

Office of the Superintendent
Acton Public Schools
Acton-Boxborough Regional School District
<http://ab.mec.edu>
(978) 264-4700 x 3211

TO: Acton-Boxborough Regional School Committee Members
FROM: Stephen Mills
ON: March 24, 2011
RE: **ADDENDUM**

JOINT SCHOOL COMMITTEE MEETING:

3.0 APPROVAL OF MINUTES

3.5 Minutes of 3/3/11 Joint SC Meeting

5.0 UNFINISHED BUSINESS

5.2 ALG Report

5.2.1 Draft minutes of 3/9/11

5.5 FY'11 and FY'12 Budget Update

5.5.3 APS Acton Town Meeting Budget Book

5.8 Class Size Task Force Update - *Amy Hedison*

5.8.1 Memo from Amy Hedison

5.8.2 Quote from Secretary Duncan's speech to the AEI, 12/10

5.8.3 Class Size Reduction, Myths and Realities

5.8.4 Class Size in Early Education, National Institute for Early Education Research

5.8.5 Class Size Research, HEROS

6.0 NEW BUSINESS

6.3 Recommendation to Approve ABRHS Science Olympiad Team overnight, out of state field trip to National Competition at the University of Wisconsin, 5/19/11 – 5/22/11 – **VOTE** – *Steve Mills*

7.0 ISSUES FOR THE COMMITTEE

7.1 School Committee Meeting Schedule, 2011-2012

8.0 FOR YOUR INFORMATION

8.1 ABRHS

8.1.1 Gift from Mr. and Mrs. Donald Meschisen to the Class of 2013

8.6 Discussion of Special Education Parent Advisory Council's (PAC) Analysis of MCAS and *Response to 2010 MCAS Analysis*, AB Sped PAC Co-Chairs

8.7 Correspondence from the Community

8.7.2 Classroom Assistant Hours

8.7.3 Possible Reduction of Kindergarten Classes

8.7.4 Class Size

8.7.5 Class Size Discussion

8.7.6 Question on Setting Limits of PTO Funds

ACTON PUBLIC SCHOOL COMMITTEE MEETING

10.1 Approval of Minutes of March 17, 2011 (*brought to meeting*)

10.2 Kindergarten Enrollment Update - *Marie Altieri*

10.2.1 Kindergarten Class Size History

10.2.2 Class of 2024, Enrollment by School

**ACTON PUBLIC and ACTON-BOXBOROUGH REGIONAL
SCHOOL COMMITTEE MEETING
Draft Minutes**

**Library
R.J. Grey Junior High School**

**March 3, 2011
7:00 p.m. Joint Exec Session
7:30 p.m. JT SC Meeting
followed by APS SC Meeting**

<i>Members Present:</i>	Brigid Bieber, Mike Coppolino, Herman Kabakof, Xuan Kong, Terry Lindgren, Sharon McManus, Maria Neyland, John Petersen
<i>Members Absent:</i>	Bruce Sabot
<i>Others:</i>	Marie Altieri, Don Aicardi, Steve Mills, John Murray (left at 7:24 p.m.), Beth Petr

The Chairs of the Acton-Boxborough Regional and the Acton Public School Committees called the Joint School Committee meeting to order at 7:04 p.m.

JT EXECUTIVE SESSION – to discuss strategy with respect to collective bargaining, AEA, and to discuss strategy with respect to litigation

At 7:04 p.m., it was moved, seconded and unanimously

VOTED by role call: that the **Acton-Boxborough Regional School Committee** go into Executive Session (Joint School Committee) to discuss strategy with respect to collective bargaining.

YES (Bieber, Coppolino, Kabakoff, Kong, Lindgren, McManus, Neyland, Petersen)

This was done after Brigid Bieber declared that an open meeting may have a detrimental effect on the bargaining position of the Board. She said the meeting was to discuss contract negotiations with the AEA.

At 7:04 p.m., it was moved, seconded and unanimously

VOTED by role call: that the **Acton-Boxborough Regional School Committee** go into Executive Session (Joint School Committee) to discuss strategy with respect to litigation.

YES (Bieber, Coppolino, Kabakoff, Kong, Lindgren, McManus, Neyland, Petersen)

This was done after Brigid Bieber declared that an open meeting may have a detrimental effect on the litigating position of the Board.

At 7:05 p.m., it was moved, seconded and unanimously

VOTED by role call: that the **Acton Public School Committee** go into Executive Session (Joint School Committee) to discuss strategy with respect to collective bargaining.

YES (Coppolino, Kabakoff, Kong, Lindgren, McManus, Petersen)

This was done after John Petersen declared that an open meeting may have a detrimental effect on the bargaining position of the Board. He said the meeting was to discuss contract negotiations with the AEA.

At 7:05 p.m., it was moved, seconded and unanimously

VOTED by role call: that the **Acton Public School Committee** go into Executive Session (Joint School Committee) to discuss strategy with respect to litigation.

YES (Coppolino, Kabakoff, Kong, Lindgren, McManus, Petersen)

This was done after John Petersen declared that an open meeting may have a detrimental effect on the litigating position of the Board.

At 7:30 p.m., the Committees were polled and voted to go out of Joint Executive Session.

STATEMENT of WARRANT

AB Warrant #11-017 dated 2/10/11 in the amount of \$1,633,234.10 and AB warrant #11-018 dated 2/24/11 in the amount of \$2,169,099.38 were signed by the Chair and circulated to the Committee for signatures.

APS Warrant #201117 dated 2/22/11 in the amount of \$232,677.38 was signed by the Chair and circulated to the Committee for signatures.

EDUCATION REPORT

Dr. Alixe Callen, Principal of ABRHS, reported on the New England Association of Schools and Colleges, Inc. (NEASC) Report of the Visiting Committee for Acton-Boxborough Regional High School. This site visit took place October 3-6, 2010 and was a major focus for the High School. While the report was very complimentary and provided many valuable comments and suggestions for the Administration, Dr. Callen said that the visiting committee was “appalled” at the work load of the staff. She said that the school was heartily commended on our mission statement, but that the staff looked forward to working on rubrics and doing more than just giving grades. She said that finding time for faculty to work together is essential, but very difficult. Time is key for professional development, technology integration, and interdisciplinary work

John Petersen read a quote from the report about how the community works together for the success of the school. John asked how we measure some of our progress. Dr. Callen said the senior and staff surveys are valuable but they want to do more. The Committee thanked Dr. Callen and her staff for all of the time spent on this important endeavor.

A committee member asked Dr. Callen to let the School Committee know how they could help them do more interdisciplinary work.

APPROVAL of MINUTES

- 4.1 Minutes of 1/6/11 Joint/AB SC meeting
- 4.2 Minutes of 1/22/11 Joint SC Saturday Budget meeting
- 4.3 Minutes of 2/3/11 Joint/AB SC meeting with Finance Committees
- 4.4 Minutes of 2/9/11 Joint SC Executive Session (Open Meeting section)

One committee member stated that it was difficult to receive minutes via email the night before a meeting and have time to adequately review them. The previous week was school vacation so packets were delivered on Monday night (as opposed to the usual Friday) and the addendum had to be completed immediately after that. It was agreed to hold all of the minutes until the next meeting.

PUBLIC PARTICIPATION

Ann Sussman spoke from the audience as a parent and architect. She is concerned that the Acton Schools are not participating enough in land use planning. She feels that our schools are too large and crowded and gave the example that some ABRHS students have to go outside instead of using the hallways to switch classes. She urged the Committee to read reports about zone build out and meeting 40B requirements. An email from her is in the packet. She advocated for doing more community planning and getting involved in Acton 2020. She invited anyone to contact her for more information.

JT UNFINISHED BUSINESS

6.1 ALG Report

John Petersen reported on the 3/2/11 ALG Meeting including the revised spreadsheet. He stated that the ALG process helps to understand what part of the citizen dollars the school should be asking for.

6.2 Acton FinCom Report

Materials for this meeting are posted on the schools' website at <http://ab.mec.edu/about/meetings.shtml>.

Xuan Kong reported on the FinCom discussions and referred to the ALG spreadsheet. He urged the Committee to look beyond just the next year.

6.3 BLF Report

Maria Neyland reported that Boxborough is still budgeting at 10% because they are very conservative. Boxborough currently has a \$340,000 deficit. Dr. Mills said that State Representatives are making opposite statements as far as state aid goes right now.

6.4 FY'11 and FY'12 Budget Update

Dr. Mills did a summary presentation on the APS and AB budgets and asked that they be revoted due to changes in the health insurance trust (HIT). He was asking for less than a 1% increase in both budgets and now that has been reduced to a ¾% increase. His goal is to get to level service budgets with the Finance Committee's approval, then address some educational needs and cash flow to reserves. One School Committee member stated that there is an option some of that money could be returned to the town, by way of reducing the assessment that will then reduce the tax rate.

Another member advocated for more assistants with that money to improve the education. The Chair cautioned about addressing one budget at a time. This discussion was about the Regional Budget first.

John Petersen made the motion for the AB Regional School Committee found on 6.4.1 in the addendum, per the recommendation of the Superintendent for \$38,502, 351. It was seconded.

He stated that the choices for the Committee are simple according to this motion. What is voted tonight goes into the warrant. Additional funding can be discussed in a month or so when numbers are firmer.

When asked for details of the change in HIT, John Petersen reported that \$300,000 is due to the lowering of HIT costs on Feb 10 and Feb 24. The new cash flow for March showed a favorable variance for just that month by \$236,000. so the Trust voted to move their rates again. This created the large surplus, resulting in the School Committee's revote.

A member asked why they lowered the assessment rather than increase the service level when the needs are known. Dr. Mills said that he has consistently asked for level service so he felt he should stick with that request. He will probably discuss the additional needs that should be paid for at a joint school committee meeting in May.

John Petersen wanted to focus people's attention on the \$2 million of reserves that the budgets plan to use. He acknowledged that some say this is unsustainable. With a budget increase of less than 1%, John feels that these are important numbers and ones that could be argued either way. The process that the Committees have gone through has done a good job of weighing all of these issues. He stated that Acton faces very real structural budget issues.

Brigid Bieber read Bruce Sabot's email, which he sent because he is out of town.

The Committee discussed the pros and cons of voting a level service budget now versus including funding for some of the needs above level service.

Acton-Boxborough Regional School Committee

It was moved, seconded and

VOTED: that the total appropriation for the Acton-Boxborough Regional School District for the fiscal year of July 1, 2011 through June 30, 2012 be set at \$38,502,351 and that member towns be assessed in accordance with the Education Reform Law and the terms of the Agreement and amendments

thereto as follows: Acton \$24,891,337, Boxborough \$6,220,828, remainder to be accounted for by the Anticipated Chapter 70 Aid in the amount of \$6,285,614, Anticipated Charter School Aid in the amount of \$37,268, Transportation Aid, Chapter 71, Section 16C in the amount of \$564,346, a transfer from E&D Reserves in the amount of \$502,300, and a transfer from the Junior High School Project Premium on Loan in the amount of \$658.

(YES: Bieber, Coppolino, Kong, Lindgren, McManus, Neyland, Petersen

ABSTAINED: Herman Kabakoff)

A committee member confirmed that the APS budget number can be changed prior to Town Meeting.

Xuan Kong made a motion and it was seconded that the APS Committee accept the Administration's recommendation that the school year 2011-2012 APS District Budget be set at \$26,113,719. This budget covers the period July 2, 2011 through June 30, 2012.

A committee member asked about ALG and John Petersen said that it was his understanding that if Chapter 70 revenues come in higher, the consequence will be to increase the reserves (E&D or Free Cash) per ALG. The member referred to the FinCom information (their 2/8/11 meeting) included in the ALG material in the addendum. The member asked John to bring any need for consensus back to the School Committee.

The Committee discussed how to handle excess of Chapter 70 funding. In previous years, the APS budget stayed the same and the excess flowed to free cash. FinCom has concerns that the budgets being voting on tonight use \$2 million of reserves. FinCom feels that if more money comes in, it is not a given that it should be spent because reserves have been used. FinCom has requested that if additional Chapter 70 money comes in, it should be used to close the gap. Instead of doing this, Dr. Mills plans on paying forward to close the gap. Secondly, FinCom would consider not taxing the \$293,000. Right now, both amounts are being taxed. Finally, if there is still additional money, another conversation was requested at ALG to talk about how to proceed. The School Committees, Board of Selectmen and FinCom would all need to discuss their priorities together. FinCom has requested that Boards not make those decisions without talking to the Finance Committee, per their contingency document. It was noted that there are different answers for the two school districts. The Region is their own appropriating authority so they can decide about extra funding. The Acton Public School District requires a Town Meeting vote so a special Town Meeting would be needed for the appropriation.

Xuan Kong asked why the ALG spreadsheet shows COPS as a reduction from the APS budget for FY12. Some committee members were confused due to the extensive discussion that took place over the past year about COPS funding. It was agreed that last year the APS SC decided that, while agreeing wholeheartedly on the value of the program, the schools would not fund COPS for FY12.

Xuan withdrew his motion and it was seconded.

He suggested that the Committee vote a \$73,000 higher APS budget. Another member asked how the \$73,000 out of balance amount created by this move would be covered. It was stated that the ALG process is not perfect but the leaders come to a consensus and that is what is taken back to the Boards. John Petersen said that although the Committee can obviously vote different budget numbers if they choose to, it should not be done casually at this late stage in the process. Everyone appreciates that it is enormously complicated to find the balances in these budgets.

Herman Kabakoff moved and it was seconded that the APS Committee accept the Administration's recommendation that the school year 2011-2012 APS District Budget be set at \$26,113,719. This budget covers the period July 2, 2011 through June 30, 2012.

Heather Harer asked for clarification about COPS funding. John Petersen said that the Town will be supporting and funding this program, although it appears that the accounting on the ALG spreadsheet is confusing people. FinCom Chair, Mary Ann Ashton clarified. She stated that she is 99% sure that the \$26,113,719 does not include the COPS funding and that the Town budget does.

Xuan asked whether there was agreement about COPS funding at the recent meeting that John Petersen had with Dr. Mills and BOS Chair, Lauren Rosenzweig-Morton. John thought there was municipal agreement to pay for COPS. John will prepare a memo with Lauren for the School Committee that explains how the COPS funding was treated in the budget. He understands that the APS budget does not include it and that the Town budget does include it for FY12.

Acton Public School Committee

It was moved, seconded and

VOTED: that the APS Committee accept the Administration's recommendation that the school year 2011-2012 APS District Budget be set at \$26,113,719. This budget covers the period July 2, 2011 through June 30, 2012.

(YES: Coppelino, Kabakoff, Lindgren, McManus, Petersen

NO: Kong)

6.5 Health Insurance Trust Report

John Petersen reported on the meetings of 2/10/11 and 2/24/11 during the budget discussion.

6.6 Subcommittee Updates

6.6.1. Policy

6.6.1.1 Recommendation to Approve New Policy on Admission of Exchange Students (File: JFABB) – **SECOND READING**

Maria Neyland reported that wording was added to specify that the policy is for up to 3 students total in grades 7 – 12. A point of clarification was made that an exchange student is for one school year or less.

It was moved, seconded and unanimously,

VOTED: to approve the New Policy on Admission of Exchange Students (File: JFABB).

6.6.1.2 Recommendation to Approve Revised Policy on Nonresident Tuition Rate (File: JFABA) – **FIRST READING**

Maria Neyland reported that this proposed policy is similar to Lexington's. Our legal counsel has reviewed it. MASC does not have a sample policy for this. It is an average of regular and special education tuition costs. In the past, only regular education costs were used.

6.6.1.3 Recommendation to Approve Revised Policy on Field Trips (File: IJOA) – **FIRST READING**

Brigid Bieber reported that the Subcommittee combined the Student Travel and Field Trips Policies. The recommendation is that only International trips will be approved by School Committee. Procedures and the form are included, although they are not voted on. A Committee member asked what is a privately run trip. Brigid said that it is one that a student could go on, but it is not sponsored by the school. A member asked if the subcommittee considered contacting other people who are affected by this policy such as school staff. Another member asked if people paying a fee for their child to go on a trip, should be told if the compensation includes anything other than expenses of the trip. He asked for some divulgence of what the money is going for. Marie Altieri noted that the disclosure form is approved by the Principal. Extra

trips are not permitted per this form. A change is needed to say that the School Committee needs to approve as well.

6.6.1.4. Recommendation to Approve New Policy on Advertising in Schools/Corporate Sponsorship (File: NEW)

This new policy is not completed yet.

A member asked if the Nondiscrimination Policy could be revisited so that adding “gender identity” could be included.

6.6.2. Class Size

Amy Hedison reported that they hope to present findings at the next meeting. Their recommendations will be dependent on students’ age. She urged the Committee to put their work into action once they are finished.

6.6.3. Long-Range Strategic Planning

Dr. Mills reported that this group continues to work on a community survey and mission/goals.

6.6.4 Cost Savings Task Force

Xuan Kong reported that this discussion has been going on for two years. It is hoped that a report will be ready for public review and comment before Acton Town Meeting.

6.7 SMART Goals Progress Updates

Dr. Mills reviewed progress on this year’s goals. He highlighted the excellent CPR review, done every 6 years, and thanked Liza Huber for her efforts. He emphasized that there are many things going on in the schools besides the budget. He highlighted Facilities Director, JD Head going into classrooms as a substitute as part of the “It’s All About Instruction” theme for this year. A member asked Marie Altieri about the new MUNIS employee self service feature. She said that we are just starting to see the benefits. Currently, it is just for staff to view their forms.

6.8 July 2010 Joint School Committee Workshop Review

Brigid review the list of action items from the workshop. Generally they have been accomplished. The Committees did not get their picture taken for the school website, something that was meant to make them more visible/accessible in the community.

Terry Lindgren asked for a balance sheet for the Before and After School Programs by May 1.

NEW BUSINESS

7.1 Recommendation to Approve ABRHS Varsity and JV Baseball teams’ overnight field trip to Easton, PA

It was moved, seconded and unanimously,

VOTED: to approve the ABRHS Varsity and JV Baseball teams’ overnight field trip to Easton, PA, 4/29/11 – 5/1/11

7.2 Change to ABRHS Student Handbook Policy re Captain’s Rule (*page 35*)

Dr. Callen stated that our current policy is very punitive and has not been effective. We need to give kids the chance to make mistakes and grow and learn from them. This is in keeping with the NEASC report about the tone and culture of our school. Being suspended for 25% of the rest of the games following an offense and other sanctions, has not been a deterrent. There’s no learning opportunity with the existing policy because it penalizes the student for so long. Several committee members wanted to see a minimum compulsory period of suspension included in the policy. Dr. Callen said that the captaincy is a term of a few months so that is clear. It was asked if there is a way to build in restorative justice. Students are required to see a drug/alcohol counselor as part of the consequences.

It was moved, seconded and

VOTED: to accept the proposed change to the ABRHS Student Handbook Policy re Captain’s Rule

(YES: Lindgren, McManus, Petersen NO: Coppolino, Kong, Kabakoff)

7.3 Discussion with Acton Boxborough Youth Soccer (ABYS)

Steve Mills updated the Committee about a preliminary proposal to field turf the lower playing fields. ABYS would take out a note and dramatically update these fields. The Town would have to be involved because JD believes the only egress is through the skateboard park. Steve met today with JD Head, Erin Bettez, and the ABYS reps. This would be a big project. Steve Desy and JD are taking approximately \$200 for a feasibility study to be done.

7.4 Acton Town Meeting Plan

John Petersen will do the APS and AB Budget presentations given that Brigid is from Boxborough. Comments regarding the Region should go to Brigid and comments regarding the APS presentation should go to John.

7.5 Recommendation: ABRSD Participation in School Choice 2011-2012

It was moved, seconded and unanimously

VOTED: To participate in the state's School Choice program for 2011-12 by only accepting siblings of existing Acton-Boxborough Regional High School Choice students, and current 6th grade Choice students from the Blanchard School in Boxborough who will be entering R.J. Grey Junior High School in grade 7.

7.6 Recommendation to Accept Gift from The Madison Group

It was moved, seconded and unanimously

VOTED: To accept a \$500 donation from The Madison Group toward the cost of the Alternative Program's trip to Merrowvista.

FOR YOUR INFORMATION

Dr. Mills highlighted several of the FYI items.

He thanked the ABRHS Boys Varsity Basketball Team for donating the proceeds of their annual Youth Holiday Clinic to Lazarus House. He also thanked The Acton Lion's Club for their \$400 donation for the Alternative Program's trip to Merrowvista. The text on the RJGJHS Discipline Report in the addendum was not updated. There was only 1 suspension during the month of February. Dr. Mills mentioned the showing of *Race To Nowhere*, followed by a panel discussion on March 15. More information is at <http://www.racetonowhere.com/home>

John Petersen thanked the community for the emails they sent to the Committees this month.

The Acton-Boxborough Regional School Committee adjourned at 11:11 p.m.

The APS School Committee decided not to meet following the Joint meeting and adjourned at 11:12 p.m.

NEXT MEETINGS:

March 17 at 7:30 pm, APS SC Meeting at Gates School

March 24 at 7:30 pm, Joint SC Meeting at RJ Grey JH Library (serves as April meetings)

March 29 at 9AM – 2PM, *MASC Day on the Hill* at the State House, Boston

Respectfully Submitted,
Beth Petr

List of Documents Used: See agenda attached
 Statement from Bruce Sabot
 Revised ALG Spreadsheet dated 3/3/11

**ACTON PUBLIC and ACTON-BOXBOROUGH REGIONAL
SCHOOL COMMITTEE MEETING**

**Library
R.J. Grey Junior High School**

**March 3, 2011
7:00 p.m. Joint Exec Session
7:30 p.m. AB SC Meeting
followed by APS SC Meeting**

AGENDA with addendum

- 1.0 CALL TO ORDER – Joint School Committee
 - JT EXECUTIVE SESSION – to discuss strategy with respect to collective bargaining, AEA, and to discuss strategy with respect to litigation
- 2.0 CHAIRMAN’S INTRODUCTION
- 3.0 EDUCATION REPORT – *Alixé Callen, ABRHS Principal (7:35)*
 - 3.1 New England Association of Schools and Colleges, Inc. (NEASC) Report of the Visiting Committee for Acton-Boxborough Regional High School, October 3-6, 2010
- 4.0 APPROVAL of MINUTES and STATEMENT of WARRANT (7:50)
 - 4.1 Minutes of 1/6/11 Joint/AB SC meeting
 - 4.2 Minutes of 1/22/11 Joint SC Saturday Budget meeting (*addendum*)
 - 4.3 Minutes of 2/3/11 Joint/AB SC meeting with Finance Committees (*addendum*)
 - 4.4 Minutes of 2/9/11 Joint SC Executive Session (Open Meeting section) (*addendum*)
- 5.0 PUBLIC PARTICIPATION (7:55)
- 6.0 UNFINISHED BUSINESS
 - 6.1 ALG Report – *John Petersen/Xuan Kong (8:00)*
 - 6.1.1. Meeting 1/31/11 Draft Minutes
 - 6.1.2 Meeting Agenda for 3/2/11
 - 6.1.3 Meeting Materials for 3/2/11 (*addendum*)
 - 6.1.4. Revised ALG Spreadsheet 3/3/11 (*addendum*)
 - 6.2 Acton FinCom Report – *Xuan Kong (oral) (8:20)*
 - 6.3 BLF Report – *Maria Neyland (oral) (8:25)*
 - 6.4 FY’11 and FY’12 Budget Update – *Steve Mills / Don Aicardi (8:30)*
 - 6.4.1 Recommendation to Approve Revised FY’12 ABRSD Budget and Assessments – **VOTE** - *Steve Mills (addendum)*
 - 6.4.2. Presentation Slides (*brought to meeting*)
 - 6.5 Health Trust Report – *John Petersen (8:40)*
 - 6.5.1. Meeting 2/10/11 (*addendum*)
 - 6.5.2. Meeting 2/24/11 (*addendum*)
 - 6.6 Subcommittee Updates (8:45)
 - 6.6.1. Policy – *Brigid Bieber (oral)*
 - 6.6.1.1 Recommendation to Approve New Policy on Admission of Exchange Students (File: JFABB) – **SECOND READING** – **VOTE** - *Maria Neyland*

- 6.6.1.2 Recommendation to Approve Revised Policy on Nonresident Tuition Rate (File: JFABA) – **FIRST READING** – Maria Neyland (addendum)
- 6.6.1.3 Recommendation to Approve Revised Policy on Field Trips (File: IJOA) – **FIRST READING** – Brigid Bieber (addendum)
- 6.6.1.4. Recommendation to Approve New Policy on Advertising in Schools/Corporate Sponsorship (File: NEW) – Sharon McManus (next meeting)
- 6.6.2. Class Size – Terry Lindgren (oral) (9:00)
- 6.6.3. Long-Range Strategic Planning – Steve Mills (oral)
- 6.6.4 Cost Savings Task Force – Xuan Kong (oral)
- 6.7 SMART Goals Progress Updates – Steve Mills (revised page 6 in addendum) (9:10)
- 6.8 July School Committee Workshop Review – Brigid Bieber (9:20)
 - 6.8.1. Attachment A.School Comm Assignments - July Workshop (addendum)
- 7.0 **NEW BUSINESS** (9:25)
 - 7.1 Recommendation to Approve ABRHS Varsity and JV Baseball teams’ overnight field trip to Easton, PA, 4/29/11 – 5/1/11 – **VOTE** – Steve Mills
 - 7.2 Change to ABRHS Student Handbook Policy re Captain’s Rule (page 35)– **VOTE** - Alixe Callen (9:30)
 - 7.3 Discussion with Acton Boxborough Youth Soccer (ABYS) regarding lower playing fields – Steve Mills (oral) (9:40)
 - 7.4 Acton Town Meeting Plan – Brigid Bieber (oral)
 - 7.5 Recommendation: ABRSD Participation in School Choice 2011-2012 – **VOTE** – Steve Mills, (9:45)
 - Proposed Motion: To participate in the state’s School Choice program for 2011-12 by only accepting siblings of existing Acton-Boxborough Regional High School Choice students, and current 6th grade Choice students from the Blanchard School in Boxborough who will be entering R.J. Grey Junior High School in grade 7.
 - 7.5.1. School Choice data
 - 7.6 Recommendation to Accept Gift from The Madison Group – **VOTE** – Steve Mills (addendum)
- 8.0 **FOR YOUR INFORMATION** (9:50)
 - 8.1 ABRHS
 - 8.1.1. Discipline Report, February 2011
 - 8.1.2 Gift to Lazarus House from ABRHS Boys Varsity Basketball Team’s annual Youth Holiday Clinic, 12/10
 - 8.1.3 Spring Coaches (addendum)
 - 8.1.4 \$400 Gift from The Acton Lion’s Club for Alternative Program’s trip to Merrowvista (addendum)
 - 8.2 RJ Grey Junior High
 - 8.2.1. Discipline Report, February 2011 (addendum)
 - 8.3 Pupil Services
 - 8.3.1. ABRSD ELL Student Population, February 2011
 - 8.3.2 On Team newsletter (addendum)
 - 8.4 Curriculum Update
 - 8.4.1 Race To Nowhere Panel, March 15 at 7 p.m. in High School Auditorium
<http://www.racetonowhere.com/home>
 - 8.4.2 Boston Globe Scholastic Art Awards

- 8.5 FY'11 Monthly ABRSD Financial Reports
- 8.5.1. Budget Status Summary
 - 8.5.2. Budget Status Summary – Special Education
- 8.6 Correspondence from the Community
- 8.6.1 Homework Pressures
 - 8.6.2. Budget Concerns (10 citizens' emails) (*addendum*)
 - 8.6.3. Where Can I View the Budgets? (*addendum*)
 - 8.6.4. School Budget Feedback (*addendum*)
 - 8.6.5. Concerns about School/Town Planning (*addendum*)
 - 8.6.6 Remember the Private Money and Time Donated to the Schools (*addendum*)
- 8.7 Enrollment Report/Class Size Numbers – February 1, 2011
- 8.8 RJGJHS Project Wellness, “Creating Connections” - March 23rd at Merrimack College
- 8.9 *Lamplighter*, December 2010, posted at www.ab.mec.edu
- 9.0 AB SC ADJOURNS and APS SCHOOL COMMITTEE MEETING BEGINS (10:00)
- 9.1 ALG Review and Possible Revote of APS FY'12 Budget – *John Petersen/Don Aicardi*
- 10.0 NEXT MEETINGS: (10:05)
- March 17 at 7:30 pm, APS SC Meeting at Gates School
 - March 24 at 7:30 pm, Joint SC Meeting at RJ Grey JH Library (serves as April meetings)
 - March 29 at 9AM – 2PM, *MASC Day on the Hill* at the State House, Boston
- 11.0 ADJOURN (10:10)

ALG Minutes March 9, 2011—draft

Present: Lauren Rosenzweig Morton, Mike Gowing, BoS; Mary Ann Ashton, Bill Mullin, FC; John Petersen, Xuan Kong, SC; Steve Ledoux, John Murray, Steve Mills and Don Aicardi, staff. Absent: Bart Wendell

This was a special ALG meeting with one item on the agenda: Three year plan and logistics for Town Meeting.

Lauren took over the duties of facilitator in the absence of Bart

Extra info: ALG SPREADSHEET

S. Mills reported that the FinCom had endorsed their plan of lowering assessment; using the savings from the HIT and then they voted to recommend the schools' budget

Lauren reported that the BoS had agreed to use 2% lower than House I for FY 12; agreed with Mary Ann's statement on the assumptions; 3% increase; not to tax the \$293k.

John P. SC met last night & reviewed the ALG plan. The SC affirmed the numbers for Ch. 70 and agreed to use 2% down from House I. They also agree to the use of E&D and free cash in the ALG plan.

However he noted that the SC believes that the 3% increase for FY 13 & 14 is not adequate for the needs of the schools. He suggested that 3.5% was more realistic.

Mary Ann reported that the FC met & was fine with the revenue assumptions. They heard the request from the SC for an increase in FY 13 & 14. They will go with [print in the warrant] the 3% and follow Bill's suggestion that that 3.5% be footnoted and the impact/range given.

There was a general discussion on how best to present the assumptions for the out years of FY 13 & 14. There was a move to do different scenarios using the different percentages and carrying it through to the tax rates needed.

S. Mill expressed concern that if the assumptions locked the schools into a 3% increase and a 5% was needed—he was not clear on how the assumptions could be changed

Mary Ann said that the beauty of this process was that in a few short weeks all came together to reach the target budget numbers and the sense of the three is to meet the level service budgets. If we put in the 3.5% now, we will be moving away from level service. The process will look at other numbers---but not today.

John P. asked for the use of staff time to work on the gap between revenue and expenses---since they were using conservative numbers at the outset.

Lauren said she agreed but that the warrant needed to go to press and there was not the time now.

Mary Ann asked for agreement on changes in the spreadsheet that included the removal of FY 10 and adding the tax impact. She will work with Do to check on the numbers that show FY 13 with a \$881k positive; FY 14 with \$1097 positive.

There was continued discussion on how to change the ALG plan for the future & the possibilities of using more reserves.

Xuan expressed his particular concern that the real needs of the schools which had not been met by the level service budgets would continue as unmet needs

Lauren said that it was important for the voters at Town meeting to understand what was being done.

It was suggested and agreed that the surplus revenue use would be placed closer to the bottom of the sheet---nearer to the totals.

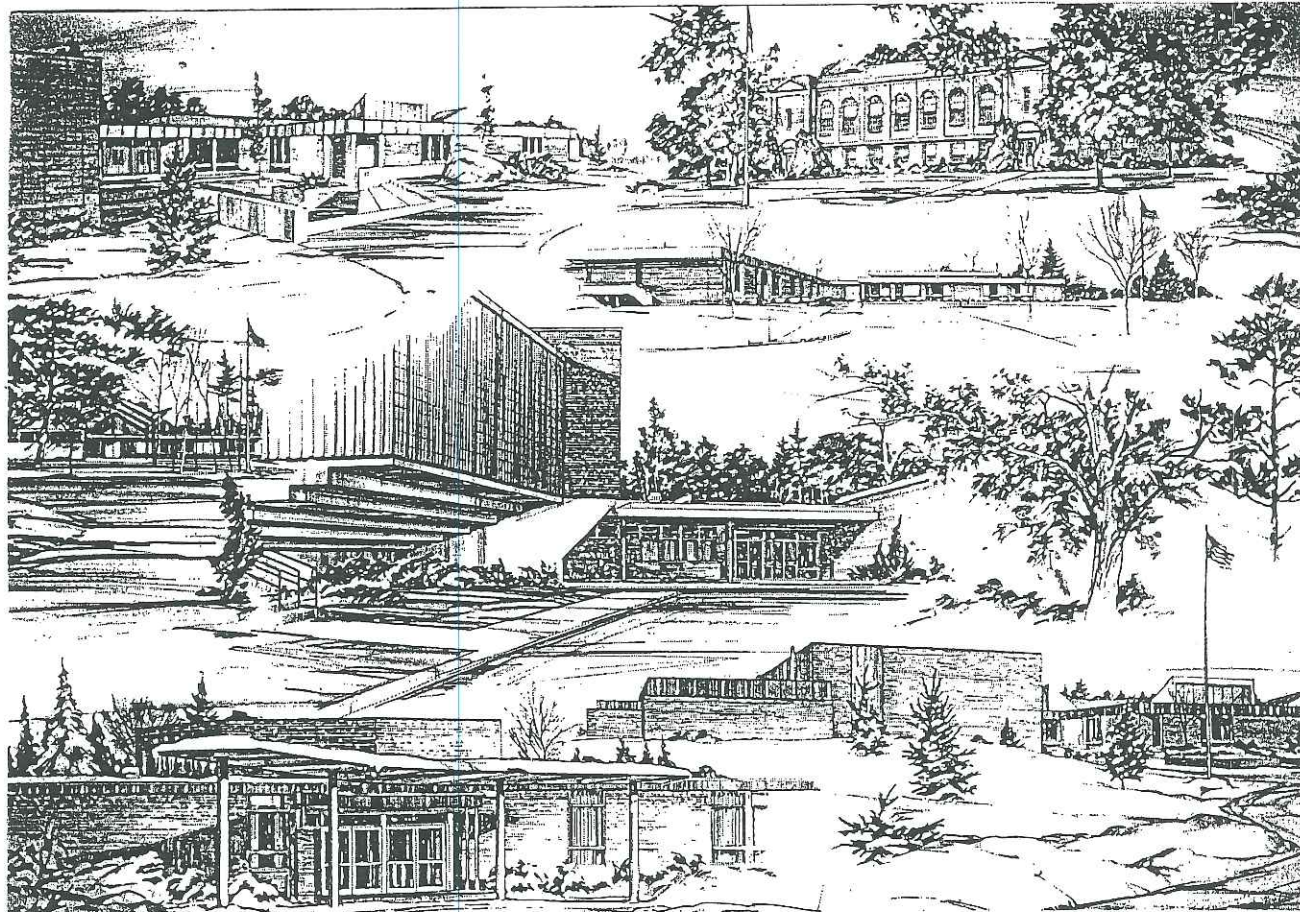
There was also the suggestion that there be an ALG meeting after Town meeting where the "old" members would meet with the new & explain what had happened this year, the assumptions, revenue sources and where the surplus stood and unmet needs for both the schools & Town.

At the close, people expressed their appreciation of Lauren's tenure on the BoS and her participation in the ALG

Adjourned—7:50

Ann Chang

ACTON PUBLIC SCHOOLS
ACTON, MASSACHUSETTS



PROPOSED BUDGET
Academic Year 2011-2012

Spring 2011

5,53,
(A)

ACTON PUBLIC SCHOOLS

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It's All About Instruction...

The School Committees welcome your attendance and participation at the upcoming Town Meetings. Currently, the proposed FY'12 operating budget for the Acton Public Schools (K-6) is \$26,113,719, up \$203,270, or 0.78% over the FY'11 budget. Similarly, the proposed total budget for the Acton-Boxborough Regional School District (7-12) is \$38,502,351, up \$273,941, an increase of .72% over the FY'11 budget. The combined local and regional proposed budgets (K-12) will increase by \$477,211, or .74 %. My goal for this fiscal year for both budgets was to achieve "level service"; while keeping the annual increase as low as possible. This was easier to achieve due to the \$973,000 in reductions from the FY'10 budget(s) to the FY'11 budget(s). The significant factors in the FY'12 budget are:

- 1) **Salaries:** Salaries and wages show an increase of \$968,665; this increase includes changes in steps and lanes for union and non-union staff, with small increases for all three collective bargaining units that were settled during the course of FY'11.
- 2) **Health Insurance:** Health insurance costs will actually go down by \$356,724. This has been accomplished by negotiating with our three collective bargaining units to have all employees increase their portion of health insurance costs (depending on the plan) from 15% to 25% or from 15% to 50% beginning in FY'12. Also, due to a favorable year in terms of health insurance claims, the Health Insurance Trust approved increases averaging approximately 3% which contributed to slowing the growth in health insurance for FY'12.
- 3) **Other Costs:** A decrease is being projected in K-12 Special Education out-of-district tuition of \$337,165 over the FY'11 budgets. This decrease is being achieved by utilizing \$372,000 (\$244,000 for Acton-Boxborough; \$128,000 for Acton Public) in FY'11 budget capacity created by federal ARRA IDEA grants to move eligible expenses from FY'12 to FY'11. Also, through a combination of conservation measures and a favorable rate for natural gas, utilities savings are also projected to decrease by \$253,085 from the FY'11 budgets.

Our proposed school budgets for FY'12 assume that state educational aid (Chapter 70) will be reduced eventually by two (2) percent from the Governor's proposed budget (House 1). The complexities of balancing the state budget due to the severity of the recession make it unlikely that the final amounts of state aid will be confirmed before the Acton and Boxborough Town Meetings.

We deeply appreciate the community's support for our public schools. The combined budgets for both school districts will meet our stated goal of continuing to provide "level service" for our students for the upcoming year, no small feat due to the uncertain financial times. Cognizant of the financial pressure that is affecting households across the state, I am confident these budgets still contain sufficient resources so that the dedicated staff of the Acton Public and Acton-Boxborough Regional Schools can continue to provide a high quality school experience for our students. I encourage you to review the extraordinary school highlights detailed on page 7. I am sure that you'll agree that we have much to be proud of.

Thank you for your support in my second year as your Superintendent of Schools.

Stephen E. Mills, Ed.D.
Superintendent of Schools

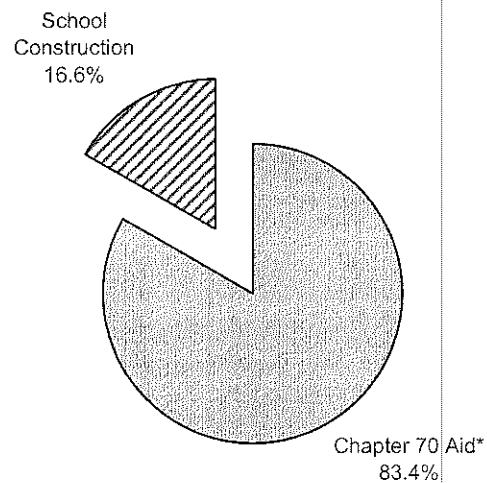
Acton Public Schools
Proposed FY'12 Budget by School Object Summary

	2009 Budget	2009 Expended	2010 Budget	2010 Expended	2011 YTD Budget Thru 3/10/11	2011 YTD Budget Thru 3/10/11	2012 Request	\$ Diff 2011 Budget	% Chg 2011 Budget
Salaries, Teaching 01	11,322,438	11,196,553	11,589,980	11,549,008	12,053,190	11,488,919	12,068,520	15,330	0.13%
Salaries, Principals 02	523,250	527,932	534,285	529,497	532,710	706,187	722,790	190,080	35.68%
Salaries, Central Ad 03	397,684	400,053	408,505	402,001	405,664	396,131	409,758	4,094	1.01%
Salaries, Supp Staff 04	2,870,377	2,723,707	2,776,490	2,715,039	2,949,771	2,623,972	3,058,357	108,586	3.68%
Salaries, Buildings 06	240,867	248,516	247,342	254,044	247,342	249,680	254,609	7,267	2.94%
Salaries, Custodial 07	653,683	697,286	671,236	656,298	658,951	574,126	636,492	(22,459)	-3.41%
Salaries, Home Instr 08	1,025	1,635	1,051	341	1,019	-	1,019	-	-
Salaries, Substitute 09	216,698	274,579	266,973	393,539	265,973	217,957	375,375	109,402	41.13%
Fringes, Course Reim 10	17,000	19,551	17,000	10,815	17,000	9,068	17,000	-	-
Fringes, Health Insu 11	3,626,548	2,991,412	3,792,778	3,517,487	3,628,313	2,831,084	3,697,937	69,624	1.92%
Instructional Suppli 16	236,979	229,583	239,839	244,160	232,400	195,699	243,860	11,460	4.93%
Instructional Textbo 17	90,721	123,791	70,736	123,278	83,379	60,999	81,613	(1,766)	-2.12%
Instructional, Libra 18	19,806	17,097	18,347	18,426	17,042	16,734	16,425	(617)	-3.62%
Other, Capital Outla 19	300,209	351,150	273,560	449,828	262,688	214,550	272,850	10,162	3.87%
Other, Maintenance B 23	206,310	258,793	211,468	218,829	211,468	153,563	212,003	535	0.25%
Other, Maintenance O 24	103,092	97,892	97,993	86,211	83,998	73,861	93,828	9,830	11.70%
Other, Legal Service 26	73,000	65,560	65,000	91,621	65,000	11,431	58,000	(7,000)	-10.77%
Other, Admin Supplie 27	223,464	194,421	223,358	184,980	189,879	129,228	197,464	7,585	3.99%
Other, Custodial Sup 29	44,000	46,887	45,100	61,768	45,100	38,852	46,700	1,600	3.55%
Other, Sped Transpor 30	395,484	380,565	526,497	518,060	446,033	446,033	510,715	64,682	14.50%
Other, Student Trans 31	330,458	332,130	338,716	326,361	338,716	296,336	349,236	10,520	3.11%
Other, Travel 32	13,932	11,757	13,340	10,319	11,761	8,374	14,638	2,877	24.46%
Other, Sped Tuition/ 33	2,077,034	1,902,878	2,304,524	2,287,723	2,192,407	2,002,473	1,920,318	(272,089)	-12.41%
Other, Utilities 34	990,259	874,152	1,019,664	836,996	970,645	502,916	854,212	(116,433)	-12.00%
Other 57	-	-	-	-	-	-	-	-	100%
Other Financing Uses 59	-	-	-	-	-	-	-	-	100%
TOTAL FUND: General Fund School	24,974,318	23,967,878	25,753,782	25,486,627	25,910,449	23,248,175	26,113,719	203,270	0.78%

Note: FY09 health insurance of \$549,814 was charged to ARRA SFSF Grant due to underfunding of FY09 Chapter 70 school aid.

FY '12 APS State Revenue Estimates

Chapter 70 Aid*	\$5,084,466
School Construction	\$1,009,458
	\$6,093,924



** 2% Reduction in Governor's Budget

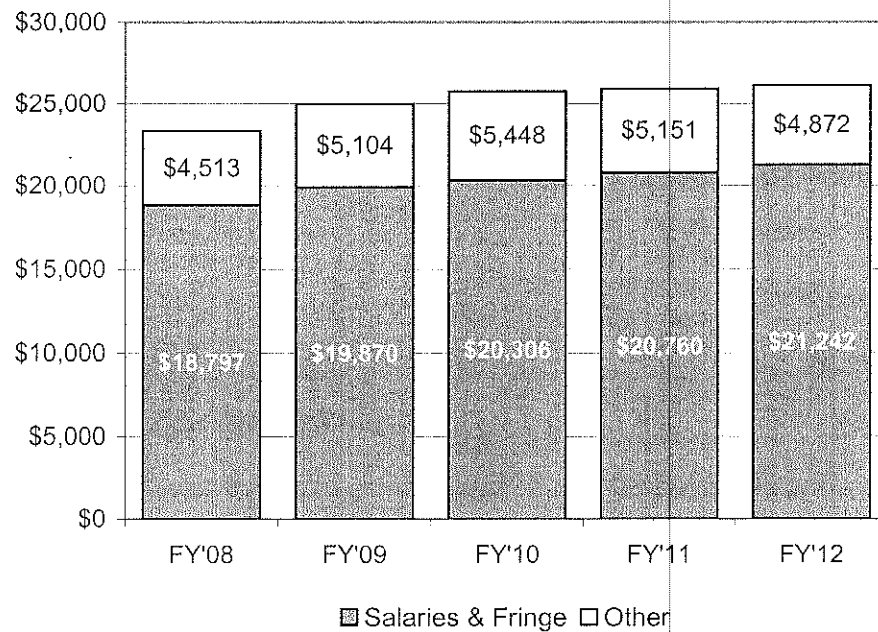
Chapter 70 State Aid

FY97	\$1,137,052
FY98	\$1,303,732
FY99	\$1,533,103
FY00	\$1,970,239
FY01	\$2,363,989
FY02	\$2,542,729
FY03	\$2,668,321
FY04	\$2,603,014
FY05	\$2,603,014
FY06	\$2,723,714
FY07	\$3,214,302
FY08	\$4,283,795
FY09*	\$4,678,327
FY10	\$5,123,578
FY11	\$5,160,527
FY12 (Est.)**	\$5,084,466
Total	\$48,993,902

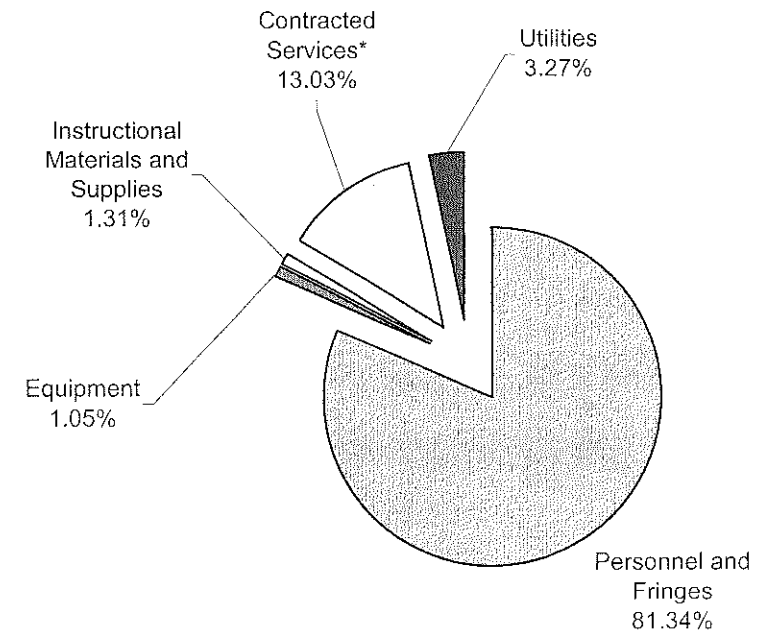
*Federal ARRA SFSF funds of \$549,814 covered shortfall in Chapter 70 funds

** 2% Reduction in Governor's Budget

APS History of Budget (thousands)

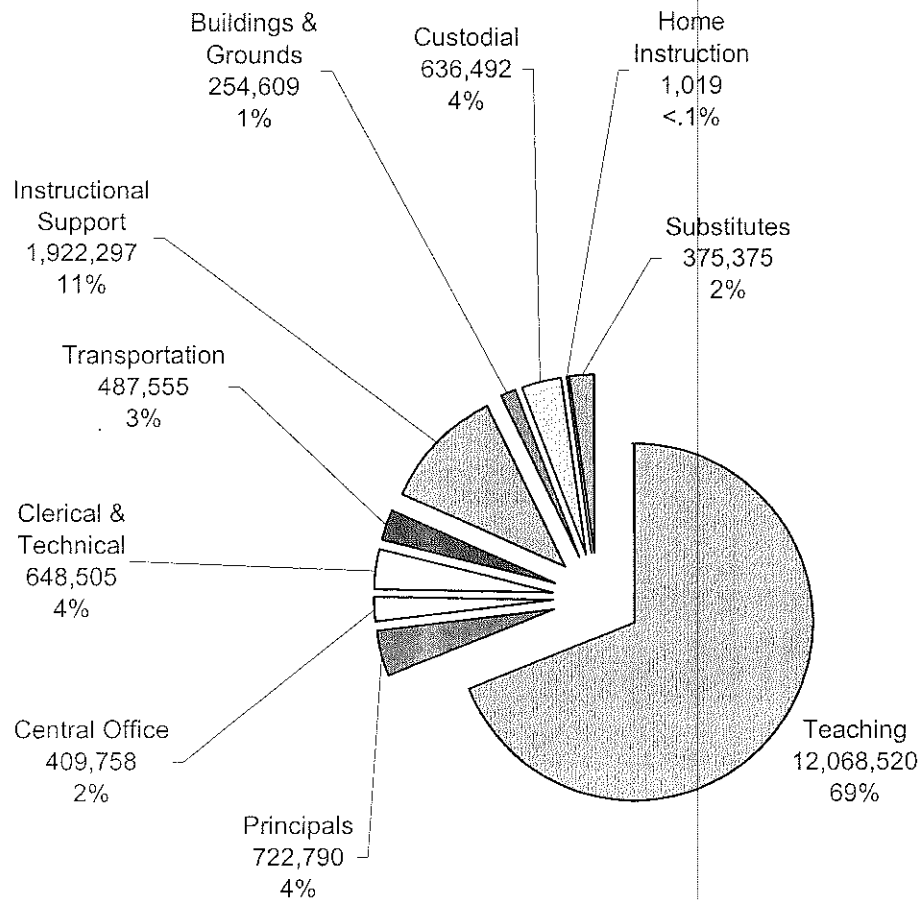


APS Budget Categories - FY '12

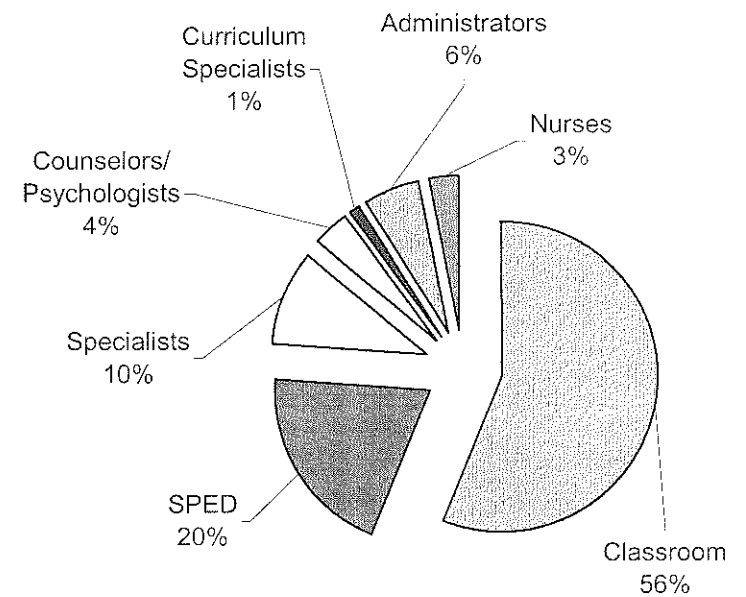


*Includes SPED tuition, student transportation, legal services, etc.

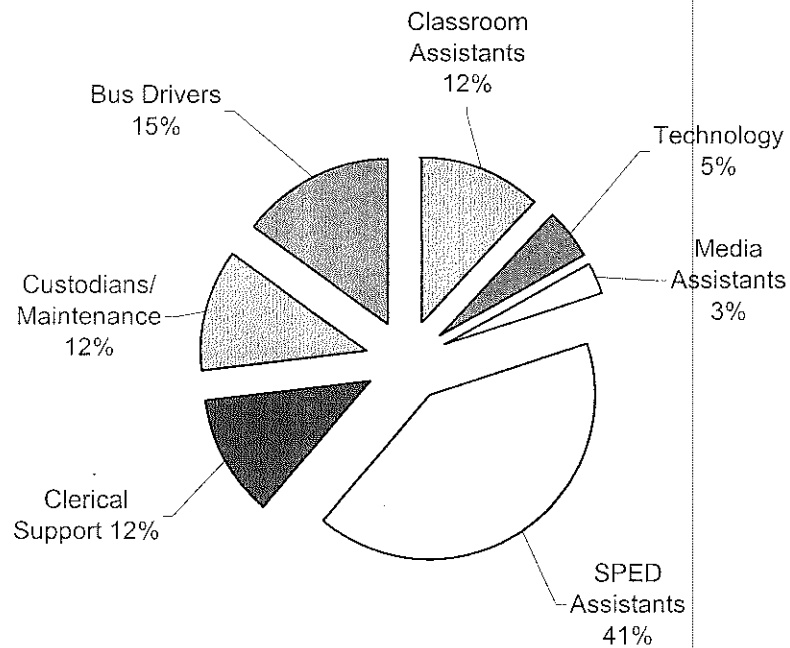
APS Personnel Breakdown by Dollars FY '12



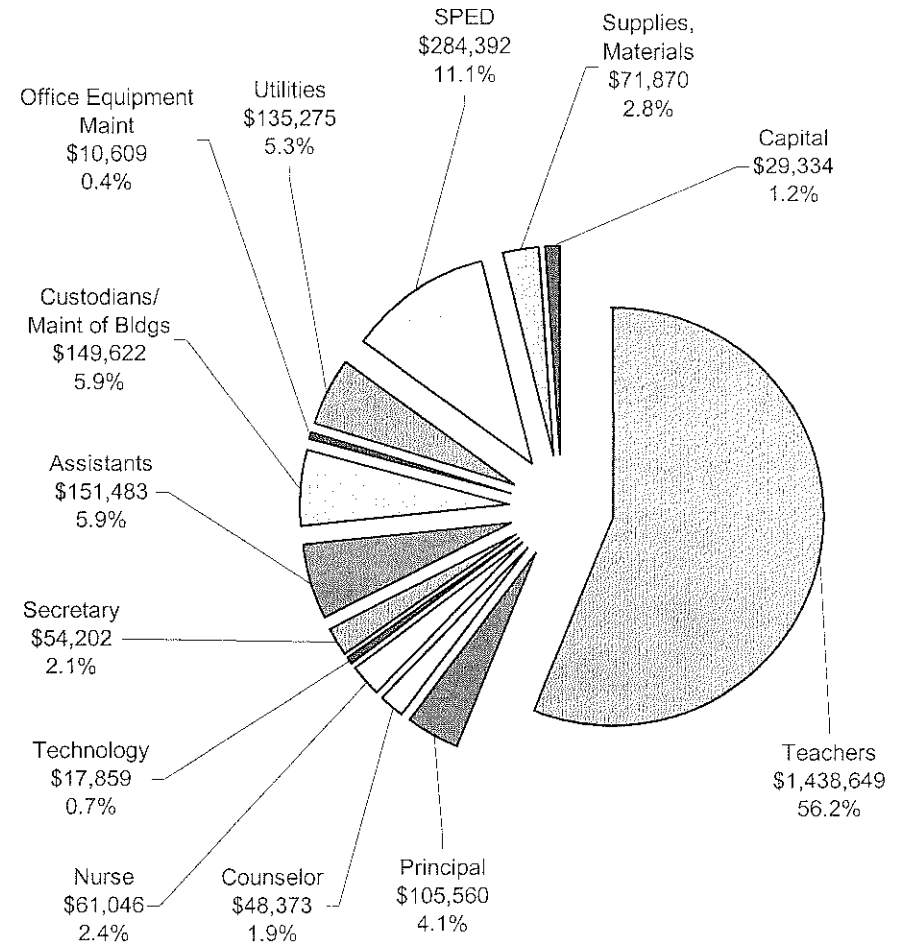
Acton Public Schools FTEs by Certified Positions 2011-12



Acton Public Schools FTEs by Non-Certified Positions 2011-12



Typical Acton Public School (not including system-wide costs)



This illustration shows the varied costs associated with operating an Acton elementary school and their relationship to each other. It is not an exact representation. (FY'10 data used in example.)

Per Pupil Expenditures*

Lincoln	\$21,812
Concord-Carlisle	\$18,872
Concord	\$16,438
Lincoln-Sudbury	\$16,324
Lexington	\$15,862
Carlisle	\$15,230
BOXBOROUGH	\$14,366
ACTON-BOXBOROUGH	\$13,110
Harvard	\$13,105
Massachusetts Average	\$13,093
AB/APS AVERAGE	\$12,178
Sudbury	\$11,801
ACTON	\$11,246

**Based on all school operating expenditures,
2009-10, Mass.Dept. of Elementary and
Secondary Education*

School Highlights

All Elementary Schools

- School-Business Partnerships are flourishing with the support of many local companies.
- PIP (Parent Involvement Program) sponsored 3rd and 5th grade Market Math at Roche Brothers.
- Annual Acton/Boxborough 4th grade Star Party was held in March.
- Annual Youth Art Month Show was exhibited at the Worcester Art Museum during the month of March.

Conant

- Community service projects included valentines for overseas troops, a food drive for Acton Community Supper, a fundraiser for Emerson Hospital and a toy drive for Toys for Tots.
- Visiting Author/Illustrator Grace Lin shared her life and career experiences.
- New Enrichment classes include Gross Science, Dance, Cheerleading, Wicked Cool Drawing and Chess.
- Kindergarten, First, Third, and Fifth Grades presented plays to parents and friends.
- International families shared their cultures and customs during an evening with the visiting giant map of Asia.
- Conant is celebrating its 40th anniversary this year!

Douglas

- Kindergartners toured the Acton Post Office.
- 1st graders "traveled" to China and Antarctica.
- 2nd graders held a Fairy Tale Gala.
- 3rd graders competed in Mouse Madness.
- 4th graders created rivers and estuaries to study erosion.
- 5th graders hosted breakfast with Shakespeare.
- 6th graders performed Annie and will perform The Little Mermaid.
- All students collected backpacks of school supplies for Free The Children in Haiti.

Gates

- Winter chorus and band concerts, Seasonal Sing-a-Long
- Community Service Projects: Household Goods Recycling Ministry, Giving Trees, and Pennies for Peace,
- Gates Talent Show
- All School Flash Mob
- Giant Map of Asia Family Night
- Invention Convention
- Kindergarten Medieval Feast

McCarthy-Towne

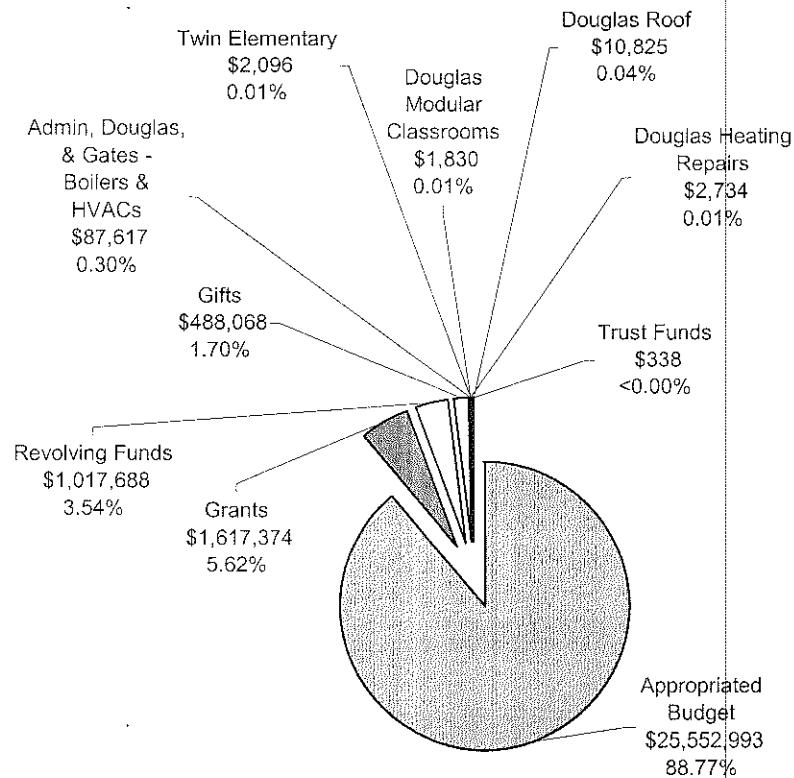
- Field trips to Concord Museum, Haartz Corporation, Museum of Fine Arts Boston, Boston Children's Museum
- Student Council sponsored Emergency Food Drive for Acton Food Pantry.
- 6th grade hosted "Egyptian Open House" for students and parents.
- Teacher and staff read-aloud fundraiser at Willow Books for "Teachers and Families as Literacy Partners" program for incoming kindergarten and 1st grade families
- Winter Band Concert
- Celebrated Dr. Suess's birthday and Read Across America Day and voted for favorite Dr. Suess book. ("Yertle the Turtle" won.)

Merriam

- Student-led conferences were held in all grades.
- Second annual Staff/PTO b-ball game was a huge success.
- Celebration of Annual Literacy Week was held in March, culminating with a "Storybook Character Dress-up Day."
- PTO/School Council sponsored an informative presentation on Bully Prevention by Meredith Shaw, of the Open Circle Program at Wellesley College.
- Teachers and other representatives from a school in El Salvador visited the two partner classrooms at Merriam.
- An administrative team from Regina, Saskatchewan will be visiting in April to learn more about our educational philosophy at Merriam.
- Math Games Night (for Merriam families) will be held in April.
- Preparations are underway for Spring Theme Day, "Our Core Values in Action."

FY '10 Total APS Expenditures

(This graph represents the total APS expenditures from appropriated and non-appropriated sources from the last complete fiscal year.)



Total: \$28,781,563

Acton Public Schools Grant Awards FY '11*

Grant #	FY '10 APS Grants	Amount	Funding Source
140	Title II Part A Teacher Quality	\$37,474	Federal Entitlement
240	SPED Entitlement	\$560,687	Federal Entitlement
262	Early Childhood/SPED	\$24,633	Federal Entitlement
305	Title I	\$52,636	Federal Entitlement
331	Title IV	\$2,697	Federal Entitlement
760	ARRA SPED IDEA	\$286,442	Federal Entitlement
762	ARRA Early Childhood	\$22,334	Federal Entitlement
780-B	SFSF Federal Grant	\$27,704	Federal Entitlement
206	Education Jobs Grant	\$353,078	Federal Entitlement
	Big Yellow School Bus	\$600	Competative
	Teaching American History	\$6,800	Competative (Reimbursement)
Total		\$1,375,085	

*Funding Period: September 2010 - August 2011

Acton Public Schools

<u>Grade</u>	<u>Number of Students</u>								Projected
	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>
Preschool	39	43	45	46	44	38	58	41	41
K	335	330	308	311	294	304	340	328	294
1	350	353	353	316	325	328	336	353	349
2	369	365	360	371	341	341	351	344	372
3	361	377	374	376	389	351	363	346	356
4	357	366	382	377	394	382	361	374	353
5	368	363	376	389	385	404	392	364	381
6	352	382	372	392	399	386	408	395	370
Other SPED	<u>22</u>	<u>23</u>	<u>21</u>	<u>25</u>	<u>27</u>	<u>25</u>	<u>14</u>	<u>18</u>	<u>14</u>
Totals	2553	2602	2591	2603	2598	2559	2623	2563	2530
"School Choice"/tuition students included ->	12	12	9	14	13	15	20	28	33

* Enrollment Subcommittee Projections

<u>Number of Certified Staff</u>									
K-6	164.22	165.57	165.87	165.49	165.58	167.28	166.93	170.26	170.26
System Wide	<u>3.46</u>	<u>3.46</u>	<u>3.46</u>	<u>3.46</u>	<u>3.46</u>	<u>3.46</u>	<u>3.46</u>	<u>3.76</u>	<u>3.76</u>
Totals	167.68	169.03	169.33	168.95	169.04	170.74	170.39	174.02	174.02

Average Teacher's Salary**

\$56,624	\$58,936	\$60,099	\$62,162	\$64,495	\$67,695	\$70,796	\$71,585
----------	----------	----------	----------	----------	----------	----------	----------

** can only
determine with
actual '11-12 teacher

Acton Public Schools (continued)

Number of Non-Certified Staff

<u>Grade</u>	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	Projected <u>11-12</u>
K-6	85.90	76.92	78.63	86.62	93.02	96.69	89.54	94.75	94.75
System Wide	<u>29.95</u>	<u>28.98</u>	<u>31.94</u>	<u>32.08</u>	<u>32.28</u>	<u>33.28</u>	<u>31.72</u>	<u>31.35</u>	<u>31.35</u>
	115.85	105.90	110.57	118.70	125.30	129.97	121.26	126.10	126.10

Class Size Information*

Average Class Size	23.1	23.3	23.4	23.4	23.6	23.0	23.6	23.2
Class Size Range	18 to 26	20 to 27	19 to 26	17 to 26	18 to 28	19 to 27	20 to 26	19-26
# Below 20	3	0	1	5	7	5	0	2
# Above 25	7	7	2	8	22	5	1	1

* Class size information for 11-12 can only be determined once students are assigned

2010-2011 Acton School Committee

John Petersen, Chairperson

Michael Coppolino

Herman Kabakoff

Xuan Kong

Terry Lindgren

Sharon Smith McManus

Central Administration

Stephen Mills, Superintendent

Donald Aicardi, Director of Finance

Marie Altieri, Director of Personnel and Administrative Services

Erin Bettez, Director of Community Education

Amy Bisiewicz, Director of Educational Technology

Deborah Bookis, Director of Curriculum and Assessment

J.D. Head, Director of Facilities

Liza Huber, Director of Pupil Services

School Administration

Damian J. Sugrue, Principal, Conant School

Christopher Whitbeck, Principal, Douglas School

Lynne Newman, Principal, Gates School

David Krane, McCarthy-Towne School

Edward Kaufman, Principal, Merriam School

NOTICE OF NONDISCRIMINATION

The Acton Public and Acton-Boxborough Regional School Districts do not discriminate on the basis of race, color, national origin, limited English proficient, gender, age, religion, sexual orientation, veteran status, handicap or homeless in admission or access to, or treatment or employment in, its programs, and activities.

Any person having inquiries or complaints concerning the Acton Public and Acton-Boxborough Regional School Districts' compliance with Title VI, Title IX, Section 504, ADA or MGL ch. 76, sec. 5 is directed to contact the Director of Pupil Services, Administration Building, 15 Charter Road, Acton, MA, telephone number 978-264-4700, x3265, who has been designated by the Acton Public and Acton-Boxborough Regional School Districts to coordinate the Districts' efforts to comply with these laws, or write to the Office for Civil Rights, J. F. Kennedy Federal Building, Room 1875, Boston, MA 02203, or the Massachusetts Department of Elementary and Secondary Education, Office of Program Quality Assurance Services, 75 Pleasant Street, Malden, MA 02148.

INTEROFFICE MEMORANDUM

TO: APS AND ABRSD SCHOOL COMMITTEES
FROM: AMY HEDISON ON BEHALF OF THE CLASS SIZE TASK FORCE
SUBJECT: RESEARCH ON CLASS SIZE
DATE: 3/22/2011
CC:

Attached please find four items relating to the importance of smaller class sizes, particularly in the earliest grades. Two articles are review articles, one is a more complete article, and one is a quote from a speech that Secretary of Education Arne Duncan gave to the American Enterprise Institute last December. In the speech Secretary Duncan was acknowledging the financial issues facing local school districts and the fact that some class sizes were likely to go up. This sentence comes from that part of the speech. Where appropriate, web sites have been included.

I have not included the seminal research on class size, the STAR Project (Student/Teacher Achievement Ratio), however, if you are not familiar with it, you can access a summary of the results of the study at <http://www.heros-inc.org/summary.pdf>.

5.8.2.
A

Up through third grade, research shows a small class size of 13 to 17 students can boost achievement.

From Secretary Duncan's speech to the AEI in December 2010

<http://www2.ed.gov/offices/OESE/ClassSize/reports.html>

Archived Information

Class-Size Reduction Myths and Realities

Myth 1: Reductions in class size have very little impact on student achievement.

Reality: Studies have consistently identified a positive relationship between reduced class size and improved student performance.

Results from the Tennessee Project STAR (Student/Teacher Achievement Ratio) study have continually demonstrated that reducing class sizes in grades K-3 to 13-17 students substantially increases children's reading and mathematics scores. These gains are particularly significant among minority and economically disadvantaged students. The Project STAR results have been confirmed by many other researchers, including those studying Wisconsin's SAGE (Student Achievement Guarantee in Education) Program, and in the CSR Research Consortium's early analysis of the California class-size reduction effort. As in Project STAR, students participating in the SAGE and California class-size reduction programs outperformed their counterparts in larger classrooms on standardized tests. In both the Tennessee and Wisconsin efforts, these benefits were strongest among African-American students who had larger gains than their white counterparts, again suggesting that reduced class sizes are a highly effective method of closing the "achievement gap" between black and white students.

The Administration's proposal to reauthorize ESEA and the Class-Size Reduction Program represents an effort to expand the success of these programs in schools across the country. The proposal would focus class-size reduction on the early grades, 1-3, particularly in high-poverty communities that are most in need of support and where the research shows that dollars can have the greatest impact on student performance.

Myth 2: The effects of class-size reduction can only be seen at the kindergarten level and the impact is short-lived.

Reality: The benefits of class-size reduction are seen in kindergarten and through grades 1-3, and the effects are long lasting.

Analyses of the STAR results confirm statistically significant differences in achievement among students who attended small classes for one, two, three or four years. Although one year in smaller classes resulted in increased achievement, the benefits of smaller class sizes in the early grades increased as children spent more years in the smaller classes. In addition to initial

benefits, there are long lasting effects on student achievement that result from reducing class sizes. Recent findings from Tennessee's Project STAR study demonstrate that students attending small classes in grades K-3 outperformed their counterparts on standardized tests in grades 4, 6 and 8; continued to outperform classmates at the high school level; took more advanced classes; were less likely to be retained a grade or drop out of high school; and were more likely to prepare for college by taking college entrance exams. Additionally, black students who attended smaller classes in the early grades were more likely to take the ACT or SAT, raising their prospects of attending college and cutting the black-white gap in numbers of students taking college entrance exams in half.

However, researchers have found that in order to optimize the carryover benefits of small classes in the early grades through the later grades, it is necessary for students to spend at least three years in small classes. The advantages of attending a small class for the four years encompassing kindergarten through third grade are equivalent to receiving an additional six months to fourteen months of schooling.

Myth 3: The explanations and conclusions of the STAR findings are flawed.

Reality: A variety of studies confirm the findings of the STAR study.

Since the introduction of the Tennessee class-size reduction effort in 1985, the original STAR database has been analyzed time and again by numerous and diverse researchers through a variety of approaches, methodological perspectives, and statistical applications. Despite these differences, the findings have been consistent--students who participated in smaller classes in grades K-3 performed at higher levels than their peers in larger classes, and these effects continued through the end of high school. In addition, SAGE data and early findings from the California effort confirm STAR's findings on the positive effects of class-size reduction.

Myth 4: There are hundreds of separate studies of the effect of "pupil-teacher ratios" on student achievement; only a handful suggests a positive relationship between reductions in class size and improvements in student performance.

Reality: There is an important distinction between class size, which is the number of students for whom a teacher is primarily responsible, and pupil-teacher ratio, which is the number of students per adults in a school (administrators, counselors, etc.). As a result, many studies have not accurately addressed the effect of reduced class sizes.

Data on pupil-teacher ratios reflect the total number of teachers and students at any time, not how they are used or impact the classroom. As a result, pupil-teacher ratios are often skewed by specialized instruction (as in special education), teachers in supervisory and administrative roles, librarians, music, art, and physical education teachers. As a result, these analyses often attempt to draw relationships in situations that do not reflect actual class size.

To be useful, studies of the effect of class-size reduction on student achievement require the surveying of individual districts about their assignment practices. Both Tennessee's STAR and

Wisconsin's SAGE have surveyed individual districts and grades within those districts for class size differences and found significant differences in achievement for students in smaller classes.

Myth 5: While existing studies do show that variations in class size can influence performance, no one has been able to identify the overall circumstances that lead to the positive effects; it is premature to develop federal policy in the absence of this information.

Reality: The Project STAR study was scientifically designed so that the only variable altered was the size of the classes, and was hence able to conclude that smaller class sizes alone do have a positive impact on student achievement. However, to maximize these benefits, effective teaching strategies are needed. Effective teacher research suggests that certain teaching strategies and skills, particularly those that actively engage students in the learning process, lead to improved student learning when combined with smaller classes.

Among these characteristics of good teaching is the ability to communicate challenging content; involving students in hands-on experiences; providing clear and immediate feedback; and supporting family involvement. As evidenced in the research base and as seen in existing class-size reduction programs in many states, smaller classes afford more opportunity to implement all of these activities. In addition, the Federal Class-Size Reduction Program allows local school districts to reserve up to 15% of their funds to support professional development that can help all teachers better meet the needs of every student.

Myth 6: The implementation of California's class-size reduction initiative demonstrates the negative impact of such efforts.

Reality: Findings from year one of an ongoing evaluation of the California initiative show positive achievement gains, despite challenges with respect to "overnight" implementation, teacher quality and supply, space constraints, and funds for new classrooms.

In July 1996, California passed legislation to reduce class size in the early grades. The state rapidly invested \$1 billion (followed by \$1.5 billion annually) in incentives to improve student achievement by reducing its kindergarten through third grade class sizes to 20 students. As a result, despite problems of limited space and too few qualified teachers, many schools reduced class size at least at one grade level in the six weeks between the passage of the legislation and the start of the school year. By the program's second year, almost all first and second grade class sizes had been reduced, along with two-thirds of third grades and kindergartens.

After just one year in smaller classes, third grade students showed a small, but statistically significant, gain in academic achievement, and this benefit was seen in all students across the board. Teachers reported being able to spend more time working individually with students. Furthermore, parents of students in smaller classes became more involved in their children's education as they were able to have more contact with teachers. Parents also expressed greater satisfaction with their children's education.

California's race to implement smaller classes in such a tight timeframe had a negative impact on teacher quality, as demonstrated by declines in the average education, experience, and

credentials of K-3 teachers. In two years, the K-3 teacher workforce increased by 38%, and the already weaker qualifications of teachers in schools with poor and minority students became worse. As a result, the state is considering a number of mid-course adjustments. These include addressing the increased need for space; increasing the focus on teacher quality, particularly in schools that serve high numbers of low-income and minority students; and targeting funds to high-poverty schools to offset the departure of teachers from poorer districts to higher income areas.

The Class-Size Reduction Program already targets funding to high-poverty communities to address the difficulty that schools in minority and high-poverty communities have in hiring and keeping the best teachers. California's effort did not target special resources to these communities. The Administration's program requires participating districts to hire certified teachers and allows them to use up to 15% of their federal class-size reduction funds to improve teacher quality. In addition, the program is flexible and will be phased in over seven years to allow schools and districts the planning time that is crucial to recruit, hire, and train large numbers of new staff.

Myth 7: Class-size reduction proposals do not address teacher quality, which is one of the most important factors in student achievement.

Reality: The Class-Size Reduction Program recognizes that both class-size reduction and improvements in teacher quality are necessary to achieve the most meaningful, lasting gains in student achievement and to close the achievement gap.

Though reducing class size in the early grades can improve instruction, efforts to reduce class size cannot be bought at the expense of placing students in classrooms with unqualified teachers. Even if classrooms are filled with fewer students, we cannot expect that students will achieve to their full potential if they are taught by unqualified teachers or by teachers who do not have professional development opportunities to learn the skills needed to teach to challenging standards. Early research on Project STAR confirms that, when combined with small classes, supporting teachers' knowledge and skills improves student learning and allows teachers to expand time spent focused on academics.

The Class-Size Reduction Program addresses these concerns and ensures teacher quality by: (1) requiring that Class-Size Reduction funds be used to hire only certified teachers; (2) targeting resources to the districts most in need of smaller classes and qualified teachers; (3) allowing districts to use up to 15% of their allocation to support teacher development; (4) gradually phasing in the implementation of smaller classes; (5) allowing districts to use the funds to recruit teachers creatively in a competitive market; (6) allowing flexibility at the local level for the placement of new teachers where they are most needed.

In addition, studies have shown that reducing class sizes can provide increased opportunities for teachers to teach better. Teachers participating in Wisconsin's SAGE program report having more time to spend actively teaching, spending less time on classroom management and student discipline, and being able to provide students with more individual attention. The recent study of

California's efforts found that teachers spent less time on distractions such as discipline, and more time one-on-one with students and attending to their individual concerns.

Myth 8: Class-size reduction efforts in the early grades are expensive in both the short and long term.

Reality: The cost of implementing smaller class sizes in the early elementary grades can be offset by the resulting decrease in within-grade retention's, reduced high school dropout rates, a diminished need for remedial instruction and long-term special education services, and increased teacher satisfaction and retention.

Some districts have experienced cost savings through implementing carefully structured class-size reduction programs. In addition, the latest reports from Project STAR estimate millions of dollars in savings from the reduced high school dropout and within-grade retention rates that resulted from smaller classes in the early grades.

For more information, please reference the following documents:

Available via the SAGE homepage: <http://dpi.wi.gov/sage/>

- Wisconsin's Student Achievement Guarantee in Education, Major Evaluation Findings 1996-1998
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- Krueger, A. and Whitmore, D. The effect of attending a small class in the early grades on college attendance plans, April 1999

Available via the CSR Research Consortium homepage: www.classsize.org

- CSR Research Consortium. Class Size Reduction in California 1996-98 - Early Findings Signal Concern and Promise, June 1999

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Preschool Policy Matters

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Class Size: What's the Best Fit?

by W. Steven Barnett, Karen Schulman and Rima Shore

Is class size an important influence on the quality and educational effectiveness of preschool programs? Teachers and parents generally believe so. Common sense suggests that smaller classes and higher staff-child ratios are better for young children, allowing more individual attention, reducing the time and effort devoted to classroom management, and reducing the number of stressful interactions. Yet, some states do not set limits on class size in their prekindergarten programs, and some researchers have suggested there is no causal link between class size and educational effectiveness. Of course, no one really believes that it doesn't matter how many preschool children are packed into a classroom. Thus, it is useful to consider what research has discovered about the relationship of class size to preschool children's experiences and outcomes.

The relationship between class size and cost also deserves consideration. Just as smaller classes benefit young children, smaller classes also cost more. Therefore policy makers and parents face a tradeoff. They must weigh the value of the gains to children from reducing class size against the costs. This is a difficult task, made more difficult by the fact that the costs are easily measured while the benefits may be hard to see and measure without rigorous research. This brief provides information on costs and guidance on comparing the benefits from smaller classes to those costs.

What We Know:

- Class size reduction is a policy that can increase educational effectiveness.
- Small class size and better staff-child ratios offer health and safety benefits.
- Most state preschool programs and the federal Head Start program do not require the small class sizes found to produce the large educational gains desired for disadvantaged students.
- Some state preschool programs set no limits on class size.
- Costs of class size reduction depend on the starting point, opportunities for more efficient allocation of staff, and the extent of cost-savings from lower administrative costs (from reduced turnover, for example).

Policy Recommendations:

- All states should set research-based program standards that jointly address class size, ratios, teacher qualifications and teaching practices.
- Reductions in class size can be phased in gradually and should be accompanied by adequate financial support so as to avoid unintended consequences.
- Policies that support teachers in adapting their teaching to smaller class sizes may maximize the benefits of class size reduction.
- Given the potential benefits and costs of class size reduction, the federal and state governments should conduct experiments with different class sizes to identify the optimal class size for classrooms with various mixes of children with economic and other disadvantages, including special education needs.

Policy and Research Effects on Class Size

To address these issues of the benefits and costs of smaller (or larger) classes, this brief reviews research on the following questions:

- *What are current state policies regarding class size?*
- *What are the effects of class size on quality and on children's learning and development?*
- *How does class size influence quality and children's learning and development?*
- *What are the costs of reducing class size?*
- *What can be done to get the greatest possible benefits from smaller class sizes?*
- *What additional research on class size is needed?*

Current State Policies

State policies on class size and staff-child ratios at ages 3 and 4 are reported in Table 1. Policies are described for two different types of programs. The first is state-funded prekindergarten. These primarily serve children at age 4, though a few serve children at age 3 as well. Thirty-eight states fund prekindergarten. The second type is child care. State licensing regulations for child care centers set limits on class size and staff-child ratios that vary by age of child. Thus, state policies may differ between 3- and 4-year-olds. Some states exempt one or more types of child care centers from state licensing so that class size regulations may not apply to all centers in a state.

The majority of states with prekindergarten initiatives set class size and ratio requirements that are consistent with standards developed jointly by the American Public Health Association (APHA) and the American Academy of Pediatrics (AAP) and with the recommendations of the National Association for the Education of Young Children (NAEYC) for 3- and 4-year-olds. Class sizes of no more than 20 children and ratios of no more than 10

students per teacher are recommended. Of the 45 state prekindergarten initiatives (plus the District of Columbia), 32 have both class-size and ratio requirements that are equal to or better than recommended levels. However, 13 of the state prekindergarten initiatives (some states have more than one initiative) fail to meet the recommended levels for class size and/or ratios. Several state prekindergarten programs set no limits for class size and/or ratios.

States also are responsible for setting class size and staff-to-child ratios for licensed child care centers. These licensing standards are more likely to be out of step with the standards recommended by national organizations than are prekindergarten regulations. Only 12 states (plus the District of Columbia) have regulations that adhere to recommended levels for both class size and ratios for 3- and 4-year-olds. In several states, the requirements for child care differ sharply from those for prekindergarten programs. For example, Oklahoma requires its state-funded prekindergarten programs to limit classes to no more than 20 children with no more than 10 children per adult, while allowing its child care centers to have classes of as many as 30 children with up to 15 children per adult.

Research on Effects of Class Size

A large body of evidence links high-quality preschool education with substantial increases in school readiness and persistent achievement gains as well as lower rates of grade retention and placement in special education programs.¹ By following preschool participants over many years, researchers have also documented longer-term benefits that include higher rates of high school graduation and lower rates of delinquency and arrests.

While researchers have been most interested in the benefits of early education for children living in poverty, several studies show that quality preschool programs can enhance learning and development for all children.²

The strongest evidence that preschool programs can produce large educational benefits for economically disadvantaged children comes from studies in which programs had both highly capable teachers and relatively small groups of children.³ For example, the High/Scope program employed two teachers with 10 to 13 children per group and the Abecedarian program's class size was 12 at age 4 and even smaller at age 3.⁴ These studies don't prove that such large effects can be produced only when classes are this small. However, there is no counter evidence that comparable effects can be produced with programs that have much larger class sizes. And, preschool programs with larger class sizes have generally failed to replicate these results.⁵

Other studies demonstrate that class size is one of the components of a quality preschool program that produces positive outcomes for young children. Research on child care classrooms indicates that when groups are smaller and staff-child ratios are higher, teachers provide more stimulating, responsive, warm, and supportive interactions. They also provide more individualized attention, engage in more dialogues with children, and spend less time managing children and more time in educational activities.⁶ Studies also provide evidence of a link between class size and overall quality of the classroom.⁷ One study of child care centers in three states found that, among several structural characteristics examined, staff-child ratios were the only factor other than teacher wages that predicted the quality of preschool classrooms.⁸

Table 1. Class Size and Staff-Child Ratio

States	State Pre-K				Child Care			
	Max. Group Size		Min. Staff-Child Ratio		Max. Group Size		Min. Staff-Child Ratio	
	4s	3s	4s	3s	4s	3s	4s	3s
Alabama	18	NA	1:9	NA	NR	NR	1:16	1:10
Alaska					20	20	1:10	1:10
Arizona	20	20	1:10	1:10	NR	NR	1:15	1:13
Arkansas	20	20	1:10	1:10	30	24	1:15	1:12
California	No limit	No limit	1:8	1:8	NR	NR	1:12	1:12
Colorado	15	NA	1:8	NA	24	20	1:12	1:10
Connecticut	20	20	1:10	1:10	20	20	1:10	1:10
Delaware	20	NA	1:10	NA	NR	NR	1:15	1:12
Florida	18	18	1:10	1:10	NR	NR	1:20	1:15
Georgia	20	NA	1:10	NA	36	30	1:18	1:15
Hawaii	No limit	No limit	1:16	1:12	NR	NR	1:16	1:12
Idaho					NR	NR	1:12	1:12
Illinois	20	20	1:10	1:10	20	20	1:10	1:10
Indiana					24	20	1:12	1:10
Iowa	16	16	1:8	1:8	NR	NR	1:12	1:8
Kansas	No limit	NA	No limit	NA	24	24	1:12	1:12
Kentucky	20	20	1:10	1:10	28	24	1:14	1:12
Louisiana*	20	NA	1:10	NA	15	13	1:15	1:13
Maine	No limit	NA	1:18	NA	30	24	1:10	1:8
Maryland	20	NA	1:10	NA	20	20	1:10	1:10
Massachusetts	20	20	1:10	1:10	20	20	1:10	1:10
Michigan	18	NA	1:8	NA	NR	NR	1:12	1:10
Minnesota (HdSt)	20	17	1:10	2:17	20	20	1:10	1:10
Mississippi					20	14	1:16	1:14
Missouri	20	20	1:10	1:10	NR	NR	1:10	1:10
Montana					NR	NR	1:10	1:8
Nebraska	20	20	1:12	1:10	NR	NR	1:12	1:10
Nevada	No limit	No limit	No limit	No limit	NR	NR	1:13	1:13
New Hampshire					24	24	1:12	1:8
New Jersey (Abbott)	15	15	2:15	2:15	20	20	1:12	1:10
New Jersey (ECPA)	No limit	No limit	No limit	No limit	20	20	1:12	1:10
New Mexico	24	24	1:12	1:12	NR	NR	1:12	1:12
New York (UPK)	20	NA	1:9 or 3:20	NA	21	18	1:8	1:7
New York (EPK)	20	20	1:9 or 3:20	1:9 or 3:20	21	18	1:8	1:7
North Carolina	18	NA	1:9	NA	25	25	1:20	1:15
North Dakota					20	14	1:10	1:7
Ohio (Pub. School)	28	24	1:14	1:12	28	24	1:14	1:12
Ohio (HdSt)	20	17	1:10	2:17	28	24	1:14	1:12
Oklahoma	20	NA	1:10	NA	30	24	1:15	1:12
Oregon	20	17	1:10	2:17	20	20	1:10	1:10
Pennsylvania	No limit	NA	No limit	NA	20	20	1:10	1:10
Rhode Island					20	18	1:10	1:9
South Carolina	20	20	1:10	1:10	NR	NR	1:18	1:13
South Dakota					20	20	1:10	1:10
Tennessee	20	16	1:10	1:8	20	18	1:13	1:9
Texas	No limit	No limit	No limit	No limit	35	30	1:18	1:15
Utah					30	24	1:15	1:12
Vermont	16	16	1:8	1:8	20	20	1:10	1:10
Virginia	16	NA	1:8	NA	NR	NR	1:12	1:10
Washington	24	24	1:9	1:9	20	20	1:10	1:10
West Virginia	20	20	No limit	No limit	24	20	1:12	1:10
Wisconsin (4K)	Det. Locally	NA	Det. Locally	NA	24	20	1:13	1:10
Wisconsin (HdSt)	20	17	1:10	2:17	24	20	1:13	1:10
Wyoming					30	24	1:12	1:10
District of Columbia	20	15	1:10	2:15	20	16	1:10	1:8

*Louisiana has three state-funded programs with the same class size and ratio parameters.

Policy and Research Effects on Class Size *(continued)*

Studies show that class size and staff-child ratios not only have an impact on the quality of the environment but also on children's outcomes. Data from The National Institute for Child Health and Human Development (NICHD) Study of Early Child Care involved a sample of 1,364 children from diverse backgrounds in nine states. These data were used to examine the relationship between standards in the areas of staff-child ratios, group sizes, caregiver training, caregiver education, and children's development. Children in classrooms that met more of the recommended standards displayed greater school readiness and language comprehension and fewer behavior problems at 36 months old.⁹

The National Day Care Study, which involved randomly assigning 3- and 4-year-olds to preschool classrooms with different child-staff ratios and levels of staff education, also demonstrated the beneficial outcomes from higher staff-child ratios. Children in smaller classes had greater gains in receptive language, general knowledge, cooperative behavior, and verbal initiative, and showed less hostility and conflict in their interactions with others.¹⁰

Expert reviews of research have reached similar conclusions. For example, *From Neurons to Neighborhoods: The Science of Early Childhood Development*, an exhaustive review of the research by the National Research Council, affirms

the positive impact of small groups on caregiver behavior and child outcomes.¹¹ They conclude that research shows the importance of regulated class sizes and higher ratios for preschoolers (ages 3 through 5) as well as for younger children.

In addition to studies involving child care centers and preschools, studies involving the early elementary grades, especially kindergarten, strengthen the case for smaller class sizes. Project STAR (Student/Teacher Achievement Ratio) in Tennessee offers by far the most compelling evidence to date regarding the effects of class size on learning and other education outcomes.¹² STAR was a true experiment

Table 1 Notes:

Four states—New Jersey, New York, Ohio, and Wisconsin—have two state-financed prekindergarten programs each. An abbreviation of the name of each individual program is provided in parentheses. In all cases, these states have different class size and/or staff-child ratio requirements for each program. In addition, Louisiana has three distinct prekindergarten programs, but they all have the same requirements, so they are not shown separately in the table.

The listed program standards for class size and staff-child ratio in Arizona's state pre-k initiative represent NAEYC requirements. All programs receiving state pre-k funds must be accredited.

Class size in California's state pre-k program is typically limited to 24, for both 3- and 4-year-olds.

Kansas does not mandate class size or ratios for state pre-k, but programs are encouraged to follow NAEYC recommendations and limit class size to 15 students with two teachers present.

In Michigan's state pre-k program, a qualified teacher plus an associate teacher must be present in rooms with 9 to 16 children. If more than 16 students are in a class, then a third adult (who does not have to meet any specified qualifications) must be present.

State pre-k programs in Nevada must provide a rationale for class size and ratio. The state recommends NAEYC guidelines.

In Texas, most state-funded pre-k classes do not exceed 18 children and a teacher and an aide are present in most classrooms, but there are no class size or ratio requirements.

Program standards in Washington's state pre-k program are targeted for 4-year-olds, but since 3-year-olds are in blended classrooms, standards apply to the educational setting for both ages. In classes of 24 students, the staff-child ratio must be 1:6.

The staff-child ratio requirement in West Virginia's state-funded pre-k changed to 1:10 as of the 2003-2004 program year, with one certified teacher mandated in each classroom.

Abbreviations Used in this Table:

NA — not applicable (state pre-k program does not serve 3-year-olds)

NR — data were not reported

Data Sources:

State pre-k data are from the 2002-2003 program year and were gathered for NIEER's *The State of Preschool: 2004 State Preschool Yearbook*. Data are not presented for Alaska, Florida, Idaho, Indiana, Mississippi, Montana, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Wyoming, as these states did not offer state-funded pre-k in 2002-2003.

Child care data are from Lemoine, S. (2004). Compiled from licensing regulations posted on the National Resource Center for Health and Safety in Child Care web site at <http://nrc.uchsc.edu>.

in which children from a large statewide sample were randomly assigned to smaller (13-17 students) or larger (22-26 students) classes from kindergarten through grade three. Students assigned to smaller classes performed better than students in larger classes on all achievement tests in all subject areas in every grade.

Minority students and students attending inner-city schools benefited most. For all children, the magnitude of effects was modest — 0.5 months increase in reading achievement and 1.6 months increase in math achievement in kindergarten. Gains increased every year the children were in a smaller sized class, and the study found that “the earlier small classes are introduced, the greater the potential for a strong impact on academic achievement.”¹³ Smaller class size also reduced grade retention. Some achievement gains were found to persist at least through grade 8.

Several quasi-experimental studies on class size reduction in the early grades, while not as rigorous in their methodology, have findings that are consistent with those of the Tennessee’s Project STAR.¹⁴ Wisconsin’s Project SAGE (Student Achievement Guarantee in Education) found positive impacts of small classes on student achievement, especially for minority students, and these impacts were consistent for the four years from kindergarten to third grade.

Children attending smaller classes in Burke County, North Carolina, did better in math and reading at the end of first, second, and third grades and continued to outpace their peers after returning to regular classes in fourth and seventh grades. An evaluation of a large-scale effort to reduce class size in California that looked at effects in third

grade found small but significant gains in reading, language, and math achievement levels.

By contrast, a statistical analysis of data from the Early Childhood Longitudinal Study—Kindergarten Cohort (ECLS-K) found kindergarten class size to have small effects on reading and no effects on math.¹⁵ Such studies employing large national data sets and sophisticated statistical analyses with multiple controls for child and school characteristics can provide useful estimates. However, they are methodologically weaker than experimental (and even quasi-experimental studies) in which class size has been altered for research purposes and there is a good match between the teachers and children experiencing different class sizes. The lack of random assignment or other procedures to ensure that children in different size classes are truly comparable and that class size is not confounded with other aspects of the environment (e.g., differences among communities and schools) reduces the confidence that can be placed in the results of the ECLS-K analysis.

Finally, students are likely to have health and safety benefits in addition to benefits for learning and development with smaller preschool classes and more teachers relative to number of students. A number of studies have found larger groups to be associated with higher rates of infection for children, greater

risk of injury due to dangerous situations (e.g., children climbing on furniture and equipment not designed for this purpose), and increased teacher stress that may even result in child abuse.¹⁶

In sum, preschool research strongly indicates that smaller class sizes are associated with greater educational effectiveness and other benefits. Even within studies that focus only on preschool children, the effects of class size have been found to be larger for younger children.¹⁷ Moreover, only those programs with small effective class sizes (15 or fewer) and high ratios of teachers to children have been found to produce very large educational benefits.

The preschool research is bolstered by research on class size for children in K-12 education, which finds that smaller classes are most productive for younger and more disadvantaged children, and “the major benefits from reduced class size are obtained as the size is reduced below 20 pupils.”¹⁸ If anything, class size recommendations based on studies of children in kindergarten and the early grades may be too large, given the characteristics and educational needs of younger preschool children. The research is consistent with the recommendations of professional organizations such as NAEYC and APHA that smaller class sizes are needed for younger children.



Understanding Why Smaller Classes Make a Difference

It is important to examine why smaller classes appear to produce better results for young children. Intuitively, the reasons seem clear. Teaching young children requires immense energy and relentless attention. When there are fewer children in the room, the teacher has more time to devote to each child, and managing the group requires less teacher time. As a result, teachers have opportunities to have longer conversations with each child. Teachers also have more time to observe each child's interests and activities so they can develop lesson plans that respond to individual children's learning styles, strengths and weaknesses. The STAR experiment provides supporting evidence since teachers in small classes spent more time on instruction and less on managerial and organizational tasks.¹⁹

The increased interaction and communication made possible in smaller classes have been shown to affect children's outcomes. An analysis of data from the NICHD Study of Early Child Care determined that responsive, sensitive caregiving was related to cognitive and language outcomes throughout the first three years of life and that frequency of language stimulation by caregivers was a particularly important factor in this link.²⁰

In addition, it seems likely that child behavior is directly affected by class size. In smaller classes, children are more likely to be engaged in learning activities and less likely to disrupt class. Children's behavior may be affected this way because smaller classes make it harder for them to escape the teachers' notice. Children may be more primed to participate, knowing they will not be able to avoid responding to the teacher's questions, and may be less likely to make trouble, knowing the teacher will catch them if they do.²¹

STAR found that children in the smaller classes took greater initiative in class, exerted more effort in learning activities, and displayed less disruptive, inattentive, and withdrawn behavior.²²

Although the STAR data are from kindergarten and the first grades of school, it seems reasonable to extrapolate from these findings to 3- and 4-year-olds. As noted earlier, theory and evidence indicate that preschool children should benefit from small class size even more than do kindergarten children. The kinds of teacher and child behaviors that were affected by the STAR class size reduction present the greatest potential for producing educationally effective preschool programs.

Eager to Learn, a report by the National Research Council on preschool education, offers further insight into the link between class size and child outcomes. The report found that, in smaller groups, child-initiated activities are

more common, with teachers more likely to follow children's leads rather than directing or scheduling all activities.²³ This echoes the STAR findings and is a particularly important benefit, since self-initiated learning is a crucial feature of sound early education curricula. A report by NIEER, *High-Quality Preschool: Why We Need It and What It Looks Like*, analyzing the features of effective preschool programs emphasized this point, documenting adverse effects when all activities are teacher-directed.²⁴

Eager to Learn also noted that small classes allow teachers to spend more time supporting children's exploration and problem-solving. With more time for each child, they are better able to work on extending children's language experiences. In addition, when there are fewer children in the room, teachers can more closely mediate children's social interaction.²⁵



Addressing Concerns About the Benefits and Costs of Smaller Class Sizes

Despite extensive research supporting smaller class sizes, there is still some debate about whether reducing class size really does make a difference and, even if it does have an impact, whether it is worth the costs. Some researchers have raised questions about whether it is smaller class size itself that makes a difference for children, or whether smaller class size simply tends to be correlated with other aspects of quality that are less easily measured. The first question, at least, would appear to be settled by STAR. Reducing class size did yield greater educational effectiveness, and it really was class size that made the difference. There is no reason to doubt that these results generalize beyond Tennessee. Class size reduction can - by itself - increase educational effectiveness.

One analysis frequently cited as evidence that preschool class size does not make a difference used data from a four-state study of child care centers that examined two classrooms in each center to consider how quality varied within a center.²⁶ By comparing classrooms within a center, the analysis aimed to distinguish the impact on quality of measurable features such as class size, which may vary among classrooms within a center, from unmeasured features such as a center's policies or a center director's leadership skills, which are shared across center classrooms. The analysis found that within a center, quality was not related to difference in staff-child ratios or group size.

However, within-center analyses likely understate the effects of class size. Variation in class size and ratio between classrooms within a center will reflect idiosyncratic differences on particular days and not policy differences that characterize class size

and ratio throughout a year. Moreover, while trying to capture the impact of unmeasured aspects that affect the quality of care at the center level, this analysis overlooks other factors that were not measured at the classroom level. For example, a center may specifically decide to place a smaller number of children in one classroom to offset other challenges that class may have, such as a child that needs more individualized attention, or to accommodate differences in teacher capabilities. These and other problems limit the usefulness of analyses that seek to control for unmeasured differences by looking at the effects of variation only within centers, auspices or sectors.

Some who question the need for smaller classes point out that preschools in many other countries tend to have large classes. Preschool class size mandates vary considerably across Europe and among economically advanced countries around the globe. Some permit class sizes larger than is common in the United States.²⁷ This fact is used to argue that if preschool programs have well-educated teachers, as are required in some other countries, large class sizes are not a problem.

Yet, there is no evidence that programs in other countries that have large class sizes are as effective as they should be. Relatively little research has been conducted on preschool program effectiveness in other countries, and such programs might be more effective if they had smaller class sizes. One country that is frequently cited for larger class sizes, France, has begun to reduce class sizes for children from disadvantaged backgrounds. This indicates that France, even after a long experience with large classes, may view smaller classes as advantageous, at least for certain groups of children.

There is some plausibility to the notion that more highly qualified teachers would be more effective in working with larger classes, but it is equally plausible that the benefits from class size reduction are higher when teachers are more highly qualified. One might expect that children gain relatively little from the increased contact with teachers provided by smaller classes when their teachers are not very effective. By contrast, smaller class sizes that increased each child's interactions with well-educated, highly effective teachers might be expected to produce meaningful gains in children's learning and development.

Even those who accept that smaller class sizes improve educational outcomes may still question whether the benefits outweigh the costs. Publicly funded preschools do not pose the challenges that can result from decreasing class sizes for child care or preschools in the private sector, where the additional staffing costs involved can make it difficult for programs to remain financially viable or can drive up fees to the point that they are unaffordable for most parents. However, there are still costs for reducing class size that governments will have to bear. Smaller classes increase the cost per student, so public agencies must increase their overall budgets for the prekindergarten program if they are to achieve their class size goals without decreasing the number of children able to participate.

Estimates of the cost of lowering class size vary. One analysis, using data from a 1989 survey of 265 centers by the U.S. General Accounting Office, determined that increasing the staff-child ratio from 1:11 to 1:10 would be associated with increased costs of approximately 4.5 percent.²⁸

Costs and Benefits of Smaller Class Sizes *(continued)*

However, it is sometimes possible to reorganize teacher responsibilities so that class size reduction can be accomplished at little or no cost. For example, Burke County's early elementary grades class size reduction was actually accomplished without any increase in costs per child. The district was able to reallocate existing resources, such as reassigning qualified staff members who had not been teaching their own classes all day.

The cost of class size reduction depends on the current size of the classes and the target size. For example, reducing class size from 25 to 20 in a program with 300 students requires the addition of 3 teachers and classrooms as the number of classes goes from 12 to 15. Reducing class size from 20 to 15 in a program of 300 students requires the addition of 5 teachers and classrooms as the number of classes goes from 15 to 20. (*Figure 1*)

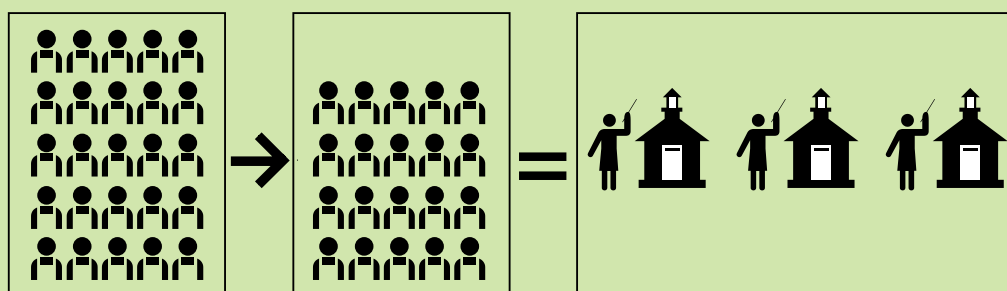
It seems likely that some of the added staffing costs from reducing class size are offset by other savings produced indirectly. For example, if smaller classes are more manageable and make teaching more rewarding, then teachers should find smaller classes more attractive. This should decrease teacher turnover, resulting in reduced costs for hiring and training. Teachers in smaller classes may also require less supervision. In addition, preschool programs with smaller class sizes may be able to attract teachers of the same quality but at somewhat lower salaries and benefits, thereby lowering costs.

The available evidence is not so precise as to permit definitive statements about the optimal class size, given the tradeoffs between costs and benefits. What is clear, though, is that preschool programs with much smaller class sizes (and higher ratios) than are commonplace today have produced

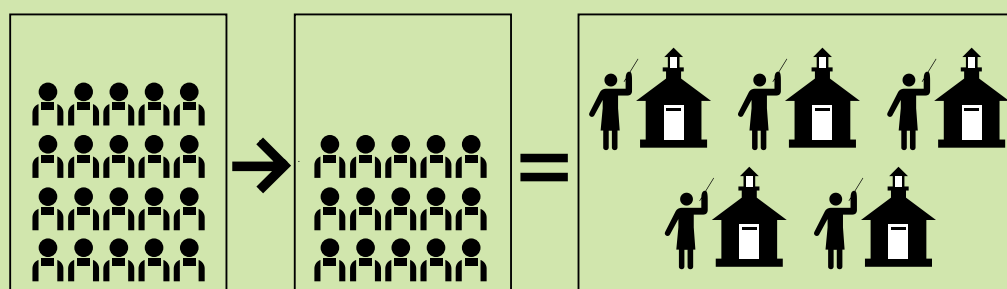
much larger educational gains than are commonly experienced. Moreover, they have done so while generating economic benefits that exceeded their costs.

Many states' regulations for prekindergarten programs and child care class size (and ratio) and federal Head Start regulations may cost the nation more in lost educational effectiveness than they save through lower expenditures since they are insufficiently strict to achieve desired outcomes. The best experimental evidence available in which class size was varied is from the STAR study of kindergarten class size effects. A comparison of the size of the STAR effects to the size of the total effects of large-scale preschool programs today suggests that class size reduction to around 15 students in preschool programs for disadvantaged children could increase outcomes by as much as 50 percent.²⁹

Figure 1. In a program with 300 students, decreasing class size from 25 to 20 requires the addition of three teachers and classrooms.



In a program with 300 students, decreasing class size from 20 to 15 requires the addition of five teachers and classrooms.



Making the Most of Small Classes

Several studies have attempted to isolate the impact of class size and weigh its importance relative to other factors that may contribute to quality such as teacher education and training. However, it may not be useful to focus on possible tradeoffs between class size and teacher training or other classroom characteristics, or on whether it is better to have highly qualified teachers in larger classes or teachers with lower education levels in smaller classes. Most preschool classrooms today are only marginally effective and do not produce the large gains in children's abilities that we know are possible and cost-effective. To change this, emphasis should be placed on examining how small classes can be combined with other factors that contribute to quality in order to produce the results policy makers want for preschool children.³⁰

Careful implementation of policy changes is required to avoid unintended consequences. Rapid increases in demand for classroom space and teachers can lead to a reduction in the quality of new teachers and facilities and to higher costs for both. Gradual change that gives labor (teacher), real estate and construction markets time to adjust may result in higher quality and lower cost. Also, reducing class size or improving ratios without attending to other aspects of quality and public subsidies has the potential to reduce other contributors to quality and increase fees to parents.³¹ Fee increases can lead parents to switch to unregulated alternatives or not enroll their children at all. Where programs are publicly funded, cost increases that are not fully reimbursed can lead providers to decide not to participate, close down, or reduce costs in other areas related

to quality. Class size, ratio, and teacher qualification standards must be set (and enforced) together, since changes in one have been found to alter the others and to affect fees.

Because program characteristics like class size, which are easy to regulate, do impact quality, it doesn't mean that policymakers and administrators can ignore program characteristics that are harder to regulate, such as the relationships between children and their teachers and encouragement of child-initiated activities. It does mean, however, that establishing smaller classes and addressing other core features through regulation can be first steps in fostering quality in prekindergarten programs. It is important that these measures be followed by more complex strategies that take full advantage of the smaller classes, such as providing training for teachers on teaching strategies.

Policymakers may have to simultaneously address the entire range of factors – from class size and teacher qualifications to teacher interactions with their students to program leadership – to see that full potential impacts are realized. While this may be more costly, it may also be the only way to reap the benefits that ultimately make a prekindergarten program pay off, in terms of increased achievement, lower rates of special education placements and grade retention, and higher graduation rates. There is much to be done. Closing even half the gap in skills and abilities at school entry between children in poverty and the middle class, would require a combination of supervision, teacher quality and class size reduction that lies beyond what Head Start and most state preschool programs currently require.

Remaining Research Questions

Although class size and ratios have been studied extensively, policy makers could benefit from more precise guidance. There are still many areas for further exploration. Important questions worthy of future research include:

- *Are there threshold levels at which lowering class size has a particularly large effect, or at which class size is so small that reducing it further has little impact?*
- *What are the costs of reducing class size (from specific high levels to other specific low levels)?*
- *What types of training help teachers take full advantage of smaller classes and the resultant increased opportunities for interaction with their students?*
- *Are there important interdependencies in program standards – for example, are gains from increasing teacher quality much larger with small classes?*
- *When it is not feasible to reduce class sizes to the desired level, are there other steps that can be taken to compensate until it is possible to reduce class sizes?*
- *Given that much of the research on class size involves child care centers serving infants, toddlers, and preschoolers, or the early elementary school grades, shouldn't consideration be given to whether the effects of class size differ appreciably for state prekindergarten program settings or Head Start compared to these other programs?*

Additional research could help shed light on these unresolved questions and enable policymakers to determine when and how it is best to modify class size. Strong preference should be given to true experiments (or strong quasi-experiments where class size is actively changed) over purely statistical studies that depend on “natural” variation.

Policy Recommendations

Although not all questions have been settled about class size, there is enough evidence for several policy recommendations:

Set and enforce program standards.

All states should set, implement, and enforce program standards for early childhood programs based on research covering teacher behaviors, child outcomes, and health and safety. The standards should jointly address teacher qualifications, class size, and staff-child ratios so as to prevent unintended consequences for one aspect of program structure relating to quality when another is targeted for improvement.

Review class size and ratio requirements.

Many states permit class sizes so large that they may jeopardize much of the potential educational benefit of preschool education. This is particularly

true when class sizes exceed those recommended by professional organizations, but even these recommended class sizes seem too large for children in poverty or with special needs.

Ensure that a focus on class size and ratios is complemented by attention to more difficult-to-regulate components of quality.

Any reduction in class size should be accompanied by other efforts, such as training for staff on teaching techniques, that take full advantage of the increased student-teacher interaction that is possible in smaller classes.

Provide resources needed when implementing smaller class sizes.

Smaller classes mean higher costs per student, so any effort to reduce class size must be accompanied by the resources to achieve this goal without reducing the number of children able to participate. States should also closely monitor the degree to which class size

reduction affects costs. Gradual implementation of class size change is likely to produce better outcomes and minimize cost increases.

Support new research on class size issues.

Research is needed to provide more precise information on the relationship of specific class sizes to child outcomes, the impacts of class size on subgroups of preschoolers, and whether there are threshold levels at which class size reduction has a particularly large impact or, conversely, at which making the class size any smaller has minimal or no effect. Research offers reasons to believe that reducing class size to 15 (or fewer) students, at least for disadvantaged children, could substantially improve educational outcomes. Given the costs and potential benefits, experiments with Head Start and state preschool programs to measure the costs and benefits of class size reductions would be extremely valuable.

Endnotes:

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² Shonkoff, J. & Phillips, D. (Eds.) (2000). *From Neurons to Neighborhoods: The Science of Early Child Development*. Washington, DC: National Academy Press.

³ Frede, E.C. (1998). Preschool program quality in programs for children in poverty (pp. 77-98). In W.S. Barnett & S.S. Boocock (Eds.) *Early care and education for children in poverty*. Albany: SUNY Press.

⁴ Class size is less clearly defined in the High/Scope studies where 20-24 children sometimes occupied one large space, but smaller groups functioned as separate classes within that space. In the Abecedarian Study, 2- and 3-year-olds were together in classes of 7 children, and children may have advanced to the next age group based on their development rather than a strict age cutoff.

⁵ Barnett, W.S. (1998). Long-term effects on cognitive development and school success. In W.S. Barnett & S.S. Boocock (Eds.) *Early care and education for children in poverty* (pp. 11-44). Albany: SUNY Press.

⁶ Vandell, D.L. & Wolfe, B. (2002). *Child care quality: Does it matter and does it need to be improved?* Institute for Research on Poverty, University of Wisconsin-Madison. ; Clarke-Stewart, K.A. Gruber, C.P. & Fitzgerald, L.M. (1994). *Children at home and in day care*. Hillsdale, NJ: Erlbaum; Howes, C. (1983). Caregiver behavior in center and family day care. *Journal of Applied Developmental Psychology*, 4: 99-107. ; NICHD Early Child Care Research Network (2000). Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Sciences*, 4, 116-135. ; Phillipsen, L. C., Burchinal, M. R., Howes, C. & Cryer, D. (1997). The prediction of process quality from structural features of child care. *Early Childhood Research Quarterly*, 12, 281-303.; Volling, B. L., & Feagans, L.V. (1995). Infant day care and children's social competence. *Infant Behavior and Development*, 18, 177-188. ; Munton, T., Mooney, A., Moss, P., Petrie, P., Clark, A., & Woolner, J. (2002). *Review of international research on the relationship between ratios, staff qualifications and training, group size, and the quality of provision in early years and child care settings*. London: Thomas Coram Research Unit, Institute of Education, University of London.

Endnotes: *continued*

- ⁷ Vandell, D.L. & Wolfe, B. (2002). Howes, C., Phillips, D.A., & Whitebook, M. (1992). Thresholds of Quality: Implications for the social development of children in center-based child care. *Child Development*, 63, 449–460; McCartney, K., Scarr, S., Rocheleau, A., Phillips, D., Abbott-Shim, M., Eisenberg, M., Keefe, N., Rosenthal, S., & Ruh, J. (1997). Teacher-child interaction and child-care auspices as predictors of social outcomes in infants, toddlers, and preschoolers. *Merrill-Palmer Quarterly*, 43, 426–450; Scarr, S., Eisenberg, M., & Deater-Deckard, K. (1994). Measurement of quality in child care centers. *Early Childhood Research Quarterly*, 9, 131–151. ; Whitebook, M., Howes, C., & Phillips, D. (1990). *Who cares? Child care teachers and the quality of care in America. Final Report, National Child Care Staffing Study*. Oakland, CA: Child Care Employee Project.
- ⁸ Phillips, D., Mekos, D., Scarr, S., McCartney, K., & Abbott-Shim, M. (2000). Within and beyond the classroom door: Assessing quality in child care centers. *Early Childhood Research Quarterly*, 15(4), 475–496.
- ⁹ National Institute of Child Health and Human Development Early Child Care Research Network (1999). Child outcomes when child care classes meet recommended guidelines for quality. *American Journal of Public Health*, 89, 1071–1077.
- ¹⁰ Ruopp, R., Travers, J., Glantz, F., & Coelen, C. (1979). *Children at the Center: Final Report of the National Day Care Study*. Cambridge, MA: Abt Associates.
- ¹¹ Shonkoff, J. & Phillips, D. (Eds.) (2000).
- ¹² Finn, J.D. (2002). Class Size Reduction in Grades K-3. In A. Molnar (Ed.), *School Reform Proposals: The Research Evidence*, Tempe, AZ: Arizona State University.
- ¹³ Finn, J.D., Gerber, S., Achilles, C. & Boyd-Zaharias, J. (2001). The enduring effects of small classes. *Teachers College Record*, 103(2), 145–183.
- ¹⁴ Finn, J.D. (2002).
- ¹⁵ Walston, J. & West, J. (2004). *Full-day and half-day kindergarten in the United States: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99*. Washington, DC: National Center for Education Statistics, U.S. Department of Education. The vast majority of the variation in class size in this study is between schools. STAR systematically varied class size within schools.
- ¹⁶ Fiene, R. (2002). *13 indicators of quality child care: Research update*. Office of the Assistant Secretary of Planning and Evaluation, U.S. Department of Health and Human Services. Available on the web at: <http://aspe.hhs.gov/hsp/ccquality-ind02>.
- ¹⁷ National Institute of Child Health and Human Development Early Child Care Research Network (2000). Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Science*, 4(3), 116–136.
- ¹⁸ Glass, G. & Smith, M. (1978). *Meta-analysis of research on the relationship of class size and achievement*. San Francisco: Far West Laboratory for Educational Research and Development. (Quotation from p. 4). Robinson, G. (1990). Synthesis of research on the effects of class size. *Educational Leadership*, 47(7), 80–90.
- ¹⁹ Finn, J.D. et al. (2001).
- ²⁰ National Institute of Child Health and Human Development Early Child Care Research Network (2000). The relation of child care to cognitive and language development. *Child Development*, 71 (4), 960–980.
- ²¹ Finn, J.D. (2002).; Cohen, D.K., Raudenbush, S.W., & Loewenberg Ball, D. (2003). Resources, instruction, and research. *Educational Evaluation and Policy Analysis*, 25(2) 119–142., Finn, J.D. & Achilles, C.M. (1999). Tennessee's class size study: Findings, implications, misconceptions. *Educational Evaluation and Policy Analysis*, 21(2), 97–109.
- ²² Finn, J.D. et al. (2001).
- ²³ Bowman, B.T., Donovan, M. S., & Burns, M. S. (Eds.) (2000). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
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- ²⁶ Blau, D. (2001). *The Child Care Problem: An Economic Analysis*. New York, NY: Russell Sage Foundation.
- ²⁷ Tietze, W. & Ufermann, K. (2001). An international perspective on schooling for 4-year-olds. *Theory into Practice*, 28(1), 69–77. Cleveland, G. & Krashinsky, M. (2003). *Financing ECEC services in OECD countries*. OECD Occasional Paper. Available at <http://www.oecd.org/dataoecd/55/59/28123665.pdf>. Munton, T. et al. (2002) report that actual class sizes and ratios in Japan and some European nations may be significantly better than national standards require.
- ²⁸ Powell, I. & Cosgrove, J. (1992). Quality and cost in early childhood education. *Journal of Human Resources*, 27, 472–484.
- ²⁹ This assumes gains in preschool of about the same size as in STAR. At current class sizes, Head Start and state preschool programs typically produce gains that are half or less the size produced by the best programs studied.
- ³⁰ Cohen, D.R. et al. (2003).
- ³¹ Chippy, T. & Witte, A. (1995). Economic effects of quality regulations in the day care industry. *American Economic Review*, 85, 419–424. Queralt, M. & Witte, A. (1996). *The impact of public policies on child-staff ratios*. Working Paper. Miami, FL: Department of Economics, Florida International University.

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From Health and Education Research Operative Services (HEROS), <http://www.heros-inc.org/classsizeresearch.htm>

CLASS SIZE RESEARCH

Probably few issues in education have been studied as often as class size, yet few studies have produced satisfactory or consistent results; many have reviewed class-size reductions from 40 to 30, or 30 to 25. There have been few major, controlled class-size studies. There have been even fewer that explored the 15:1 range suggested in 1978 by Gene Glass and colleagues when they wrote "Meta-analysis of research on class size and achievement" published in Educational Evaluation and Policy Analysis.

The Research Staff and Consultants at HEROS have been researching the effects of reducing class size to a ratio of 15 to 1 since 1984. Dr. Helen Pate-Bain (HEROS consultant and Board Chair) began to conduct research on the impact of reduced class size while at the Center for Excellence in the Teaching of Basic Skills to Economically and Educationally Disadvantaged Students. In the Dupont Class Size Study, she (with Ed Whittington and Ben Dennis) studied the effects of class size (1:15) on the teaching/learning process during grades 1-3 in the Metropolitan Nashville-Davidson County Schools.

The research started with an experimental group consisted of 105 first grade students divided into seven classes of 15 students each. The control group consisted of 90 students divided among three and one-half teachers with a class size of 25 students each. A blind control group was selected comprising of 105 students drawn from 35 elementary schools, matched with the experimental group demographically according to five pre-established criteria: (a) sex, (b) race, (c) economic status, (d) date of birth within 45 days, and (e) total pre-reading raw score within four point on the California Achievement Test Level 10. The statistical analysis of pre- and post-test results indicated that the experimental group consistently achieved better results than either control group. The only intervening variable was the reduction of class size from 1:25 to 1:15. Therefore, it was concluded that reducing class size to 1:15 has a positive effect on student reading and math outcomes. The research results were reported in the article "Effects of Class Size on First-Grade Students" prepared by Ed Whittington, Helen Pate-Bain, & C.M. Achilles and published in *Spectrum, Journal of School Research and Information*, Fall 1985. A more detailed summary on this research will be available online from HEROS in September 1998.

In 1985, Dr. Helen Pate-Bain shared the results of the first year of her study & information on Project Prime Time in Indiana with the Tennessee State Board of Education and the House and Senate Education Committees. Based on her urging that Tennessee examine the issue of optimum class size and with the support of Rep. Steve Cobb & Sen. Doug Henry, legislation (House Bill 544) was passed to conduct a well-designed study of class size. The Tennessee State Department of Education organized to conduct the legislated study of reduced student/teacher ratio and adopted the name STAR, an acronym for Student/Teacher Achievement Ratio. Dr. Jayne Boyd-Zaharias, DeWayne Fulton, and Van Cain began their study of the class size effect in education during the course of this research.

In 1996, foundation funding permitted HEROS, Incorporated begin conducting follow-up research on the **Project STAR Class Size Study**. A goal of our current work has been to provide educational researchers with access to this important data. On September 1, 1998, HEROS, Incorporated began offering a public access data set from this study. The data files, definitions, and descriptors are available online at the [Project STAR Data web site](#). You will find more detailed information on class size research, including new

results from the HEROS [STAR Follow-up Studies](#) online at the [Project STAR](#) homepage here at the HEROS Website

Background Material into the Class Size Issue

Class size is among the most thoroughly researched topics in public education. Over 250 separate studies dealt with class size by 1950. Since that time related research has increased proportionately. Often cited as the beginning of the most recent era of class size research, Howard Blake's 1954 inquiry analyzed the literature on class size prior to 1950. From the 267 reports located, he chose 85 of those based on original research that dealt with elementary and secondary school students. Of these 85 studies, 35 indicated that small classes were better, 18 indicated that large classes were better, and 32 did not support either conclusion. In further analyzing these studies, Blake established criteria to test their scientific acceptability (adequacy of sample, adequacy of measurement of the independent variable, adequacy of criterion variable measurement, rigorousness of data examined and appropriateness of the conclusions). Only 22 of the 85 previously acceptable studies met these minimum requirements. Of these, 16 favored small classes, 3 favored large classes, and 3 were inconclusive.

Empirical research prior to the 1980s had not produced consistent results regarding the relationship between class size and student achievement in spite of the amount of research that has addressed this question. In 1978, the Educational Research Services published a review of 41 studies of the effects of class size on achievement, concluding that reducing class size alone would not increase student achievement. In classes of 25-34 students at the primary level, the studies show some support for the hypothesis that smaller classes are related to higher achievement in reading and mathematics, particularly if the students are socially or economically disadvantaged or remain in small classes for at least two years (ERS, 1978).

The first meta-analysis by Glass, Cahen, and Smith (1978) dealt with the impact of class size on student achievement. By combining 77 studies, which yielded 725 comparisons of achievement in classes of different sizes, they were able to spot trends that did not show up clearly in every study. An important outcome of the Glass/Smith meta-analysis was the finding that the greatest gains in achievement occurred among students who were taught in classes of 15 students or less. Glass, Cahen, and Smith (1978) summarized their findings in these words:

As class size increases, achievement decreases. A pupil who would score at about the 63rd percentile on a national test when taught individually, would score at about the 37th percentile (when taught) in a class of 40 pupils. The difference in being taught in a class of 20 versus a class of 40 is an advantage of ten percentile ranks.

A follow-up study by the [Far West Laboratory for Educational Research and Development](#) using "meta-analysis" was published in 1979. Non-achievement effects on class size such as effects on students, effects on teachers, and effects on the instructional environment and processes were investigated. The results indicated that decreasing class size had a beneficial effect on the classroom environment. In the review, class size was shown to have a more "substantial effect" on teachers than on students or the instructional environment. The effect of class size was more significant for students below the age of twelve (Smith et al., 1979).

When N. Filby and colleagues published "What happens in smaller classes? A summary report of a field study" in 1980 they reported that teacher attitudes improved in smaller classes. Teachers in reduced class size environments were able to reach a child and help him/her when the help was needed; in larger classes the teachers felt that they could not get there to help. These teachers stated that with large class assignments their workload was heavy and overburdened. When such overloading decreased, as smaller classes became a reality, the teachers were able to relax more, feel less frustrated, and were able to create a more positive learning climate that also discouraged classroom disruptions. They found that the attention rates for students increased as class size decreased. The range of those paying attention was

from 56 percent in large classes to 72 percent in the smaller classes. Increased attention span meant less time waiting for help or causing disturbances in the classroom

The researchers concluded that the class size reductions alone do not necessarily bring about change. However, teachers experience improved conditions, and this development brings about greater enthusiasm on the part of the teacher. Such enthusiasm can lead to changes that benefit everyone. Teachers usually do what they are inclined to do anyway; however, smaller classes allow them to do a better job. This conclusion was supported by an earlier teacher survey. The National Education Association conducted a teacher opinion poll in 1975. It reported that more teachers named lowering class size than any other item as the one improvement that would create better teacher morale and job satisfaction. It was the opinion of these teachers that smaller classes mean that student attitudes toward learning and motivation would be more positive resulting in higher academic achievement.

A statewide reduction of classes in grades K-3 was the result of pilot data from the Indiana State Department of Education (1983). The 1981-83 study compared reading and mathematics achievement of 24 K-3 classes at a ratio of 14:1 to K-3 classes averaging 23 students. Standardized reading and math test scores showed that students in the "small" classes exceeded normal growth in greater numbers than comparable students in the "regular" classes. Generally, 14 percent more students in smaller classes exceeded the expected achievement than students in larger classes. Teachers also saw improvements in the behavior of students, increased productivity, and more hands-on participatory learning.

Research has begun to focus upon what actually happens in smaller classes as opposed to larger ones. The Ministry of Education in Ontario, Canada was concerned with this question in a two-year study. Students from the fourth grade were assigned, in the first year, to some thirty-four different classes--some with sixteen students, some with twenty-three, some with thirty, and some with thirty-seven. During the second year they were all reassigned to different sized classes. This allowed the re-searchers to study the same students and the same teachers in different settings and to observe changes in classroom processes. The overall findings indicated that even though class size did not change the degree of individualized instruction, the teacher did spend up to twice as much time per student in the reduced size classes (Klein, 1985).

In a 1986 review for Education Research Service, Robinson and Wittebols objected that the Glass and Smith findings because the meta-analysis had included college classrooms and individual tutoring arrangements. They suggested a Related Cluster Analysis approach designed to: (1) identify and summarize all of the research studies available on the effects of class size, and (2) group the research findings into clusters related to each of several major areas in which problems, issues, and decisions relating to class size are likely to occur. The advantages of this approach, according to Robinson and Wittebols, was that it sorts out from the large body of research findings on class size into those findings that relate directly to specific areas and it made the research understandable and useful for application to specific decisions. It differed from the Smith and Glass Meta-Analysis in that Meta-Analysis removes decision makers from familiarity with the research by giving them only broad generalizations. However, when Robinson and Wittebols did a cluster analysis by grade level they concluded that smaller classes were beneficial in the early primary grades. (Robinson et al., 1986).

The most comprehensive review, meticulously conducted for the California Educational Research Cooperative by David Mitchell and colleagues concluded that:

For all student populations, class size research, while difficult to synthesize offers convincing evidence of an important link between lowered student/teacher ratios and higher achievement (Mitchell, et al., 1989).

Findings from the current major well-designed class size studies, seem to have influenced policy makers toward the institution of reduced class size. Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching, has laid out a four-point plan to ensure that all children are educated to their

full potential, which includes reducing classes to "no more than 15 students per teacher" for the early elementary grades. In addition, the National Association of Elementary School Principals (NAESP) Delegate Assembly has revised their class size policy statement from 20 to 1 down to recommending a student-teacher ratio of 15 to 1.

6.3.
(A)

Acton Public Schools
Acton-Boxborough Regional School District
Acton, MA

OVERNIGHT, INTERNATIONAL and/or OUT-OF-STATE
FIELD TRIP PERMISSION FORM

Submit for Superintendent and School Committee approval

Please file at least four (4) weeks in advance for 1-3 day trips

Please file at least three (3) months in advance trips longer than 3 days and/or trips with per student cost greater than \$500.00

• Name of Teacher(s): Brian Dempsey

• School: Acton-Boxborough Regional High School

• # of Students going: 20 # of Chaperones (gender): 3 → (2 male, 1 female)

Names of Chaperones: Brian Dempsey, Susan Bohmiller, TBA

• Date(s) of Trip: 5/19/11 - 5/22/11 School Time Involved: May 19 + 20

• Purpose of Trip/Destination: National Science Olympiad Competition / University of Wisconsin

• Have you taken this trip before? Yes (to Illinois + Indiana)

• Any special arrangements required (such as extra insurance, ADA accommodations)? No

• Cost per Student: (Please describe how the cost is determined.) \$250 (Total estimated cost is \$8,000, students pay \$5,000, school pays for the difference).

• Who will pay for the trip? Students + ABRHS

• Has any fundraising been done? Not yet If so, what? Working with PIP to identify corporate sponsors

• Are any parents driving? Yes - to and from airport If so, have appropriate insurance forms been filled out? Not yet

• Have you followed the procedure outlined in Policy IJOA? Yes

• Other comments:

<input checked="" type="checkbox"/> Approved <u><i>[Signature]</i></u> Principal	<input type="checkbox"/> Not Approved	<u>3/22/11</u> Date
<input checked="" type="checkbox"/> Approved <u><i>[Signature]</i></u> Superintendent	<input type="checkbox"/> Not Approved	<u>3/22/11</u> Date
<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved	 Date
School Committee		Date

8.1.1.
(A)

To: Stephen Mills
cc: Maura Champigny
Karin Drowne
From: Alixe Callen
Subject: Donation
Date: March 14, 2011

Mr. and Mrs. Donald Meschisen have donated \$120.00 to the Class of 2013.

We would appreciate it if you would approve their donation. Thank you.

TO: School Committee Members
Dr. Steve Mills

CC: Nancy Sherburne & Bill Guthlein
AB SpEdPAC Co-Chairs

FR: Liza Huber

RE: Discussion of Special Education Parent Advisory Council's (PAC) Analysis of
MCAS

DATE: March 24, 2011

As always, the schools appreciate the feedback from our Special Education PAC membership about the MCAS results, specifically for ABRSD Grades 7 & 8 and for the McCarthy-Towne School.

Please refer to the respective reports, "2010 MCAS Analysis for ABRSD Grades 7 & 8" and McCarthy-Towne School", prepared by Bill Guthlein, revised 3/3/2011, for the SpEd PAC's comprehensive findings specifically highlighting English Language Arts (ELA). This document outlines the school's responses to SpEd PAC's suggestions and recommendations:

ABRSD Grades 7 & 8

1. It is essential to gain a full understanding of AB's unique "seventh grade slump" so we can adjust curriculum, teaching strategies, etc. as necessary to eliminate it.

In process: The building principal will investigate this issue with appropriate staff members and analyze the results so that a correction plan be developed and implemented with necessary adjustments to sequence of instruction, evaluating and adjusting instruction, when and if necessary, etc. Additional resources including a reading specialist for FY12 has been recommended.

In our discussions, we will analyze performance by grade, test and strand.

2. We recommend that the Administration and School Committee include Student Growth Percentile (SGP) targets for the aggregate student population and the special education subgroup in the District's and each school's Annual Improvement Plan.

Not implemented: We are unable to implement SGP as a measuring tool as there are no mid-year MCAS data points for accountability.

3. In order to track how well the District is doing with the full range of students, we would recommend that the District perform an analysis, which determines SGP *{Student Growth Percentile}* by the following seven achievement levels – high Advanced, low Advanced, high Proficiency, low Proficiency, high Needs Improvement, low Needs Improvement and Warning.

Under consideration: We will discuss the Composite Performance Index Point Scale by examining the following five categories: Proficient and Advanced; Needs Improvement –High; Needs Improvement – Low; Warning/ Failing –High; Warning/Failing – Low.

4. In the long term, we would recommend that SGP be one of the data points used to assess annual teacher performance and determine staff compensation.

Not implemented: Student performance and achievement are important considerations for teacher evaluations. While the District supports multiple data points for measuring teacher performance, we do not currently use SGP data. One data point that is incorporated into evaluations is the teacher's ability to improve outcomes of students based upon assessment, instruction, tracking progress, and aligning curriculum to meet the needs of students, including high-stakes testing. In this regard, a teachers' knowledge and skills in developing learning opportunities for students is key. However, we will discuss with all parties, including the Massachusetts Teachers' Association (MTA) on how to improve our evaluation process to ensure optimal outcomes.

Not implemented: Negotiations and financial resources are needed to consider staff compensation.

5. Each year we recommend that the District continue to identify all students scoring at the MCAS Warning level who are not currently in special education and refer those students to a Child Study Team (CST) to determine whether or not they should be evaluated for special education eligibility.

Implemented: We offered our Child Study Team (and SAT) opportunities, demonstrations, and training, based upon the Report of the Special Education Financial Task Force II, December 2008, {Action Plan #5} so that regular education interventions are effectively measured. Although this practice is already instituted, we will visit the CST and offer an opportunity through a case study approach to walk through a student's academic issues that involve a MCAS Warning level.

McCarthy-Towne

1. We recommend that the District conduct an in-depth analysis to determine the underlying cause(s) of this significant performance drop with particular focus on the fifth grade.

Partially Implemented: The building principal is assessing reading comprehension and writing ability for this targeted group by examining the multiple choice questions related to a passage of literature and open response questions which require students to demonstrate comprehension through writing. The latter involves making inferences or supporting ideas through factual references of the text. Acton will place a high emphasis on writing a response to a question.



2. As part of its analysis the AB SpEd Pac recommends that the District conduct a grade level analysis to gain better insight into the underlying source(s) of McCarthy-Towne's low SGP scores.

To be implemented: Grade level analysis is helpful in evaluating the extent to which the curriculum is aligned with State Curriculum Frameworks.




3. .. we recommend that the District conduct an analysis of how McCarthy-Towne students have performed in junior high school over the last three years relative to their peers.


Not implemented: A historical review may be helpful but the concentration of effort and resources is helping the present students to achieve on the MCAS.






4. A material disparity in student progress and performance among schools also begs a policy question about the equity of school placements in Acton.
Discussion: The schools are concerned about equity and school placement and will make every effort to ensure that students have equal opportunity in all schools.
5. We recommend that the District establish annual SGP performance targets for both the District and individual schools. We recommend that the Administration and School Committee include SGP targets for the aggregate student population and the special education subgroup in the District's and each school's Annual Improvement Plan.
Not implemented: We are unable to implement SGP as a measuring tool as there are no mid-year MCAS data points for accountability.
6. In order to track how well the District is doing with the full range of students, we would recommend that the District perform an analysis, which determines SGP *{Student Growth Percentile}* by the following seven achievement levels – high Advanced, low Advanced, high Proficiency, low Proficiency, high Needs Improvement, low Needs Improvement and Warning.
Under consideration: We will discuss the Composite Performance Index Point Scale by examining the following five categories: Proficient and Advanced; Needs Improvement –High; Needs Improvement – Low; Warning/ Failing –High; Warning/Failing – Low.
7. In the long term, we would recommend that SGP be one of the data points used to assess annual teacher performance and determine staff compensation.
Not implemented: Student performance and achievement are important considerations for teacher evaluations. While the District supports multiple data points for measuring teacher performance, we do not currently use SGP data. One data point that is incorporated into evaluations is the teacher's ability to improve outcomes of students based upon assessment, instruction, tracking progress, and aligning curriculum to meet the needs of students, including high-stakes testing. In this regard, a teachers' knowledge and skills in developing learning opportunities for students is key. However, we will discuss with all parties, including the teachers' association on how to improve our evaluation process to ensure optimal outcomes.
Not implemented: Negotiations and financial resources are needed to consider staff compensation.
8. Each year we recommend that the District continue to identify all students scoring at the MCAS Warning level who are not currently in special education and refer those students to a Child Study Team to determine whether or not they should be evaluated for special education eligibility.
Implemented: We offered our Child Study Team (and SST) opportunities, demonstrations, and training, based upon the Report of the Special Education Financial Task Force II, December 2008, { Action Plan #5 } so that regular education interventions are effectively measured. Although this practice is already instituted, we will visit the CST and offer an opportunity through a case study approach to walk through a student's academic issues that involve a MCAS Warning level.

From:  nsherburne <nsherburne@mindspring.com> Sun, Mar 06, 2011 2:47:20 PM 

Subject: 2010 MCAS Analyses for APS & AB

To:  smills@mail.ab.mec.edu  ABR School Committee <abrsc@acton-ma.gov>
 "APS School Committee" <apsc@acton-ma.gov>

Cc:  Bill Guthlein <william.guthlein@verizon.net>

Attachments:  Attach0.html 6K
 AB MCAS Analysis rev 3.3.11.pdf 207K
 Attach2.html 1K
 APS McT MCAS Analysis rev 3.3.11.pdf 300K
 Attach4.html 1K

Dear Dr. Mills, APS and AB School Committee Members,

The Acton-Boxborough Special Education Parent Advisory Council (AB SpEd PAC) has prepared two reports for your review based on our analysis of 2010 MCAS achievement and Student Growth Percentile results. One report focuses on special education student progress at McCarthy-Towne highlighting particular concerns in the fifth grade. The other report focuses on special education student progress at R. J. Grey highlighting particular concerns about the seventh grade. Since the district has already focused extensive time and resources towards addressing Math concerns at the Junior High, we would draw your attention to the ELA concerns that recent MCAS data highlights. We offer these reports in the hope that identifying significant trends and asking questions will lead to better academic outcomes for all students in our district.

On Thursday, March 3 we had the opportunity to meet with district staff, including Principals, Special Educators, and the Curriculum Director regarding these reports and were pleased to discover that many of our recommendations regarding analysis are already under way. We were also pleased to learn that our school districts are increasing the number of formative assessments used at all grade levels, which will provide important regular feedback to teachers about student skill acquisition that can directly inform teaching instruction throughout the school year. However, during our meeting district staff mentioned their concerns about being compared to other school districts like Concord, Lexington and Westford. They explained that while we like to think of ourselves as being in the same category of schools the reality is our school systems' resources are very different. For example, in Concord the class sizes are much smaller and the staffing levels quite different than ours. In Concord each school has an ELA Specialist, a Reading Specialist and 3-4 Reading Assistants. We have 1 reading specialist at each school. This level of

staffing makes a huge difference in terms of professional development opportunities for staff and direct instruction to students.

For us this meeting helped underscore how essential it is for our districts to prioritize the strategic hiring of additional staff at our schools to help mitigate large class sizes and improve direct instruction and professional development opportunities. As a SpEd PAC we strongly encourage the district to pursue the hiring of a Math and ELA Specialist/Coach as well as K-6 Math assistants and other essential staff identified during the budget process. We would argue that the declining MCAS scores of special education students in our districts should be viewed as the canary in the coalmine. We cannot continue to provide all of our students with a quality education if we do not start reinvesting in the staffing and other unmet needs of our schools.

While these reports show how SGP data can help identify important trends, we want to reiterate our firm belief that MCAS and SGP should never be the sole means for evaluating individual students, teachers, schools or districts. We readily acknowledge this test's limitations. However, on balance, we believe it still offers helpful information to inform decision-making and encourage the School Committee to explore the powerful uses of the new Student Growth Percentile metric in their oversight function.

Sincerely,

Nancy Sherburne & Bill Guthlein, AB Sped PAC Co-Chairs



2010 MCAS Analysis For ABRSD Grades 7 & 8

Evidence of a Seventh Grade Slump

Prepared by: Bill Guthlein
Revised 3/3/2011

Introduction

There is no question that the Acton-Boxborough Regional School district is a high-performing school district that provides a quality education to our student population in aggregate. However, available MCAS data for both student proficiency and student growth indicate that in certain areas our special education students are not performing to this same high standard, as evidenced by R. J. Grey's current designation as a school in "Corrective Action" due to four consecutive years of not achieving adequate Annual Yearly Progress (AYP) for the special education subgroup. The Acton-Boxborough Special Education Parent Advisory Council (AB SpEd PAC) has focused its MCAS analysis on the subgroup of students within the AB school district who don't seem to be achieving at a level commensurate with the district's overall academic performance.

Recent Positive Interventions at R. J. Grey Junior High School

The AB SpEd PAC applauds the district for all of the hard work it has done over the past year evaluating special education student performance at the Junior High school. Clearly a lot of time and energy has gone into this activity and many excellent interventions have been put into place as a result of the district's in-depth analysis. We anticipate that those interventions will yield positive results for the district this spring. However, after analyzing the available MCAS data we have identified some additional areas of concern for both special education and regular education students that warrant additional district investigation.

Acton-Boxborough Seventh Grade Slump

When you look at Student Growth Percentile (SGP) scores – i.e., how much a student is growing each year in relation to a similarly achieving peer group across the state – our analysis identified a few areas of concern. In 2009 the 7th grade special education subgroup experienced a 21-point drop in student growth from their 6th grade performance in Math, moving from an SGP of 53 in the 6th grade to only 32 in the 7th grade. The state average SGP for this subgroup of students was 43 that year, so AB performed 11 points below the state average in regards to student growth for the special education subgroup. Interestingly, AB's 7th grade class in aggregate very closely followed the 21-point drop in Math of the special education subgroup. The aggregate Math SGP for AB's 2009 7th grade class dropped from an SGP of 63 in 6th grade to 44 in 7th grade indicating a 19-point drop, so this experience wasn't limited to the special education subgroup. There was also a material but less severe decline in Math SGP scores in the 2010 7th grade class. The special education subgroup's scores declined by 13.5 points while the aggregate 7th grade SGP scores declined by 9.5 points. It is likely that these 2010 numbers reflect the benefits of initial interventions employed by the district following its in-depth math MCAS analysis.

Similarly, in 2009 the special education subgroup experienced a 20-point drop in student growth from their performance in sixth grade English Language Arts (ELA), moving from a 63 in sixth grade to a 43 in seventh grade. In the following year (2010) the 7th grade special education subgroup experienced a 22-point drop in student growth from their 6th grade performance in English Language Arts, moving from an SGP of 56 in 6th grade to 34 in 7th grade while the state average held steady at 42. So AB performed 8 points below the state average last year in regards to student growth in ELA for the special education subgroup. In this instance the aggregate student performance was only marginally affected, so the ELA drop in student growth appears to be primarily affecting the 7th grade special education subgroup.

Please note, the median SGP scores for the special education subgroup are based on 60+ Acton sixth grade students and 70+ AB seventh grade students. We do not have the necessary data to adjust for Boxborough students entering the seventh grade. Notwithstanding the population size and selection we believe declines of this magnitude are worthy of district research and analysis to determine root causes. From our conversations with various administrative staff it does not appear that the district has explored the “seventh grade slump” to date, particularly in the ELA subject area. Consequently, the AB SpEd PAC recommends that the district conduct an in-depth analysis of the special education subgroup’s recent ELA MCAS performance to identify the underlying causes of this dramatic drop in student growth.

Special Education SGP Comparison to Peer Districts

To determine if this “7th grade slump” is a common phenomenon we compared AB’s special education sixth and seventh grade SGP medians with similar peer districts, i.e., Concord/Concord-Carlisle, Lexington, and Westford. It turns out other public school districts are performing at a significantly higher level than AB for 7th and 8th grade. Lexington and Westford are posting SGP scores for the special education student subgroup in the 65-69 range. In other words they’re showing above average growth for this student population. Whereas AB is posting SGP scores in the 34-51 range for 7th and 8th grades, which is below-average to average growth for this student population.

In addition, Lexington and Westford tend to maintain or improve their special education students’ SGP performance from 6th to 8th grade, whereas our students’ SGP scores decline, in some cases significantly during 7th and 8th grade. It is important to note that the Massachusetts state average SGP performance for this student population also increases from 6th to 8th grade, so our district is moving against state student growth trends for this particular subgroup of students.

Peer districts’ Student Growth Percentiles for the graduating Class of 2014¹ are shown below in Table 1. For both ELA and Math, AB’s seventh grade median SGP was the lowest of the four districts while in sixth grade Acton was the highest in ELA and second highest in Math. Based on this analysis we conclude that the “seventh grade slump” is unique to our school district.

¹ The Class of 2014 is the only Class year with SGP data available for sixth, seventh, and eighth grades. The subgroup’s size is 62 sixth graders, 72-73 seventh graders, and 72 eighth graders.

Table 1 – Special Education SGP Comparison to Peer Districts

Class of 2014 - Student Growth Percentile

ELA - SwD				Math - SwD			
	Grade				Grade		
	<u>Sixth</u>	<u>Seventh</u>	<u>Eighth</u>		<u>Sixth</u>	<u>Seventh</u>	<u>Eighth</u>
Acton A-B	63.0	43.0	51.0	Acton A-B	53.0	32.0	49.0
Concord	37.5	46.5	47.5	Concord	29.5	56.0	63.0
Lexington	60.0	52.0	68.0	Lexington	55.0	64.0	58.0
Westford	44.0	69.0	61.0	Westford	40.0	60.5	65.5

Special Education Math Achievement Comparison to Peer Districts

When we look at student achievement scores for the special education population in Lexington and Westford, we also find that their students' AYP scores are significantly higher than ours, probably as a result of the increased growth their students experience. For example, in 8th grade Math last year, only 32% of AB's special education population scored proficient or better on MCAS, whereas in Westford 40% of their students demonstrated proficiency or better and in Lexington a full 54% of their special education student population scored proficient or better on MCAS. If these public school systems can demonstrate this level of achievement and growth for the special education subgroup, then it is clearly an achievable goal for Acton-Boxborough.

Aggregate AB Student SGP Performance

Since the majority of special education students are taught in a full inclusion setting we looked to see if there was a similar slump in the aggregate student population. There were declines from sixth grade to seventh grade in both the Class of 2014 and 2015. In ELA the Class of 2014 and 2015 showed median SGP declines of 6.5 and 5.5 points respectively. In Math the Class of 2014 and 2015 showed median SGP declines of 19 and 9.5 points respectively. While we lack the sophisticated statistical skills or data to determine the likelihood there is a common underlying cause to the "seventh grade slump," it appears that the 19-point decline in Math SGP among all students likely indicates a common underlying problem. However, the modest drop in ELA SGP among the aggregate AB student population suggests that the underlying cause of the aggregate drop is likely due to the 20+ point SGP drop in the special education subgroup. Therefore it appears that the underlying cause(s) of the significant student growth drop for the special education population are unique to that subgroup of students

Table 2 – Aggregate AB English Language Arts SGP Performance

Acton-Boxborough (Acton Grade 6)
ELA Student Growth Percentile

Class of:	Sixth Grade	Seventh Gr.	Eighth Grade	Tenth Grade
2011				45
2012			37	50
2013		56	38	
2014	59	52.5	47	
2015	56.5	51		
2016	58			
2017				
2018				
2019				
Boxborough				
2014	59			
2015	55			
2016	75.5			

Table 3 – Aggregate AB Math SGP Performance

Acton-Boxborough (Acton Grade 6)
Math Student Growth Percentile

Class of:	Sixth Grade	Seventh Gr.	Eighth Grade	Tenth Grade
2011				54.5
2012			51	63
2013		60	44	
2014	63	44	53	
2015	67.5	58		
2016	71			
2017				
2018				
2019				
Boxborough				
2014	36			
2015	31			
2016	47.5			

Lack of Adequate SGP Rebound in 8th Grade to Compensate for AB's 7th Grade Slump

While it is possible that the impact of poor student growth one year can be mitigated by faster-than-normal growth in subsequent years, research suggests that it takes dramatic increases in above average student growth to compensate for one or more low growth years. While we do not have the technical expertise to determine exactly what level of subsequent student growth would be necessary to overcome a poor year, the eighth grade SGP data does not suggest that we've demonstrated enough of a rebound in eighth grade to offset the "seventh grade slump." Table 4 below shows the change in median SGP for the special education subgroup's graduating class years 2013, 2014 and 2015 as well as the three-year average increase/decrease. On average our eighth grade SGP performance continues to slump relative to this group's sixth grade student growth.

Table 4 – Special Education Annual SGP Change from 6th to 8th Grade

Acton A-B Annual Change in SGP by Class Yr.

Class	ELA - SwD		Math - SwD	
	6th to 7th	7th to 8th	6th to 7th	7th to 8th
2013		-18.5		-3.0
2014	-20.0	8.0	-21.0	17.0
2015	-22.0		-13.5	
Average	-21.0	-5.3	-17.3	7.0

Class	ELA - Aggregate		Math - Aggregate	
	6th to 7th	7th to 8th	6th to 7th	7th to 8th
2013		-18.0		-16.0
2014	-6.5	-5.5	-19.0	9.0
2015	-5.5		-9.5	
Average	-6.0	-11.8	-14.3	-3.5

Impact of Lower SGP on Special Education Student Achievement Scores

If we look at the AB Class of 2014, the lower student growth experienced by this class' special education subgroup appears to be showing up in the group's MCAS achievement (AYP) scores. For example, as shown in Table 5 below, Acton's special education sixth graders tied with Lexington's for the highest percentage of students scoring Proficient or better on the MCAS ELA test at 64%. However, by eighth grade only 69% of AB's 2014 Class scored Proficient or better on MCAS compared to 80% of Lexington's 2014 Class who grew at an above average rate over the previous two years while AB's students grew at a low average rate. Within two years AB's special education students had fallen to only 1% point above the lowest performer in our peer districts.

Table 5 – Peer Group Special Education Proficiency Change from 6th to 8th Grade

<u>Proficient Percentage</u>							
ELA - SwD				Math - SwD			
	<u>Grade</u>				<u>Grade</u>		
	<u>Sixth</u>	<u>Eighth</u>	<u>Change</u>		<u>Sixth</u>	<u>Eighth</u>	<u>Change</u>
Acton A-B	64	69	5	Acton A-B	37	32	-5
Concord	63	76	13	Concord	34	24	-10
Lexington	64	80	16	Lexington	57	54	-3
Westford	48	68	20	Westford	20	40	20

Recommendations

1. While the district has spent a significant amount of time analyzing why special education students weren't able to demonstrate adequate Annual Yearly Progress in Math over the last four years, that same type of in-depth analysis should be done for the English Language Arts subject area. Given two successive years of 20 point SGP drops in ELA for 7th grade special education students, we recommend that the district conduct in-depth research and analysis of special education student MCAS performance in ELA over the last 3 years to determine the underlying causes of this significant performance drop. It is essential to gain a full understanding of AB's unique "seventh grade slump" so we can adjust curriculum, teaching strategies, etc. as necessary to eliminate it.
2. Recently available Student Growth Percentile data is a very useful metric for tracking annual student growth/progress. For the first time the education community has an objective and widely available measure of a student's annual progress to complement standard achievement measures. We recommend that the district establish annual SGP performance targets for both the district and individual schools. We recommend that the Administration and School Committee include SGP targets for the aggregate student population and the special education subgroup in the district's and each school's Annual Improvement Plan.
3. For the special education subgroup we would suggest that a realistic short term SGP goal might be 50% or higher for each subject and grade. As a long-term goal for this subgroup we would recommend an SGP target in parity with the overall district goal. Since SGP is a measure of how each student is growing in relation to a similarly achieving peer group across the state, it seems appropriate for the district to commit to equal annual growth for all students. In order to track how well the district is doing with the full range of students, we would recommend that the district perform an analysis, which determines SGP by the following seven achievement levels – high Advanced, low Advanced, high Proficiency, low Proficiency, high Needs Improvement, low Needs Improvement, and Warning.

4. Current research indicates that the greatest factor affecting student progress is teacher effectiveness. The SGP metric offers one objective measure of teacher effectiveness. We recommend that the district begin to use available SGP data to assess teacher effectiveness over time. In the near term it could also be used to help identify which teachers might benefit most from additional training, to help make hiring decisions, to assess program and teaching strategy effectiveness, and for the planning of teacher–student classroom configurations. To protect teacher confidentiality we would recommend that the district create a report of the number of individual teachers by grade with an SGP in the following five ranges: below 30, 30-40, 40-60, 60-70, and above 70 to identify the current range of teacher performance. It would also be helpful to create a report of MCAS performance by special education program. In the long term, we would also recommend that SGP be one of the data points used to assess annual teacher performance and determine staff compensation.
5. Each year we recommend that the district continue to identify all students scoring at the MCAS Warning level who are not currently in special education and refer those students to a Child Study Team to determine whether or not they should be evaluated for special education eligibility. Students performing at this level are clearly being “left behind” educationally and are likely to need additional supports whether regular or special education in nature.



2010 MCAS Analysis for McCarthy-Towne School

Troubling trends at McCarthy-Towne

Prepared by Bill Guthlein
Revised 3/3//2011

Introduction

There is no question that the Acton Public School district is a high-performing school district that provides a quality education to our student population overall. However, available MCAS data for both student proficiency and student growth indicate that in certain areas the district's special education students are not performing to this same high standard. The Acton-Boxborough Special Education Parent Advisory Council (AB SpEd PAC) has focused its MCAS analysis on this subgroup of students within the APS school district who don't seem to be achieving at a level commensurate with the district's overall academic performance.

McCarthy-Towne MCAS SGP Performance

When you look at Student Growth Percentile (SGP) scores – i.e., how much a student is growing each year in relation to a similarly achieving peer group across the state – the AB SpEd PAC's analysis identified particular concerns for special education students at McCarthy-Towne Elementary School. Academic progress in English Language Arts as measured by SGP has materially lagged the Acton district average for the last three years and has fallen behind the state average for the last two years. In Math, special education students' SGP scores have been deteriorating so that most recently McCarthy-Towne's SGP of 31.5 is more than 20 points below the Acton district average and 10 points below the state average for this particular subgroup of students. These SGP numbers indicate a need to explore and identify the performance drivers/challenges for this subgroup of students at McCarthy-Towne.

Table 1 below compares each school's special education student growth median with the district average. The school level data presented below combines Grade 4-6 MCAS scores because of the small number of special education students in each grade. Each elementary school has a total of 40-46 special education students in grades 4-6; consequently only school level data is publicly available on the DESE's website.

Table 1 – Special Education SGP Scores for APS

ACTON SPECIAL EDUCATION SUBGROUP - SGP

	English Language Arts SGP			Mathematics SGP		
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Conant	56	48	63	51	50.5	60
Douglas	49	56	42	57	67	39
Gates	56.5	44	55	59	57	55
McT	39.5	27	35.5	56.5	42	31.5
Merriam	65	58	43	45	62.5	59
District	54	48	47.5	53.5	56.5	52
<i>B(W) than District</i>						
Conant	2.0	0.0	15.5	-2.5	-6.0	8.0
Douglas	-5.0	8.0	-5.5	3.5	10.5	-13.0
Gates	2.5	-4.0	7.5	5.5	0.5	3.0
McT	-14.5	-21.0	-12.0	3.0	-14.5	-20.5
Merriam	11.0	10.0	-4.5	-8.5	6.0	7.0

McCarthy-Towne MCAS Achievement Performance

Surprisingly, McCarthy-Towne's below district average growth rates for the special education subgroup don't seem to be as evident in student achievement scores as we would expect. The school has performed relatively close to the district average in regards to student achievement as measured by the percentage of students receiving a Proficient or better designation on MCAS, as shown in Table 2 below. An analysis by Composite Performance Index ("CPI") – the combined weighted score associated with student proficiency designations – shows McCarthy-Towne only modestly trailing the district average as shown in Table 3 below.

Since both Student Growth Percentiles and changes in achievement are linked to the MCAS test we would expect lower SGP scores to result in lower achievement scores. However, this does not seem to be the case using publicly available MCAS data. We suspect the lack of correlation between growth and achievement has to do with the changes in student population tested. Each year a new fourth grade class is added and the prior year's sixth grade class is eliminated. In addition, student transfers in and out of each school will impact MCAS results given the size of the special education population is only a total of 40-46 students across Grades 4-6.

Table 2 – Special Education Proficiency Scores for APS

ACTON SPECIAL EDUCATION SUBGROUP - PROFICIENCY

	ELA Proficient - %			Math Proficient - %		
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Conant	55%	37%	51%	38%	37%	38%
Douglas	45%	53%	62%	43%	60%	44%
Gates	50%	50%	41%	48%	46%	39%
McT	51%	39%	39%	42%	31%	39%
Merriam	60%	49%	44%	46%	43%	41%
District	51%	43%	44%	40%	41%	38%
<i>B(W) than District</i>						
Conant	4%	-6%	7%	-2%	-4%	0%
Douglas	-6%	10%	18%	3%	19%	6%
Gates	-1%	7%	-3%	8%	5%	1%
McT	0%	-4%	-5%	2%	-10%	1%
Merriam	9%	6%	0%	6%	2%	3%

Table 3 – Special Education CPI Scores for APS

ACTON SPECIAL EDUCATION SUBGROUP - CPI

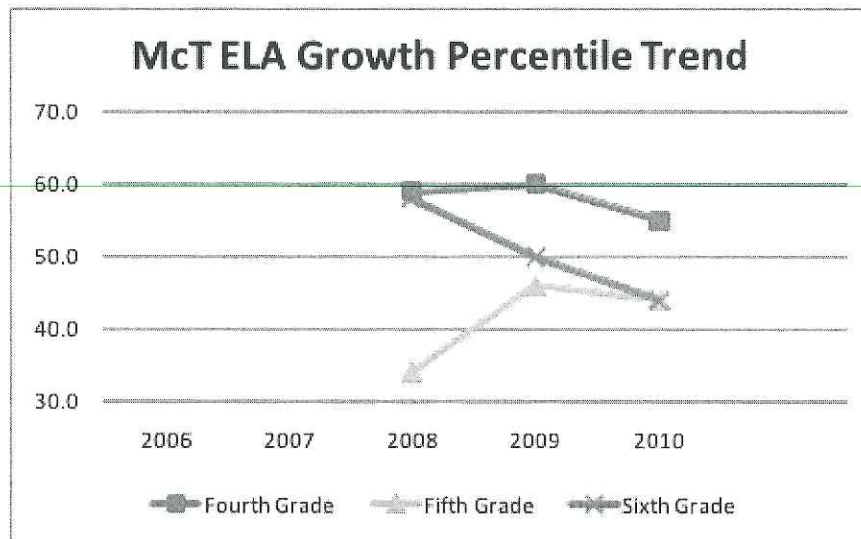
	English Language Arts CPI			Mathematics CPI		
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Conant	74.4	72.7	79.8	69.6	69.2	72.9
Douglas	77.1	85.5	85.1	73.4	78.3	70.9
Gates	79.6	82.1	73.1	78.9	79.8	71.8
McT	73.2	76.0	73.4	73.2	68.3	67.6
Merriam	85.6	82.3	74.1	76.9	80.0	75.9
District	78.1	78.7	75.7	73.9	74.4	71.2
<i>B(W) than District</i>						
Conant	-3.7	-6.0	4.1	-4.3	-5.2	1.7
Douglas	-1.0	6.8	9.4	-0.5	3.9	-0.3
Gates	1.5	3.4	-2.6	5.0	5.4	0.6
McT	-4.9	-2.7	-2.3	-0.7	-6.1	-3.6
Merriam	7.5	3.6	-1.6	3.0	5.6	4.7

Regardless of whether or not SGP declines are reflected in student achievement scores, the AB SpEd PAC finds the dramatic student growth decline in both ELA and Math for special education students at McCarthy-Towne quite concerning. Remember, each student's annual growth is measured in relation to a similarly achieving peer group across the state. Therefore the net change in the achievement level of new entrants and departures does not affect a child's Student Growth Percentile. SGP is a pure reflection of individual student growth over the previous year in direct comparison to a statewide student peer group. A Class Year analysis would provide better insight into the underlying source(s) of McCarthy-Towne's low SGP scores. However, this is an analysis the district will need to conduct itself because class level MCAS data is not publicly available.

Aggregate McCarthy-Towne Student SGP Performance

Since the majority of special education students are taught in a full inclusion setting we looked to see if there was a similar slump in the aggregate student population. Unfortunately, the unfavorable growth trend in English Language Arts, as measured by the Student Growth Percentile median, affects the overall student population at McCarthy-Towne as well. Student growth in all grades slipped lower in 2010. While fourth grade ELA SGP scores are acceptable, the fifth grade has not reached the statewide median in three years and the sixth grade scores have trended consistently downward to now fall below the statewide median in 2010.

Table 4 – Aggregate McCarthy-Towne ELA SGP Performance



If you look at the aggregate SGP data by graduating Class Year, as shown in Table 5 below, the Class of 2015 and 2016's student growth has been significantly below the district average for two consecutive years. The fifth grade ELA scores are particularly worrisome with a very low SGP median of 34 for the Class of 2015 and major year-to-year declines for the Class of 2016 and 2017.

Table 5 – Aggregate McCarthy-Towne ELA Growth Scores by Graduating Class Year

**McCarthy Towne - Aggregate
ELA Student Growth Percentile**

Class of:	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>
2014				58
2015			34	50
2016		59	46	44
2017		60	44	
2018		55		

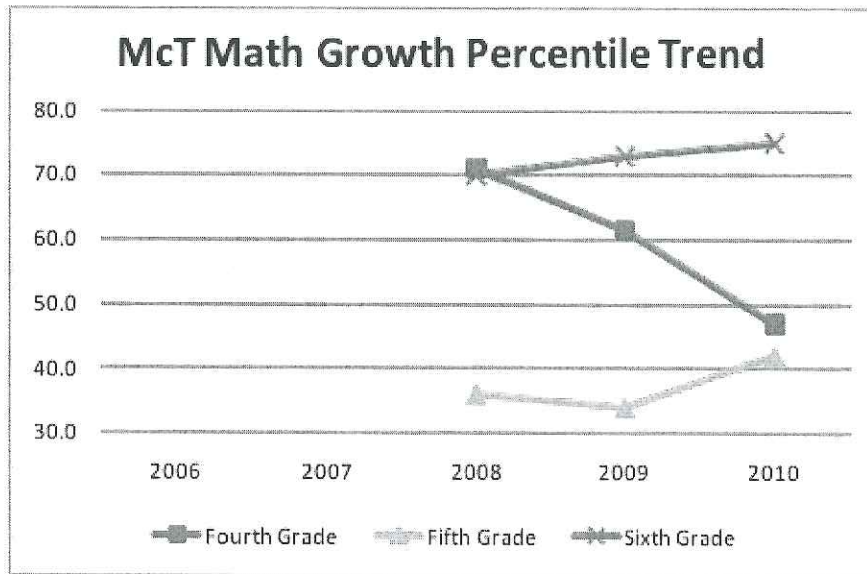
McCarthy Towne - B(W) District

Class of:	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>
2014				-1
2015			-25.5	-6.5
2016		0	-13	-14
2017		1	-10	
2018		-5		

Aggregate McCarthy-Towne Student SGP Performance

McCarthy-Towne's fifth grade Math SGP median grade scores have been very weak for the past three years. Fourth grade SGP scores have also plummeted from a very high 71 to 47, which is now below the state median. The sixth grade growth has consistently remained very high, possibly in part due to some rebound effect from the unusually low fifth grade student growth. However, while the sixth grade SGP reflects a single year of high student growth, this number is not high enough to make up for two years of below average student growth.

Table 6 – Aggregate McCarthy-Towne ELA Growth Scores by Grade



Aggregate McCarthy-Towne Math SGP Performance by Class Year

An analysis of the Math SGP by graduating Class shown in Table 7 below highlights low student progress in the fifth grade over multiple years. McCarthy-Towne's fifth grade Math SGP median has trailed the district's median by 17 to 25 points over the last three years. For the Class Years 2015-2017 a pattern appears to be emerging of high progress in the fourth and sixth grades and low progress in the fifth grade. However, the Class of 2018's 4th Grade SGP of 47 is below the state median and well below prior fourth grade classes at McCarthy-Towne. If this Class of students experiences the same slow growth in 5th Grade as preceding Classes have, it is unlikely that the sixth grade program and teachers can catch these students up in time to enter junior high school on par with their 6th Grade counterparts across the district.

Table 7 – Aggregate McCarthy-Towne Math Growth Scores by Grade

**McCarthy Towne - Aggregate
Math Student Growth Percentile**

Class of:	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>
2014				70
2015			36	73
2016		71	34	75
2017		61.5	42	
2018		47		

McCarthy Towne - B(W) District

Class of:	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>
2014				7
2015			-25	5.5
2016		6	-24	4
2017		-4.5	-17	
2018		-13		

McCarthy-Towne Grade 6 ELA Proficiency Comparison to Other APS Schools

In order to assess whether McCarthy-Towne students are at a disadvantage relative to other Acton school students we compared sixth grade achievement levels over the last three years. Table 8 below shows the results of that analysis for English Language Arts. Proficiency levels at McCarthy-Towne, i.e., percentage of students scoring Proficient or better on MCAS, declined 9 points over the three-year period and in 2009 and 2010 were 17 and 5 points below the district average. The proficiency change for the special education subgroup of students was dramatic over this same time period. Proficiency for the special education student subgroup dropped 35 points from 77% proficient or better in 2008 to only 42% proficient in 2010. It is essential that the district identify the cause(s) behind this dramatic decline in student achievement.

The difference in aggregate student performance is also larger when you consider the category of students who scored Advanced on MCAS from 2008-2010. The percentage of McCarthy-Towne students scoring Advanced declined 16 points over this three-year period and in 2009 and 2010 was 17 and 15 points below the district average respectively.

Table 8 – Aggregate APS Grade 6 ELA Proficiency Scores

ELA - Grade 6

Proficiency %

<u>Aggregate</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Change</u> <u>08 -10</u>
McT	93	82	84	-9
District	91	99	89	-2
Diff.	2	-17	-5	-7

SwD

McT	77	46	42	-35
District	64	56	56	-8
Diff.	13	-10	-14	-27

Advanced %

<u>Aggregate</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Change</u> <u>08 -10</u>
McT	38	20	22	-16
District	44	37	37	-7
Diff.	-6	-17	-15	-9

SwD

McT	8	0	0	-8
District	12	8	7	-5
Diff.	-4	-8	-7	-3

McCarthy-Towne Grade 6 Math Proficiency Comparison to Other APS Schools

As you would expect from the SGP data, the smaller growth decline in Math MCAS scores translated to a smaller achievement gap than that previously demonstrated in English Language Arts. Math proficiency as measured by percentage of students scoring Proficient or better on MCAS, declined 5 points in Math over the three-year period and lagged the district average by 9 and 7 points in 2009 and 2010 respectively. Despite the low math SGP scores of the special education subgroup at McCarthy-Towne relative to the Acton district median, proficiency was in line with the district overall. As mentioned earlier, we believe changes to the subgroup's membership over time may be confounding the anticipated link between growth and achievement.

When you consider the category of students who scored Advanced on MCAS from 2008-2010, the percentage of McCarthy-Towne sixth graders who achieved "Advanced" scores in Math

declined 4 points over the three-year period and lagged the district average by 16 and 5 points in 2009 and 2010 respectively.

Table 9 – Aggregate APS Grade 6 Math Proficiency Scores

MATH - Grade 6

Proficiency %

<u>Aggregate</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Change</u> <u>08 -10</u>
McT	87	76	82	-5
District	86	85	89	3
Diff.	1	-9	-7	-8

SwD

McT	46	46	53	7
District	51	44	55	4
Diff.	-5	2	-2	3

Advanced %

<u>Aggregate</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Change</u> <u>08 -10</u>
McT	60	38	56	-4
District	57	54	61	4
Diff.	3	-16	-5	-8

SwD

McT	8	15	16	8
District	13	13	18	5
Diff.	-5	2	-2	3

Recommendations

1. In English Language Arts, special education students' SGP scores have consistently fallen between 12 and 24 points per year over the last three years. Student progress has materially lagged the Acton district average for the last three years and has fallen behind the state average for the last two years. In Math, special education students' SGP scores have been deteriorating so that most recently McCarthy-Towne's SGP of 31.5 is more than 20 points below the Acton district average and 10 points below the state average for this particular subgroup of students. In addition, the change in MCAS proficiency for the special education subgroup over this same time period has been dramatic. Proficiency for the special education student subgroup dropped 35 points from 77% proficient or better in 2008 to only 42% proficient in 2010. We recommend that the district conduct an in-depth analysis to determine

the underlying cause(s) of this significant performance drop with particular focus on the fifth grade. It is essential to gain a full understanding of the negative performance trends at McCarthy-Towne over the past three years so that we can adjust the curriculum, teaching strategies, etc. as necessary to reverse the trend.



2. As part of its analysis the AB SpEd PAC recommends that the district conduct a grade level analysis to gain better insight into the underlying source(s) of McCarthy-Towne's low SGP scores. These are analyses the AB SpEd PAC cannot run because class level MCAS data is not publicly available due to small special education student subgroup size per grade.
3. Acton parents expect that each public elementary school will provide their children with equivalent academic skills, albeit with some differences in pedagogy. However, it doesn't appear that is the case at present. In 2010 McCarthy-Towne showed the lowest school wide SGP in both English Language Arts (48) and Mathematics (55) in the district. Conant reported the highest SGPs in Acton in both ELA (66) and Math (73). In both Math and ELA there is an 18-point difference in student growth between the two schools and a 9-point difference from the district average. We don't have the ability to calculate the difference in academic achievement that would result from an 18-point difference in average student growth over three years (grades 4-6). However, we anticipate that difference could be significant. Recent research has indicated that it is difficult for students to catch up with peers after two consecutive years of low growth. To gain a better understanding of how this is affecting these students long term, we recommend that the district conduct an analysis of how McCarthy-Towne students have performed in junior high school over the last three years relative to their peers.
4. A material disparity in student progress and performance among schools also begs a policy question about the equity of school placements in Acton. If a school becomes less desirable in the district due to relatively weak academic performance, it is likely to be less attractive to parents during the school lottery process. For those students who don't get their top school choices it might also mean that some children receive a "second-class education," at least by Acton standards.
5. Recently available Student Growth Percentile data is a very useful metric for tracking annual student growth/progress. For the first time the education community has an objective and widely available measure of a student's annual progress to complement standard achievement measures. We recommend that the district establish annual SGP performance targets for both the district and individual schools. We recommend that the Administration and School Committee include SGP targets for the aggregate student population and the special education subgroup in the district's and each school's Annual Improvement Plan.
6. For the special education subgroup we would suggest that a realistic short term SGP goal might be 50% or higher for each subject and grade. As a long-term goal for this subgroup we would recommend an SGP target in parity with the overall district goal. Since SGP is a measure of how each student is growing in relation to a similarly achieving peer group across the state, it seems appropriate for the district to commit to equal annual growth for all students. In order to track how well the district is doing with the full range of students, we would recommend that the district perform an analysis, which determines SGP by the

following seven achievement levels – high Advanced, low Advanced, high Proficiency, low Proficiency, high Needs Improvement, low Needs Improvement, and Warning.


7. Current research indicates that the greatest factor affecting student progress is teacher effectiveness. The SGP metric offers one objective measure of teacher effectiveness. We recommend that the district begin to use available SGP data to assess teacher effectiveness over time. In the near term it could also be used to help identify which teachers might benefit most from additional training, to help make hiring decisions, to assess program and teaching strategy effectiveness, and for the planning of teacher–student classroom configurations. To protect teacher confidentiality we would recommend that the district create a report of the number of individual teachers by grade with an SGP in the following five ranges: below 30, 30-40, 40-60, 60-70, and above 70 to identify the current range of teacher performance. It would also be helpful to create a report of MCAS performance by special education program. In the long term, we would also recommend that SGP be one of the data points used to assess annual teacher performance and determine staff compensation.
8. Each year we recommend that the district continue to identify all students scoring at the MCAS Warning level who are not currently in special education and refer those students to a Child Study Team to determine whether or not they be evaluated for special education eligibility. Students performing at this level are clearly being “left behind” educationally and are likely to need additional supports whether regular or special education in nature.

8.7.2.
(A)

From:  Nicole Lippa <" data-bbox="215 100 235 115"/>

Fri, Mar 18, 2011 8:04:18 PM  

Subject: Classroom Assitant Hours

To:  <apsc@acton-ma.gov>  <abrsc@acton-ma.gov>

Attachments:  Attach0.html

3K

It is my understanding that there is a motion on the table to limit the amount of money that PTSO's can contribute to assitant hours. I would like this to be voted down. The class sizes in our schools are a HUGE concern. They are at unacceptable levels. Even the teachers I spoke with have said that this is a huge problem. Having the assitants in the classroom helps. If our school district can not afford to lower the number of students in our classes and they can not pay to have these assitants there to help the teachers, then we should allow the PTSO's to use as much money as they can raise to help their schools.

I can't imagine why someone would want to vote to limit the amount of financial help we give to our schools. I have heard that some schools raise less PTSO funds than others so there are some people that feel there is an unfairness in this system. I think it is unacceptable to say that because some schools can't raise enough money, we should punish the schools that can. Since one school can't have assitant hours, then no school should have them. Instead we should be worrying about why those schools are unable to raise the same level of PTSO funds and see if there aren't things those school PTSOs could do to increase their funds. We need to try to increase the level of our school quality, not decrease it. If parents are willing to put in tons of time and money to help improve their schools, we should not turn that help away. Please do not limit what the PTSO can do to help the schools at time when the schools need all the extra help they can get.

Nicole Lippa

Noah,

Thank you for sharing your concerns about class size with the school committee. We will be continuing our discussion of class size with respect to kindergarten sections at Thursday's meeting as we attempt to determine what allocation of our resources will provide the best education for our children.

8.7.3,
(A)

I hope you will be able to join us.

Sincerely,

John Petersen

Chair, Acton Public School Committee

From: N Nelson [mailto:nelson@acton-ma.gov]
Sent: Sunday, March 20, 2011 3:49 PM
To: [sho](mailto:sho@apsc@acton-ma.gov); apsc@acton-ma.gov
Subject: Kindergarten class reduction

Dear School Committee,






I would like to express my concern and disappointment about the possible reduction of kindergarten classes, and I am writing to plead your reconsideration.

While I understand that overall registrations are down this year and that the committee feels that class sizes will remain within the limits of acceptance, I have also been told that Acton class size is already 3 students over the state average. With this in mind, I would see this as opportunity to bring the Acton schools closer to the state average rather than maintaining the status quo.

I realize that there are many factors to consider, but I believe that an investment in reducing class size is superior to adding additional part time teacher support.

Sincerely,

Noah A. Nelson
Acton, MA

From:  Stow Laboratories Inc <stowlabs@stowlabs.com>
Subject: Re: Class size,
To:  cwhitbeck@mail.ab.mec.edu
Cc:  smills@mail.ab.mec.edu  Acton School Committee <apsc@town.acton.ma.us>
Attachments:  Attach0.html 12K

Dear Dr. Whitbeck,

thank you for your reply. Absent any evidence that smaller classes in school systems such as ours result in measurable benefits to the children -- and you do not offer any such evidence -- the debate becomes one of opinions and perceptions. Such debates do not lead to satisfactory conclusions.

I know that the Acton school system has been increasingly criticized for subjecting the kids (and their parents) to too much pressure, but I was not aware that we are classifying kindergartners as "underachieving". I hope that this was intended just to get a reaction from me -- that you are not really telling parents that their 5 year old is not "on grade level".

Regards,

Charlie

On 3/21/2011 12:36 PM, Chris Whitbeck wrote:

Dear Charlie,

Thank you for sharing Dr. Hanushek's paper. I am familiar with it and I, as well as other research scientists disagree with some of his statistical analysis. There is certainly a heated debate. I do believe that, compared to other populations that have been studied, Acton is now dealing with similar disadvantaged populations. Ultimately, there is quote of Dr. Hanushek's that I believe to be at the crux of this debate:

Surely class size reductions are beneficial in specific circumstances and for specific groups of students, subject matters, and teachers. Second, class size reductions necessarily involve hiring more teachers, and teacher

8.7.5

(A)

quality is much more important than class size in affecting student outcomes. Third, class size reduction is very expensive, and little or no consideration is given to alternative and more productive uses of those resources.

We all realize that the critical effect size differs across groups with different socioeconomic and academic preparation structures. What we must do is target resources toward our under achieving students. Our current kindergarten classes have, on average 33% of their students who are not on grade level. As Dr. Hanushek writes, we should consider all alternatives. Many of these students may benefit the most from smaller classes. They would certainly benefit from work with a certified math specialist or additional reading and language arts specialists. I think it's a much better bang for our buck to reduce the class size by enrolment attrition (a goal of 15-16 students would be my guideline) than it would be to hire the extra staff at each school, to address these needs.

Chris

Stow Laboratories Inc <stomail@stolab.com> writes:

Dear Dr. Whitbeck,

your comment at last night's school committee meeting about me not reading the research about class size was certainly well received by the audience, but it is incorrect. I have read many such reports but have not found any that are applicable to a community such as Acton, to a student population which is not disadvantaged and/or handicapped by poorly trained teachers, reports which address the potential benefits of a very small reduction in our already very low class sizes -- which was the issue being discussed by the school committee (16 sections of Kindergarten vs. 15 for about 290 kids, i.e. an average class size of 18.1 vs. 19.3). If you know of any such studies, please tell me about them.

I think that Dr. Hanushek's paper :

http://www.wallis.rochester.edu/WallisPapers/wallis_10.pdf

does apply to Acton. If you have not seen it, just read the last two sentences of the Abstract.

Regards,

Charlie

From:  Stow Laboratories Inc <--> Mon, Mar 21, 2011 11:56:58 AM  
Subject: More on class size
To:  cwhitbeck@mail.ab.mec.edu
Cc:  Acton School Committee <apsc@town.acton.ma.us>  smills@mail.ab.mec.edu
Attachments:  Attach0.html 2K

Dear Dr. Whitback,

I spent some time this weekend "Googling" class size, to see if there is some more recent information than my collection of various references. I did find this, from July 2010 :

<http://www.educatedreporter.com/2010/07/what-class-size-research-really-says.html>

From the first paragraph (emphasis mine) :

"Nearly every education writer knows about Project STAR, *the only large-scale, random-assignment experiment that has been conducted on class size.*"

and

"We do not know much about is what kind of difference class size makes *outside the parameters of that experiment,* at least not with the certainty that comes with the methodological rigor of an experiment like STAR."

I think -- I hope -- that you agree that the parameters of this "experiment" conducted more than 20 years ago in rural Tennessee have no relevance to our school system.

Do you have better information ?

Regards,

Charlie

From: Jennifer Neidig Nelson <jennifer ~ ~ ~

1/2011 12:10:30 PM

Subject: Class Size Discussion

To: apsc <apsc@acton-ma.gov>

Attachments: Attach0.html

5K

8.7.5
(A)

Dear School Committee,

While in general I believe that Dr. Mills and the committee are making recommendations that are best for both the students as well as teachers, I have questions about the contradictory communications around class size. Below is an excerpt from the December 2, 2010 Joint and Regional School Committee meeting regarding recommendations from the Class Size Subcommittee that conflicts with last weeks proposal at the school committee meeting.

This, in addition to the acknowledgement by Dr. Mills (during the 2011 Kindergarten information night) that class sizes are large (and the assurance that he and his team are looking at it) seems only to support maintaining 16 kindergarten classes. With reduced enrollment, I see this as an opportunity to implement the below recommendations. I also understand the requested support from the schools regarding classroom assistants, but it seems that amongst the teachers and principals, that class size reduction would be preferred.

Thank you for your time and your service.

Best,
Jen Nelson, Parent

Class Size – Solution Analysis

- Reducing class size will require “out-of-the-box” thinking

- It is important to get input from as many stakeholders as possible:



- Teachers
- Administrators
- Staff
- Students
- Parents
- Other school districts

Class Size – Solution Analysis

- Preliminary Plan of Action
 - Meet with principals of seven schools (two already completed)
 - Meet with teachers
- Teacher forum? Suggestion box?
 - Parent forums
 - Student forums
 - PTSO's
- Prepare preliminary compilation of suggestions

8.7.6.

(A)

From:  Karen Dean <dl
Subject: Question on setting limits of PTO funds
To:  <apsc@acton-ma.gov>

Mon, Mar 21, 2011 4:53:17 PM  

Attachments:  Attach0.html

1K

Dear School Committee Members,

I have just read that a proposal to cap the amount of money a PTO can raise was on the table. It just seems odd to me - isn't the idea of fundraising to raise the most amount of money you can? Can you please tell me the reasons why the Acton school committee would wish to cap the amount of money raised by a PTO?

Thank you,
Karen

Kindergarten Enrollment 2011-2012

Read columns from top to bottom to view class sizes for this kindergarten as it moves through 6th grade

March 2011 Actual Registrations						
	Enrolled	Yr to Yr Progression Ratio	Staff	Total	15	16
K	261		6			
Add 15*	276		6	282	18.8	17.6
1st	295	1.07	6	301	20.1	18.8
2nd	311	1.06	6	317	21.2	19.8
3rd	322	1.03	6	328	21.9	20.5
4th	329	1.02	6	335	22.3	20.9
5th	334	1.02	6	340	22.7	21.3
6th	340	1.02	6	346	23.1	21.6

*We have planned for 15-20 new kindergarteners to register between now and the start of school.

Current total estimate of 282 includes an estimate of 15 additional students who could register between now and September

Year to Year progression ratio comes from Ashton's projections for the 2011 kindergarten class

3/22/2011

10.2.1.
A

Kindergarten Enrollment History

	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Projection	288	274 (Planned for 325)	287	276	309	349	316	338	319	306	351	338	335
Registered by March (including staff)	267	302	311	284	277	289	279	308					
1-Oct	276 Projection	320	334	301	292	305	308	328	334	361	338	323	326
Staff	6	8	6	3	2	5	2	1					
Total Oct 1	282	328	340	304	294	310	310	329	334	361	338	323	326
Difference Oct 1 and projection		54	47	25	-17	-44	-8	-10	15	55	-13	-15	-9
Difference between registra and Oct 1		26	29	20	17	21	31	21					
Same class in 6 th grade (with staff kids)	346	394	406	377	365	387	366	394	407	384	397	390	370
Number of Sections	15	16	16	15	15	15	15	16	16	16	15	15	15
Kind Class Size	18.8	20.5	21.3	20.3	19.6	20.7	20.7	21.9	22.3	22.6	22.5	21.5	21.7
6th Grade Class Size	23.1	24.6	25.4	25.1	24.3	25.8	24.4	24.6	25.4	24.0	26.5	26.0	24.7

K-6 Enrollment 2011-2012

Grade	Students	Sections	Class Size
K	282*	15	18.8
1	349	16	21.8
2	372	16	23.3
3	356	15	23.7
4	353	15	23.5
5	381	15	25.4
6	370	15	24.7

*Includes estimated enrollment of additional 15 students after registration

*# Staff Children
Case 1
CAD, DAD, GAD, TAD, and MAD - ALL DAY PROGRAMS*

Revised Enrollment Projections - 12/10

PUBLIC SCHOOL ENROLLMENT PROJECTIONS

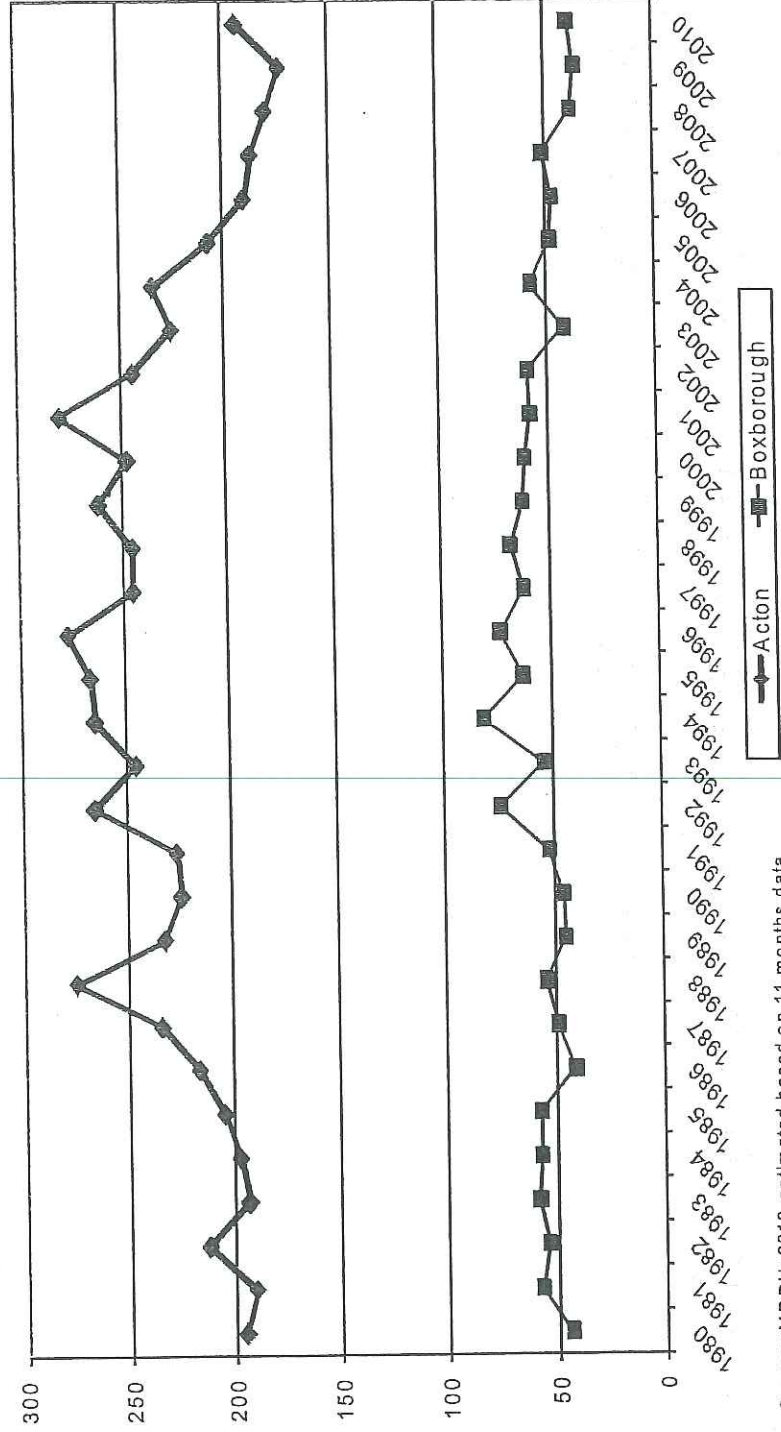
Elementary School

Acton, MA: 2001-2022

Year	K-12	K	1	2	3	4	5	6	Total
2001*	4307	338	345	351	360	335	364	367	2460
2002*	4450	361	361	350	353	357	343	381	2506
2003*	4517	334	348	369	360	355	365	349	2480
2004*	4575	328	352	363	376	365	361	379	2524
2005*	4654	308	352	359	372	380	375	370	2516
2006*	4712	305	315	371	375	375	387	390	2518
2007*	4762	292	320	340	389	394	382	397	2514
2008*	4773	301	326	336	349	381	404	384	2481
2009*	4830	334	333	349	358	359	391	407	2531
2010*	4815	320	347	342	344	369	360	394	2476
2011	4791	288	341	366	354	351	376	366	2443
2012	4769	278	308	361	379	361	357	382	2425
2013	4718	268	297	325	373	386	367	363	2379
2014	4645	257	285	313	336	380	393	374	2339
2015	4605	287	274	301	324	343	387	400	2317
2016	4527	248	306	290	312	330	349	394	2229
2017	4449	254	265	323	300	318	336	355	2151
2018	4403	260	271	280	334	305	324	342	2117
2019	4346	266	278	286	289	341	311	329	2100
2020	4314	272	284	293	296	295	347	316	2104
2021	4268	268	290	300	303	302	300	353	2116
2022	4195	266	285	307	310	309	307	305	2090

Births in Acton and Boxborough

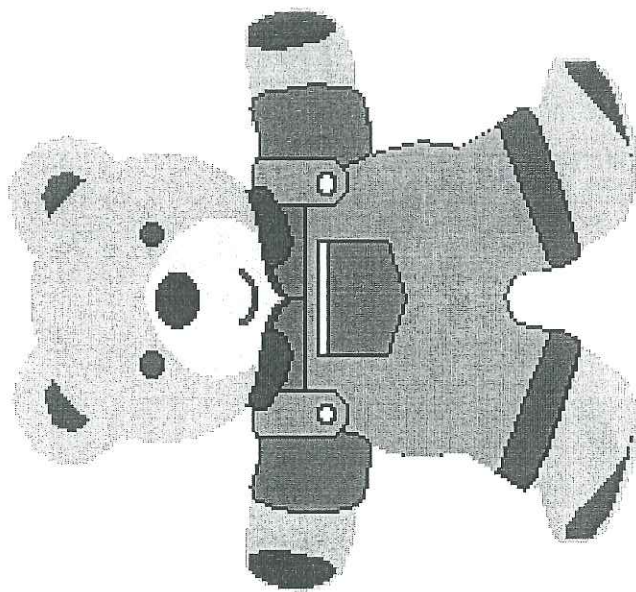
1980-2010



Source: MDPH; 2010 estimated based on 11 months data

- Acton and Boxborough births declining since 2002; slight uptick in 2010 in Acton
- Reflects larger demographic trend, lower turnover rates

All Students



Class of 2024

Count of Those Who Had Special Requests

First Choice	Sibling	Retention	Walker	Special Needs	Language	Total
Conant	24	0	0	1	4	29
Douglas	23	0	5	0	0	28
Gates	29	0	2	3	0	34
Towne	27	0	0	0	1	28
Merriam	35	0	0	3	2	40
No School	0	0	0	0	0	0
Total	138	0	7	7	7	159

Program	Total	Priority	Random	Retentions 7+ Case not counted
All Day Conant	34	17	17	CAD = 0
All Day Douglas	28	13	15	DAD = 0
All Day Gates	21	17	4	GAD = 0
All Day Towne	35	18	17	TAD = 0
All Day Merriam	30	19	11	MAD = 0
All Day Sum	148	84	64	Total = 0
In the count - do not add				

School Choices for All of Incoming Students

Choice	Sibling	1	2	3	Total
Conant	24	56	14	19	89
Douglas	23	51	26	38	115
Gates	29	47	41	18	106
Towne	27	54	18	18	90
Merriam	35	59	29	30	118
No School	0	0	0	0	0
Total	138	267	128	123	518

School Choices for Those Without Siblings

Choice	1	2	3	Total
Conant	32	13	18	63
Douglas	28	25	37	90
Gates	18	40	17	75
Towne	27	16	16	59
Merriam	24	28	29	81
No School	0	0	0	0
Total	129	122	117	368

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