Students are Now Acting like Students

Year One Evaluation of the Smaller Learning Communities Grant Chicopee and Springfield (Massachusetts) Public Schools

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Acknowledgements

While third-party evaluators are sometimes perceived as removed from the process under evaluation, our work would have been impossible without the support and cooperation received from those implementing the smaller learning communities grant in the Springfield and Chicopee Public Schools. In particular, the two districts' SLC coordinators, Ann Ferriter and Sheila Hoffman, have been invaluable resources in scheduling interviews and tirelessly responding to requests for information. Barbara Roche, project coordinator, has also provided support and important background information. The various individuals and departments responding to our requests for data through Ms. Ferriter and Ms. Hoffman also have earned our gratitude.

Finally, this evaluation would be empty apart from the willing time spent by administrators, teachers, and students responding to our questions in each of the five high schools. Their honest feedback is the substance and heart of this report.

Students are Now Acting like Students

In fall of 2003, the first year of implementation for a smaller learning communities grant from the U.S. Department of Education began in five high schools in the Springfield and Chicopee (Massachusetts) Public Schools. In reality, a couple of the high schools, convinced of the possible benefits regardless of available resources, had already implemented ninth grade academies in the previous one or two academic years. This report is a summative evaluation of the first year of implementation of this grant and is, perhaps more importantly, a formative evaluation, making recommendations for the remaining two years of the grant and beyond.

Smaller learning communities, as an education reform strategy, are designed to give students and teachers in large high schools a sense of being in a smaller setting and increasing the likelihood that every student will be known and supported by one or more teachers or staff within the school. At the heart of these smaller learning communities are teams of teachers and students who stay together throughout a year and, if a practice labeled "looping" is implemented, for multiple years of high school.

The Pioneer Valley Planning Commission was approached by the Regional Education and Business Alliance (REBA) in September 2004 with a request that the Commission's Regional Information Center conduct the third-party evaluation of the smaller learning communities grant. Knowing the importance of this project not only to the two communities receiving the grant, but to the region as a whole, we were eager to participate and are hopeful that our involvement will only increase the degree of this project's success. It is important to understand that we are not impartial in our posture toward this project and are enthusiastic supporters. However, we have done our best to produce a report of the utmost professional integrity and honesty, because we believe that this is the most genuine form of support we can offer.

The report itself relies on two primary sources of information: interviews with administrators, teachers, and students; and quantitative data obtained both from the districts and from the Massachusetts Department of Education. We had hoped to deploy and analyze detailed surveys of every teacher and student in each of the five high schools, but there was not sufficient time from when we joined the project until this report was due in which to develop and utilize an instrument we would trust. Therefore, surveys will be developed and deployed in spring of 2005, but they are obviously not a component of this report.

In general, we found that everyone we interviewed was very forthcoming and honest, providing a wide range of opinions and a depth of information. It was clear through our interviews that in particular schools we were scheduled to interview either those teachers having the best or those having the worst experience with smaller learning communities. Among student interviews we clearly had, in every high school, a cohort of some of the highest achieving and mature students in each school. Students were selected for interviews by each school and in the future we may want to implement some random or quasi-random method for getting a broader sample of student opinions.

With respect to quantitative data, we were faced with attempting to report comparable data for high schools from two districts with two different data management systems. In some cases, data available for one district was not available for the other. One district has recently changed their software package for student data management and this affected our ability to get much historical data. Nevertheless, we have used, to the best of our ability, the data that was available and we believe it begins to paint a picture; though, with only one year of the grant completed, most of the quantitative data in this report serves as benchmarks for future measurement.

Unsurprisingly, the experience of the five high schools with smaller learning communities is very different from one school to another, and even within schools. Therefore, we elected to include in this report individual assessments of each school and an overall assessment that attempts to bring together the findings and lessons learned from the project as a whole.

Our ultimate findings and recommendations are limited by our own perspective and information as third-party evaluators. Certainly viewing the initiative from the outside has advantages of greater objectivity and we believe our findings will be useful; however, we also know that ours is not the only perspective and there are things that can be seen or learned only from the front line. It is our hope that this report will serve as a new and different lens on the initiative and that it will be used in combination with other perspectives to sharpen the focus and improve the outcomes of this exciting project.

Data and Methods

The Smaller Learning Communities (SLC) Grant, given to the Chicopee and Springfield Public Schools by the U.S. Department of Education's Office of Vocational and Adult Education will run for three years, from 2004 to 2007. For each year the SLC program runs, the Pioneer Valley Planning Commission (PVPC) evaluation team will collect both qualitative and quantitative data from the schools and districts involved and evaluate the data and trends over the course of the grant. This, the evaluation team's initial report to the SLC grant program, establishes a baseline for comparisons in future years. This report reviews the situation of each school and district prior to the grant's initiation as well as its current status with respect to implementation in the past few months. In the subsequent three years, the evaluators will follow up with an evaluation report of the previous year's SLC implementation and results at each school. A final summative report covering all SLC grant implementation in Springfield and Chicopee over three years will be completed at the close of the program.

The PVPC evaluation team initially established a plan outlining each activity the team expected to perform in conjunction with REBA and the SLC coordinators in each district. This outline described the goals measured by each activity, the type of data collected for each measure, the date expected to perform the data collection, the assignment of who would perform collection, and other notes. In addition to specific collection activities, the evaluators relied heavily on any documentation that was available from the individual districts and schools. Following are brief descriptions of the data sources and methods employed in the development of this report.

Data

Qualitative Measurements

Qualitative measurement tools that the evaluators used included principal, student, and teacher interviews at each of the five schools. Except where otherwise noted, all data collection and analysis was done by the PVPC evaluation team between October and December of 2004.

One principal interview at each school measured structure, strategy, and outcomes for the goals that every student is known, student confidence is increased, a rigorous curriculum is established, and professional development is successful.

Between one and two group student interviews at each school measured structure, strategy, and outcomes for the goals that every student is known, student confidence is increased, and a rigorous curriculum is established. The original intent was to interview, in each school, one group of students who had been in teams and one group of students who had not. While this took place at some schools, it did not in others because all of their students had previously been in teams of some form or another.

Two to four group teacher interviews were also conducted at each school and measured structure, strategy, and outcomes for the goals that every student is known, student confidence is increased, a rigorous curriculum is established, and professional development is successful. While we intended to interview a group of teachers in each school with experience in teams and a group without such experience, this was not accomplished in every case. However, because we met with multiple groups of teachers in every school, we still feel confident that we received a broad range of views from each high school.

Quantitative Measurements

The quantitative measurement tools utilized by the evaluation team included principal and teacher questionnaires and administrative data. Student and teacher surveys were planned and ultimately postponed until the spring of 2005 as explained in greater detail below.

Principal and teacher questionnaires

The questionnaires given to the principals and teachers at the five schools provided quantitative feedback on the Year One goals that each school identified for implementation, and were designed to evaluate structure and strategy.

Administrative data

Administrative data were solicited from each of the schools' districts and three years of history were requested for each of the following topics.

- MCAS average scores and passing rates
- Enrollment
- Attendance and truancy
- Grades
- Course enrollments
- Dropout statistics
- SAT scores and participation
- Discipline statistics

Unfortunately, three years of history were not available for most of these statistics in both districts either because the timeframe was too short to generate the information or changes in data management systems prevented accessing the information at all. In some cases, data readily available from the Massachusetts Department of Education was used to supplement that received

from the districts. When data was available both from the district and the Department of Education, we relied first on the data provided by the district.

Because so little historical data was available, much of the quantitative data in this report serves primarily as a baseline against which to make future comparisons. As data is collected during the next two years of smaller learning communities' implementation, it will be used to identify changes or gains made as a result of the grant.

Student and teacher surveys

Surveys of all students and teachers in the five high schools were proposed to examine the project's progress towards achieving its five goals. These surveys were expected to be done in November and analyzed in December of 2004, but because of limited time we felt that a survey instrument with a high degree of reliability and validity could not be constructed and deployed in time to report findings for this report. It is anticipated that both surveys will be developed and deployed in spring of 2005 to collect baseline data for future comparisons.

Methods

Qualitative Analysis

The SLC evaluation team visited each of the participating high schools in Chicopee and Springfield during November and December of 2004. The purpose of the visit was for the evaluators to interview the school principal, two teacher groups, and two student groups. All teachers and administrators were asked to fill out a questionnaire at the beginning of the discussion (see Quantitative Analysis below), and otherwise the interviews proceeded using structured discussion guides. In every case two evaluation team members were present for every interview so that one could lead the discussion while the other took notes. Sessions were also recorded. Evaluators' recall was used to categorize attendees by race and gender, and these categorizations are subject to error.

Bias in the selection of students and teachers for interviews may have influenced our findings and this should report should be read with the knowledge that the findings reflect the perspectives of those we interviewed. In some cases the principal, other administrators, or teachers were responsible for choosing the people to be interviewed, and in other cases the SLC coordinator did so. We did not make an effort to randomly select students or teachers for interviews because we anticipated the use of surveys to collect data from the entire population of teachers and students. The teachers generally represented members of leadership teams, or seemed invested in the SLC program, knew a lot about it, and supported it. In a few cases teachers were either not on teams (such as upper class or elective teachers) or appeared to be unwilling participants in the grant program and the interviews. The students interviewed in every school consistently appeared to be reasonably good students, as evidenced by their math levels, post-high school plans (i.e. college, law school, medical school, and other post-graduate

study), and their general demeanor in interviews. Validity concerns specific to each school are outlined in the following descriptions of methods by school.

Chicopee Comprehensive High School

The SLC Evaluation Team (Theresa Perrone and Jarita Sadler) convened at the Chicopee School District's Chicopee Comprehensive High School (Comp) on Friday, November 5, 2004 at 8:30 a.m. Interviews took place in the following order: Principal (1), Teacher Group I (4), Student Group I (6), Teacher Group IV (2), Student Group II (5), Teacher Group II (2), and Teacher Group III (2), for a total of 22 people, including 12 males and 10 females. By estimation, one participant was black, one was Hispanic, and 20 were white. At Chicopee Comp we had the benefit of interviewing one teaching team that did not appear to be functioning effectively, one team that appeared to be highly-functioning, and a team with active SLC leadership team members.

Chicopee High School

The SLC Evaluation Team (Theresa Perrone and Jarita Sadler) convened at the Chicopee School District's Chicopee High School (Chicopee) on Friday, October 29, 2004 at 8:30 a.m. Interviews took place in the following order: Principal (1), Student Group I (4), Teacher Group I (3), Teacher Group III (1), Student Group II (3), and Teacher Group II (3), for a total of 15 people, including seven males and eight females. By estimation, one participant was black, four were Hispanic, and 10 were white. The sample and findings may reflect the fact that the teacher groups were highly functioning and the students all appeared to be doing reasonably well in school, as evidenced by their math levels, post-high school plans, and their general answers to the questions. Notably, in every teacher and student group it was observed that all participants used about equal time sharing their thoughts.

High School of Commerce

The SLC Evaluation Team (Paul Foster and Jarita Sadler) convened at the Springfield School District's High School of Commerce (Commerce) on Friday, November 19, 2004 at 8:30 a.m. Interviews took place in the following order: Principal and Assistant Principal (2), Student Group I (6), Teacher Group I (1), Teacher Group II (4), Teacher Group III (3), and Student Group II (4), for a total of 20 people, including eight males and 12 females. By estimation, six participants were black, five were Hispanic, eight were white and one was Asian. Validity concerns specific to Commerce include the following: 1) with two exceptions all the teachers interviewed were either on the leadership team or did not teach in teams at all; and, 2) MCAS retesting occurring on the day of our visit affected attendance of both teachers and students.

High School of Science and Technology

The SLC Evaluation Team (Paul Foster, Theresa Perrone and Jarita Sadler) convened at the Springfield School District's High School of Science and Technology (SciTech) on Friday, October 22, 2004 at 7:30 a.m. Interviews took place in the following order: Teacher Group I (6), Teacher Group II (2), Principal & Vice Principal (2), Teacher Group III (4), and Student Group I (6), for a total of 20 people, including 10 males and 10 females. By estimation, four participants were black, four were Hispanic, and 12 were white. In addition to the validity concerns that applied to all schools, at SciTech only one student group was interviewed, resulting in a corresponding lack of data from the student segment.

Putnam Vocational Technical High School

The SLC Evaluation Team (Theresa Perrone and Jarita Sadler) convened at the Springfield School District's Putnam Vocational Technical High School (Putnam) on December 2, 2004 at 8:30 a.m. Interviews took place in the following order: Principal (1), Teacher Group I

(4), Teacher Group II (5), Student Group I (7), and Student Group II (7), for a total of 24 people, including 12 males and 12 females. By estimation, seven participants were black, seven were Hispanic, nine were white, and one was Asian. There were no additional validity concerns specific to Putnam.

Quantitative Analysis

Principal and teacher questionnaires

Principal and teacher questionnaires were given to all principals, teachers, guidance counselors, or other administrators who took part in the interview process at each school. The questionnaire was tailored to the individual schools based on their stated goals and objectives, and was intended to determine whether the school had achieved their first year goals according to those who may have played a part in implementing them. All questionnaires asked for level and type of experience, and whether the individual was a member of a leadership team. The questionnaires were filled out at the beginning of each interview. Some of the teachers interviewed did not have experience with the SLC program, and therefore had little to no knowledge of how it was being implemented. The teachers often talked about the questions and compared notes, which may have resulted in skewed responses.

Administrative data

As has been previously discussed, not as much administrative data, particularly history, was available as we would have liked; therefore, much of the administrative data in this report is shared with little analysis of findings. The data itself forms the baseline for future analyses, but the data was too limited to draw significant conclusions about the progress of the initiative to date.

School Reports

This grant was awarded to the Pioneer Valley Smaller Learning Communities Initiative on behalf of five schools in two different school districts. Although the cities of Chicopee and Springfield share a political boundary and a common geography (both are located along the Connecticut River in western Massachusetts), the opportunities and challenges found in the two districts can be dramatically different.

At the same time, the districts administer some traditional academic high schools, specialized or thematic high schools, and vocational or career/technical schools. Additionally, Springfield Public Schools directs an alternative evening program for non-traditional age students and students unable to attend one of the high schools during the day.

With such a wide variety of classes, students, and faculty, each of the five schools has begun to implement smaller learning communities in its own unique ways–ways that capitalize on particular assets, tackle unique threats and obstacles, and try to achieve the greatest degree of success for each of the students involved in the program. Still, we do find commonality among the strategies employed in some of the schools, and in their assessment of what they need and desire to ensure successful program implementation. This is particularly true for the vocational or technical schools in each district, whose solutions to challenges will most likely be very different from the solutions applied at the non-vocational schools.

Thus, our overall program evaluation is preceded by individual reports on each of the five participating high schools. These reports better highlight the nuances that emerged in our interviews with principals, teachers, and students, and provide detailed background and baseline information that will be helpful in our evaluation of years two and three of this grant.

The individual school reports start with an historical overview of conditions at the high schools, including some discussion of factors (such as physical space or municipal finances) that

may not, on the surface, appear to be related to the smaller learning communities grant, but have deep impacts on the ability of administrators and teachers to achieve successful implementation.

The school reports then discuss in greater detail the methods used to implement smaller learning communities during Year One of this grant (2003-2004), followed by a discussion of the outcomes teachers, students, and administrators perceived. The school reports utilize data provided by each district's data manager or SLC coordinator, as well as interview comments recorded by the evaluators who visited each school.

Finally, the school reports identify some suggestions for building on the momentum generated during Year One of this grant, and issues that will need to be addressed in order for implementation to move forward. We hope these school reports provide a more detailed picture of the similarities and differences we discerned among the five schools and provide the framework for our overall program evaluation and recommendations.

Chicopee Comprehensive High School
Principal: Stanley F. Kozikowski

School Profile

Chicopee Comprehensive High School (Chicopee Comp), currently serving more than 1,300 students in grades 9 through 12, is one of the two main high schools in the Chicopee district. During the 2003-2004 school year, average enrollment from September to May was 1,221 students. In addition to offering standard academic classes, Chicopee Comp offers a "Career and Technical Education" program. This alternative allows students to spend several periods of each school day studying in one of the following programs:

- Automotive technology
- Carpentry
- Drafting technology
- Electrical technology
- Food production, management, and services
- Horticultural services and operational management
- Machine technology
- Metal fabrication/welding

According to Principal Kozikowski, one quarter (26 percent) of students enrolled this year (2004-2005) take part in the Career and Technical Education program. It remains challenging to schedule vocational classes within the SLC model, as those classes typically run for two or more periods each day. Increasing purity on teams will continue to pose obstacles, particularly among tenth graders who enroll in more elective or vocational courses.

The current school facility is about 50 years old, and plans are underway to build a new $75 million facility on the same school grounds during the next two years. The new building

will be designed, in some ways, to facilitate the roll-out of the SLC program, as well as to provide improved facilities for the career and technical education programs offered at Chicopee Comp.

According to the Massachusetts Department of Education's school profile, 29.3 percent of students are considered low-income. This is only slightly higher than the state-reported average of 27.2 percent. Providing additional services to low-income students, such as free and reduced-price lunch, is an important part of management and administration of the school.

Demographically, Chicopee Comp is somewhat less diverse than Chicopee High, with white students composing 87.1 percent of the student body. There are about half as many Hispanic/Latino students at Chicopee Comp (9.9 percent of total enrollment compared to nearly 20 percent at CHS), and 1.8 percent of students are African American. During our interviews with teachers at Chicopee Comp, some teachers discussed challenges with racially-based disagreements and personal issues. This is discussed in greater detail in the *Implementation* section of this report.

It should be noted that 12.6 percent of students at Chicopee Comp receive special education services, requiring that teachers adhere to individualized education plans (IEPs). This figure is similar to the share of special education students at Chicopee High (11 percent), and slightly lower than the Massachusetts state average of 15.6 percent. Implementing SLCs with special education inclusion programs, as well as the robust vocational program, presents significant challenges for teachers and students. Administrators are mindful of the stress faculty can experience when managing a large volume of IEPs and teaching several inclusion classes.

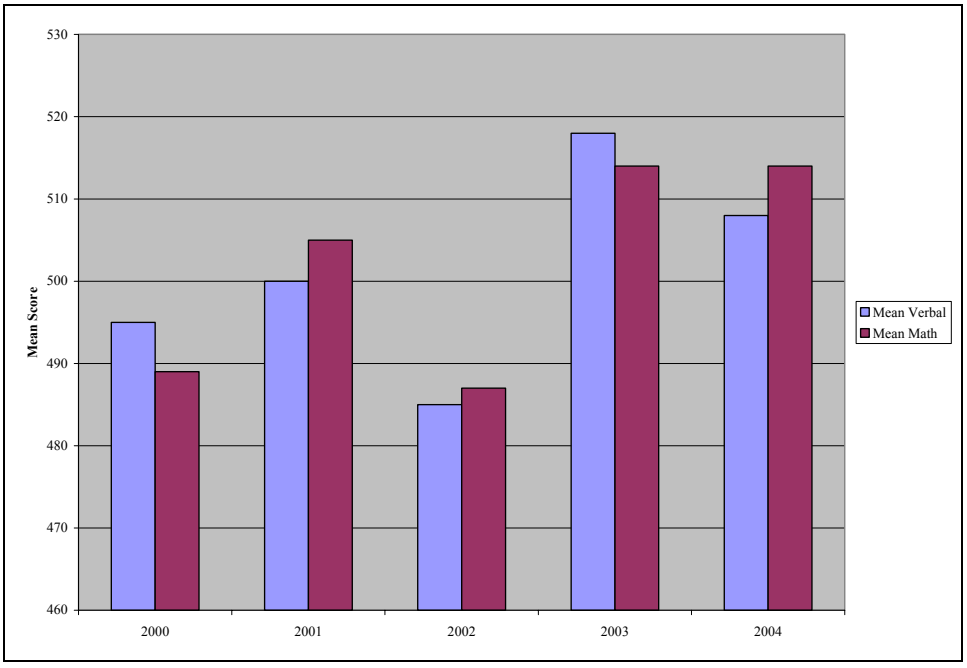
Chicopee Comp has experienced a high degree of turnover in recent years, with many teachers and guidance counselors retiring or moving to other districts. In the past two years,

three out of five guidance counselors have been replaced, and last year, seventeen new teachers were hired. During the current 2004-2005 school year, another 23 teachers were added, and it is anticipated that 20 teachers will retire after the 2005-2006 school year. Thus, it becomes especially important that teachers new to high school or new to teaching in general have an opportunity to interact with veteran teachers.

Academic performance

During the last five years, student performance on the SAT and MCAS exams has been equal to or lower than state averages. SAT scores fluctuated fairly significantly from 2000 to 2004 (see Figure 1), with the lowest scores recorded during 2002. Mean scores on the math and verbal sections of the SAT recorded in 2004 were 514 and 518 respectively. These scores are very close to the state averages for the same year of 523 math and 518 verbal.

Figure 1: Mean SAT Scores at Chicopee Comp, 2000-2004



Despite solid performance on the SAT, it is important to note that participation continues to vary from year to year, with an overall 28 percent drop in the number of students taking the SAT

between 2000 and 2004. In 2004, 95 students sat for the SAT exam, representing about 32 percent of juniors.

Since 2000, tenth grade MCAS scores in math and English have risen and fallen from one year to the next. Between 2001 and 2004, the percentage of students scoring in the "advanced" category on the math exam has steadily improved (see Table 1), but has consistently fallen below state averages (which rose from 18 percent in 2001 to 29 percent in 2004). However, performance on the English portion of the MCAS exam improved from 2001 through 2003, but declined in 2004.

Table 1: MCAS Percent Advanced and Failing at Chicopee Comp, 2001-2004

YEAR	MCAS: MATH		MCAS: ENGLISH	
	% Advanced	% Failing	% Advanced	% Failing
2001	7	36	5	29
2002	14	24	7	10
2003	18	21	9	13
2004	20	24	4	16

It should be noted that Chicopee Comp still reports failing rates on both the math and English MCAS exams that are higher than state averages. While 24 percent of Chicopee Comp students failed the math MCAS in 2004 (compared to 15 percent statewide), 16 percent of students failed the English exam (compared to 11 percent statewide). There is a commitment from district staff and grant evaluators to continue tracking MCAS performance as in indicator of student improvement and achievement.

Discipline and attendance

Administrators and faculty at each of the Chicopee and Springfield public high schools struggle to address difficult student behavior, incidents of violence, and retention. In the 2003-

2004 school year, 82 students (or 6.7 percent) withdrew from school; thus, keeping students engaged and active in school life is a critical concern for Chicopee Comp faculty and staff.

Tracking both in-school and out-of-school suspensions is a useful way of monitoring improvements in student behavior. At Chicopee Comp, the total number of suspensions in 2003-2004 amounted to 11.3 percent of total enrollment (4.7 percent out of school and 6.6 percent in school).[1] While statewide reporting during the 2002-2003 school year indicated nearly identical percentages, reducing the number of students receiving disciplinary action is important to Chicopee Comp educators. Many of the individuals we interviewed hope that student behavior both in and out of class will improve with expansion of the SLC model, but continue to grapple with discipline issues on a daily basis.

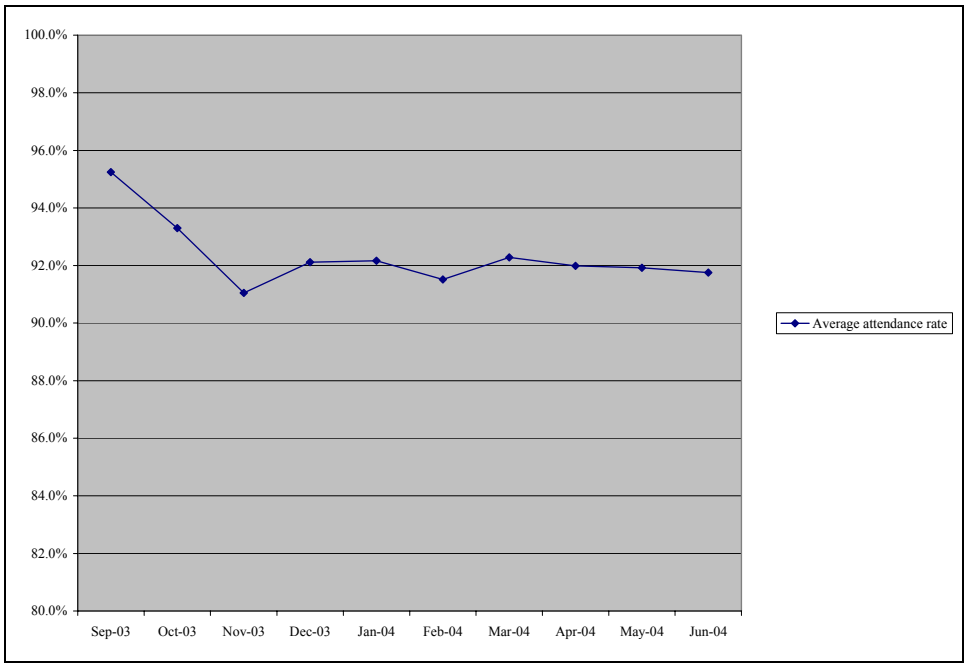
Many education researchers have linked student performance (both on standardized tests and in coursework) to absenteeism and tardiness. Those students who chronically skip school or show up late have a tendency to under-perform. Disciplinary measures used to address lateness, skipping, and chronic absence include "sessions" or detentions, "Wednesday school" extended detention until 5pm, "Saturday school" day-long detentions, and both in-house and external suspension from school.

Fortunately, chronic absenteeism was not noted as a significant problem at Chicopee Comp, though monthly attendance figures during the 2003-2004 school fluctuated between 91 percent and 95.2 percent (see Figure 2). The annual average attendance rate was 92.4 percent – down from 93.0 percent during the previous school year, and just below the state's 2002-2003 average of 93.9 percent. As expected, attendance was highest in September, with periods of low attendance in November, February, and May. Faculty and administrators hope that full

[1] It is important to understand that a student can be suspended numerous times over the course of the year, so the 11.3 percent figure does not mean that 11.3 percent of students were suspended during the year.

implementation of the SLC model in the ninth and tenth grades can result in fewer incidents of tardiness and improved attendance rates.

Figure 2: Average Attendance Rate at Chicopee Comp, 2003-2004



Student incidents of violence have also fluctuated between 2000 and 2004, with the fewest number of incidents occurring during the 2001-2002 school year. During Year One of the SLC grant (the 2003-2004 school year), a total of 71 incidents of student violence were reported. During the same year, Chicopee High School reported a total of 32 incidents of violence–less than half as many as Chicopee Comp. As we will discuss in the *Outcomes* section of this report, discipline, potential violence, and negative student behaviors emerged as a common theme in our interviews with teachers. One teacher asserted that Chicopee Comp has a large "bully problem" that can be exacerbated by the SLC model, where the same students interact with each other in all four of their academic classes every day.

SLCs in Chicopee Comprehensive High School

Implementation

Chicopee Comp implemented an academy for all ninth graders during Year One of the SLC grant. However, some interviewees reported only partial implementation, suggesting there may be a need for greater sharing of information with teachers about the SLC's progress. As in other high schools, several ninth grade classes included repeaters, or students in other grades required to retake some ninth grade courses. Thus, purity in classes can be affected by the inclusion of repeaters in the classroom.

Reducing class size may be a valuable priority, as nearly 30 students are enrolled in some core courses such as English and social studies. From interview comments, it appears that students in larger classes experience more disruptive behavior, which requires a good deal of teacher attention at the expense of teaching course content.

One of the important lessons learned from last year centered on how many SLC classes faculty should teach. During the 2003-2004 school year, there were several teams that taught five SLC classes, which proved to be burdensome and stressful for those teachers who had previously taught a wider variety of coursework and a more diverse student body. The Leadership Team, SLC coordinator, and administrators found that by offering teachers the opportunity to add even one non-SLC class–for instance, an upper-class elective or an honors level class–to their schedule, they could generate greater overall satisfaction with the SLC program.

While the SLC program supports the use of both common planning time and common preparation time, only common planning time was scheduled for Chicopee Comp team teachers during Year One. This time, available for one period during every school day, has been used

primarily to schedule and hold parent-teacher conferences and to follow up on disciplinary issues. In order to assess the value of common planning time, each team keeps a log of activities and plans, which is reviewed by the school principal. It is expected that during the current school year and in future years, teachers will use common planning time in a more sophisticated way; for instance, discussing interdisciplinary curriculum, new and innovative teaching styles, and other proactive measures to improve student outcomes. Most teams have also informally had the opportunity to have common prep times because the scheduled worked out so that most members of teams have the same prep period as the rest of their team. Whether prep periods were used for common preparation was entirely at the discretion of individuals and their teams.

One of the issues that arose during our interviews with both teachers and the school principal was the lack of enthusiasm on the part of some faculty to participate in this new model. While some of the teachers who are on teams were volunteers, others were added to a team by virtue of the fact that they had always taught ninth grade classes. One teacher mentioned that there is a small group of faculty who "oppose change for change's sake." Working to inspire those teachers who are nearing retirement or did not request to participate in the SLC program will aid in successful implementation in future years.

As part of our research, each teacher and the principal completed a pre-interview questionnaire about SLC implementation. On a four-point scale, the mean score for "full implementation of freshman academies" was 3.12–indicating an awareness that there is room for growth and improvement in the way the program is administered at Chicopee Comp. When asked about specific school tactics designed to help reach SLC goals, several teachers felt that some activities had not been implemented at all, while others felt they did not have enough knowledge to comment (because they did not teach at Chicopee Comp last year, or did not

participate on a team). Activities that scored particularly low with regard to degree of implementation included "purchase needed instructional materials (including student calendar/organizers)" (successful implementation rated 2.75) and "develop and implement parental involvement strategies" (successful implementation rated 2.63). Indeed, during our interviews, teachers and the administrator indicated a commitment to addressing these specific activities during the current and upcoming academic years.

Overall, however, most of the teachers we spoke with are excited about the new interaction they have with teachers in other subjects, and feel that a support system has been created, especially for new or young teachers with little experience. Teachers feel bonded with their team, and see value in having consistent rules and policies across classes, particularly in terms of discipline and student behavior.

Administrators, faculty, and staff have recognized parental involvement as a key component of successful implementation of the SLC program at Chicopee Comp. It was noted in several of our interviews that parental involvement has been very limited thus far. During Year One, both teachers and the principal reached out to parents through special orientations, after-school and weekend meetings and events, newsletters, the CCHS Web site, and personal phone calls to parents. Still, it was noted in our interviews that many parents are not convinced that the program is dramatically different from a traditional high school experience, is easing their child's transition to high school, or could benefit from greater parental interest. It is possible that information sharing sessions or materials could educate parents about the importance of the program's goals and progress. One teacher suggested, "Maybe the parents should come with their children on the first day of school." Importantly, this suggestion was

implemented at the start of the 2004-2005 school year as parents came with their children on the first day of school.

Outcomes

Opinions on the success of Year One of the SLC model at Chicopee Comp were mixed. Overall, the principal has a positive opinion of the program and its effect on student success (from improved in-class behavior to impacts on drop-out rates and grades). While some of the newer teachers see some improvements in student behavior and academic progress, others remain unconvinced that the SLC model will have a positive impact on outcomes.

Students with and without SLC experience participated in two separate focus groups. Those students currently in ninth or tenth grade had a generally favorable opinion of their high school experience thus far, while those in eleventh and twelfth grade reacted negatively to the idea of the SLC program and its goals (discussed in greater detail below). Our group of students who had experience with SLCs agreed that the model would not be useful for tenth graders, since they believe that the main goal is to ease the transition from middle school to high school.

Two central themes emerged during our interview sessions at Chicopee Comp: discipline and transitions into ninth grade.

Discipline issues

One of the most interesting findings during these sessions was the heavy emphasis placed on rules and discipline. This focus was evident in teacher and student interviews, with teachers discussing at length the ability for SLCs to result in improved in-class behavior. "Obeying the rules" was mentioned as one of things teachers expect from students, and several teachers talked about the usefulness of being able to address–as a team–students who "act up" in class.

When it comes to breaking rules or disobeying teachers, students at Chicopee Comp (much like at some of the other schools we visited), felt that the SLC model prevents students from "slipping under the radar," so to speak. While acting out in one class might result in "sessions" or detentions, students understand that all of their team teachers communicate with each other, and that slipping grades or a negative attitude will probably result in a parent conference or other action.

> *They spend too much time getting people to pay attention and be quiet.*
> - Ninth grader at Chicopee Comp

Still, some students believe the faculty is fixated on discipline and regulations, and that more time could be devoted to teaching class content rather than trying to settle down some of the larger classes.

Can the SLC model improve student behavior? Students, particularly the juniors and seniors, are skeptical. More than a few students, and a number of teachers, noted that the SLC model could in fact exacerbate existing personal issues between students. Since the team structure requires that the same group of students see one another in different classes throughout each school day, a number of comments indicated that disagreements between students could cause violent outbursts as the school year progresses.

Easing the transition from middle school

Again, as we found in other Springfield and Chicopee schools, faculty and administrators recognize that ninth graders are a "vulnerable population" whose high school success is partly contingent on making a smooth transition out of the middle school environment. Principal Kozikowski believes that by creating a smaller, friendlier community atmosphere, students can ease into a high school experience.

Some of the team teachers agreed with this objective, noting that students' enthusiasm appears to increase, they become more disciplined in terms of class work and homework, and they are more open to interacting with teachers outside of the classroom.

Alternatively, another set of teachers and a fairly large number of students disagreed with the guiding principle that easing the transition into high school is beneficial. Many students, particularly the upperclassmen, said that the model "babies" students, and does not reflect college or "real-world" atmospheres. Students agreed that moving from middle school to high school is difficult, but that they had succeeded without a special SLC model in place. The expectation was that if other students can and do succeed, there is no need to change the structure of the ninth grade.

Teachers who agreed with this sentiment noted that the SLC model might "retard the progress of the students… since they don't get the 'independence thing.'" The same teacher indicated that "they're not growing up fast enough" when placed in an SLC.

Moving into years two and three, it will be essential for the principal, SLC coordinator, SLC leadership team, and other team teachers to keep accurate data on student outcomes in order to better understand the impact of the SLC model on student maturity and independence.

Moving Forward

As a vocational high school in an aging facility, Chicopee Comp faces some challenges that are not found in some of the other schools we evaluated. Scheduling and the physical structure of the building remain an impediment to successful implementation of ninth grade academies, or tenth grade “exploratory” academies (which would allow students access to a wider variety of career or technical classes).

The suggestion by the principal to move to a six-period day (instead of the seven-period day which has been in place since 1949) might facilitate the expansion of academies into other grades. Block scheduling or partial block scheduling was another possible suggestion for managing career-technical classes in the SLC environment (recall that the career-technical classes may meet anywhere from 1.5 to three periods each day).

Finally, the new school building may reinvigorate both students and teachers with a positive attitude towards this new model. Restructuring the building to make it easier for students on teams to efficiently move between academic classes as well as the career-technical wing may result in more successful program implementation.

Overall, teachers on high-functioning teams are hopeful that student behaviors and academic performance will improve because of the SLC model. There is already district-wide support, and with a new superintendent expected to be hired within the next few months, it will be critical for the principal, SLC coordinator, and others to ensure that the new superintendent understands and supports the goals and objectives of the SLC program at Chicopee Comp.

Chicopee High School
Principal: Roland R. Joyal

School Profile

Chicopee High School (CHS), currently serving nearly 1,100 students in grades 9 through 12, is the other major high school in the city of Chicopee. Students and teachers moved into a new facility at the start of the 2004-2005 academic year, in a building designed, in many ways, to support the expansion of Smaller Learning Communities (SLCs) to students in all grades. The new facility clusters classrooms designed for teaching different subjects together (e.g., math and science classrooms equipped with electronic white boards, computers, and projectors as well as standard classrooms used by English, social studies, and other courses). During one of our first conversations with CHS faculty, an SLC teacher said "having teachers close geographically fostered a small community."

According to 2002 data from the National Center for Education Statistics, about one-third of students at CHS receive free or reduced-price lunch. This represents a greater share than the statewide average, where we find only about one-fifth of all Massachusetts students receive free or reduced-price lunch. Nearly 80 percent of students at CHS are white, almost one-fifth of students are Hispanic, and fewer than three percent are Black, Asian, or Native American. In general, the Chicopee high schools benefiting from this grant have far fewer students of color than their Springfield counterparts.

Academic Performance

Since 2001, tenth grade MCAS scores in math and English have fluctuated, rather than steadily improving or declining. Math scores generally improved until 2004, when we see a jump in the number of students with scaled scores below 220 (the "needs improvement" level). Overall, English scores dropped between 2002 and 2003 but rose slightly between 2003 and

2004. Despite some gains in performance, CHS students are performing below statewide levels, with a very small percentage of students scoring at the "advanced" level (5 percent at CHS compared to 20 percent across the state).

The College Board reports a steadily declining number of CHS students taking the SAT exam between 2000 and 2004. It should be noted none of the teachers we spoke with referred to this statistic as an indicator of student performance. At CHS, as well as in several of the other schools we visited, performance indicators were associated mainly with in-class behavior and academic outcomes, rather than standardized tests. While schools in other districts, cities, or regions may look carefully at the percentage of students sitting for the SAT or ACT exams, teachers and administrators at CHS were concerned with comprehensive or overall academic improvement, as seen through class behavior, the quality of coursework and participation, organizational skills, and cooperation with classmates and teachers.

Still, SAT scores remain a useful indicator of students' math and verbal abilities. At Chicopee High School, mean math and verbal scores have fluctuated by only a few percentage points between 2000 and 2004, with an overall increase of 2.7 percent in mean math scores and a 1.2 percent increase in verbal scores.

During Year One, Chicopee High School students managed means scores of 499 for math and 490 for verbal. These means fell just slightly below state and national averages (see Table 2).

Table 2: Mean SAT Scores at Chicopee High School, 2003

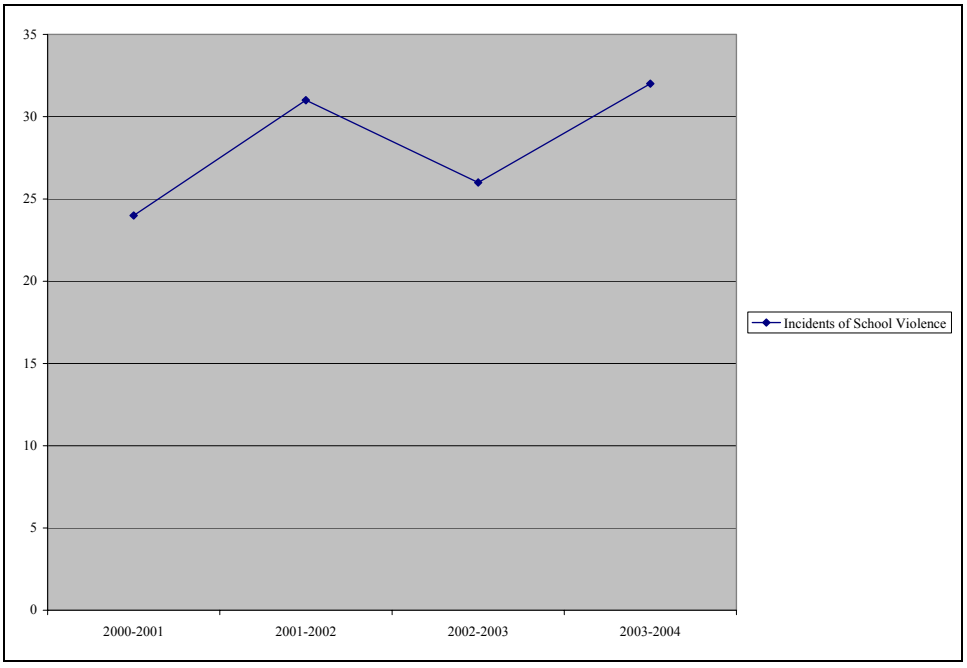
	Math	Verbal
Chicopee High School	499	490
Massachusetts	519	507

Nation	516	504

Discipline and attendance

Keeping students enrolled in school has been a challenge at Chicopee High. Both in-school and out-of-school suspensions have increased. Some educators we spoke with suggest that the SLC model allows teachers and staff to identify inappropriate behavior more easily and among a wider group of students, resulting in an overall increase in the number of students sitting for detentions or being suspended or expelled from school. Despite an increase in the number of disciplinary actions, there is a positive trend in teachers and administrators knowing students well enough to spot problem behavior before it results in students' grades slipping, or worse, their dropping out of school.

Figure 3: Incidents of Violence at Chicopee High, 2000-2003



During academic year 2003-2004, monthly attendance rates fluctuated between 92.4 percent and 87.2 percent, with a school-year average of 89.2 percent. For comparison, students

anywhere in Massachusetts must have a 95 percent attendance rate in order to appeal their MCAS scores, and students in another SLC high school in Springfield are required to maintain 93.3 percent attendance rate (no more than 12 missed school days in the 180-day academic year–three per marking period).

During the past four years, incidents of school violence have varied, but appear to be on the rise (Figure 3) at Chicopee High. As with detentions, suspensions, or expulsions, it is possible that the SLC model allows teachers to become more familiar with student behaviors both in and out of class time. The rise in incidents during the 2003-2004 school year may be tied to an increase in reporting rather than an actual increase in school violence. Alternatively, the SLC program as it has been implemented in CHS results in fewer teachers monitoring hallways and school grounds. According to a July 2004 Massachusetts Department of Education report on youth risk behaviors, researchers found that 31 percent of all students had been involved in a physical fight in the 12 months preceding the survey. Given total enrollment at CHS, incidences of violence remain extremely low. Should administrators feel a need to further investigate the causes of the slight increase in violence from the 2002 to 2003 school years, a more detailed analysis of the type of incident, time of day, location, etc., can be performed.

SLCs in Chicopee High School

Implementation

Chicopee High School began considering SLCs about five years ago, starting with a series of discussions between faculty and administrators. The first SLC–referred to as an "academy" in CHS–was implemented in the 2002-2003 school year (before being awarded any

SLC grant funds). Rather than selecting a pilot group of freshman for teams or academies, CHS began by rolling out the academy system with all of its 2002 ninth graders.

The principle motivation behind this type of structure was to ease the transition from middle school to ninth grade, and to allow for more supportive, non-traditional activities to take place. In addition, use of the academy structure (as opposed to the "house" structure or magnet environment) was designed to support academic teaming across departments and the use of common planning and common preparation time.

In Year One of the grant (2003-2004), all ninth and tenth graders were grouped in teams or academies. While the pre-grant award stage of implementation focused on composing pure teams of teachers, a great deal of attention was paid in Year One to maintaining the highest level of consistency of students on each team ("purity"), understanding that scheduling conflicts, electives, and other factors may make 100 percent student purity impossible. Interestingly, in interviews with teachers it was reported that only a few tenth graders were on teams in the 2003-2004 school year, suggesting that not all teachers in the high school are fully aware of the progress or status of the smaller learning communities within their school. Moving forward additional effort may need to be focused on sharing information in a manner that is heard by all staff.

Currently, six teams of teachers at CHS are part of the SLC academy structure–three in ninth grade and three in tenth grade. Four or five teachers, a designated guidance counselor, and a vice principal make up each team, and the ninth grade teams have at least two periods with the same students scheduled back-to-back every day. In the early stages of discussion, vice principles and guidance counselors were not particularly active in SLC implementation, but during Year One, vice principals began to play a larger role in implementing the program.

On a daily basis, each team makes use of 48 minutes of common planning time, though there is no formally scheduled or mandated common preparation time.[2] Common planning time has a variety of uses, from discussing potential discipline issues and holding parent-teacher conferences to programming interdisciplinary lesson plans, projects, or events. The teachers we interviewed were very vocal about the value of common planning time; an English teacher noted, "we are fortunate to have this time every day."

The teachers we interviewed at Chicopee High School each completed a brief questionnaire gauging the success of implementation of the SLC model. On a four-point scale, "full implementation of ninth grade academies" received a mean score of 3.71. Other goals, such as assigning one vice principal to each team, and instituting advisory groups, were not considered to be successfully implemented in Year One, but teachers noted the structures in place to implement these new programs and practices in years two and three.

I'm happy to come to work because of the SLC program

- Veteran CHS teacher on a new SLC

Teachers also agreed that successful implementation hinged on expansion of the program to include guidance counselors. The team structure challenged guidance counselors to become acquainted with students in a new way: rather than being assigned a group of students based on their last names (e.g., a section of the alphabet), counselors worked with a group of students who shared common teachers. Though one counselor noted that in the beginning of the school year it was difficult to remember each student's name, she valued the new program, and noted that "SLCs served as a connection that helped students feel less lost and confused."

[2] Each teacher retains his or her own class preparation time. Some teachers choose to use this time to develop interdisciplinary lesson plans, while others use the time to prepare materials for their individual classes.

While many older teachers are retiring, there is a vibrant and young pool of applicants, eager to teach in both the SLC and non-SLC structure. Staffing changes have not impacted the SLC program's roll-out to the tenth grade in 2004-2005. This grant has allowed the district to hire a dedicated SLC coordinator, who serves as a liaison between teachers, administrators, and the SLC coordinator for the three Springfield high schools involved in the program.

Outcomes

During our focus group sessions with teachers, students, and the principal of CHS, a few common themes emerged about the program. The general tenor of interviews was positive, with students, teachers, and the principal indicating an overall level of success, some room for improvement, and enthusiasm for continuing to implement and expand the program.

Common themes included the sense of "family" that develops among teachers on the team and with students, easing the transition between middle school and high school, and addressing issues with scheduling and the structure of the school day.

According to CHS principal Roland Joyal, purity rose in Year One to a percentage in the "high 90s." According to the Regional Education and Business Alliance, average purity in SLCs hovers around 85 percent. Tenth grade purity during Year One–the first year that tenth graders were included in academies–was not as high as administrators would like, but as scheduling conflicts are addressed and new methods of scheduling are tested, the hope is that purity will increase. Still, the offering of electives during the tenth grade will continue to impact academy purity.

The administrator, teachers, and staff indicate a high level of success in implementing academies during Year One, as evidenced by the full participation of CHS ninth and tenth graders in teams or academies. However, several goals and projects identified by staff and

teachers as important elements of SLC expansion have not been implemented. Most of the teachers in our focus groups indicate that the hiring of a dean of students, the assignment of one vice principal to each academy, and the development of a new after-school program have not yet taken place. These initiatives will likely roll out in years two and three.

Advisory sessions for every student in the school, which would pair small groups of 10 to 12 students with faculty, guidance counselors, or an administrator for 20 minute meetings each week, was in the planning stages during Year One. These "advisories" will be implemented across all grades halfway through Year Two of the grant.

Developing a sense of "family"

Early in our interviews, teachers noted that students seemed to share a "sense of family… and a higher comfort level in the classroom." Indeed, students in our focus groups indicated that their classes generally meet their expectations, and that teachers care about students' futures. According to students, this is evident in the help teachers provide during class, on MCAS preparation, and through extra-credit assignments.

> *When you give back respect it's easier to learn.*
>
> - CHS Student

At Chicopee High School, students and teachers appeared to be working as partners, hoping to achieve common goals of increased student performance, lower drop-out rates, and several other goals. While some conversation centered on what students considered "unfair" policies (e.g., the "no hats" rule, the ID policy, etc.), students generally feel that their experience at CHS is a worthwhile one. They agree that they have more freedom than they did in middle school, and they understand that this freedom comes with a responsibility to participate in class, "work hard," and respect teachers and administrators.

There is also an understanding that the SLC model makes it difficult (or nearly impossible) for students to "get away with anything"–from cutting class to turning in shoddy work. There is a shared sense among students and teachers that the team structure prevents students from "slipping through the cracks."

The sense of family extends beyond the classroom, where students noted that they feel comfortable talking with teachers about a range of topics. Not only do students "joke around" or "talk about basketball games and practice," they also feel at ease discussing extra-credit assignments, school work, and personal issues. During our teacher interviews, one team joked that it seemed that students are sometimes "too open" with a teacher on the team, noting that they will tell her "everything!"

Parent involvement has been identified as an important factor in successful SLC implementation. Like many schools, CHS team teachers make good use of common planning time to hold parent-teacher conferences or to follow up with parents by phone. The teachers we spoke with found that while some parents may be disinterested in the SLC concept, a much larger group of parents have become more participatory (attending orientations, field trips, and a special "math night" in preparation for the MCAS exam) since the advent of SLCs.

Transitioning from middle school

The SLC academies at Chicopee High School appear to be easing the transition from middle school to ninth grade. Parents of students in academies during school year 2002-2003 shared their assessment of the program with CHS staff through a one-page questionnaire. Overall, CHS found that parents felt very comfortable communicating with their child's teachers (84 percent). More important, nearly three-quarters of parents surveyed felt that their child

easily transitioned into high school–one of the desired outcomes for students in CHS teams or academies.

Scheduling

> *The students come in a little scared, but once they acclimate they're more comfortable.*
> – CHS team teacher

Teachers and administrators at Chicopee High School began discussing the benefits of smaller learning communities several years ago. As a result, the current SLC dialogue at CHS appears to be moving away from the theoretical and towards the practical implementation of effective academies.

Our conversations with both students and teachers revealed an awareness of and concern with scheduling issues. Everyone involved agreed that scheduling was an impediment to full successful implementation, and that innovative scheduling options should be pursued. Notably, even students felt a sense of ownership over the scheduling issue, and offered informed and insightful suggestions for moving from a seven-period day to "block scheduling" (currently found, they noted, in the Granby Public Schools).

The students we interviewed enjoyed their high school experience overall, but the frantic pace of the day was noted by several students as problematic. Not having enough time between classes, crowding into a busy cafeteria, and rushing to sports team practices makes for a harried environment. Disciplinary consequences for lateness include after-school detentions and all-day weekend detentions.

Moving Forward

Students, teachers, and administrators at Chicopee High School appear pleased with the SLC program and enthusiastic about continuing to implement changes and expand teams to the upper grades. Our research revealed several assets for implementation such as a supportive

principal, superintendent, and district staff. Parent involvement has been strong, and faculty and staff continue to build on the momentum and conceive of creative ways to involve parents in their children's education.

Dialogue with the SLC coordinator has helped team teachers remain focused on the goals of the SLC program and learn from teams in other schools, districts, and cities. One obstacle to overcome during the next few years of the program is the perception of the team structure as voluntary. While most of the teachers we interviewed were excited about becoming part of this new learning environment, some teachers were added to teams as a result of their having always taught ninth grade classes. In a few cases, this resulted in a team that was less cohesive, creative, and ambitious. Continuing to share information about the benefits of the SLC model with all teachers may ease the transition from a non-team structure to a team structure.

Finally, some teams are very aggressive about sharing information learned in professional development sessions, developing new lesson plans, and making the best use of common planning time. In other cases, team teachers noted that there could be more interaction and information sharing between teams. For example, one teacher specifically noted a "lack of sharing amongst teacher teams. Some other teams do interdisciplinary units (this team has done 4-5), but the other teams don't want to see what this team has done or show their own. All the teams could benefit from sharing their interdisciplinary lesson plans." CHS administrators and staff could facilitate cross-team information sharing through special professional development events and activities, and by documenting the classroom success of interdisciplinary units.

Springfield High School of Commerce
Principal: Ann J. Stennett

School Profile

Springfield's High School of Commerce (Commerce), currently serving approximately 1,673 students in grades 9 through 12, is one of Springfield's three high schools receiving SLC grant funds. During the 2003-2004 school year, average enrollment from September to May was 1,726 students.

Commerce's curriculum features an International Baccalaureate (IB) program as well as the following three career concentration strands that students can pursue:

- Medical careers (health and medical science)
- Entrepreneurship and finance (business administration, accounting)
- Law

To date, the IB program and concentrations have operated separately, but during the summer between Year Two and Year Three of the grant school staff will be working out the relationship between the two programs.

The Commerce population includes about 73.3 percent low-income students, according to the Massachusetts Department of Education. While significantly higher than the state average of 27.2 percent, this figure falls slightly lower than the Springfield School District average of 77.1 percent.

Commerce has a diverse ethnic population, with white students composing 13.4 percent of the student body, compared to Springfield's 20.7 percent. Nearly half of the student body at Commerce is Hispanic, which matches the district, and African American students compose 36 percent of Commerce's population. In the initiative, the three Springfield schools differ markedly from the Chicopee schools that largely mirror statewide demographics.

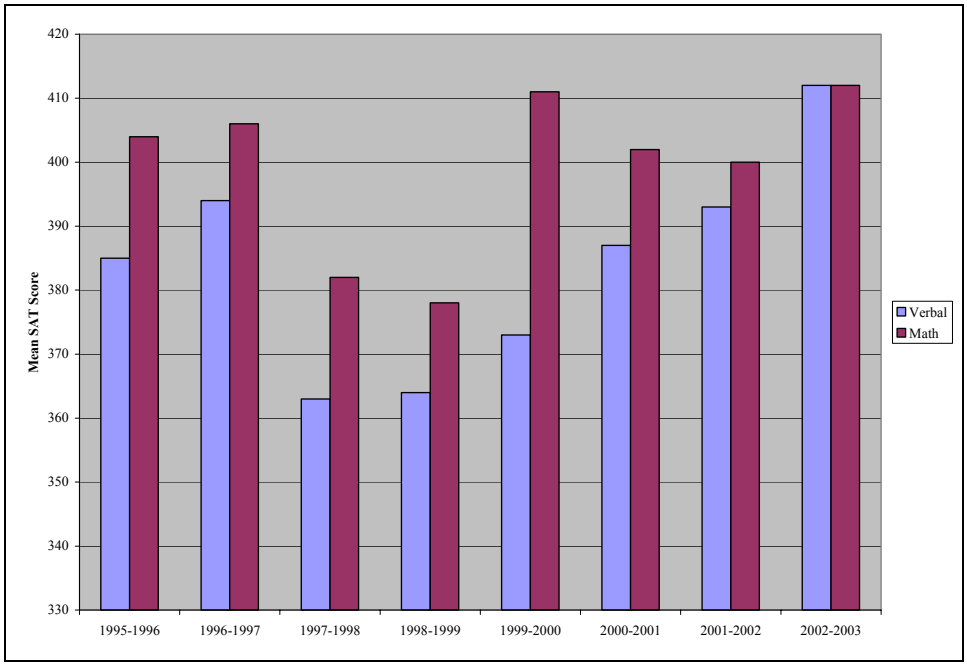
A comparatively higher percentage of Commerce students (17.8 percent) receive special education than Chicopee schools, putting pressure on Commerce to prioritize individualized education plans (IEPs).

Loss of teaching positions due to annual district-wide budget cuts has dramatically affected Commerce in its ability to roll out SLCs, and will be addressed below.

Academic performance

Commerce has struggled alongside the district with student performance on MCAS and SAT exams. SAT scores have fluctuated over the years but have begun to stabilize at a higher level since 2000 (see Figure 4), with the lowest scores recorded during 1998-1999.

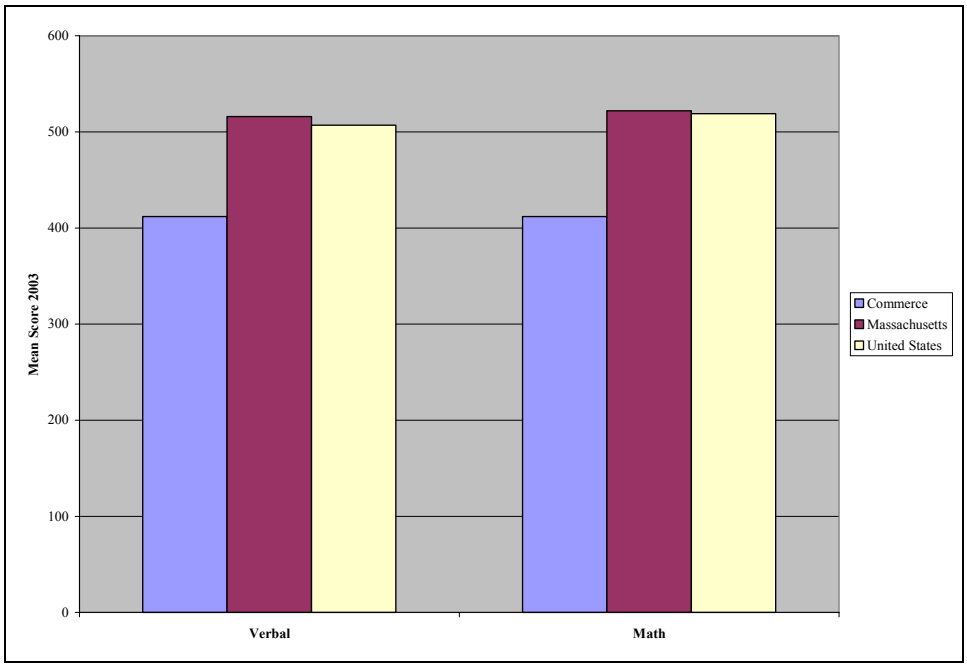
Figure 4: Mean SAT Scores at Commerce, 1996-2003



As shown in the chart, mean verbal scores have steadily risen during this time, while math scores jumped steeply in 2000.

Although these scores have been on the rise, they are still significantly lower than the 2003 state averages of 522 math and 516 verbal (see Figure 5). Mean scores on the math and verbal sections recorded that year at Commerce both equaled 412.

Figure 5: Comparative Mean SAT Scores, 2003



Another factor in assessing SAT performance is that participation has varied from year to year, with a steep upward trend showing an 83 percent increase in the number of students taking the SAT between 1996 and 2003. However, between 2002 and 2003 Commerce experienced a 24 percent decrease in its SAT test takers.

MCAS results for Commerce sophomores have shown a distinct and nearly consistent drop in percentage of students with “failing” scores since 2000. The students failing math dropped from 84 percent to 34 percent, and in English 64 percent to 26 percent. During this same period, the percentage of students scoring in the "advanced" category on the math exam has shown a slight overall improvement to 5 percent (see Table 3). These scores have consistently fallen below state averages (which rose from 15 percent in 2000 to 29 percent in 2004).

Advanced performance on the English portion of the MCAS exam improved from 2000 through 2003, with a decline in 2004.

Table 3: MCAS Percent Advanced and Failing at Commerce, 2000-2004

YEAR	MCAS: MATH		MCAS: ENGLISH	
	% Advanced	% Failing	% Advanced	% Failing
2000	1	84	1	64
2001	0	74	3	46
2002	3	62	4	32
2003	2	60	4	42
2004	5	34	2	26

Commerce High School's 2004 failing rates on both the math and English MCAS exams are higher than state averages. In math, 34 percent of Commerce students failed compared to 15 percent statewide, and in English, 26 percent of students failed, over two times the 11 percent rate at the state level. Additionally, these failure rates are higher than the Chicopee district, which had also struggled with underperformance on MCAS compared to the state. Still, the school's failing percentages fall below the Springfield district's percentages (29 for English, 39 for math) in 2004. Considering the steep decline of failing scores in both math and English since 2000, Commerce is showing swift and notable improvement despite its poor performance relative to the state.

Discipline and attendance

In the 2002-2003 school year, the adjusted number of dropouts at Commerce totaled 90 of the 1672 enrolled (or 5.4 percent). Compared to the 3.3 percent rate at the state level during

the same year, this figure illustrates the continued challenge that Commerce faces with student retention.

Commerce has a series of disciplinary measures that are used to address problems such as tardiness and skipping school. Students may be given "in-house" (full day) suspensions for being late to class, and they are recorded as "absent" once they have been tardy three times. Absenteeism is kept in check by a system that requires students to file an appeal at the district level when they have missed more than four days to avoid receiving a failing grade. The school is equipped with a metal detector and has a strict ID policy. Students who fail to bring their ID to school must purchase a temporary ID for the day. In 2002-2003 Commerce experienced a 16.8 percent in-school suspension rate, and a 35.8 percent out-of-school suspension rate, indicating that the school's disciplinary problems are an ongoing challenge.

Student reaction to disciplinary measures at Commerce was noted during in-school interviews, and will be discussed at greater length under *Outcomes* below. The students not only identified areas in which they felt school policy was unduly strict, but also areas in which the school may not be enforcing policies as well as they could.

SLCs in Commerce High School

Implementation

The High School of Commerce began implementing smaller learning communities at the start of the 2003-2004 school year with nearly all of the freshmen students and a few sophomores participating in SLC academies. During Year Two, 100 percent of freshmen are in academies and most of the sophomores are as well. Commerce expects to expand the SLCs program to

include eleventh and twelfth grade career academies in Year Three of the grant, while simultaneously beginning looping of ninth and tenth grade teaching teams.

Principal Ann Stennett explained that early on she had to work hard to "sell" the SLC grant to teachers. Some of the initial teachers who initially opposed the program are no longer at Commerce, and she finds that the high level of faculty support currently evident within the school is one of the strongest assets supporting the smaller learning communities initiative as it moves forward.

The teachers and administrators identified several areas of strength that are paving the way for SLC implementation. The teachers emphasized cross-discipline collaborations, the support structure provided by their team, and common planning time that includes guidance counselors and assistant principals. The principal and assistant principal stressed district support, dedication of the teachers and their collaborative efforts, visits they have made to other schools in the program, and the sharing of information between SLC schools. In addition, both the administration and the teaching staff particularly expressed appreciation for their SLC district coordinator, Ann Ferriter, for her role in the successful implementation of SLCs. In the words of Principal Stennett, "Ann has been invaluable."

The principal and assistant principal identified areas of challenge in the overall integration of the SLC program. One of these is scheduling, which has not been revised thus far as they have been attempting to overlay the SLC component on the existing schedule. The struggle has been to weave the SLC structure with the current program without limiting the students' ability to follow the International Baccalaureate program.

The biggest obstacle to implementation at Commerce, however, has been the consistent loss of teaching staff, which has affected the ability to keep teams pure, avoid "crossovers"

(teachers working on multiple teams), and implement looping, common planning time, and other activities. While the district staff has said they support the SLCs at Commerce, the school is not getting the requisite funding to retain teachers. The reductions in staffing, as well as common planning time and looping issues identified by both administrators and teachers, are further addressed below, as they emerged as major themes during our interviews at Commerce.

In addition to concerns about a shrinking faculty, limited common planning time, and looping, teachers expressed their frustration about budgetary issues. From the perspective of some teachers, money from the grant is not being spent on activities suggested by teachers, such as field trips. However, it is important to understand that this was not voiced by every teacher interviewed, and some teachers shared about at least one field trip taken using grant funds.

Faculty reductions

Commerce has been experiencing a decline in faculty on a yearly basis. At one point the school had around 1,250 students and 158 teachers, but over time the student population has increased and the number of faculty has decreased resulting in 1,700 1700 students and only 131 teachers. Since last year alone the school lost about 20 teachers, while the student population remained relatively stable. Faculty reductions due to district-wide budget cuts are the number one obstacle to the smooth implementation of the SLC program, according to the principal and assistant principal. Without enough staff, the school is less effective overall and does not expect to achieve completely pure teams. Scheduling changes have to be made when there are not enough teachers at the start of the year.

> *We're doing the best with what we've got, we understand the fiscal situation.*
> - Principal Ann Stennett regarding staffing cuts

Teachers also noted loss of faculty as an obstacle to SLC implementation, expressing their concern that upper level (eleventh and twelfth grade) career academies are unlikely to be

implemented with the current staffing shortages. Otherwise, the teachers pointed to more indirect obstacles that may relate to staffing problems, such as inadequate common planning time and perceived lack of support from the administration.

Common planning time

As noted earlier, common planning time was a recurring theme in our discussions with both principals and teachers. The principal and assistant principal say they were not able to implement as much planning time as they had hoped, but they are making progress. In addition to the weekly common planning time that is "sanctioned," teachers have the option to use their common prep time for additional planning if they so choose. One of the successes of common planning time seen in the past year is the level at which teachers are talking as a group and sharing ideas across disciplines. Commerce is starting to witness integration of math and English across the curriculum as a direct result of these meetings. The principal believes this integration will ultimately improve MCAS scores. This sentiment was echoed by the math department head, who believes that cross-discipline sharing has resulted in a noticeable improvement in the teachers' communication skills via regular practice in formulating and expressing their opinions related to larger academic goals for their students.

The administration also intends to begin putting aside time after school for ninth and tenth grade teachers to meet within their own subject area. Currently, algebra and geometry teachers are getting training for this type of common planning time during Saturday workshops. When this is implemented, the teachers will be paid to have common planning time every other week for an hour and a half after school. Teachers will put their lesson plans on the computer for easy sharing with other teachers in the discipline.

The teachers we interviewed were very supportive of common planning time, as it gives them a cross-sectional view of how their students are doing in other subjects. The resulting collaboration across the curriculum allows team teachers to have common goals for their students to reach by the end of the year. The teachers feel that the effectiveness of common planning time is presently compromised by impurity of teams (although this is improving), duty schedules, and overall scheduling problems. They feel strongly that they should be granted planning time more often, as they have exactly 47 minutes per week and that simply is not, in their view, nearly enough time to do everything they believe is necessary. Often they are not even able to use their one period a week for planning, as other priorities outside of their control interfere and they are not granted requests to make up the time. While it is true that individual prep time is theoretically usable as additional common planning time, some teachers found this impractical. One teacher suggested that members of teams be assigned to the same duty and duty period so they can continue informally their common planning discussions, while monitoring hallways or the cafeteria. Overwhelmingly, the teachers believe that the relative success of SLC implementation they witness at the High School of Science and Technology is directly attributable to that school's emphasis on scheduling ample common planning time.

Looping

While Commerce is strongly committed to the concept of "looping," which keeps the same teachers with the same students as they move from year to year, both teachers and administrators identified significant obstacles that may need to be addressed before looping can be successfully integrated into the system. One issue that could interfere with a smooth transition is the certification that is required of teachers at the state level. Both math and science have distinct requirements for certification within specific areas of the disciplines. For example,

science teachers are usually certified in one area such as physics, chemistry, general science, biology, or botany, and are not usually able to transfer this certification to another sub-field. The result is that a teacher would have to come in with multiple certifications to be able to loop and teach the next level in their respective discipline.

The current shortage of staff is another large obstacle to looping, and the idea has engendered resistance from teachers who have no interest in teaching multiple grade levels, or are so specialized in their upper levels that they would struggle to adapt to teaching broader subjects at the ninth or tenth grade level. Teachers also identified some student-based issues, such as the large transient population and failure rates as high as 30 percent, that would hinder the purity of looping teams.

Outcomes associated with the SLC model

Teachers who are currently participating in the SLC program are mixed in their responses to the outcomes of smaller learning communities at Commerce at this early stage. Some said it was hard to answer right now and they were not sure whether any changes they see are actually related to teaming. Students are now showing higher levels of achievement such as higher MCAS scores, as the standards for admission are rising and the school is starting to develop a new image that attracts a more competitive "clientele." However, some have witnessed that students are definitely bonding more with teachers and seem to be more comfortable overall. Teachers sense that students are developing a feeling of identity and stability within the school due to the team structures, and that the students understand that they can go to their teachers for help both academically and personally. The principal echoed this feeling that the school has been successful in showing students that people are there for them via a mentoring relationship.

The student-teacher bonds may be growing stronger as a result of particular aspects of Year One implementation, such as the physical orientation of teams within the building. A teacher with no previous teaching experience says he sees his students every day and has great bonds with them, and this is partially a result of having the rooms for each teacher in a team in the same part of the building, keeping students in roughly the same area for most of the day.

Teachers of upper level courses who had mostly juniors and seniors had a relatively low sense of the impact of SLCs thus far. However, they did note that based on observation in the cafeteria during lunch, younger students overall seemed more well-behaved and orderly than in the past, which may or may not have been the result of the SLC program. They also agreed that this year was one of the smoothest openings of the school year that they can recall. In addition, some of these non-SLC teachers felt that ninth and tenth grade students seem better prepared for the elective courses that the students take outside of their teams.

Mutual respect and effort

The 10 students that were interviewed at Commerce included tenth graders who had been part of SLCs in the previous year and twelfth graders who had never participated in SLCs. The students overall had the expectation that their teachers give 100 percent and teach to the best of their abilities. They were appreciative of a good education and seemed prepared to give the most in a class where they felt the teachers were doing the same. In return for effort on the teacher's part, the students considered their own responsibilities to be participating in class, doing their best work and doing it on time, showing respect, and striving to achieve what the teachers know they can accomplish. The students all stated that they talk to

> *Teachers can help by giving good recommendations and encouraging us… take that extra step even if they're not paid to do so.*
> - Commerce student

some of their teachers outside of class, both about personal and school issues. Students do not, however, talk to all of their teachers, as some teachers only "teach just to teach."

The students expressed disappointment in classes where teachers were absent for extended periods of time and in classes where the teacher did not take the time to slow down and make sure that people were catching on. In one instance, the entire class failed two chapter tests, but the teacher kept on going without reviewing the material in question, expecting the students to keep up. This kind of situation, in the students' opinions, leads to longer term problems such as high failure rates on the MCAS. As one student pointed out, whether or not this is intentional, "if you can't be patient with me and teach me, you're setting me up to fail."

Based on the interview responses as a whole, it appears that students are keenly sensitive to the issue of respect and feel strongly that it should be mutual between students and teachers. This partly relates to the students' perceptions that the school's administrators do not know their students well. The students feel that reciprocity of respect is not currently occurring between students and staff. "We're people too, we need respect," noted one student.

Students also believe that classes are overcrowded and the learning environment is easily disrupted by the behaviors of students who do not want to be in school. In several instances lack of supplies, such as books and paper, was mentioned, and the students wondered where the money goes (such as money collected from students for the issuance of temporary ID passes). While not directly commenting on the budget situation, they seemed fully aware of and frustrated at the reductions in staff. If they were principal, students said, they would not lay off the best teachers or place them in inappropriate positions for their abilities. For example, students appreciated an exceptional chemistry teacher who was also laid off and now teaches at SciTech. The students seem to be asking for more accountability from administrators, and had a

good idea of what they were missing not only in terms of basic needs but also of peripheral "extras" such as cultural opportunities. Students argued that they could use more activities such as field trips, something they often did in middle school and they now miss in high school.

Security

> *I would get a real metal detector that works. Now kids can come to school with knives, bb guns, guns . . ..*
> - What one Commerce student would do if he were principal

While students believe some policies are too strict, they simultaneously feel that more serious offenses are sometimes missed, and that the enforcement of some policies is not as strict as it should be. For instance, other area high school students and even adults have been seen wandering the building without an ID, because anyone can pay a dollar for and receive a temporary ID without first having their identification verified.

In addition, students believe that the school's metal detector gives a false sense of security because the detector is inconsistently monitored, as people setting off the detector are not usually checked further. These perceptions are not necessarily representative of the general opinion at Commerce, since the school's security enforcement was not the focus of our interviews and therefore not part of our standard set of questions to all interviewees. However, lack of building security combined with their sense of anonymity discussed earlier did come up repeatedly in both student groups interviewed, and both deserve attention in light of the SLC goal to make schools a place where "every student is known" and where students feel they can learn.

Moving Forward

Commerce has some unique opportunities and challenges to the successful implementation and outcomes of smaller learning communities. The remarkable upward trend in

MCAS and SAT scores indicates that the school is already moving in the right direction academically. In moving forward with the grant, the school will continue to grapple with how to maintain and expand their rigorous curriculum as teachers are lost and student numbers increase. In the face of faculty reductions, Commerce will need to strive to find creative ways to implement academies at all grade levels, to loop the academies, and to provide sufficient common planning time for teachers. The geographic component of the SLCs seems to be working well so far, and to the extent that Commerce can preserve the existing team structure and look for ways to strengthen it, the school will come closer to realizing its objective of enhancing teacher-student connections, which is imperative in light of student feelings of alienation in the school. While attention has been devoted to student concerns over the administration's discipline and security policies, the relevance of these findings to SLC program implementation lies primarily in its power to confirm the school's need for a system that increases the sense of community for the students, faculty, and administrators alike. As the school addresses issues of scheduling, planning time, looping, and full SLC implementation at all grade levels, the intended benefits will include the opportunity for students to be more recognized and supported by faculty, which will in turn give students a greater voice in the school community to express their concerns for their own education, security, and sense of accomplishment.

Springfield High School of Science and Technology
Principal: Jesus F. Jara

School Profile

Springfield School District's High School of Science and Technology (SciTech) currently serves approximately 1,856 students in grades 9 through 12. During the 2003-2004 school year, average enrollment from September to May was 1,855 students.

The Massachusetts Department of Education reports that 64.6 percent of SciTech's student body qualifies for free or reduced-price lunch, substantially higher than the statewide average of 27.2 percent. Like its neighboring Springfield schools, SciTech is highly diverse, with white students composing 23.6 percent of the student body, slightly higher than the district average. Like the district, almost half of the student body is Hispanic/Latino, while African American students compose 28 percent of SciTech's population. Of SciTech students, 17.8 percent receive special education, making IEPs significant here as well as at other Springfield high schools implementing SLCs.

Academic performance

SAT scores trended downward at SciTech between 2000 and 2002 (see Figure 6), with a large disparity between verbal and math scores in 1998 that has since stabilized. Mean verbal scores started comparatively high and rapidly shifted downward since 1998, while math scores rose in 1999 and began shifting downward in subsequent years. The state's 2003 SAT averages of 516 math and 512 verbal (see Figure 7) remain higher than SciTech's scores. Mean scores on the math and verbal sections recorded that year at SciTech were 447 math and 451 verbal, still comparatively higher than the scores of other Springfield schools. SciTech also experienced an overall 181 percent increase in the number of students taking the SAT between 1998 and 2002.

The years 1999 and 2000 resulted in steep increases, while in 2001 and 2002 the percentage of SAT takers at SciTech dropped.

Figure 6: Mean SAT Scores for SciTech Students, 1998-2002

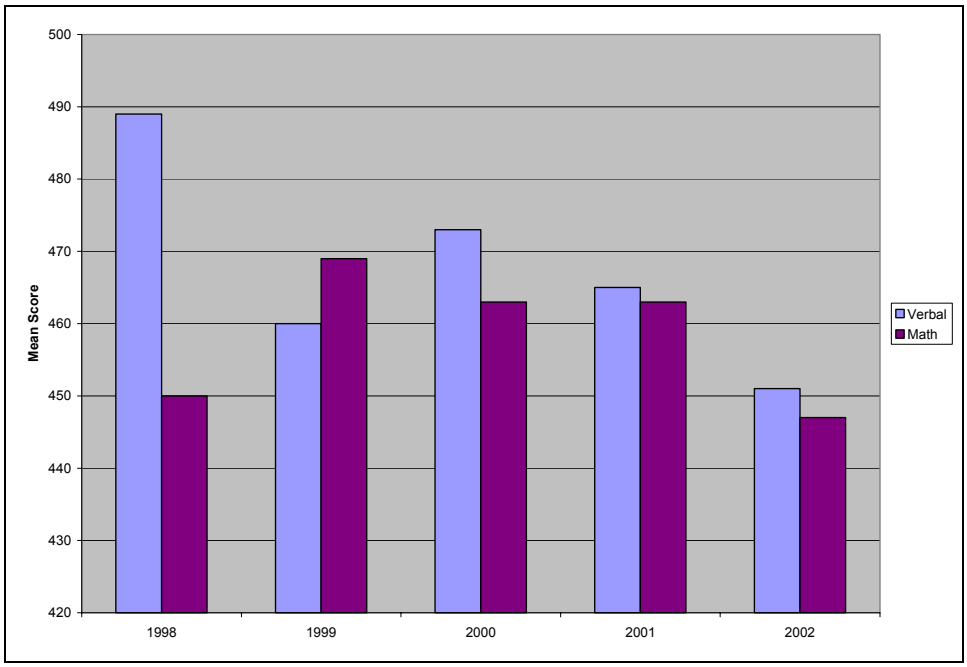
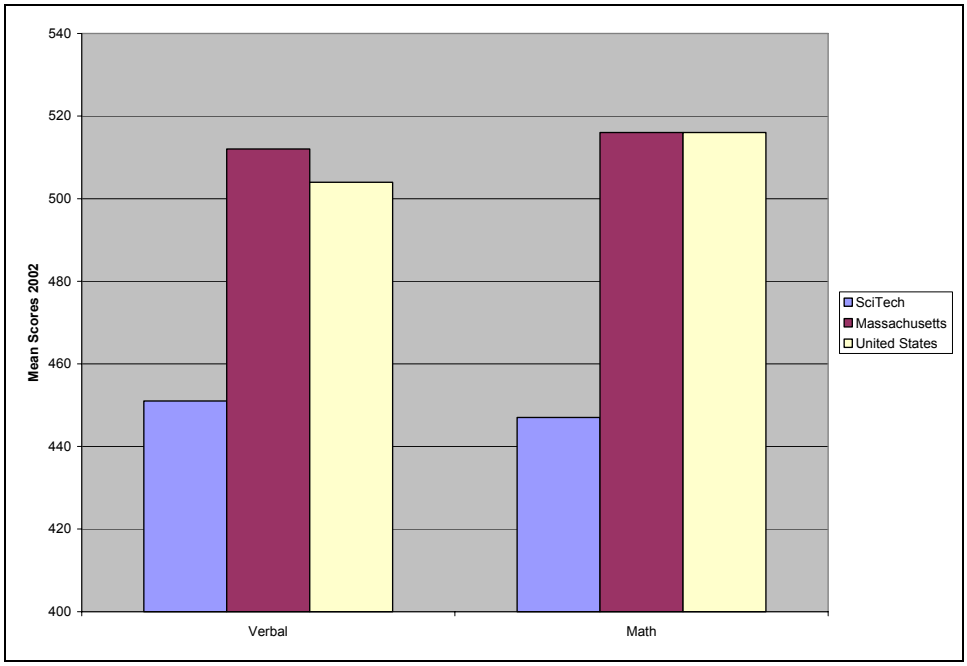


Figure 7: Comparative Mean SAT Scores, 2003



Since 2000, tenth grade MCAS results at SciTech have shown a consistent drop in percentage of students with "failing" scores in both math and English. The students failing math dropped from 67 percent to 37 percent, and in English 48 percent to 31 percent. During this same period, the percentage of students scoring in the "advanced" category on the math exam has shown overall improvement to 9 percent (see Table 4). Though improving, SciTech's scores have consistently fallen below state averages. Advanced performance on the English portion of the MCAS exam improved from 0 to 7 percent from 2000 through 2002, then declined to 2 percent by 2004.

Table 4: MCAS Percent Advanced and Failing, 2000-2004

YEAR	MCAS: MATH		MCAS: ENGLISH	
	% Advanced	% Failing	% Advanced	% Failing
2000	5	67	0	48
2001	4	49	5	37
2002	6	48	7	29
2003	7	44	4	29
2004	9	37	2	31

Like other Springfield schools we examined, SciTech's 2004 failing rates on both the math and English MCAS exams are higher than state averages, as well as nearby Chicopee's averages. While 37 percent of SciTech students failed the math MCAS, 31 percent of students failed the English exam. The school's 2004 failing percentage in math is slightly lower than Springfield as a whole, but in English the rate is higher than the district's rate. Considering the consistent drop in percentages failing math and English since 2000, SciTech is measurably succeeding in implementing its MCAS-related curriculum.

Discipline and attendance

In the 2002-2003 school year, the adjusted number of dropouts at SciTech totaled 56 of the 1,743 enrolled (or 3.2 percent). This figure closely reflects the state's 3.3 percent dropout rate, indicating that SciTech faces similar challenges to Massachusetts as a whole in student retention.

In the 2002-2003 SciTech school year, a number of suspensions were issued equivalent to 32.9 percent of enrollment. SciTech's approach to discipline is similar to other schools in the SLC grant, with standard measures such as "in-house" suspensions. Teachers state that attendance is being rewarded, and they reinforce student goals and consequences on a daily basis. When behaviors need to be addressed, the teachers first talk to the students, then to the parents, then to guidance counselors. SciTech staff explain that sharp increases in suspensions this year are partly a result of teaching teams quickly addressing behavioral issues that previously might have persisted.

SLCs at the High School of Science and Technology

Implementation

The 2003-2004 school year was SciTech's second year of integrating smaller learning communities at the ninth grade level. Principal Jara originally intended to have full ninth grade teams in place last year and expand teaming to the upper grades this year. While 85 to 90 percent of freshmen were on teams last year, they did not feel ready to expand this year, so they chose to focus again on the ninth grade and "do it right" before trying to expand to upper grades.

According to the principal, the greatest obstacles to implementation last year were commitment of resources at the district level, full teacher buy-in, and socially promoted students.

While the district has been philosophically supportive of the program, budget cuts have compelled the superintendent's office to cut staff. Lack of teachers has created a challenge to implementing SLCs in the upper grades. The largest class size currently in the ninth grade SLCs is 24 with two teachers per class. In the upper grades, class size averages 35-40 students, and the school simply does not have the teachers to adequately expand SLCs.

Scheduling also represents a challenge. There has been no alteration to the bell schedule thus far, but administrators are considering alterations for the next school year (2005-2006). Specifically, they plan to implement a block schedule which will enable the school to better meet the needs of all students, including those students in courses two or more years below their grade level. A shift to block scheduling would permit greater changes to the curriculum as well.

A particular asset to SLC implementation at SciTech has been their close relationship and collaboration with their business partner, MassMutual. A focus group made up of the SLC leadership team working in concert with MassMutual has helped identify and analyze key issues to help steer reform efforts. The partnership has provided not only financial support, but also a third voice to the superintendent's office when priority needs arise.

Principal Jara said that common planning and team time has worked exceptionally well with teachers doing team time in place of other duties. The principal did note that common planning time could use additional work to support an interdisciplinary curriculum. During Year One of the grant, teachers had common planning time but no common prep time. This year, with both in place, teachers are spending time together and doing prep work. Furthermore, common planning time has allowed newer teachers to more easily acclimate to the school and their profession.

Academic and disciplinary challenges

Teachers at SciTech view the smaller learning communities initiative as a move toward improving on issues of discipline and poor student performance. It is also hoped that SLCs will reduce SciTech's "horrendous" dropout rate. Typically, 750 students come into the ninth grade and as few as 180 of the same class will ultimately graduate. Teachers also hope the SLCs will improve student attendance. Some teachers claim that up to half of their students are literal or figurative "no-shows" and that many students are only coming once every two weeks. One teacher says that 40 out of 97 students already have had three or more absences in the fall term of 2004. In addition, the teachers are concerned about the academic level of their students, with one team noting that only three students on their team are at or above grade level in language, and five in math.

The teachers feel strongly that the Springfield middle schools need drastic improvements, as failing students are still promoted to the ninth grade and SciTech has to bring these students up to their grade level to pass the MCAS. During Year One, teachers had teams that included grade-level repeaters who often had a negative attitude, and teachers are most excited that such students are no longer on ninth grade teams in Year Two.

Schoolwide buy-in and support

The teachers we spoke with were enthusiastic about the SLC initiative, and feel that the school overall is strongly supportive. In particular, teachers feel that SLCs could not happen without an administration that supports this program and they have never had a

> *The administration has cleaned up this school. It used to be out of control with unsafe hallways and gang activity.*
> - SciTech SLC teacher

principal that gave as much support to the concept of smaller learning communities as Principal Jara. Teachers also feel they have a handle on students because of the team model, and they are "no longer stuck all alone with this."

Teachers identified several expected student outcomes of SLCs, such as students knowing they are part of a smaller group or family, experiencing a smooth transition to high school, developing school-friendly behaviors, and knowing that teachers care about their and success.

SciTech teachers participated in several professional development activities last year, covering student achievement, grades, attendance, vocabulary, note taking, etc. For the most part, teachers reported that these activities were very helpful in offering different techniques for implementing SLCs. One area of concern was that many SciTech teachers were denied, by district administrators, an opportunity to attend a workshop on inclusion despite the fact that SciTech has a large contingent of inclusion students. Teachers were aware that SLC money was spent to support the attendance of some teachers, but felt that a district administrator's favoritism towards another high school has limited their opportunities for professional development.

Outcomes associated with the SLC model

During the last year and a half, according to teachers, the school has been transformed. Defiance is not present in the way it used to be and students are receptive to education and to corrective measures. The number of students staying after school for help has increased significantly since last year. Interestingly, despite a measurable increase in suspensions this year, the faculty and administration agree that this is largely the result of a more streamlined system that more effectively and quickly resolves disciplinary issues.

Teachers have observed that tenth graders this year are much better behaved and are making the attempt to do work. "Students are now acting like students," and are more comfortable speaking out and participating. A higher level of student learning is evident, which teachers attribute to high expectations.

> *One student told us 'you guys have made me feel good about myself.'*
> - SciTech teacher on changes seen in student confidence

The use of student portfolios as an organizing tool has precipitated a vast improvement in students' sense of personal awareness and responsibility for their own education. In mathematics, students are doing their own assessments and explaining how they reached their conclusions. This shows a high level of thinking on the students' part.

Increasingly, teachers feel they know their students well and have witnessed a rise in camaraderie and bonding among students and between students and teachers. Overall the teachers observe that students are becoming more comfortable and working harder. While most students want to do well, ask questions, and get involved, a few appear to "act out" within teams because they are more at ease in the classroom.

The teachers also observed that many students coming into high school are ill-equipped for ninth grade and should never have graduated from middle school the year before. However, while these socially promoted students would have failed in the past, within teams they have a chance to learn and succeed.

The teachers have talked to students about the SLC program to persuade them that the program is positive, but some students think something most be wrong with them if they are in teams. Once they understand why the teams exist and how the program works to help them adjust to high school and learn appropriate study skills, the students' attitudes change.

All students we interviewed at SciTech are in the tenth grade. They explain that in class they are expected to pay attention, do assignments on time, be respectful, and do what they can to their fullest extent. In return they expect "good teachers and good teaching," to learn something new every day and to be able to get help on their level from the teachers when needed. Many stated that most of their classes met their expectations last year because the material was interesting and the teachers were in tune with what the students were learning. While most students were very comfortable with their teachers last year, several felt that their classes were not sufficiently challenging.

Students also discussed how last year's incoming freshmen had scheduling problems which resulted in several weeks of missed classes and homework. Because of an ongoing influx of new students, they would get shuffled from team to team just as they were getting comfortable.

The students feel that overall the school is well-managed. When asked what they would change if they were principal, they could not think of much. Students feel that teachers are following the curriculum and that students are getting a good education. Still, a few responses revealed areas the students would change if they had the chance. For example, students would like to be allowed to change classes if a student and teacher have an interpersonal or communication problem.

> *Nothing, Mr. Jara did everything we asked for. The principal is doing a great job.*
> - One student's response to what he would change at SciTech if he were principal

School Supplemental Profile: The High School of Science and Technology's Twilight School

The Springfield Twilight School program provides an alternative for students seeking a diploma who are no longer enrolled in one of the city's traditional high schools. Twilight School

students attend general education classes during the late afternoons and evenings; some students may be older than typical high-school students, may work or have children, or may have had disciplinary or behavioral issues that prevent them from staying in a typical high school setting. The program is housed at Springfield's High School of Science and Technology, and is primarily administered by one of the school's assistant principals. It is important to note that directing the Twilight School program is an additional responsibility for the assistant principal; there is not an administrator dedicated full- or part-time to directing the program.

The Twilight School program currently enrolls more than 130 students, according to the teachers we interviewed, and a moderate portion of students require special education and Individualized Education Plans (IEPs). All classes in the Twilight School program are considered "inclusion" classes, and each teacher is responsible for drafting, following, and updating students' IEPs. By virtue of the small size of the program, Twilight School teachers appear to function as their own SLC or team, meeting regularly to strategize about new teaching tactics and to discuss student issues.

During Year One of this grant, one Twilight program teacher served on the SLC leadership committee, allowing her to attend professional development seminars and share her training with other Twilight teachers. However, the teachers we spoke with recognized that the "train the trainer" model has not benefited them as fully as they expected. Rather, they see more value in attending high-quality training sessions as a team. One teacher said that if they do not receive professional development as a team it is "pointless."

The Twilight School program teachers we interviewed indicated that their relationship with administrators and staff has improved, but that they continue to feel as if their needs are a lower priority than those of the daytime school. The appointment of a dedicated guidance

counselor has resulted in improved relationships among team members, but there is still a grave need to hire more teachers, ensure consistent security in the building, and provide educational materials like books and planners.

In terms of the smaller learning communities grant, the Twilight School program teachers, through a one-page questionnaire, indicated a very limited knowledge of the level of program implementation. This may stem from the likelihood that the goals outlined in the grant application were developed for the High School of Science and Technology, and not necessarily for the Twilight School program.

The SLC model, as it appears to be implemented in the Twilight School program, has provided a venue for teachers to have richer conversations about students and their needs. While last year's class sizes hovered between 15 and 20, current classes sometimes approach 40 students. Teachers suggested that hiring more staff for the program should be a primary administrative concern going forward.

Despite the fact that there are many structural obstacles to fully and successfully implementing a smaller learning community in the Twilight School program, the teachers we spoke with talked candidly about changes they have witnessed in student behavior and performance. One teacher noted that this semester alone 14 students made the honor roll, and that students are beginning to take more personal responsibility for their education. As in the other five schools, "repeaters" in the Twilight School program can be a distraction for some students. One teacher said that removing the repeaters made for a "clean slate" and that new strategies, like peer teaching, increase the commitment from students. Also, because students at the Twilight School sometimes face issues different from students in the traditional day schools, they are more sensitive to consistency, regularity, and routines. Because the teachers function as

a team, they can share ideas about teaching styles and discipline methods, providing students with a much-need measure of consistency in their classrooms.

Moving Forward

Through our conversations with students, teachers, and administrators, it is evident that the SLCs in SciTech enjoy significant support and enthusiasm. From the principal to the students it was obvious that implementation is going well despite ongoing challenges with staff reductions, lack of resources and persistent student behavioral issues. Students and teachers have a sense of rapport and trust with each other, and new classroom techniques such as the use of portfolios has had a clear positive impact on classroom management and student success. Additionally, both students and teachers were unreserved in their support for Principal Jara. In moving forward, SciTech is already being careful to slow down and make sure one piece of the program is implemented successfully before trying to do more. After experiencing a somewhat chaotic year of teaming at the ninth grade level, the school would likely have encountered further difficulty in trying to team upper grades this year. Planning is taking place now for a new level of implementation next year, and the additional challenge remains to utilize resources via the SLC grant to mitigate problems at the academic and behavioral levels, and to do this in the face of dwindling District resources. Given the structure of support and commitment the school has already developed, SciTech is in a good position to achieve the goals set forth within the SLC framework.

Putnam High School
Principal: Kevin McCaskill

School Profile

Roger L. Putnam Vocational Technical High School (Putnam), currently serving 989 students in grades 9 through 12, is one of the four primary high schools in the Springfield Public Schools district. During the 2003-2004 school year, average enrollment from September to May was 982 students. Putnam offers a Vocational/Technical "Learning Communities" program that allows students to spend alternate weeks attending standard academic classes and vocational classes through one of the following "schools":

- *School of Construction and Design*: Carpentry and Cabinet Making, Electrical Construction, Drafting and Design, Metal Fabrication, and Sign Construction and Design
- *School of Health, Human Resources and Hospitality*: Cosmetology, Culinary Arts, and Nursing
- *School of Transportation, Communications and Technology*: Auto Body, Auto Mechanics, Commercial Art, Computer Maintenance Technology, and Graphic Arts
- *School of Technical Exploration*

Enrollment in previous years was sometimes significantly higher, with more than 1,300 students enrolled in 2000 and 2001. Starting last year, a number of changes were made to the Putnam entrance examination, resulting in fewer students being offered admission. Thus, while enrollment is down, it is expected that performance in both academic and vocational classes will be higher than in previous years.

Between Year One and Year Two of the grant, Kevin McCaskill was hired to serve as principal of the high school. Principal McCaskill is committed to improving the SLC program at

Putnam; thus, a number of changes are planned in Year Two and Three of this grant. These changes are centered on scheduling changes and some modifications to the school building.

Putnam's physical plant is in a state of serious disrepair. The individuals we interviewed noted several times that the physical structure acts as an impediment to successful implementation of SLCs and, more generally, how problems with the structure make for a less safe, healthy school environment. Currently, there are plans in place to secure funding to build a brand new facility.

According to data from the Massachusetts Department of Education 77.4 percent of students enrolled during the 2003-2004 school year were considered low-income. This is almost three times the statewide average of 27.2 percent, and presents significant challenges for teachers and staff. Nearly 13 percent of students at Putnam are white, 59.5 percent of students are Hispanic, and 26.9 percent are African American. Fewer than one percent are Asian or Native American. Thus, Putnam has one of the most diverse and economically disadvantaged student bodies, as compared to the other four schools benefiting from this SLC grant.

Academic performance

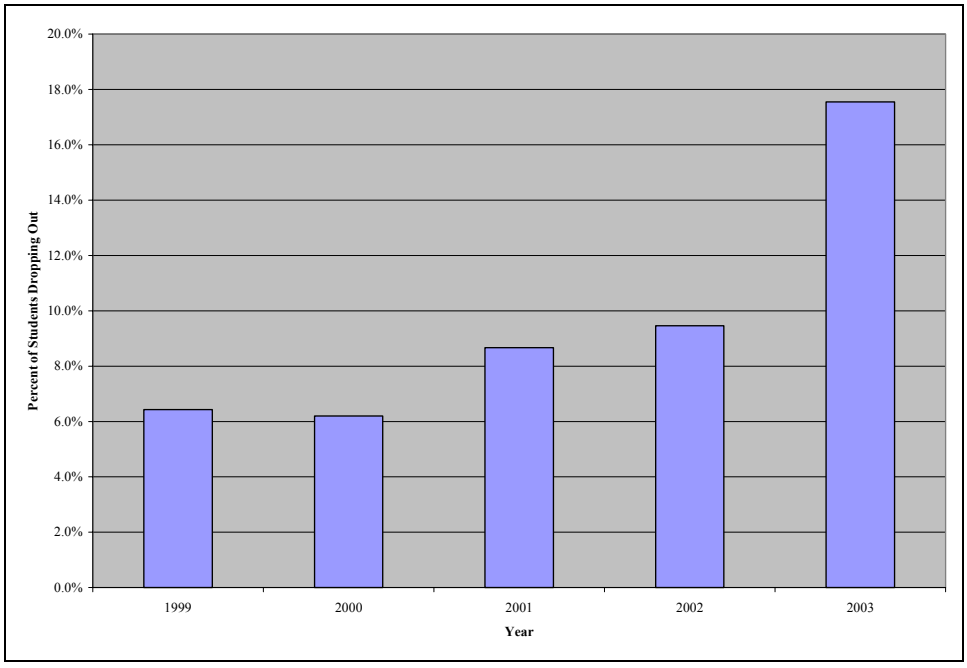
Since 2001, tenth grade MCAS scores in math and English have improved, with a steady decline in the number of students failing, and increases in the number of students scoring at the "advanced" and "proficient" levels. As expected, there has been a jump in the number of students in the "needs improvement" category, because of the drop in failures. Despite these noteworthy gains in performance, Putnam students continue to perform well-below state levels, with a very small percentage of students scoring at the "advanced" level in 2004 in either subject (less than one percent).

The Springfield Public Schools report an increasing number of students sitting for the SAT exam between 1995 and 2002, though the percentage of students is still quite small (52 students took the test in 2002 when there were 210 seniors enrolled). Although the increase in participation is a positive trend, scores are still much lower than state and national averages, with school scores on both the math and verbal portions of the test falling about 150 points short of state and national averages.

Discipline and attendance

Like many urban public high schools, Putnam is focused on assuring that students regularly attend school, and that they graduate instead of dropping out. Unfortunately, drop-outs have been on the rise in recent years, with the Springfield Public Schools reporting 17.6 percent of students dropping out during the 2003-2004 school year.

Figure 8: Annual Dropout Rates at Putnam, 1999-2003



Putnam addresses lateness, class cutting, and absenteeism with detentions or “sessions,” a "tardy table," external suspensions, and in-house suspensions in the "civility room."

Monthly attendance data was provided for the 2001-2002 and 2002-2003 school years. During the course of the school years, attendance rates fluctuated between 85.7 percent and 77.7 percent, with a school-year average of 81.0 percent.

Between 2000 and 2002, disciplinary incidents have varied, with 983 incidents of truancy in the 2002-2003 school year alone. Drug and weapons possession incidents have remained relatively stable, with 24 weapons possession and 25 drug possession incidents recorded during the academic year that preceded Year One of this grant. Because of the seriousness of discipline issues at Putnam, administrators may resist taking teachers off of hallway and school-grounds monitoring duties.

SLCs at the Putnam Vocational Technical High Schools

Implementation

Putnam has been working to implement SLCs for three years, starting with a pilot program in the 2002-2003 school year. While there exist several methods for implementing the SLC model, Putnam opted to create a series of "exploratories" with teams of vocational teachers and teams of academic teachers. In the "exploratory" model, students spend one week in academic classes and one week in the vocational classes. The model is designed to expose students to all the vocational and technical courses offered by the high school in a smaller learning environment.

Putnam included 100 percent of its ninth graders in its exploratory academies during Year One, and continues to add all incoming ninth graders to the program. There are currently about 250 students in the program this year. One of the reasons for using the exploratory model was to increase integration between the vocational and academic faculty; however, academic

teachers are not yet part of the team structure. In addition, the physical structure of the building and the scheduling requirements associated with vocational and technical programs result in a disconnect between vocational and academic teachers.

The high school operates on an "A" week and "B" week schedule, where students are in a full week of vocational or "shop" classes followed by a full week of academic classes. This allows each student to experience a full week of each of the different vocational and technical courses offered, but also requires that a fair amount of time in academic classes is spent on review. One student noted that her expectation of teachers is to "refresh [her] memory." The school plans to roll out a new scheduling model during the 2005-2006 school year, in order to increase interaction between vocational and academic teachers, and strengthen the team structure.

Putnam teachers and administration agree that the goal of the SLC program is to increase interaction between students and teachers, so that teachers know students well and can help them achieve their goals.

During Year One, common planning time (CPT) was extremely limited. Vocational team teachers are permitted to meet as a group once each month; however, some faculty have created their own planning times one or two other times each month. This requires giving up their own preparation periods so that they may have a group discussion about their common students. One reason for this lack of common planning time has been the need to keep ninth grade teachers on "critical duties" such as hallway and door monitoring. Because there are fewer teachers in the building (due to budget cuts, retirements, and resignations), it has not been possible to take these responsibilities away from team teachers. Thus, scheduling common time for planning

interdisciplinary lessons, contacting parents, or discussing student behaviors has been extremely limited.

The teachers we interviewed at Putnam each completed a brief questionnaire gauging the success of implementation of the SLC model. On a four-point scale, "full implementation of ninth grade academies" received a mean score of 2.33. Other goals, such as purchasing needed instructional materials, were considered not to have been successfully implemented in Year One, and teachers noted fiscal constraints associated with moving the goals forward in future years. For the academic teachers, the SLC model still feels "theoretical"–those teachers are not yet part of the new model.

Fiscal constraints have also caused a decline in the number of teachers at Putnam. Principal McCaskill and several teachers noted that funding for 26 teaching positions was lost. In addition, several teachers resigned or retired in each of the last two years. At the same time, 13 new teachers were hired for the ninth grade, seven of whom are brand new to teaching. During Year One, the equivalent of 132.5 full-time employees taught at the school, 86.4 percent of whom are licensed in the subjects they teach.

Principal McCaskill noted that the hiring of a dedicated SLC coordinator, who serves as a liaison between teachers, administrators, and the Chicopee Schools SLC coordinator has been a great help to program implementation.

Outcomes associated with the SLC model

During our focus group sessions with teachers, students, and the principal of Putnam, a few common themes about the program emerged. The general tenor of interviews was hopeful, but there is a measure of confusion about the success of program implementation. This stems in part from the sense that Putnam is two schools in one: vocational and academic. In addition, the

physical structure of the building, the daily schedule, and class size emerged as frequent discussion topics.

Some of the teachers we interviewed had previous experience with SLCs, and suggested that implementation at Putnam looks different from other models. Several teachers mentioned on a few occasions that a fully-functioning SLC program should result in smaller class sizes, but due to budget cuts and lack of staff, Putnam academic class sizes are still very large. Students noted that it is common to have 30 or 40 students in ninth or tenth grade academic classes, while "shops" tend to enroll fewer than 20 students. As a result, many of the vocational teachers say they have close relationships with their students. Students generally agreed, saying they talked with teachers about extra-curricular activities, personal matters, and after-school help.

The physical structure of the building continues to present obstacles to successful implementation. Team vocational teachers are spatially separated from one another, and this was highlighted as an impediment to interacting with team members and having informal conversations about student issues.

Several students agreed that their in-school quality of life is negatively impacted by the state of the building. When asked what they might change about the school if they were the principal, one immediately offered, "I wouldn't let the building fall apart." Nearly all the other students present agreed. Air quality and noise were also mentioned as issues that impact the students' ability to perform well or to want to be in school.

As in each of the schools we visited, scheduling is a major obstacle to successfully rolling out the SLC model. In Putnam, the need to accommodate a large variety of vocational courses, whose teachers are accountable both to the principal and to a vocational director, makes this obstacle extremely challenging. Principal McCaskill remarked that it was a "huge

disappointment" that there were no schedule changes implemented during Year One of the grant. He is confident that the program will be successfully implemented once scheduling changes can take place.

Finally, students were open and candid about their relationships with teachers, offering that they have stronger and closer relationships with their vocational teachers because of the difference in class size. On average, the vocational classes are much smaller than academic classes, with some "shops" enrolling only 5 or 10 students. Students indicate that they spend more time overall with their vocational teachers as opposed to their academic teachers; this allows them the opportunity to get to know their teachers better, to receive one-on-one help, and benefit from guidance and support that extends beyond classroom activities.

Moving Forward

Putnam High School has experienced serious staffing changes in recent years, but the energy and enthusiasm of the school's principal and district-wide SLC coordinator are certainly assets. Overcoming the "two schools in one" mentality has not been accomplished and it remains a barrier. Still, students seem to value the experience of the "exploratories." In addition to developing close relationships with vocational teachers, students say they feel they are learning "twice as much" as in a traditional school, and expect to get a job in their field or attend two- or four-year colleges.

Continuing to foster collaboration between vocational and academic teachers is critical for successful implementation of the SLC program at Putnam. Scheduling more common planning time for existing teams and new teams is essential if teachers are to begin developing interdisciplinary lesson plans or increase parental involvement in student affairs. Finally,

contract and budget issues will likely continue to slow down the structural changes that must take place at the school. Without adequate funding, the school cannot hire the staff it needs or make the scheduling changes necessary for fully implementing SLCs at Putnam.

Project Evaluation

The grant application submitted by the Pioneer Valley Smaller Learning Communities Initiative on behalf of the Chicopee and Springfield Public Schools featured five goals that formed the structure of the project's design and the over-arching objectives. Having reviewed the particular circumstances and progress of each of the five participating high schools, it is important to consider the entire project as a whole and its success in achieving its five stated goals.

It is important to understand that some of the project's goals are primarily process goals that could and need to be achieved very early in the grant's implementation. The first goal, implementing the structure to ensure that every student is known well and supported, is one such goal, and we would expect to find some success in the achievement of this goal even after only one year of implementation. On the other hand, two of the goals in particular, increasing the number of students completing a rigorous curriculum and increasing the number of students passing the MCAS (the Massachusetts Comprehensive Assessment System), are outcome goals that are likely to be achieved over a slightly longer term. The explicit goal is to improve MCAS passing rates by 20 percent in years Two and Three of the grant. Because of the different time frames of each goal, some will be addressed in greater detail than others, though each will be discussed at some level.

Overall, the Pioneer Valley Smaller Learning Communities Initiative appears to be on track. Year One evidence suggests that a structure has been implemented in at least four of the five high schools that is facilitating a process through which every student feels known and supported, and there appears to be evidence that entering ninth graders have greater self-confidence, though this is difficult to measure.

Professional development opportunities for teachers have been quite successful, and most teachers involved in SLCs across the five high schools seem to have an increasing capacity to implement the model at the ninth grade level. The capacity to implement the model school-wide is not evident yet, and a number of teachers indicate that they would like additional training in particular aspects of SLCs such as "advisories," mentoring groups, and collaboration between academic and vocational programs.

Finally, there is not significant evidence at this early stage in the project's implementation of gains in the number of students completing a rigorous curriculum or the rates of students passing the MCAS exam. This analysis is in part complicated by the difficulty of obtaining information on previous classes against which to compare last year's ninth grade cohort.

This chapter presents an overall assessment of the smaller learning communities' project through the framework of the grant's five goals. Secondarily, this chapter presents a brief summary of the most salient assets and threats to the success of this initiative.

Evaluating Progress Towards the Five Goals

Quantitative data is limited for the first three goals defined by the smaller learning communities grant application. The analysis of progress towards the achievement of these goals relies heavily on the qualitative reporting through interviews. In each case, however, some data is used that in some respects reflects on achievement of the goal. The last two goals both specify quantitative goals, and the evaluation therefore necessarily relies heavily on quantitative data. However, thus far a method has not been determined to quantitatively measure increases in the number of students taking a rigorous curriculum (Goal 4). Data on course enrollments was available for Springfield high schools, but was not provided with sufficient time to develop a thorough analysis.

Goal 1: Implement the structures to ensure that every student is known well and supported.

This goal is, in some respects, the fundamental objective of implementing smaller learning communities in high schools. Within a smaller unit of a large high school, it is hoped that students will feel known and supported. The importance of this goal was not lost on those we interviewed, as one principal noted that the ninth and tenth grade years are a vulnerable time for young people when they need support from adults they can trust.

One necessity for successful achievement of this goal will be purity in teams so that students in fact find themselves in a supportive community in which they are known. In Year One of grant implementation, four of the five high schools reported that the majority of ninth graders were in teams. Within the ninth grade teams, however, the degree of purity was uneven. Schools beginning to implement tenth grade teams found that purity became more difficult as the range of electives available to students diversified. By the start of Year Two, four of the five

high schools reported nearly 100 percent purity in ninth grade teams, and at least two high schools had a substantial share of their tenth graders in teams.

Facilitated by team purity and central to the achievement of Goal 1 is whether or not students are forming relationships with their teachers. In the four high schools that have been able to implement mostly pure ninth grade academies, teachers almost universally feel they know their students well. However, while some teachers ascribe this to the teams, others believe they knew their students just as well prior to the introduction of the new model. Regardless, repeatedly teachers noted that students approach them outside of class and that the topics of conversation range from homework to personal issues to sports. At Chicopee High School, teachers said that they continue to have good relationships this academic year with the students they had in teams last year, though they are no longer their students. Teachers also report having students ask about material they are learning in another class. Overall, some teachers seem to feel that the smaller learning communities' teams provide students with a sense of stability and set of teachers they know and can approach, while other teachers feel it has not had a significant impact on their relationships with students. One positive aspect of teams noted by a teacher was giving students a sense of identity with a smaller group within the school.

While a majority of teachers are positive about the impact of the grant on student-teacher relationships, students have more mixed feelings. Students do report good relationships with teachers and that they can have conversations with teachers on a wide range of topics similar to those reported by teachers. However, some students specifically questioned whether being on teams would actually mean teachers got to know them better. Students also suggested that being with the same teachers over multiple years, through looping, would "annoy" them. There were some comments from students suggesting favorable relational benefits of teams, including

having an easier time talking to teachers and having better relationships with fellow students because of being in a smaller unit. Overall, it would appear that there are relational benefits to smaller learning communities, but teachers may be feeling a greater sense of connectedness at this point than are students.

Another way in which a school's connection to a student might be improved through smaller learning communities is relationship with or engagement of parents. At two of the five high schools, the ability of entire teacher teams to meet with a parent during common planning time has been invaluable both in addressing problems and in better knowing students. One example of the possible success of smaller learning communities in promoting parental involvement is data from Chicopee High School suggesting that ninth and tenth graders' parents are very involved, while eleventh and twelfth graders' parents are not involved enough. While it is too early to determine that this is a result of the implementation of smaller learning communities at the lower grade levels, it is a positive sign. Interestingly, reporting from principals suggests that parental involvement is greater in the Chicopee high schools than in Springfield, but this appears to be the continuation of pre-existing trends rather than a result of different implementation processes in the two districts.

The ability of students to become known within their schools has been in some cases limited by instability in the student body at several of the high schools. Creating an atmosphere in which students are well known is not likely to succeed if the student body of the school turns over too quickly. For example, at the High School of Science and Technology, it was noted that more and more students were assigned to the school for the first several months of the year, and the already understaffed school had difficulty absorbing them. Because of this, many students

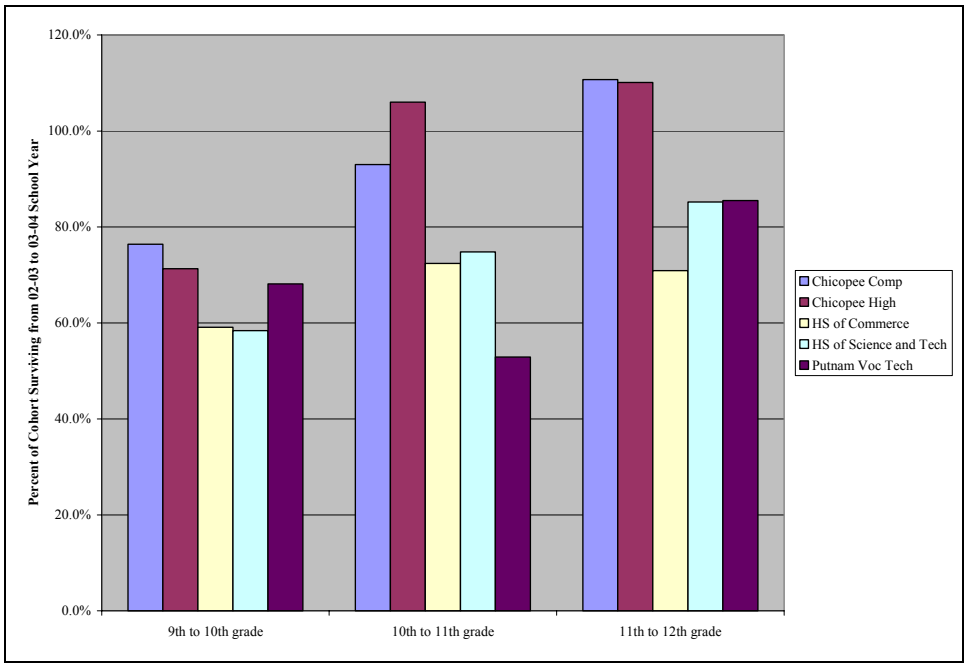
were cross-teamed, assigned to classes in more than one team, and shuffled between teams until January.

Students at the High School of Commerce suggested that a week-long orientation for freshman before upper classmen return to school would have facilitated the adjustment of freshmen to high school. Given the number of students who mentioned the difficulty of adjusting to high school, this may be a good suggestion and might facilitate or accelerate teaching teams' knowledge of their students.

Over time one would expect that a school that successfully implements structures so that students are well known and supported would see higher rates of cohort survival. Cohort survival rates are a percentage of a group that remains in school from one year to the next. For example, if there are 100 freshmen in a high school in a particular year and then there are 80 sophomores the next year, the cohort survival rate would be 80 percent. Figure 1 provides the baseline cohort survival rates for all five high schools from the 2002-2003 school year to the 2003-2004 school year. In future evaluation reports, these rates will be compared to rates for another year to determine if survival rates have increased with the implementation of smaller learning communities. Typically, the lowest cohort survival rate is for the transition from ninth to tenth grade, and ninth grade academies have the potential to increase student connection to the school and improve these rates.

While the data in Figure 9 does not allow a comparison of change over time it allows an analysis of the starting point for each high school. With the exception of Putnam Vocational Technical High School, every high school has its lowest cohort survival rate in the ninth to tenth grade transition. Also of note, Springfield's high schools have consistently lower cohort survival rates than Chicopee's high schools.

Figure 9: Percent of Students Remaining in a Class from 2002-03 to 2003-04 School Years



Overall, most high schools appear to have made progress towards Goal 1 during Year One of the grant, but concerns remain about purity and students willingness to be well known and supported. With purity most achieved in the ninth grade academies for Year Two of the grant, it will be important to look for increases in the cohort survival of Year Two's ninth graders.

Goal 2: Implement strategies to increase the personal strengths and self-confidence of all students.

As with Goal 1, the second goal is central to the objectives of smaller learning communities. By moving students into smaller groups and keeping them with a consistent set of teachers, it is hoped that they will become aware of their own strengths and increase their performances.

With respect to the specific statement of Goal 2, there were a smattering of reports from teachers suggesting gains in student self-confidence levels. Most explicitly, one teacher recalled a student saying, "You guys have made me feel good about myself." In one high school, teachers reported that students feel more comfortable, and in another school teachers reported that students appear to be adjusting faster to high school, which has the effect of boosting their confidence. On the other hand, inconsistencies remain and teachers in yet another high school suggested there is little difference in student self-confidence with or without teams.

Closely related to confidence are considerations of whether or not students are taking greater responsibility for themselves and their learning. The issue of personal responsibility is not trivial as students' lack of a sense of personal responsibility, and awareness of their learning, is one of the biggest challenges facing teachers, according to one at the High School of Science and Technology. The use of portfolios and day planners, methods of organization for students, appears to counter this by increasing students' awareness of their progress. One teacher has reported that students know better, with smaller learning communities, the expectations for their academic performance and behavior. There is, among some teachers, a concern that placing students in teams, basically a similar model to middle school, does not require them to mature as they enter high school.

> *Kids who came back this year are more like students.*
> - A teacher at SciTech's Twilight School

Behavior is also related to students' sense of personal responsibility and their self-confidence. If the smaller learning communities are having their desired effect on students, one would expect to see fewer disciplinary problems. At the High School of Science and Technology, teachers are tremendously positive about the impact of smaller learning communities on students. They indicated that behavior among tenth graders, who were in teams

for the ninth grade, is much improved. This sentiment is echoed at the High School of Commerce where teachers report that this year's tenth graders (ninth graders in Year One) appear better behaved, and they report that the start of school for Year Two was one of the smoothest ever.

Interestingly, in the two Chicopee high schools, the results seem more mixed from the perspective of teachers. For example, in one high school, teachers report that students are less able to misbehave without consequences because of teams, but in the same school teachers also report uncertainty about whether behavior has improved. Illustrating the range of perspectives within a single school, one teacher reports that behavior is much better in a smaller learning communities, while another teacher reports that behavior "has and has not improved," and yet another teacher reports that the smaller learning communities project has been "highly unsuccessful." Overall, however, it appears that there is some consensus that the smaller learning communities have some kind of impact on behavior and personal responsibility among students.

One of the strategies of smaller learning communities that might have the most significant impact on student confidence and awareness of their learning process is advisories. Unfortunately, to date none of the five high schools have implemented advisories. At the High School of Science and Technology and at Chicopee High School, the principals cited the non-implementation of advisories as one of their most significant disappointments with the process in Year One.

One of the surprising findings of this analysis is that a number of interviewed students did not favor or like being on teams. According to teachers at one school, students have expressed a desire not to be on teams after ninth grade so they can have more independence. In

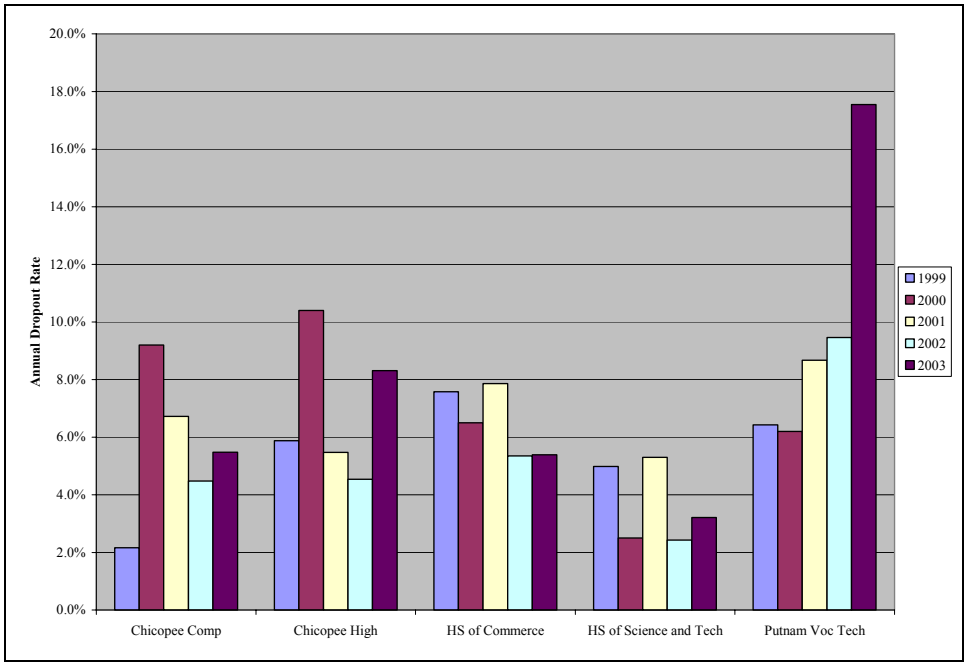
one high school students expressed strong feelings about being on teams in ninth grade. Students suggested that in order to learn they need to interact with a variety of teachers and students. Other students felt that by tenth grade they should be able to "see other kids." One student described being on teams as "boring" because of being with the same people all day every day. Another student observed that being in teams does not prepare them for college where they will have to interact with many people. It is important to realize that students' frustrations with teams are focused on their socialization and, possibly, their desire to be in classes with their friends. It is possible that they could remain frustrated but still see improvement in their academic performance. This issue will be monitored in the next two years to determine if students' concerns are short-lived as a result of the transition to teams, or if they remain a complaint.

Of additional concern to students and teachers is the notion that students who simply do not get along are with each other all day, allowing problems between students to grow. In response to this specific concern, students suggested that they be allowed to change teams if they have problems with a particular student or teacher. Again, because this concern is rooted in the perceptions of students and teachers, further investigation is merited, because there are established processes by which students can change classes, and it remains unclear whether these processes have been used more or less since the implementation of SLCs.

Because students with higher levels of personal responsibility and self-confidence are less likely to drop out of high school, we use annual dropout rates to examine outcomes related to Goal 2. As with cohort survival data, the information in this report is in many ways the baseline against which the future should be measured, because the project does not have enough history to significantly impact an indicator like dropout rates.

Figure 10 presents the annual dropout rates for each of the five high schools over the last five school years. Again with the exception of Putnam Vocational Technical High School, the general trend in dropout rates has been a decline with a few one-year exceptions. Generally, the High School of Science and Technology has the lowest annual dropout rates and Putnam has the highest. In the next two years, the presence of ninth and tenth grade academies should result in declining dropout rates because students who make it to their eleventh grade year usually finish high school.

Figure 10: Annual Dropout Rates by School, 1999-2003



Once consistent data on discipline across both districts has been obtained, reporting of discipline incidents as a percentage of enrollment will be used to examine behavioral changes as a result of smaller learning communities.

In summary, there is limited anecdotal evidence that student self-confidence and personal responsibility are increasing, but strategies that remain to be implemented, such as advisories, may have the potential to significantly advance this goal beyond its current state.

Goal 3: Increase the capacity of adults to fully implement the SLC model school-wide.

Goal 3 is in many ways the goal that will enable the achievement of the other four goals. Without giving school administrators and teachers the capacity to successfully implement smaller learning communities, students will not be well known, their confidence will not increase, their curriculum will not be more rigorous, and their MCAS scores will not increase. It is logical then that Year One activities probably achieved the most towards this goal.

The major mechanism by which teachers have been supported to implement smaller learning communities has been through common planning and team times in their teaching teams. Among other things, this has begun the process of developing cross-curriculum instruction, though in every high school the extent of inter-disciplinary teaching remains limited and is a desired area of focus among principals and teachers.

Given our findings, common planning time is undoubtedly the most important component of the smaller learning communities grant for developing the capacity of teachers to implement the model successfully. Overall, teachers report that common planning time has been tremendously beneficial, though in some high schools there is significant concern about the extent of common planning time. Having a connection with other teachers that allows them to get advice and correct behavioral or academic problems quickly was an often-cited benefit of the smaller learning communities from teachers' perspectives.

One of the major barriers to common planning time is the necessity of covering other non-teaching duties when teachers are having common planning time. This issue was mentioned at nearly every high school, and those high schools that have offered their ninth grade teacher teams the most common planning time have done so by excusing them mostly or completely

from other duties such as hall or lunchroom monitoring. This obviously has the potential to affect discipline and orderliness within the school as well as the attitude of non-teamed teachers towards the smaller learning communities' teams. At one high school, teachers are very upset by the limited amount of common planning time and the absence of common team or prep time. This has been perceived as a lack of support from the school's administration.

The second major mechanism through which teachers' capacity to implement smaller learning communities has been boosted is through professional development workshops. Four of the five high school principals noted that they felt the professional development activities had been beneficial for teachers. Professional development activities were generally perceived as helpful by teachers with some notable exceptions. An early summer professional development meeting had a component on technology that was, in the words of one teacher, "totally unnecessary."

> *[It was] not that bad, I thought it would be terrible.*
> - A teacher commenting on an SLC professional development workshop

Teachers appear to want professional development narrowly tailored to teaching them how best to implement the specific activities under the smaller learning communities framework such as advisories, use of common planning time, and scheduling. A major workshop in June of 2004 received some criticism because teaching teams were not yet in place because of significant staff turnover during the summer, particularly in Springfield. One teacher suggested that activities designed to help teams get started would be most useful once teams are finalized for the coming year. Another substantial recommendation coming from teachers is that workshops be for the entire faculty as opposed to those involved with the smaller learning communities.

One of the biggest and most oft-cited limitations to the success of the smaller learning communities' project in the three Springfield high schools has been reduced staff levels.

Because of recent budget cuts at the state and local level, those interviewed at all three schools indicated that they have faced staff reductions. Attempting to implement smaller class sizes in the academies creates significant class size problems in the upper grades. For example, in one high school, the ninth grade academies have class sizes around 24, but this has meant that the average tenth to twelfth grade classroom has 35 to 40 students. In this case, the principal indicated that the reductions in staffing prevented the implementation of tenth grade teams in the grant's second year. Staff reductions have made purity among teams particularly difficult. For example, science teachers have to be certified in their particular sub-field (physics, chemistry, biology, etc.) and students cannot remain exclusively with teachers from one team because there may be only one or two teachers in the building certified in a particular science. Interestingly, the Chicopee high schools did not report such staff reductions or significant complications resulting from staff reductions.

No high school, after Year One, has made significant alterations to their bell schedules to accommodate the smaller learning communities, but three of the five high schools indicated that changes to the bell schedule were planned for next year to better facilitate not only ninth grade academies, but the expansion of SLCs to the upper grades. This is especially challenging for the two high schools offering vocational or technical programs whose classes meet for several periods each day. Principals at these schools discuss moving to "block scheduling" so that students spend one half of the school year in a particular set of classes and then the next half of the year in another set of classes. This would allow students to be enrolled in fewer classes at a given time, but have more concentrated periods of time in those classes. Vocational and technical schools will need to tackle the scheduling issue differently than the other high schools

and may, as a result, lag behind in successful modifying the schools' structures to make SLCs a success.

Some principals noted a feeling that portions of their schools' faculty had to be "sold" on the idea of smaller learning communities and, even after being exposed to the grant, some teachers still opposed the idea. Because of resentment from non-SLC teachers, some teachers suggested that smaller learning communities should be implemented in the future as a school-wide initiative so that everyone in the school is aware of what is happening.

Thus far, looping–elevating teachers through the grades with a cohort of students–has not been implemented in any of the five high schools. A principal noted that some teachers do not want to teach other grades than they have already taught, making looping difficult. Also, the fact that the school has assigned many of its newest teachers to the ninth grade academies, and that the newest teachers are the first to be laid off in a reduction, means that staff reductions particularly impact the ability of a cohort of teachers to move from the ninth to the tenth grade with their students.

Goal 4: Increase by 5% each year the number of students who complete a rigorous curriculum

Unlike goals 1 through 3, goals 4 and 5 explicitly identify quantitative benchmarks to be achieved as a result of smaller learning communities. In the case of Goal 4, there is an expectation that smaller learning communities will result in more students taking a rigorous course load throughout high school. Unfortunately, quantitative data was not available on this issue for all high schools, and the data that was available was received too late to be included in this report. However, some interview comments remain relevant to this topic, and SAT scores and participation can be used as a proxy for the rigor of students' curriculum.

> *If you can't be patient with me and teach me, you're setting me up to fail.*
> -A student at the HS of Commerce about whether classes meet their expectations

The particular comments about curriculum included a significant concern in the minds of students about their assignment to particular teams. As is the case in many high schools, students are often either in all honors classes or all non-honors classes, and students believe that teaming makes it more difficult to change if they are in a class that is at an inappropriate level for them. According to teachers, parents have expressed a similar frustration. However, it is possible for students to change classes within the SLC structure, and there is no data at this point suggesting that teams make class changes less flexible than they were before teaming. An effort will be made to collect data for the Year Two evaluation to determine whether or not teaming has limited students' ability to be in the class most appropriate for their level. Of additional interest is whether or not this concern would be alleviated by a greater degree of differentiation among learning styles and levels within individual classrooms.

Teachers were not the only stakeholders to identify this problem, as students said that if they are not honors students in a particular class they should not be put into honors. Put another way, one student said that the problem with teams is that it makes it hard to take certain classes. Students could identify that they or some of their classmates had been placed in honors classes when they should not have been. According to students, this informal tracking hurts students who are both behind or ahead.

Scholastic Aptitude Test (SAT) scores and participation might be thought of as a proxy for the rigor of students' curriculum. If more students are taking a rigorous curriculum, one would expect to find increases in SAT participation because students in a tough curriculum are likelier to consider college; mean SAT scores should also rise as more students take the SAT with greater preparation.

Figures 11 and 12 display mean SAT math and verbal scores, respectively, for each of the five high schools over the past four years. For both math and verbal scores, four of the five high schools have had mean scores consistently near, usually below, 500. Putnam Vocational Technical High School has consistently lower mean scores hovering below 400. There is no discernible upward or downward trend in SAT scores for any of the five high schools. Therefore, if SAT scores begin to rise in the next couple of years, the implementation of smaller learning communities may be a reasonable explanation.

Figure 11: Mean SAT Math Scores by School, 2000-2003

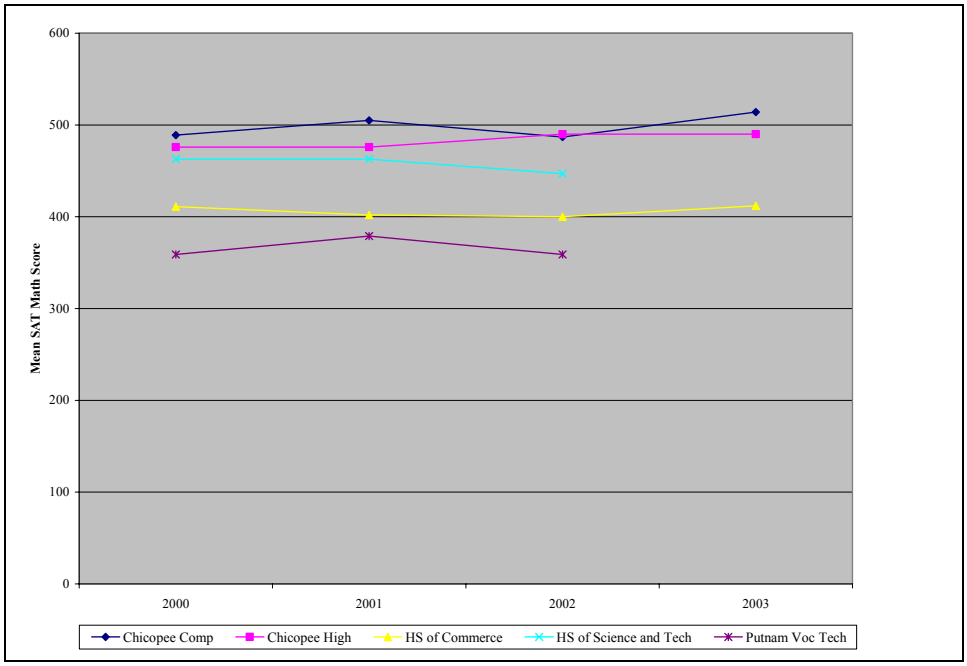


Figure 13 shows student participation in the SAT over the past four years for each high school. In both Chicopee high schools, participation appears to be dwindling. The High School of Science and Technology has had sharp decreases in participation while the High School of Commerce was varied and Putnam is showing increased participation. As with scores, increases in participation over the next two to three years will be a positive indicator that more students are choosing a rigorous curriculum.

Figure 12: Mean SAT Verbal Scores by School, 2000-2003

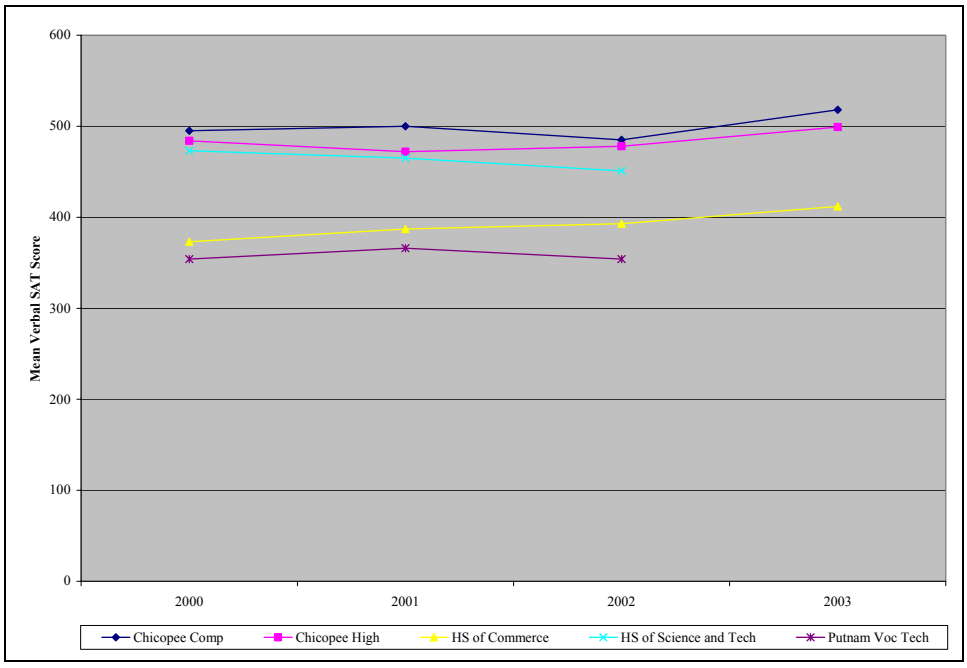
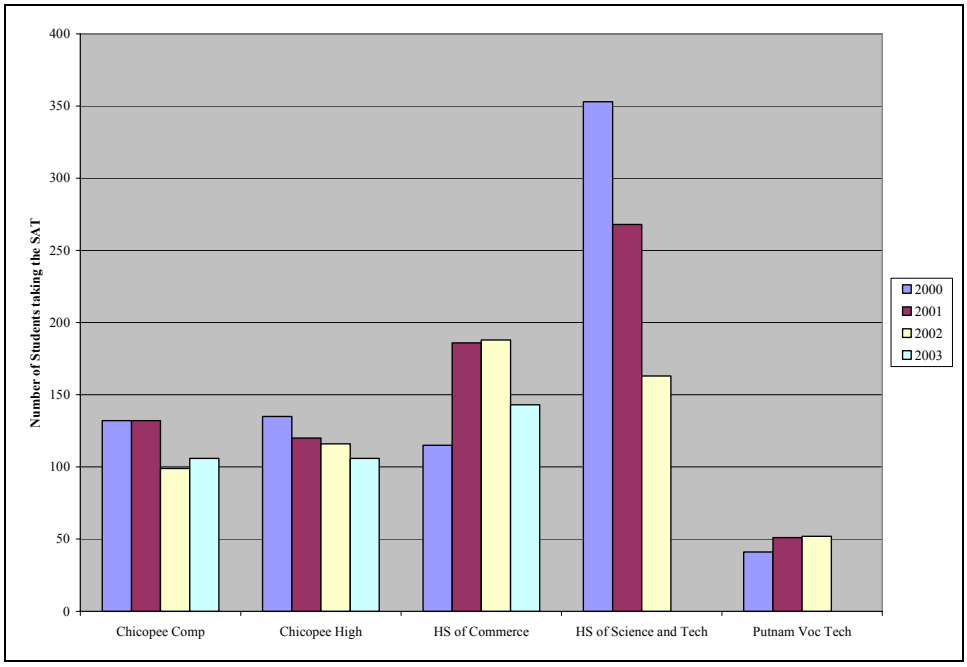


Figure 13: Number of Students taking the SAT by School, 2000-2003



Overall, there do not appear to be any changes in the level of rigor in students' curriculum after Year One of the smaller learning communities grant. In the next year, a

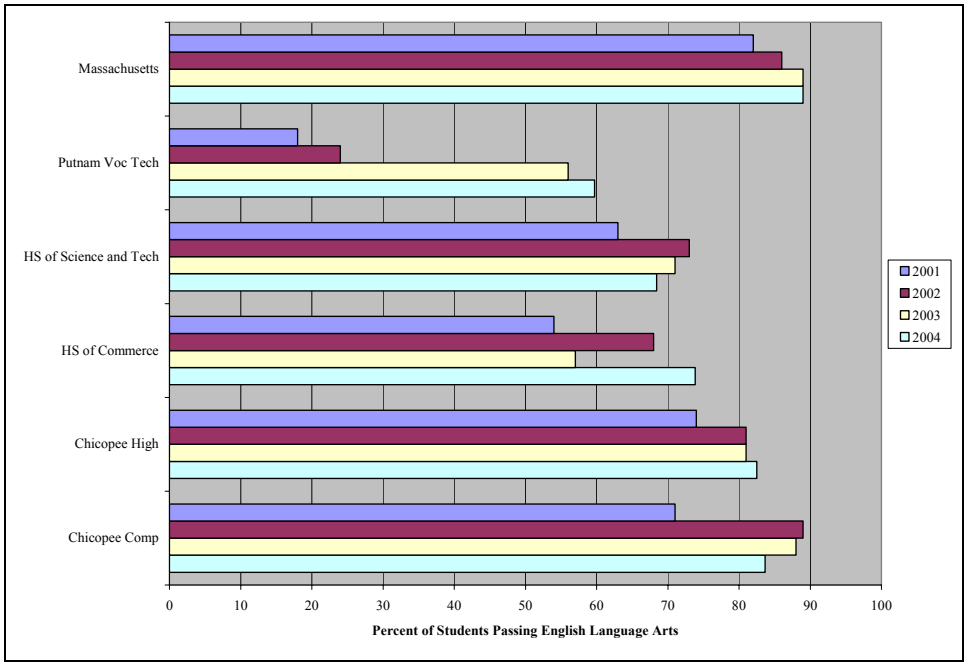
thorough method will be developed and applied to examine the actual curriculum of students in the five high schools to measure against the five percent goal.

Goal 5: Increase by a minimum of 20% (in years two and three) the number of students who pass the MCAS

Assessing progress towards the achievement of Goal 5 is simple, though the goal explicitly states that the benchmark 20 percent increase is not expected until Year Two. Therefore, data presented in this report serves primarily as a benchmark for future comparisons.

Figures 14 and 15 show the percent of students by high school passing the MCAS English language arts and math exams, respectively, over the past four years. Three of the five high schools have shown fairly steady increases in English language arts passing rates, but the High School of Science and Technology and Chicopee Comprehensive have seen their passing rates decline steadily from 2002 through 2004.

Figure 14: Percent of Students Passing the MCAS English Language Arts Exam by School, 2001-2004



In math, the news is more consistent, as all five high schools have had gradually increasing passing rates. Perhaps most troubling is that, despite increases, four of the five high schools have passing rates in both subjects that are well below those of Massachusetts as a whole. If the smaller learning communities grant is successful, the gap between the high schools in the project and Massachusetts should narrow considerably.

Figure 15: Percent of Students Passing the MCAS Math Exam by School, 2001-2004

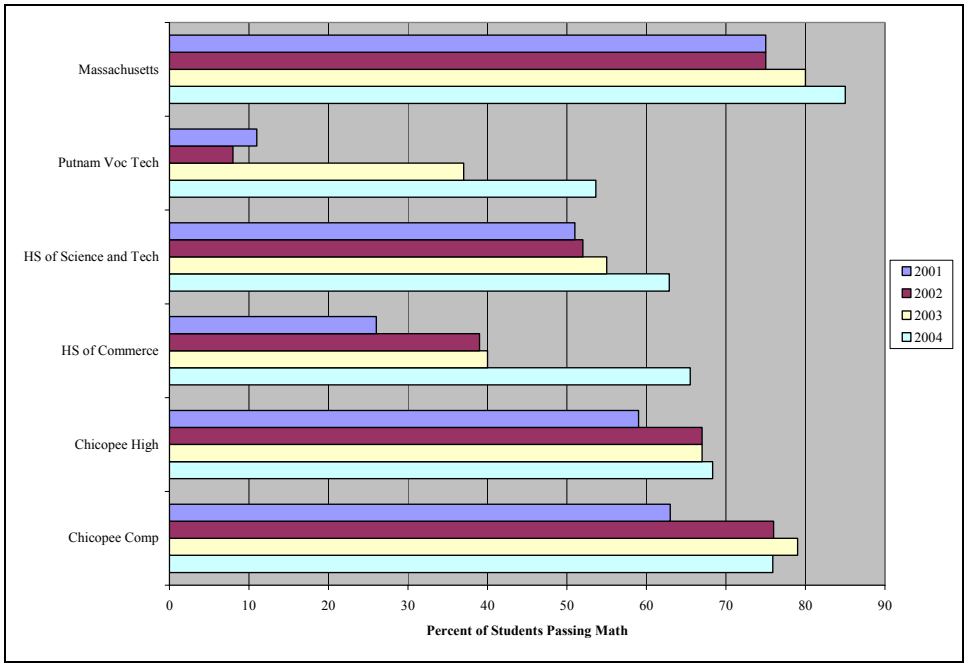


Figure 16 shows the change in the percentage of students passing the English language arts and math MCAS exams from 2003 to 2004. Interestingly, the Springfield high schools have made significant gains, outpacing Chicopee's high schools and Massachusetts. This, however, is largely explained by the fact that Springfield's scores were much lower to begin with. Figure 17 illustrates the actual data points that are described by Goal 5 as it displays the percentage change in the number of students passing the MCAS for each high school between 2003 and 2004. Notably, Putnam Vocational Technical High School achieved the numeric benchmark of Goal 5, a 20 percent increase, in math between 2003 and 2004. This is good news, but also reflects how

far below the other high schools Putnam began. These changes may also reflect changes in Putnam's entrance requirements that have resulted in the enrollment of a higher-achieving student body. In the future, percentage changes will in some way be weighted to account for changes in enrollment, as the declines in numbers passing at the High School of Science and Technology may simply result from a decline in the number of students taking the test.

Figure 16: Change in the Percent of Students Passing the MCAS from 2003 to 2004

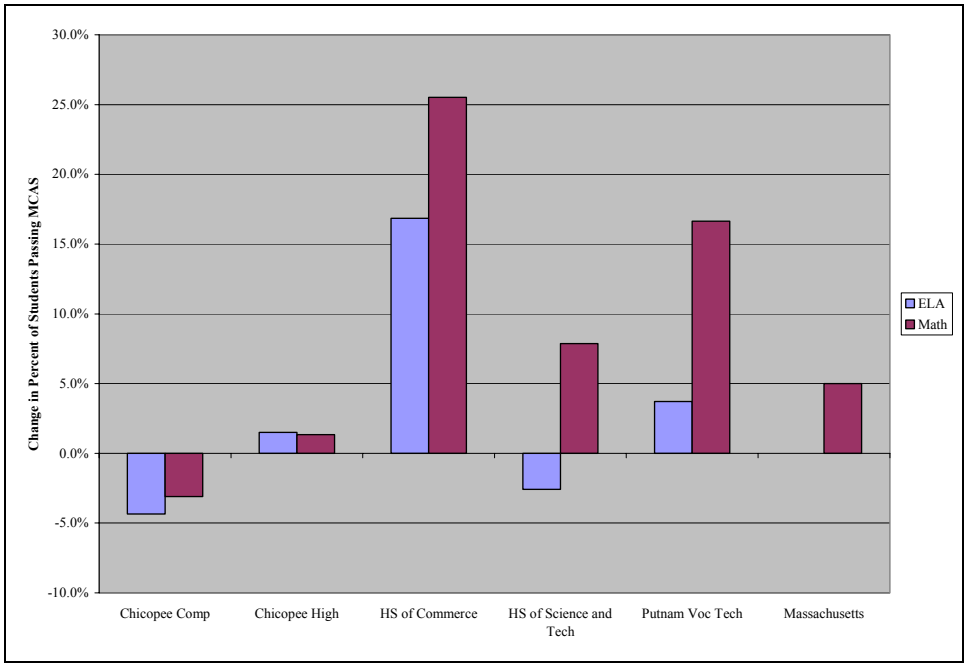
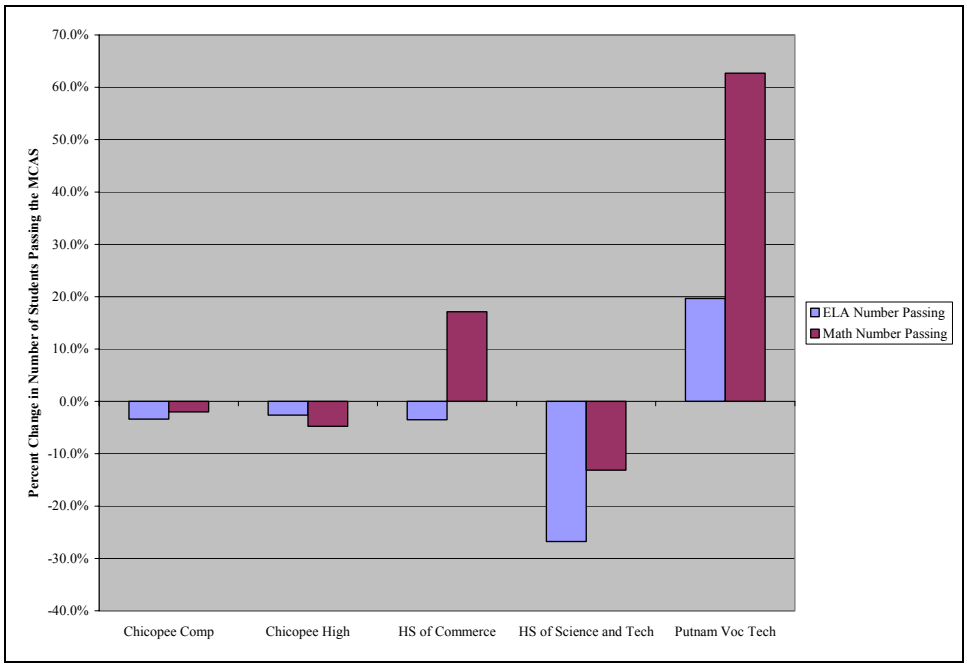


Figure 17: Percentage Change in the Number of Students Passing the MCAS from 2003 to 2004



An Analysis of Assets and Threats to the Initiative

Assets

Primarily through interviews, a number of assets were identified that appear to be significant in supporting the successful implementation of the smaller learning communities grant. These assets range from teacher support structures, such as common planning time and professional development workshops, to the commitment of particular individuals or groups of individuals to the success of the project.

Without question, common planning time is the most important asset in achieving both successful implementation of smaller learning communities and in realizing the expected benefits. Both teachers and principals frequently cited this as a critical component of the initiative. Considering all teacher interviews, the teachers most satisfied and excited about smaller learning communities are those in high schools that have offered the greatest amount of common planning and team time. Among the benefits of common planning time cited by teachers are opportunities to meet with parents as a team, opportunities to discuss students' academic or disciplinary problems and form a plan of action, support from fellow teachers, and a chance to plan inter-disciplinary curriculum.

> *Common planning time is the best part of the whole day.*
> - A teacher at Chicopee H.S.

Principals did not universally praise common planning time, as only three of five cited it among the greatest successes of the initiative-to-date. However, these responses, as with teachers, correlate with the amount of time offered. Principals most satisfied with and excited about common planning time are those in schools that have offered their teams frequent and numerous blocks of time. Several principals specifically said they believed their teams were

using planning time wisely, as evidenced by logs and minutes of planning time meetings that are shared with administrators and the SLC coordinators.

Among the other assets frequently cited by teachers and principals alike is the role played by the district SLC coordinators, Ann Ferriter in Springfield and Sheila Hoffman in Chicopee. Three of the five principals specifically named their respective coordinator as one of the most important assets for implementation. Teachers frequently cited the guidance offered by SLC coordinators and their ability to communicate knowledge and learning from other schools participating in the grant.

> *[She] is invaluable*
> *[She] is wonderful*
> - A principal and a teacher respectively discussing their SLC coordinator

Professional development activities carried out under the grant were also frequently cited by principals and teachers as significant outcomes of and assets to the implementation of smaller learning communities. Principals in three of the five high schools specifically said they believed professional development activities had been useful. However, as will be seen in the section on threats, the feelings of teachers towards professional development activities were decidedly mixed.

Several principals credited the commitment of their administrative and teaching staff for the progress of the initiative. The coordinating role of the Regional Education and Business Alliance was also mentioned as significant in the initiative's progress. In high schools with frequent common planning time, the ability to engage parents in their child's education through parent conferences with an entire team of teachers was cited as beneficial, but in high schools with less available planning time a lack of parental involvement remained a problem. While these last-mentioned assets are important, it is clear from our evaluation that common planning

time, the SLC coordinators, and professional development are the three activities or assets that have thus far been central to the initiative's accomplishments.

Threats

While there are significant assets supporting the project's implementation, there are also a series of threats found across multiple sites that form substantial obstacles for the initiative to overcome. Foremost among these obstacles is the issue of staffing, or, in the opinion of those interviewed, under-staffing. This threat is particularly salient for the three high schools in the Springfield Public Schools, where the city's financial situation has triggered the creation of a state-led financial control board that has oversight over all city spending (though their influence over the school system is limited). Beyond Springfield's particular crisis, both school districts are operating in a period of low state revenues and substantial budget cutting.

Two of the three principals in Springfield cited staff reductions as the most significant barrier to successful implementation. Teachers are also keenly aware of the limitations imposed by budget cuts and consequent layoffs. In addition to having to accomplish their goals with fewer staff, Springfield teachers note that they have a large number of new teachers every year because the lack of a contract in Springfield provokes veteran teachers to depart for openings in other districts. With an influx of new teachers every year, it is difficult, according to teachers, to maintain cohesiveness within teams. Furthermore, teachers in two high schools mentioned that lack of staffing has restricted the availability of common planning time, because teachers are needed for duties such as hall or cafeteria monitoring.

Staff reductions and their effect on the schools are not invisible to students, one of whom complained about having as many as 42 students in some classes. A student in one high school said that students sit on window sills because there are not enough chairs in their classroom.

Perhaps related to the lack of available staff, teachers in several high schools felt that they had insufficient common planning time to accomplish the goals of the grant. In one case, teachers indicated they had one period of common planning time every two weeks, while in another school planning time was only officially available once per month. Given the importance of common planning time described by both teachers and principals, the inability of some schools to provide an adequate amount of time, for whatever reason, is a very serious concern for the success of smaller learning communities in those schools in the future. Some principals did express concern that common planning time was not being used by teachers as effectively as it might have been. In one case the principal felt the time was used only for discipline and to discuss students. In this case the solution was to establish guidelines that two days per week be used for discussions of student and discipline issues, while two other days per week be used for planning interdisciplinary units. We did not receive feedback from teachers on whether they felt this was a good solution, but it would be worth examining in the future. One principal suggested that the planning times were good, but that teachers needed additional training to use them most effectively. As has been cited before, the schools that have faculties least satisfied with the grant are those with the most limited common planning time.

Given the centrality of consistent teams of students with a team of teachers, the instability of some student bodies was raised as a concern for the initiative. If students can change schools every year, it will be impossible to have pure teams that loop. In one high school, it was mentioned that the district kept assigning new students to the school in large numbers for the first

six months of Year One of the grant. In this case, the ability of teachers to get to know their students and have consistency on teams was severely limited.

In a related area of concern, the implementation of ninth grade teams is made difficult by the large number of grade-level repeaters created by the end of social promotion. In one high school this was resolved by removing repeaters from ninth grade teams. While this addressed the purity and stability concerns for the academies, the impact of this change on those repeating is unclear.

Resistance from some teachers was also cited as a threat to the viability of the initiative. In particular, this concern was cited in several of the high schools, where upper class teachers have resisted the smaller learning communities because they are not part of the process and because the small class sizes for ninth and tenth graders often mean much larger class sizes for upper class teachers. Resistance may also stem from general misconceptions about the grant and familiarity with smaller learning communities' successes in other schools.

Of some concern is our finding that some stakeholders in both school districts felt that support from district administrators was strong in words, but weak in reality. In one high school, a particular concern was voiced that the district administration asks them to implement a new initiative every few years and that such "jumping around" limits the success of any one initiative. This issue needs to be explored further in the future.

One area of concern particular to the two vocational high schools in the initiative is how to implement smaller learning communities when students have both academic and technical courses. Students cannot be in their teams all the time, and this reduces the purity of the academies. In one case, the effort to implement teams meant reducing the amount of technical education, which was disappointing for some students.

Overall, these threats can be addressed, and in many cases they are a result of the under-utilization of some of the assets identified in this report. Certainly, problems associated with limited common planning time can be addressed if innovative strategies are adopted to find teachers more time to meet. However, staffing issues and class size issues will require solutions outside the context of this grant.

Conclusion

In reviewing the goals identified by each high school for Year One of the smaller learning communities grant, we believe the first year in the Chicopee and Springfield public schools was largely successful. Leadership teams were established to champion the implementation of the smaller learning communities and, in four of the five participating high schools, ninth grade success academies were established that included nearly all ninth graders. Furthermore, common planning time, in a variety of forms, was provided for teachers in every high school, though the amount of time was very limited in two of the five schools. The common planning time was particularly meaningful in boosting parental involvement with a child's education because a parent could be scheduled to meet with a student's entire teaching team at one time. A number of professional development activities were provided to teachers working with the SLC academies and these were, with a few exceptions, found to be useful. Also, materials were purchased, such as student calendars or organizers, that supported student awareness of their own learning.

The implementation of advisory groups is the one activity identified as a year one goal by every high school that was not achieved in any of the five high schools in Year One. Looking back, those involved in setting the implementation timeline would probably now suggest that simply making functional ninth grade academies with their associated common planning time was a lofty and significant goal by itself. All five high schools, reflecting on their inability to launch advisory groups during Year One, intend during Year Two or at the beginning of Year Three to have advisories fully operational. There is no question that both teachers and administrators view advisories as central to the achievement of the smaller learning communities' goals.

Apart from the degree to which participating high schools achieved stated Year One goals, there are a number of other important findings from this evaluation that affect the future of implementation. These findings are presented, by category, in the left-hand column below. Furthermore, some of our findings suggest possible changes or improvements as implementation moves forward in years two and three. These recommendations are outlined below in the right-hand column.

Key Findings	**Recommendations**
Implementation of Smaller Learning Communities	
▪ In at least two of the five high schools, the presence of repeaters in the ninth grade caused problems with purity and successfulness of teams during Year One.	▪ In every school where the presence of repeaters is a problem for teams, follow the model adopted in Year Two by the High School of Science and Technology of separating repeaters from the ninth grade academies.
▪ The two vocational schools involved in the project have unique and particularly challenging staffing and scheduling issues with respect to implementing academies, because students are splitting their class time between vocational programs and academic courses.	▪ Provide additional professional development or technical assistance to the two vocational high schools that is specifically tailored to help them overcome scheduling and staffing obstacles and to identify the best approach to implementing SLCs in their unique contexts.
▪ In Springfield, the continual assignment of new students to schools throughout the year and, more importantly, the frequent movement of students between schools was identified as a problem for the successful implementation of pure teams.	▪ Limit, at the district level, the ability of students to transfer between schools during the school year and limit the extent of shuffling done by the district for disciplinary or other reasons.
▪ In some high schools, the implementation of teams has engendered resentment among non-team teachers. However, we found less evidence of this than expected and where it was found there were usually rational reasons. For example, in one school where non-team teachers have expressed resentment, they are having to cope with 30-35 student classes while team	▪ Implement as quickly as possible tenth grade academies and eleventh and twelfth grade career academies to engage the majority of teachers in the SLC process. ▪ Improve information dissemination about the project to all teachers in each building. ▪ Expand SLC professional development

Key Findings	Recommendations
teachers have 20-25 students in each class.	activities, in appropriate cases, to non-SLC teachers so they experience a benefit from the program.
▪ Students appear to dislike teams because they limit their socialization or ability to be with their friends in class.	▪ Wait and see if students perspectives change if they begin to feel differently about school and about their own abilities in school.
▪ The use of student portfolios or planners in several high schools was cited as improving students' awareness of their progress as learners.	▪ Use some form of student self-organization or management tool in every high school.
▪ Students and teachers feel that, in some cases, having teams makes it more difficult for a student to change classes if there is either a behavioral or academic reason that their current class is not the best place for them.	▪ Examine the degree of movement between classes to determine if it is too limited to allow students to be in the appropriate classes for their academic level.
▪ Advisories have not been implemented.	▪ Implement advisories in every school as soon as possible.
Common Planning and Prep Time	
▪ Common planning time has been used for planning, discussion of students, support, and meetings with parents. This activity has been invaluable and may be the most significant success of the SLCs thus far. However, in two high schools the amount of common planning time afforded to teachers on SLC teams was very limited.	▪ Make every effort to provide the most possible common planning time for SLC teams in every high school. Based on interviews, we would recommend at least two meetings per week as a minimum for such time to have the desired impact.
▪ The use of logs tracking the activities of teams' common planning time has been applied in most schools and has been useful in improving the use of the time.	▪ Implement planning time logs in every SLC school.
▪ While only one high school has formally provided team teachers with common prep time for their team, such time is available in at least two of the other high schools because the schedule causes team teachers	▪ If possible, formalize common prep times in every high school, even if only once a week.

Key Findings	Recommendations
to have the same prep period.	
▪ SLCs have not yet led to much interdisciplinary curriculum, as the use of formal or informal common prep time for interdisciplinary curriculum planning is optional and erratic.	▪ Provide additional professional development on using common prep time and preparing an interdisciplinary curriculum. ▪ Consider how to develop interdisciplinary curriculum that is engaging enough that students do not tire of addressing common topics across subjects.
▪ An unintended benefit of common planning time has been its usefulness in helping new teachers become oriented to their profession and their school.	
Professional Development	
▪ Some professional development activities have been very well received by teachers, while others have been seen as less useful. For example, a professional development workshop on using technology was viewed as highly repetitive and unnecessary.	▪ Narrowly focus professional development workshops on providing teachers with the tools to make the best use of the activities of SLCs. Examples might include training on how to best use common planning time, how to design interdisciplinary curriculum units, and how to implement advisories.
▪ Professional development activities scheduled near the end of the school year or during the summer, if staff and team assignments are not in place for the following school year, lose some value because teachers are not attending together with their team for the following year.	▪ Schedule professional development activities early in the school year or late in the summer once teams have been identified so that teams can participate together and then have the maximum amount of time to practice what they have learned during the school year.
Outcomes	
▪ There were no remarkable achievement gains noted in any of the high schools after Year One, but this was anticipated because outcome gains were not expected from one year of work in a three-year project.	
▪ MCAS passing rates have steadily improved in every high school, but this is a trend pre-dating SLCs and, while it might	▪ Identify means of distinguishing between achievement gains made as a result of SLCs and gains made as a result of other

Key Findings	Recommendations
be improved by the implementation of SLCs, is largely the result of intensive efforts to improve MCAS performance across the state.	school improvement efforts.
▪ Comparing conversations with students in teams and students not in teams, those students in teams appear to be more satisfied with their high school experience thus far.	
▪ Students and teachers appear to feel that students on teams are not as able to get away with poor behavior or achievement because of the level of accountability through the teams.	
▪ Through parent conferences during common planning times, teachers feel they have been able to better engage parents in their children's education. However, this was cited only at those schools with greater amounts of scheduled common planning time.	▪ Provide as much common planning time as possible to allow more opportunities for parents to meet with the entire team of teachers.
▪ Dropout rates have been generally declining in four of the five schools, but as with MCAS scores this trend pre-dates SLCs and is likely a result of numerous factors.	
Evaluation Strategy	
▪ In measuring non-quantifiable information, this evaluation relies entirely on interviews with non-random samples of teachers and students. This means that we are largely dependent on particular peoples' perceptions. This emerged as a problem when findings from interviews indicated that a particular activity did not happen when it in fact happened. There is sometimes a difference between what happens and what individuals remember	▪ Surveys of every student and teacher in each high school were a part of the initial design for the Year One evaluation, but time constraints precluded their use. In spring of 2005, implement such a survey and then repeat it at least two additional times in the future. This will eliminate concerns about the non-randomness of interviews and provide a wider set of perceptions that will likely provide a more accurate picture.

Key Findings	Recommendations
having happened.	
▪ Because Chicopee and Springfield use different data management software, it was difficult to obtain the same information for all five high schools. Furthermore, because of changes in database software, it was not possible to obtain as much historical data as would have been useful to measure changes pre- and post-SLC implementation.	▪ Begin collection of quantitative data in the summer for next year's evaluation to give district staff sufficient time. ▪ Provide district data managers with spreadsheet data forms, created by the evaluators, that will collect the same information from each district.

To the credit of those guiding the implementation of the smaller learning communities grant in Chicopee and Springfield, they were already aware of most of these findings and many of the recommendations were already being implemented as part of Year Two activities.

Overall, the smaller learning communities project is on track in Chicopee and Springfield, and we expect to find significant advances in implementation by the end of Year Two, particularly the implementation of advisories.

Appendices

(Additional Tables and Figures)

These appendices provide several additional tables and graphs for each high school. Most of the information is for only one or two academic years, and these tables and graphs will grow with each new year of data. They are included in this report to give a sense of the starting point or baseline for each.

Chicopee Comprehensive High School

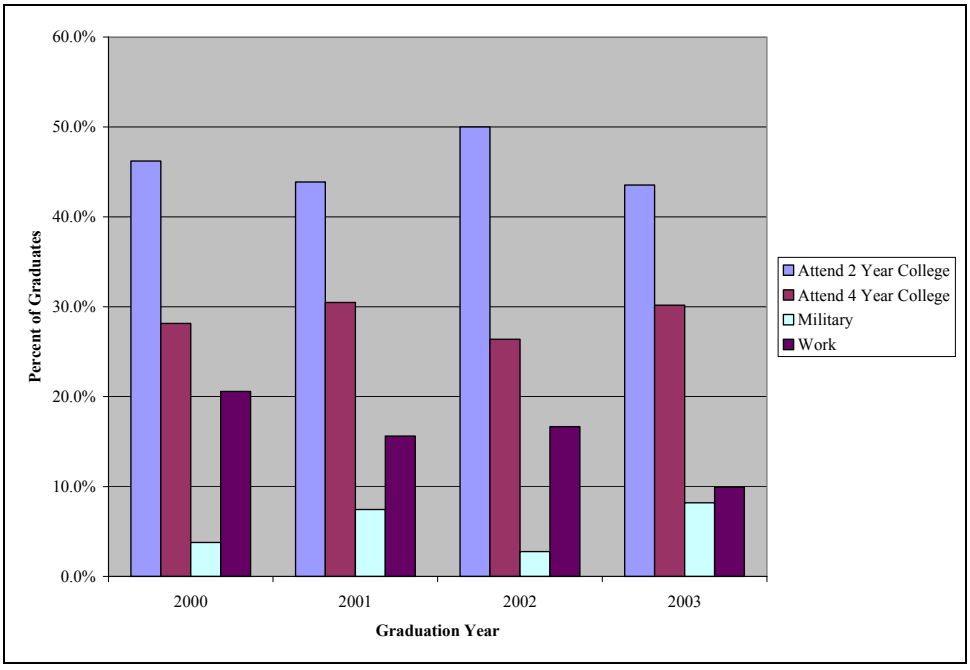
Table 5: FTE Teachers by Licensure Level in Subject Taught, CCHS

Year	FTEs Total	FTEs Licensed	Percent	FTEs High-Quality	Percent
2003	90.5	90.5	100.0%	55.7	61.5%

Table 6: Cohort Survival Analysis, CCHS

School Year	Freshman	Sophomore	Ratio	Junior	Ratio	Senior	Ratio
02-03	450	314		215		244	
03-04	366	344	0.764	292	0.930	238	1.107

Figure 18: Plans of Graduates, CCHS



Chicopee High School

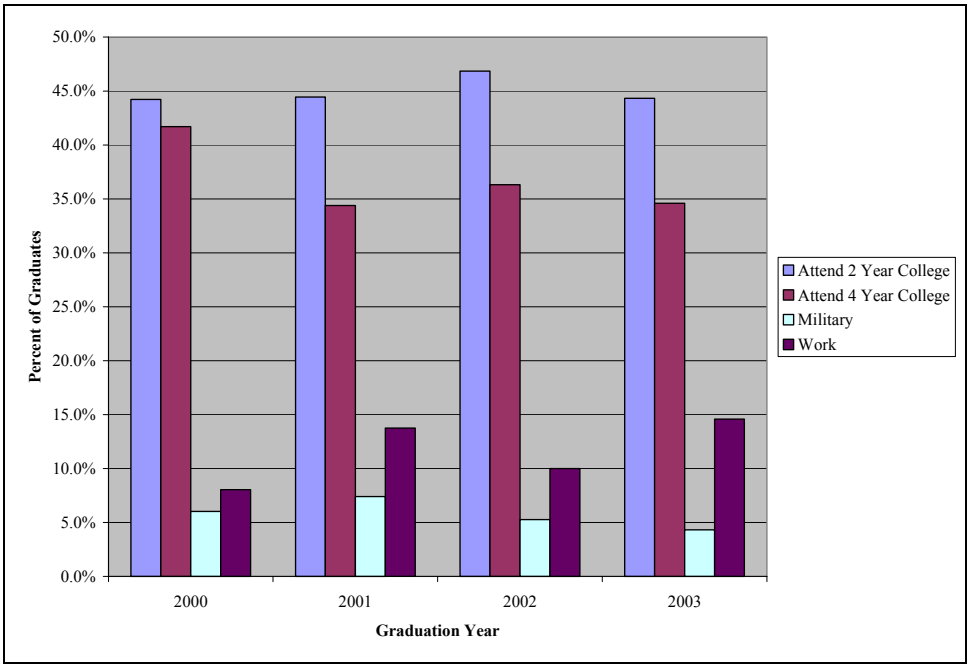
Table 7: FTE Teachers by Licensure Level in Subject Taught, CHS

Year	FTEs Total	FTEs Licensed	Percent	FTEs High-Quality	Percent
2003	72.6	69.1	95.2%	49.1	67.6%

Table 8: Cohort Survival Analysis, CHS

School Year	Freshman	Sophomore	Ratio	Junior	Ratio	Senior	Ratio
02-03	390	248		198		211	
03-04	241	278	0.713	263	1.060	218	1.101

Figure 19: Plans of Graduates, CHS



High School of Commerce (Springfield)

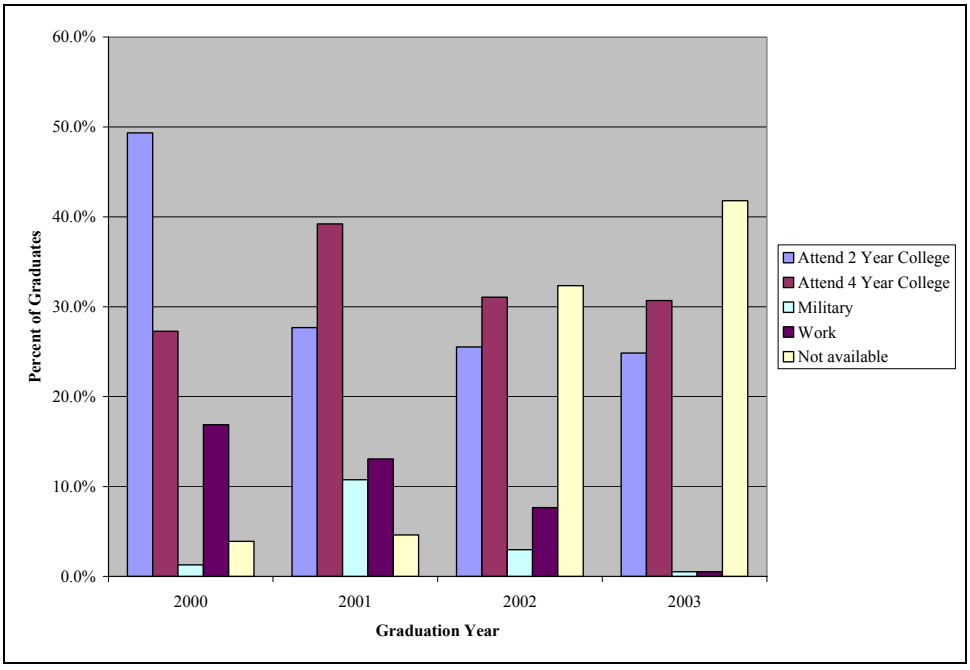
Table 9: FTE Teachers by Licensure Level in Subject Taught, Commerce

Year	FTEs Total	FTEs Licensed	Percent	FTEs High-Quality	Percent
2003	131.6	107.6	81.8%	79.6	60.5%

Table 10: Cohort Survival Analysis, Commerce

School Year	Freshman	Sophomore	Ratio	Junior	Ratio	Senior	Ratio
02-03	731	402		278		260	
03-04	802	432	0.591	291	0.724	197	0.709

Figure 20: Plans of Graduates, Commerce



High School of Science and Technology (Springfield)

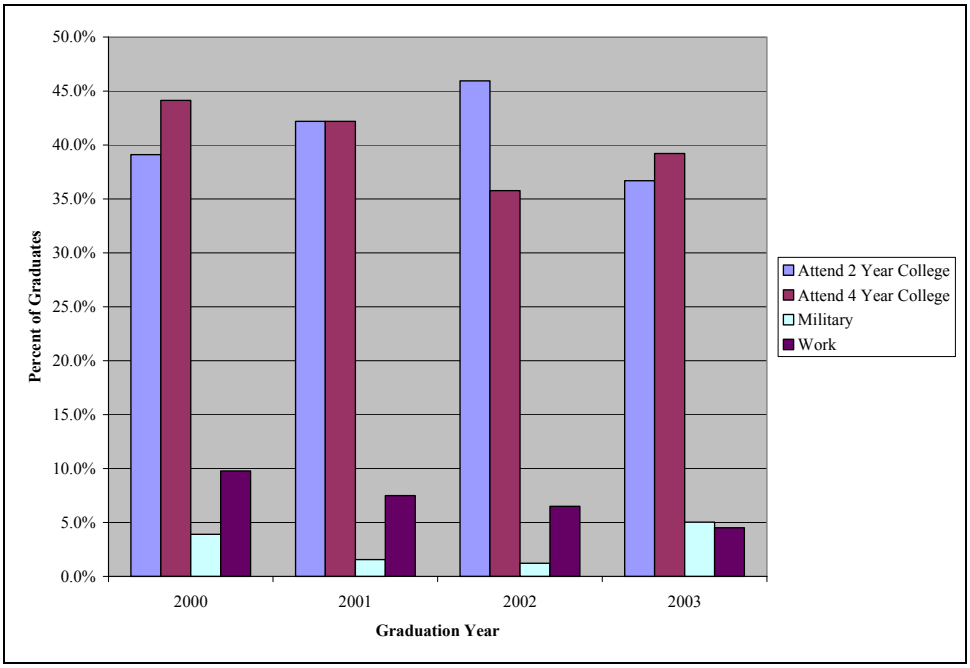
Table 11: FTE Teachers by Licensure Level in Subject Taught, SciTech

Year	FTEs Total	FTEs Licensed	Percent	FTEs High-Quality	Percent
2003	134	120	89.6%	100	74.6%

Table 12: Cohort Survival Analysis, SciTech

School Year	Freshman	Sophomore	Ratio	Junior	Ratio	Senior	Ratio
02-03	724	457		310		252	
03-04	824	423	0.584	342	0.748	264	0.852

Figure 21: Plans of Graduates, SciTech



Roger L. Putnam Vocational Technical High School (Springfield)

Table 13: FTE Teachers by Licensure Level in Subject Taught, Putnam

Year	FTEs Total	FTEs Licensed	Percent	FTEs High-Quality	Percent
2003	132.5	114.5	86.4%	54.5	41.1%

Table 14: Cohort Survival Analysis, Putnam

School Year	Freshman	Sophomore	Ratio	Junior	Ratio	Senior	Ratio
02-03	429	244		221		206	
03-04	372	292	0.681	129	0.529	189	0.855

Figure 22: Plans of Graduates, Putnam