reduced class sizes - which are expensive - correlates with higher achievement. If a shrinking school district budget makes these options logistically impossible, we need to find hope in other options (Kennedy, 2019).

Here, we'll list alternative projects and investments a school might consider in lieu of reducing class sizes to achieve increased student enjoyment and educational outcomes in a less potentially problematic way:

- 1. Increase the Sustainability of Your School:** Not only is sustainability a current buzzword that is excellent for marketing (even for academic institutions), it's a great way to invest in solutions that will continue to enhance your school's operations for years to come. If your school leaders invest in ways to create more sustainability surrounding your school, you'll find that the school's overall yearly budget will decrease due to lowered necessary expenses. For example, finding ways to reduce the necessity or reliance upon paper systems for registration, payroll, and billing can save the environment - and cash for your school budget. Similarly, finding ways to make your school's water, electricity, and heating systems a little greener could reduce your school's energy bills - freeing up more capital to invest in your students and teachers (Kennedy, 2019).
- 2. Allocate a Little More Time and Effort Toward Finding Cost-Effective or Free Options:** There are numerous fees and bills that many schools happily pay that, as it turns out, may not be as necessary as they believe. Having a creative mindset to search for alternatives to expensive recurring bills can save your school district thousands of dollars per year. For example, ditching landline phones in every room and relying instead on internet-based video calls has saved lots of money for schools previously paying through the roof for several different communication methods. If your school uses a 1:1 computing system, searching for used or refurbished computers can go a long way toward reducing the investment of that program. Finally, there are several free academic platforms online that teachers can use to build their lessons and upgrade their student's engagement. Recommending those to your teachers instead of subscribing to expensive academic content or organization systems can yield extra money that could go to teacher salaries or student programs (Kennedy, 2019).
- 3. Review the Contracts Your School Has Before You Renew:** If your school utilizes any external services on a contract basis, it's important to remember to monitor them prior to letting them auto-renew. Sometimes, you'll find that your school's cleaning service or insurance agent will stack your bill with hidden fees when it comes time to renew the contract, often relying on the fact that people rarely check these routine bills. Make sure that someone from your school is staying on top of the fine print in these recurring contracts. Shopping around, too, and using different companies from time to time can also save your school thousands of dollars per year (Kennedy, 2019).

4. **Raise Funds Using Your School's Own Site:** There are two ways to have more money: Making more money, and spending less. Typically, an academic institution will place most of its budgetary focus on reducing its outgoing expenses, but schools can make money, too! See if your school can offer unused classrooms or other spaces (for example, during the evenings) to local businesses and organizations. Often, small companies are looking for places to host their events (e.g., training sessions or business meetings). You could also rent out any large places you have for events or parties. In this way, your school could raise funds specifically for investing in your students' educational experiences (Kennedy, 2019).
5. **Automate as Many Processes as You Can:** For an educational institution, it's fair to say that (in an ideal world) the majority of the staff and personnel would be directly serving the students. However, schools are businesses, too, and many schools spend a lot of time and money on those business processes (such as billing, payroll, and maintenance requests). Prioritize automating as many processes that don't directly relate to education as possible - freeing up human expertise and labor for educational activities, instead of repetitive tasks that could be handled by technology (Kennedy, 2019).
6. **Invest in Your Teachers:** Teachers are the backbone of every school, and (as mentioned elsewhere in this course) tend to drive better educational outcomes for their students, regardless of the specific class size. If you have investment capital, use it to increase teacher happiness, provide them solutions so they can better serve their students, and even (if possible, if desired) assist them in professional development and career advancement. Your school may risk teachers moving on after all of this investment, but for the most part, you'll find that if you create an environment that teachers want to work in, you'll have no shortage of high-quality teachers working at your school at all times. This, as we have seen, is truly the system that will lead to the best educational outcomes for your students (Kennedy, 2019).

### **One Last Note: A Follow-Up to Project STAR**

Project STAR, the seminal Tennessee study which spawned many of the beliefs held by an entire generation regarding class size, ended in the late 1980s. In the early 2000s, twenty years after Project STAR, the National Education Association (NEA) did a follow-up study in which they met up with many original subjects of the study. As middle

schoolers in the '80s, those study participants were just beginning to enjoy solidified careers, in many cases.

The NEA performed a wide-ranging survey of those previous students, just to see what the primary demographic data was regarding the students who had, twenty years before, enjoyed smaller class sizes. After analysis, the NEA found that:

- The students who had been in the smaller classes during their formative years (grades 1-5) enjoyed higher achievement levels in their high school courses (across math, science, reading, and social science disciplines), even after the study was over.
- The teachers of those students reported that the students were more positive about their learning experience, even after study termination.
- A close look at the high school transcripts of all the students in the study found that students who were in smaller classes for at least three years were more likely than their peers to finish high school.

These results are significant, but not conclusive. It does tend to show that there is a benefit, on some level, that may be caused by or may just correlate with smaller class sizes - at least for when a student is very young.

Prioritizing class sizes may not always be possible. For those looking to manage small class sizes optimally or recreate the benefits of a smaller classroom without the financial repercussions, we turn to the third section.

## **Section 2: Summary**

In this section, we discussed the fact that much of the evidence that drives current thought on class size occurred several decades ago - and has not satisfactorily been replicated since. More modern studies delving into class size theories have discovered that factors like school image, the variability of the student body, and the happiness and engagement of teachers may all have a more direct influence on student educational outcomes than strictly restricting class size.

In addition, we discussed the fact that reducing class sizes can sometimes be prohibitively expensive - or come with unacceptable trade-offs, such as large decreases in teacher salary. There are other investments that schools can make that also increase student experience and educational outcomes that are less undesirable.

There are also other ways to replicate the benefits of smaller classrooms if reductions aren't possible. To learn more about those strategies, continue to the third section of this course.

## Section 3: Practical Policies and Practices for Managing Varying Class Sizes

If it is true that many of the benefits of smaller classrooms are secondary to the specific student-teacher ratio, it stands to reason that one could replicate those benefits by taking strategic measures regarding classroom instruction, organization, and management. It also stands to reason that even if a school invests in smaller class sizes, a poorly-managed class could negate the specific benefits of the class size reduction.

In either case, it's important to know what the best practices are to optimize class size or to make up for larger class sizes, as the case may be. In this section, we'll explore various policies that school districts have put in place to manage varying class sizes.

### **What are the optimal policies a school can establish to maximize the benefit of varying class sizes for their students?**

Whether truly taking steps to decrease class sizes is an option or not, there is enough variability in the data surrounding smaller class sizes to suggest that schools need to be very careful with expectations and confounding factors as they take the necessary steps to improve their students' learning experiences.

The OECD's recent study on class sizes and student-teacher ratios has yielded four provisional policies which schools can adapt to better serve their students, regardless of the specific amount of capital a school has to spend on any investments for their community (OECD, 2020).

These policies are:

- 1. Strongly recommend the benefits of small-group instruction to teachers, regardless of the number of children in their classroom.**

If the teachers of smaller classrooms simply follow the same teaching rubric as do their peers who have large classrooms, the actual benefit to the students in that scenario will be negligible. The enhanced educational outcomes for students in smaller classrooms hinge upon the assumption that teachers in these scenarios will take advantage of small-group instruction. One way, therefore, to mimic the

effects of a smaller classroom when that is not logistically possible is to subdivide your classroom into small groups for that enhanced experience (OECD, 2020).

While this will not provide all the advantages of a naturally smaller classroom - this strategy will, for example, not necessarily make it easier for teachers to strengthen their relationship with each member of their classrooms - it will provide others. For example, interpersonal relationships between students will be strengthened. Within smaller groups, each member of the class will feel more comfortable asking questions and discussing topics of interest. If monitored strategically and divided thoughtfully, teachers could even use small group instruction to increase the efficacy of in-classroom instruction and use the setup to garner an idea of how various groups of students are doing (OECD, 2020).

One way to encourage this is to assist teachers in setting up their classroom space in a way that helps students naturally seek out individualized, small group, or active learning approaches. For example, instead of setting up a classroom in a more traditional chairs-to-the-front lecture-focused design, the school administration and maintenance staff could help teachers split their rooms into different learning areas (a reading corner; a design, art, or project table; a discussion corner, etc). This will help teachers optimize their classroom instruction time, cater to a wider array of student learning modalities, and provide elements of education that look very similar to the idealized smaller classroom. Even small changes, like turning desks to face each other, can help students internalize the idea that their learning experience will be a collaborative one - not one that is focused on the teacher (OECD, 2020).

To support this strategy, school leaders could also consider approaches that differ from the traditional one-classroom-one-teacher setup. By allocating human resources in a more flexible manner and by allowing teachers to work in teams or trade-off small-group instruction with larger presentations or project time, schools could not only increase the engagement of their student body with different, more exciting classroom experiences - but they could naturally learn more about the efficacy of different student-teacher arrangements prior to actually making an investment in smaller class sizes (OECD, 2020).

- 2. If finances are limited, reconsider the priority of adjusting school and class size if at all possible.**

Although no large-scale studies have replicated the results of Project STAR since its completion, smaller studies have shown that the relationship between class size and student outcomes is extremely nuanced. Among other findings, various assessments (including those performed by the OECD) show that:

- Students in **larger classrooms** are more likely to score higher on national scientific assessments; and, as a result, will more likely continue on into a science-related career than a student from a smaller school or smaller class (OECD, 2020).
- Students in **smaller classrooms** tended to enjoy a more disciplined classroom experience. As opposed to their peers studying in larger classrooms, these students tend to skip school less and show up on time for classes more often (OECD, 2020).

There are also very simple financial benefits to larger classrooms, which make it much easier (or possible) to open and maintain academic institutions in rural or underdeveloped areas. In these environments, maintaining class sizes that prioritize tight student-teacher ratios may not actually be in the best interest of the community. In these cases, it may be best for all involved to lean into the benefits of at-scale education. Instead of straining the financial realities of a community in need of a school to get classes down to their smallest size, allow the predetermined budget to suggest what the priorities of the school system may be. If it doesn't appear, as a result, that small class sizes will be worth the investment for your academic institution, prioritizing other strategies and investments should be the next consideration (OECD, 2020).

**3. Realize that there is a direct trade-off between class size and teacher salaries - and the ramifications of that trade-off. Then, take steps to rethink that relationship for a better outcome.**

Smaller class sizes require more teachers. Larger class sizes require fewer. As, often, the same budget must cover the overall teacher salary expenditure regardless of the staffing strategy chosen, there is a very real trade-off between desired class size and the generosity of schools when it comes to teacher salaries. In cases where schools prioritize smaller classes, teachers often get paid less (OECD, 2020).

Remember that the primary factor that drives increased student educational outcomes, regardless of specific class size, is teacher quality. When teachers are

underpaid, they often leave, don't have enough resources to invest in themselves or their students, or are simply unhappy (which can influence their day-to-day job performance) (OECD, 2020).

There are some instances in which that trade-off may be worth it. For example, studies have shown that reducing class sizes for specific populations in a precise, targeted way does have a beneficial effect for those students - mainly students from disadvantaged backgrounds, students with special needs, and students in the earlier grades (OECD, 2020).

Otherwise, a specific type of 'small school' educational practices (instead of actual small class size) drive educational outcomes for most students. In these cases, it's much more important that schools work to provide more engaging classroom practices for students and increase the amount of student-teacher and student-student interaction within those classes. These strategies, along with making investments to enhance the school environment, will suffice for the vast majority of students - without necessarily adversely affecting the salaries of hard-working teachers (OECD, 2020).

Many countries are currently sidestepping the hot-button issue of reduced class sizes simply by placing greater importance on increased teacher salaries. By doing so, they're enabling their teachers to invest more of themselves into their students, thereby accomplishing the same eventual goal as class size reduction. However, other countries currently have an influx of teachers. Instead of reducing class sizes, they're allocating funds to employ more teachers, some of whom are coming in as aides to bolster the student-teacher ratio in existing class sizes - achieving the same result with a fraction of the work (OECD, 2020).

Ultimately, the strategy your district pursues should be very specific to the needs of your particular students and the resources of your special and unique community. This point dovetails quite nicely into the fourth policy point recommended by the OECD.

#### **4. Design the efficiency of your school's community (with incentives, if needed) that prioritizes the need of your specific students in their specific environments.**

Before your school makes any decision regarding the importance of reduced class sizes, your school professionals need to consider the unique populations it serves - and the unique environment in which your school is established. There may be some areas that benefit from larger schools. In other places, educational efficiency

and quality may be increased when school districts put a cap on class size (OECD, 2020).

Authorities need to realize that these types of decisions need to be made after extensive studies into the needs of their communities. The average age group of your student body, the fraction of your community that requires special attention, and the influx of available adult volunteers or young teachers all establish the local educational context that will influence the overall student experience. As a rule, school districts need to pay attention to all of these diverse factors prior to making policy decisions which will affect every member of the academic community (OECD, 2020).

### **When does a smaller class size have the biggest impact?**

As we learned from the research above, a reduction in class sizes tends to have the biggest impact for younger students - those in kindergarten through third grade. Because the skills being learned at that age are foundational and because children of these younger ages are still learning how to learn effectively, having a smaller class size for children of this age tends to have the biggest impact.

This does not mean that you're off the hook if you're a high-school teacher; smaller class sizes will likely benefit older students as well but in a less significant way. If your school is seeking to make class size judgments on a district-wide basis, it makes sense to allocate resources and teachers to younger students to benefit that age group (Kieschnick, 2018).

### **Small-Group and Small-Class Instructional Strategies to Enhance the Learning Experience of Any Number of Students**

As it has become clear that the quality of the teachers and the strategies used to teach in a smaller classroom are at least as important as the number of students in any given class, thought must be given to what those strategies are. If a teacher in a larger-size class is able to implement these strategies to good effect, that could result in a superior learning (and teaching) experience for the entire community.

Two of the primary ways that smaller class size is considered beneficial as compared to larger class sizes are increased interactions between students and teachers alike. If you or another teacher in your school is looking to invest in these benefits, these action items may constitute ways to do so, regardless of the population density at your school.

These strategies will work well in any class size - and even virtual classrooms, if that is your current contextual milieu.

## **Ways to Increase the Number and Efficacy of Student-Student Interactions**

In a smaller class environment, students will naturally turn more to each other, fostering interpersonal relationships that greatly enhance their educational experience. Here are five ways to create opportunities for student-student interactions - an effort that could replicate the feel and benefits of a small class with any number of students.

- 1. Create Complex, Challenging Learning Activities:** If you want your students to work together, you need to create learning objectives and activities that require their collaboration. The assignments you give your students can't be too simple, for example. Otherwise, the students will realize that it's easier to tackle the project on their own. Even if you tell the students to work with each other on a too-simple project, they'll just perform a cursory check-in for the sake of fulfilling the assignment.

Instead, gear your projects to necessitate true collaboration. Make your assignments difficult and expansive enough that your students need to depend upon each other in order to get the outcome they desire. You'll need to hit a delicate balance: Your tasks cannot be so difficult as to be overly frustrating or impossible. A good goal to aim for is complexity. Make sure that the projects or assignments you designate require multiple different knowledge bases or skill sets; make sure that each activity has enough pieces comprising it so that it would be infeasible for each person involved to go it alone.

One good example of a project that might work is simply by asking your students to identify a real-world problem; then, have them (hypothetically) fix it. They'll have to perform research, they'll have to have discussions and debates among themselves, they'll have to create mock-ups of their solution, and they'll have to present it - either to you or to the class (Burns, 2016).

This is an effective project, also, because it will help prepare the students for work projects years after they graduate. As will the second recommendation for enhanced student-student interactions:

- 2. Help Your Students Realize What it Takes to Be On a Team:** You might be tempted to go the route of assigning team members because you know what will happen if you don't: The usual cliques will stick together, and the usual students will be left

out. However, assigning collaborative groups often veers further in an equally unhelpful direction: Unless you, as the teacher, truly have a deep understanding of each child's interests, proclivities, weaknesses, and strengths, you likely won't be able to fit perfect groups together. Even if you did have that knowledge, you certainly don't have the time to complete that puzzle. As a result, you'll resort to random assignments to groups, which will likely end up with imbalanced talents and misplaced skills - a true recipe for frustration for all involved (Burns, 2016).

Before you group your students, teach them the reason why true collaboration is necessary for success, both in school and after it. Help them understand that good partnerships aren't just formed of friends sticking together; guide them through the steps of seeking out good team members. Routinely give your students information about being a good team player, and fostering the communication, trust-building, and conflict-management skills that will truly last them the rest of their lives.

If your students still need a little nudge after that to form productive, non-cliquey groups, then you'll be there to provide that assistance. Start by letting your students reach out to one another more naturally. The resultant groups will be stronger, and it'll be a lot easier for you, as well (Burns, 2016).

- 3. Take Steps to Reduce Common Complaints Regarding Group Projects:** If you completed any group projects when you were a student, you might recognize a common litany of complaints when you assign group work to your students. When a group of students is expected to turn in one assignment collaboratively, it's very easy for at least one student - if not all of those involved - to feel that the load of work wasn't properly shared. One student may end up doing the bulk of the work, leaving the others 'free-riding' instead of doing their share (Burns, 2016).

If you design the project strategically, you can minimize the ways that one or more students can unfairly hand the burden of work to their peers. Ways to do this include making sure that your students are grouped into small groups (no more than four, or possibly five); making it clear that you will be assessing each student individually, in some way, instead of just assigning a group grade for the finished project; give your students ideas of team roles that will immerse each student in the content (for example, researcher, communicator, designer, etc) so that it's very clear that all students have a role that they can step into and enjoy responsibility for; and, finally, have your students provide assessments both of their own participation and each other's work anonymously at the end of the project or at

steps along the way. Based on their self-assessments and your own observations about the group dynamic, you'll often be able to identify free riders or over-workers at that point and step in to nudge your students in the right direction, if required (Burns, 2016).

4. **Make Sure that Your Projects Include Designated Times for Discussion:** Students tend to be opportunistic people. When beginning a project, they will look to the swiftest, easiest way they can complete it. Taking time to soak up the educational details or delve deep into the interesting subject matter isn't something that naturally occurs to many at young ages. Neither is working together, particularly if students aren't working with their close friends. As one of the objectives of group projects is the strengthening of interpersonal relationships, you as the teacher need to create opportunities within the scope of the project for discussion. Make it clear that their project includes brainstorming sessions, group decision-making, and times where all members of the project need to defend or propose what they have been doing (or will be doing) with their time. This not only prepares students for similar expectations that they will navigate in further educational opportunities and in the workforce, but it also will strengthen their team bond, strengthen each member's reasoning and presentation skills, and enforce the idea that constructive argumentation can be a positive thing (Burns, 2016).
5. **Give Each Student in a Group Project the Chance to Stretch and Strengthen Their Skills:** Even though each student may come into a group project with some idea of a defined role, it's important that all members who collaborate not only get a chance to practice their natural skillset - but also that they get time to learn new skills. One way that you can help your students focus on this 'stretching' aspect of group projects is to include some kind of mentorship or teaching angle. If your students have embraced specific team roles as they begin their collaboration, have a designated time where students trade roles, teach others their own tips and tricks for success, and help train others at what they do best. For example, if one of the students in the group is the designated presenter, that student can do all of the formal presenting - but can also work with other students in the group as the project progresses to share some of the ways to tell good stories, put together good slides, or reduce stress before stepping in front of a crowd. This will help all of the students in the group learn a little more - and it'll also help all the students feel stronger in their areas of expertise. Teaching a skill or a subject helps a student learn something more than passively taking it in; so, if you can use that to your advantage to help your students strengthen and stretch their skills, you'll

help your students get the maximum good they can out of their group project (Burns, 2016).

## **Ways to Increase the Number and Efficacy of Student-Teacher Interactions**

The other piece to the puzzle when considering methods to increase the value of in-person instruction is student-teacher interactions. When students feel closer to their teachers, they get more work done, engage more with their studies, and can enjoy more personalized attention and feedback - further increasing the efficacy of their instruction and boosting their educational outcomes.

However, creating those teacher-student bonds is not always easy. In a smaller class, they may happen more organically simply because there is less competition for teacher time. In larger classes, it may be a good idea to use some of the following strategies to boost student-teacher interactions and relationships.

- **Introductory Worksheets:** This is a common first-day-of-school activity for lower grades, but it often gets left out as students get older. Early on in each school year, give your students a brief questionnaire delving into their hobbies, interests, struggles, and dislikes. Review the answers to those questionnaires upon receipt, keep them in a special file, and revisit them often (perhaps when you're grading a specific student's work, for example). This will give you a quick and easy cheat-sheet for providing your students with specialized feedback, easy conversation starters, and a starting point for showing more interest in each of your students as individuals.
- **Taking the Time to Dialogue With our Students:** This may seem like a clear strategy, but teachers often don't consider spending valuable time on frivolous dialogue to be important when building relationships with their students. Other teachers may find that conversation comes very easily with some students, and they fail to invest in a similar way with shy students or students that pose behavioral issues in the classroom. Taking the time to invest in your relationship with all students with simple, brief, yet personal conversations is one of the best ways to build trust. (You can use your introductory worksheets to find specific ways to relate to each student.)
- **Invest in your Active Listening Skills:** One way to get students to tell you about their interests or struggles is simply to present yourself as an excellent listener. Make eye contact with your students, refrain from multi-tasking when you're speaking with a student, and ask relevant follow-up questions. (Updating your

introductory worksheet on all students from time to time with new information about their interests can help with this),

- **Consider Mentoring an After-School Club or Interest Group:** Even though it will cut into your free time or time you could be spending grading or doing other work, consider offering to be the teacher in charge of an after-school event. Students will begin to see you as a person, not just the one who grades their homework. You'll find that their opinion of you will change quite quickly after that!
- **Share Your Struggles and Stories:** While keeping safe boundaries around your personal life and ensuring that you maintain the student-teacher respect that is fundamental to your relationship, make sure to strategically share stories about your life. It will humanize you, it will help students undergoing similar struggles realize that they're not alone (and that there is a light at the end of the tunnel) and it will help your students believe that they can share personal information with you, as well.
- **Walk Around Your Classroom to Offer Personalized Support:** If you've asked your students to work quietly on individual projects for a while, you could also use the opportunity to walk around your classroom to assist your students or to see if any are experiencing undue challenges. You'll get a good idea of where each student is academically - and the students you assist will appreciate the fact that you made time for them and their struggles.
- **Implement an Open-Door Policy for Your Students:** Allow your students to come to you with both personal and academic issues. If you have grading time during the day, simply keep your door open, let your students know when that time occurs, and be flexible with how you use those minutes. If a student takes you up on this opportunity, take the time to listen to the presenting problem and brainstorm a creative and practical approach toward a solution.
- **Respect Your Students:** Children can tell when adults aren't listening to them. Likewise, they can tell when adults do not consider them worthy of their time or attention. Take the time to invest in your students with your care, respect, and trust. Remember that your students are unique individuals who will flourish if you give them your encouragement and support.
- **Encourage and Praise Your Students:** Positive feedback helps a relationship grow faster than negative feedback. If your students have merited high grades, if you see them working hard on an assignment, even if you notice that underperforming

students have turned a corner: Giving them verbal encouragement whenever possible will help your students' confidence and self-esteem grow - and they'll be happier to turn to you for feedback in the long run.

- **Say Hello to Your Students:** The last tip we'll offer is a simple one: When you see your students, greet them! Whether they're entering your classroom or you're seeing them in the hall, dignifying them with a greeting and calling them out by name will make them feel good. As an added bonus, they'll be much more likely to return the favor (Alstad-Davies, 2019).

## Summary and Conclusion

Whether your school is in a position to invest in smaller class sizes or not, there are ways that you as a teacher can influence the learning experience of your students for the better. As school administrations worldwide learn more about the potential benefits and pitfalls of class size reductions, teachers everywhere can find comfort in the fact that by simply focusing on small-group instruction, by increasing the number of student-teacher and student-student interactions, and by making other small and strategic changes in their educational methods, they can mimic the benefits of small class sizes in their classrooms, no matter how many children are in them.

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