

The Learning Team

Volume 22, Number 1 | Fall 2018

A publication for parents and teachers working together for children's education

Class size matters



How many students are in your child's class?

RECOMMENDED CLASS SIZE TARGETS*

17

STUDENTS
IN GRADES
K-3

23

STUDENTS
IN GRADES
4-6

25

STUDENTS
IN GRADES
7-9

27

STUDENTS
IN GRADES
10-12

*ALBERTA'S COMMISSION ON LEARNING (2003)

EDITOR'S NOTE

Large classes a barrier to student success



Phil McRae
Editor
The Learning Team

Class size and composition matter! They matter to the development of interpersonal relationships within our students' learning environments, and they matter to establishing optimal conditions for both teaching and learning. Most importantly, they matter for our students' overall development from kindergarten to Grade 12, their parents' and guardians' hopes and aspirations, and for our Alberta teachers' optimal conditions of practice. This issue of *The Learning Team* tackles this important subject and brings to a focus some of the latest research on the topic.

Why does class size matter? Simply put, reasonable student-to-teacher ratios allow for higher levels of student engagement, increased time with the curriculum, and more opportunities for our high-quality Alberta teachers to better focus on the individual needs and interests of students in the classroom. The large body of research on class size shows that it is indeed an important determinant of student outcomes, ranging from test scores to broader life outcomes.

A recent comprehensive review of major class size research studies conducted by Northwestern University, and published by the National Education Policy Center at the University of Colorado Boulder, sheds clear light on this subject. Under the guidance of Diane Whitmore Schanzenbach (2014), associate professor of human development and social policy at Northwestern and chair of the Institute for Policy Research's Program on Child, Adolescent, and Family Studies, the following four key recommendations emerged from the review:

1. "Class size is an important determinant of student outcomes, and one that can be directly determined by policy. All else being equal, increasing class sizes will harm student outcomes."
2. "The evidence suggests that increasing class size will harm not only children's test scores in the short run, but also their long-run human capital formation. Money saved today by increasing class sizes will result in more substantial social and educational costs in the future."
3. "The payoff from class-size reduction is greater for low-income and minority children, while any increases in class size will likely be most harmful to these populations."
4. "Policymakers should carefully weigh the efficacy of class-size policy against other potential uses of funds. While lower class size has a demonstrable cost, it may prove the more cost-effective policy overall."

Another recent research study by Baker, Farrie and Sciarra (2016) analyzed 20 years of data on school funding and student achievement. This study states that "ample research has indicated that children in smaller classes achieve better outcomes, both academic and otherwise, and that class size reduction can be an effective strategy for closing racially or socioeconomically based achievement gaps."

While class size and composition are certainly not the fix-all for the many challenges in modern education systems, they are necessary considerations if we want to have great schools for all Albertans. I hope you enjoy this issue and are able to share it with others in your community.

Dr. Phil McRae is the associate co-ordinator of research for the Alberta Teachers' Association and an adjunct professor within the faculty of education at the University of Alberta.

References

- Schanzenbach, D. W. 2014. *Does Class Size Matter?* Boulder, Colo: National Education Policy Center, University of Colorado.
- Baker, B. D., D. Farrie D.G. Sciarra. 2016. *Mind the Gap: 20 Years of Progress and Retrenchment in School Funding and Achievement Gaps.* Princeton, N.J.: Educational Testing Service.

Class size matters

Reducing class size enables improved student learning

In the summer 2015 issue of the ATA Magazine, University of Alberta professor José da Costa discussed a landmark 2001 class size study he co-authored entitled *Literacy Achievement in Small Grade 1 Classes in High-Poverty Environments*.

Working with staff from Edmonton Public Schools, the U of A research team examined improvements in student learning when classes were limited to 15 students and participating teachers were supported by professional development activities focused on balanced literacy and/or early literacy.

The following is an excerpt of that Q&A.

Q: Can you tell us about some of your key findings?

A: Our main finding showed that teachers with smaller class sizes had more time to devote to each child, to support and scaffold their learning more effectively.

I recall one teacher who realized, with the switch to the substantially smaller class, that one student who appeared to be progressing with the class was in fact falling behind but was skilfully masking this by asking her classmates for help and borrowing other students' work. This sort of falling through the cracks happens when we expect teachers to work with large numbers of students with complex learning needs.

Q: In the decade that has passed since your team's study there has been a lot more research and much more controversy. How, if at all, has your thinking changed on the class size issue?

A: I think where we saw the greatest shift as a result of our work and the work of many other researchers was in the recognition of the importance of smaller class sizes in the critical formative years in lower elementary school. This seems to be the time during which students develop their efficacy as learners.

If we're serious about having students learn curriculum in ways that are meaningful to them and in ways that positively impact their communities, we can't just herd them through a factory funding and mass-production model, allowing them to sort themselves. Every child who we fail to support to reach his or her maximum ability is a loss for our local communities and society as a whole. What is the loss to society when, because of excessive numbers in a classroom, a student gains only the knowledge required to get a good grade but fails to gain mastery that would allow deeper understanding of a subject at advanced levels of learning?

What have we gained as a society in the long term by saving education dollars by putting 35 students in a class when the child who had the aptitude and ability to be success-

ful doesn't learn in elementary and junior high school the nuances necessary for this success?

Q: Many pundits and policy-makers, citing international studies including those emanating from the Organisation for Economic Co-operation and Development, claim that the Alberta government should focus on quality teaching instead of class size reductions. Do you see merit in these claims?

A: The education system we currently see in our publicly funded schools is the product of the Industrial Revolution, when an efficient mass production approach to education was put into place. The system



"Increasing class size beyond what the literature suggests as optimal simply results in teacher time being spread more thinly across the increased number of learners."

—José da Costa

then was meant to enable students to gain a sufficient but rudimentary understanding of reading, writing and arithmetic so they could be productive factory employees. These rudimentary skills are a far cry from our expectations of learners today.

Today's classrooms cannot simply be places in which teachers, as talking heads, deliver their lessons and then have students regurgitate what they heard on meaningless worksheets. Today's classrooms must be focused on individualizing instruction to facilitate meaningful learning, starting with what the learner knows, understands and is meaningful — it's about creating learner-centred experiences rather than teacher-centred experiences.

We also need to recognize the great diversity of our learners. These include abilities such as intellectual capacity and cultural and linguistic diversity. The diverse learning needs in our classrooms are accentuated by mainstreaming initiatives that have seen the desegregation of students with learning disabilities. This

is a move in the right direction for learners, but this shift does place additional demands on classroom teachers to meet the learning needs of an even more diverse group of learners than ever before.

Of course quality teaching is critical. However, increasing class size beyond what the literature suggests as optimal simply results in teacher time being spread more thinly across the increased number of learners. This simply results in a system in which students are seen to be learning as long as they meet whatever external benchmarks have been established. This takes away the focus from enabling students to learn and achieve to the best of their ability.

For example, the student who consistently achieves the standard of excellence on external tests but isn't actually pushing herself to do so is achieving below her capability. Teachers don't have the time, in large classrooms, to push that student to reach her individual capacity. If we fail to do this, we fail the student and our province's future.

Q: As a researcher, you have seen decades of debate on class size in this province. How might we engage education partners and the public at large in a meaningful discussion around the class size issue?

A: This is a very difficult question. I think it is more a political question than a research one, although research can obviously inform the discussion.

Parents who see their children in classes with large numbers of other students with diverse learning needs are often the ones who notice their children aren't getting pushed to the limits of their ability. Those parents who have the social capital and financial ability often enrich their children's learning by providing them with enrichment activities outside of school.

Members of the general public who don't have direct connections to contemporary schools are less likely to be sympathetic to the learning needs of students in large classes, or of students in smaller classes that have unprecedented numbers of children with a variety of individualized learning needs.

We can only understand schools from the point of view of our experiences with schools. People who are not directly connected to K-12 schools typically view the education system based on their own experiences as a learner in that system, even if that dates back four, five, six or more decades. While schools and education have changed drastically, even in the last couple of decades, our experiences are always grounded in what we know and what we think is still true. I believe the issue is, how do we challenge those preconceptions to the point where people understand that today's classrooms are not what they experienced decades ago?

What happens when class sizes are reduced?



Better academic performance

Smaller class sizes have a positive impact on students' academic performance, especially in the early grades (K-3), and for vulnerable students.



Long-term student success

Students who get the support they need early in their school lives are more apt to perform better and require less support later on.



ISTOCK

Inclusion means classrooms that are increasingly complex

Joni Turville

Alberta teachers have been consistently and insistently describing the conditions of inclusion as being one of their biggest areas of concern. Responding to this concern, in 2013 the ATA spearheaded the creation of the Blue Ribbon Panel on Inclusive Education in Alberta Schools, in collaboration with the University of Alberta.

The panel conducted a study focused on better understanding the current state of inclusion in Alberta schools, and among its key findings was the assessment that classrooms are large, increasingly complex communities.

Teachers participating in the study frequently described the increasing size and complexity of Alberta classrooms. The number of children with whom teachers worked varied, but the classroom size and the level and diversity of student needs clearly affect the extent to which teachers can attend to each student's needs.

The size and complexity of classrooms

affect teacher workload — teachers need to prepare and implement in-class supports, and complete a large amount of paperwork associated with individualized program plans and other modifications. Despite highlighting such challenges, the study indicates that teachers want to attend to students' diverse needs. Overall, though, the study results emphasize that classroom size and composition constitute a major factor in the capacity of schools to implement inclusion in a way that supports all learners.

The overall conclusion of the study was that positive possibilities for inclusion exist, but shared vision, leadership, research and evidence, resources, teacher professional growth, time, and community engagement are necessary to facilitating effective implementation.

Joni Turville is the assistant executive secretary of the Alberta Teachers' Association.

A version of this article was originally published in the July 2016 issue of Inside Inclusion, a newsletter produced by the Alberta Teachers' Association's Council for Inclusive Education.



It's complicated

Complexity in school classrooms has increased dramatically over the last number of years, with anecdotal evidence suggesting that there are more students with exceptional needs in classrooms than ever before.

REPORT OF THE BLUE RIBBON PANEL ON INCLUSIVE EDUCATION IN ALBERTA SCHOOLS

ACOL targets

What are they all about?

As part of a review of the education system, Alberta's Commission on Learning (ACOL) released class size targets in a 2003 report. The targets were based on a wealth of research showing a link between class size and students' academic performance.

ACOL's recommended provincial class size targets

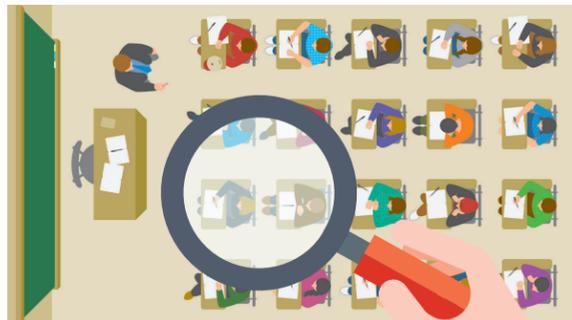


Class size targets are based on three main principles

- 1 Class composition**
Complex classes (special needs, English-language learners, etc.) should have fewer students than the target.
- 2 Accountability and public assurance**
School jurisdictions and the province should be required to report annually on average class sizes and should be accountable for explaining whether or not the guidelines have been met.
- 3 Adequate funding**
The province should provide adequate funding to enable school jurisdictions to meet the class size.

Can you relate? In order to understand and meet students' educational needs, teachers work to establish meaningful relationships with their students. This is much more difficult in large classes.

Exceeding recommendations



Fact The impact of class size on educational outcomes is among the **most researched** topics in education.



Fact An in-depth investigation by the *Edmonton Journal* in the spring of 2018 revealed that in six of the province's largest school districts, 78 to 91 per cent of K-3 classes **exceed** commission guidelines.

Fact



Between 40 and 50% of Alberta classrooms from kindergarten through junior high **exceed** the province's targets.



More than 80% of high school classes **exceed** the targets.



Class size research shows that ...

“
... Parents of students in reduced size classes had more contact with teachers and were more satisfied with their children’s education. Seventy-four per cent of parents reported initiating contact with their children’s teachers, compared with 69 per cent of parents in non-reduced classes. Parents who had children in smaller classes also gave higher ratings to every aspect of their schooling.

Bohrnstedt, G.W., and B.M. Stecher. 1999. *Class Size Reduction in California 1996–1998: Early Findings Signal Promise and Concerns*. Palo Alto, Calif.: CSR Research Consortium.



... The payoff from class size reduction is greater for low-income and minority children, while any increases in class size will likely be most harmful to these populations.

Schanzenbach, D. W. 2014. *Does Class Size Matter?* Boulder, Colo: National Education Policy Center, University of Colorado.

... Class size reduction enabled teachers to interact with individual students more frequently and use a greater variety of instructional and differentiated strategies. Students were more engaged and less disruptive in the classroom.

Parents were encouraged by being able to meet with teachers more frequently and many reported a better relationship with teachers when their children were assigned to a smaller class.

Bascia, N. 2010. *Reducing Class Size: What Do We Know?* Toronto: Canadian Education Association.

... Smaller classes had a positive impact on students’ learning behaviour, including decreases in anti-social behaviour (i.e., withdrawing from interactions with the teacher or other students and/or engaging in disruptive acts) and increases in pro-social behaviour (i.e., following rules and interacting positively with the teacher as well as collaborating with other children).

A positive relationship existed between reduced class size and learning behaviour, social behaviour and teaching styles. Reduced class size was linked with increased academic engagement, student effort, initiative taking in the classroom and time on task. Additionally, teachers of small classes were able to get to know each student more intimately and their tolerance for a broader range of student behaviours was increased.

Finn, J.D., G.M. Pannozzo and C.M. Achilles. 2003. “The Why’s of Small Class Size: Student Behavior in Small Classes.” *Journal of Educational Psychology* 97, no.2: 214–223.

... Small class sizes better enabled teachers to engage “low-effort” students, as defined by a below average tendency to begin work promptly, behave appropriately in class, exhibit self-discipline, and follow directions.

Babcock, P., and J.R. Betts. 2009. “Reduced-Class Distinctions: Effort, Ability, and the Education Production Function.” *Journal of Urban Economics* 65: 314–322.



“
... Smaller classes had a strong positive impact on student achievement and narrowing the achievement gap in the vast majority of studies reviewed. The benefits of smaller class size outweighed the cost in all but three of the 112 peer-reviewed studies.

Zyngier, D. 2014. “Class Size and Academic Results, with a Focus on Children from Culturally, Linguistically and Economically Disenfranchised Communities.” *Evidence Base* 1.

Compiled by Leonie Haimson and Katie Donnelly of Class Size Matters, a New York-based advocacy group. More research showing the benefits of class size reduction are available at www.classsizematters.org.