

**Pittsfield Public Schools
Pittsfield, New Hampshire
District-Level Systems Change Initiative
Phase Two Year Two**

**Nellie Mae Education Foundation
Submitted by Education Development Center, Inc.
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Introduction

This report includes findings and analysis on the efforts of the Pittsfield Public School district in the Nellie Mae Education Foundation (NMEF) District-Level Systems Change (DLSC) initiative. The most recent cycle of data collection was conducted during 2016–17 as part of the second year of Phase 2 of the grant, which extended work that began in 2012 in Phase 1 of the initiative.

Over the years of NMEF grant funding, Pittsfield has developed and implemented activities to support student-centered learning (SCL) in alignment with the goals of DLSC. In the sections that follow, detailed findings are provided in key topics of DLSC and cover trends in data since the inception of NMEF funding in the district, with greatest attention to recent developments in the second year of Phase 2. This introduction provides an overview of important contextual developments that inform the interpretation of the findings.

Pittsfield has benefitted from the stability provided by a strong core of leaders during the DLSC initiative, including administrators, teachers, and school board members. These stakeholders have demonstrated a commitment to advancing SCL throughout the district, evidenced by their actions to create student-centered classrooms and to develop systems that facilitate student ownership, such as advisory, competency-based courses, extended learning opportunities (ELOs), learning studios, restorative justice committee, site council, and student-led conferences. Many administrators and teachers who were early adopters of SCL have remained in the district, lending consistency to Pittsfield's DLSC efforts and awareness of past successes and challenges. While this group of staff has been instrumental to the district's SCL undertakings, teacher turnover in recent years has raised some concerns about maintaining collective momentum as new teachers acclimate to Pittsfield's approach to proficiency-based learning (PBL) and classroom instruction.

The community population and setting of Pittsfield are other important contextual factors for interpreting the findings in this report. Pittsfield is a small, rural town with a strong sense of community. A large percentage of families are low-income, and there is a significant population of transient students. According to recent census estimates, slightly less than 15 percent of Pittsfield families earn an income below the poverty level. Approximately 20 percent of adults in the town hold bachelor or graduate degrees, which is substantially lower than New Hampshire's statewide rate of 35 percent.

Relations between the school and segments of the community were more antagonistic in 2016–17 than in previous years, further exacerbating tensions about the role of public education in Pittsfield. Administrators noted that individual critics of the district have become increasingly vocal, with the potential to exert an outsized influence in a town of only 4,000 residents. The local Board of Selectmen formed a committee to study and report on the amount of money taxpayers could save by closing the high school and educating students in grades 9–12 in other local districts. Although the committee came to the conclusion that savings would be minimal, property tax rates to fund the school are an especially contentious issue in Pittsfield due to the town's weak property base. The 2017–18 budget was approved by only four votes, and the town twice voted down proposed teacher contracts. Administrators expressed concern that

these outcomes could harm efforts to recruit new teachers and reduce turnover rates, particularly in a district where teacher salaries are already among the lowest in the state.

Data Collection 2016–2017

During the 2016–2017 report cycle, data was collected through interviews, observations, and online teacher and student questionnaires. In the spring of 2017, three members of the EDC evaluation team conducted a two-day site visit to Pittsfield. During the visit, the evaluators conducted observations of 15 classrooms, a whole-staff professional development session, and a grade-level team meeting. A one-day site visit was conducted by a single evaluator in late spring 2017 to observe an end-of-school-year community event.

Evaluators also conducted interviews with students, teachers, administrators, and staff at the local community partner. To analyze interviews, we developed qualitative analysis procedures to guide the team’s work with the Max-QDA qualitative software and an initial coding scheme to capture discussion of important topics and perspectives from the interview data. The codebook contained a list of 18 codes and 33 sub-codes. The codes consisted of topics such as proficiency-based learning and personalized learning; experiences such as challenge and change; factors that influence implementation such as systemic factors; and power quotes that illustrate compelling points in the data. A definition for each code helped to support inter-coder reliability amongst our team. Once we reached a shared understanding of the coding scheme and consistency in coding, we coded a total of nine interview transcripts collected from Pittsfield. We then examined coded data from each code and created categories and sub-categories that subsumed the initial codes and aligned with variables used in our quantitative analyses. We summarized coded data for each category and sub-category, for each transcript, then developed summary matrices that allowed us to use grounded theory strategies of constant comparison and memoing to identify and describe emerging categories and themes from each category across the set of transcripts that were analyzed for each district. The memos were incorporated into the evaluation report.

In spring 2017, the EDC teacher and student questionnaires were administered in the site. This was the sixth year of the teacher questionnaire in Pittsfield, and it was distributed to all faculty members. Twenty-two teacher questionnaires were completed and used in analyses in this end-of-cycle report. The number of responses was comparable to previous years of administration (25 in 2016, 27 in 2015, 21 in 2014, 23 in 2013 and 21 in 2012).

The student questionnaire was administered for the fifth year to all students in grades 9-12. One hundred thirty student questionnaires were submitted, and 114 were included in the final analysis (compared to 128 used in analysis in 2016, 119 in 2015, 106 in 2014 and 81 in 2013). Evaluators excluded surveys that were blank, that had identical responses to all items, or for which student IDs could not be matched with associated population data. Below, Table 1 presents a breakdown of the sample.

Table 1. 2016-17 Student Sample and Population Demographics

	Sample Demographics		Population Demographics	
	#	%	#	%
All students	114	100%	166	100%
Free/reduced lunch	48	42%	71	43%
IEP	21	18%	*	*
ELL	Not reported; insufficient numbers			
AP/Honors	Not reported; insufficient numbers			

*Data unavailable.

Significance testing was conducted to analyze free/reduced lunch and Individualized Education Plan (IEP) subgroups. There were insufficient numbers of English Language Learners and AP/honors students in the sample to conduct analyses of responses from those subgroups.

Findings in Key Domains

Proficiency-based Learning and Assessment¹

Topic Summary

In Pittsfield, competencies continued to serve as the key framework for communicating learning objectives, designing assessments, and reporting on student progress. Across classrooms, student competency scores were guided by rubrics, with many teachers relying on performance-based assessments as a way for students to demonstrate competency. During the 2016-17 school year, Pittsfield also made efforts to promote greater consistency in grading and assessment practices among teachers. Ongoing participation in New Hampshire's Performance Assessment of Competency Education (PACE) assessments and expansion of PBL to the elementary school further attested to the district's commitment to competencies.

Several policies and structures that have been revised over the years to reflect PBL as a school-wide priority. Pittsfield has continued to identify systemic factors that require additional attention to strengthen the implementation of PBL, such as student pacing, community interpretation of competency grading, and work-study habits. While some activities, such as a new course on work-study skills, are already underway to address these needs, additional adjustments may be necessary to ensure that all students are able to succeed in a PBL system.

Strategies

Building on several years of experience with competencies, Pittsfield continued to evaluate and refine school-wide systems and practices to support PBL. During the 2016-17 school year, administrators took steps to foster greater consistency in competency-based grading and assessment practices among teachers. For instance, the software interface teachers use to enter grades was modified to prevent automatic conversion of percentages into competency scores. As a result, grading and assessment across classrooms should now be uniformly tied to

¹ For consistency across DLSC evaluation reports, the term "proficiency-based learning" is used here. In Pittsfield, the term is "competency-based learning."

competency rubrics based on a scale of 1-4. At the beginning of the year, teachers were required to create and share assessment maps, with the aim of solidifying the connection between every classroom assessment and identified course competencies. Administrators also informally evaluated teachers' use and understanding of competencies by reviewing faculty grade books and obtaining feedback from students about their experiences with assessments and competency scores.

Pittsfield continued to participate in the piloting of PACE, New Hampshire's standardized testing program that measures student competency through authentic multi-day, multi-step performance tasks. In 2016-17, PACE was administered at the high school in some English, math, and science courses. A few teachers assumed leadership roles in the pilot process, participating in item development and representing Pittsfield at external PACE meetings.

The past year also marked the beginning of PBL at Pittsfield's elementary school, underscoring the district's confidence in the benefits of competencies for students at all grade levels. Administrators are hopeful that the district-wide expansion of PBL will ease student transitions to upper grades, as incoming cohorts will already be familiar with competency-based grading and assessment practices.

Detailed Findings

Pittsfield continues to appreciate the ways in which PBL benefits both students and teachers. Competencies provide students with clear learning objectives, while associated rubrics identify the specific skills and areas of knowledge students must demonstrate as evidence that they've met or exceeded each competency. Teachers value the increased sense of ownership over classroom instruction and the added flexibility in assessment options. Multiple teachers also commented on how competencies help teachers to pinpoint strengths and areas for improvement for individual students. As one teacher remarked:

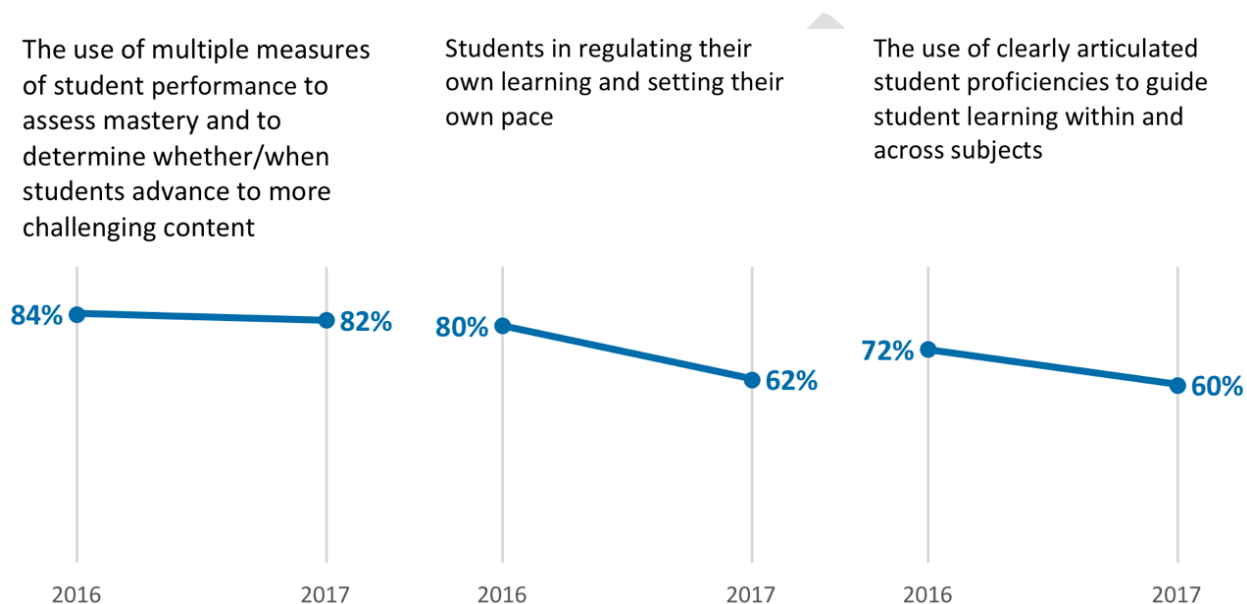
I like that [PBL] separates it, so that you can really identify for a student, your reading is great...but your writing is really disorganized and unstructured....So you can separate all of their skills....I think, psychologically, that does something where they're not, 'I failed. I failed the whole thing.' It's like, no just this part. That's what you have to work on.

Although administrators and teachers expressed an ongoing commitment to PBL during our site visit, teacher questionnaire data indicated a moderate decline over the past year in some aspects of school-level support for PBL (see Figure 1). While perceived support for the use of multiple measures to assess student mastery remained high, the items "My school supports students in regulating their own learning and setting their own pace" and "My school supports the use of clearly articulated proficiencies to guide student learning within and across subjects" both experienced a notable decrease. With only two years of data available, these shifts should be viewed with caution until additional years of trend data can be interpreted. However, the decrease in these items does correspond with concerns expressed in interviews about the effectiveness of the overall system of PBL, including the absence of strong supports to help students strengthen work-study habits. Staff theorized that bolstering students' capacity to self-direct their learning would expand their ability to take full advantage of the opportunities offered in a student-centered learning environment. During the past year, Pittsfield introduced

a mandatory one-semester, freshman level course designed to reinforce work-study practices among incoming students. While it's too early to assess the long-term impact of the new class, some teachers suggested that a more extensive, sustained emphasis on work-study habits would better equip students with the skills to assume ownership over their learning throughout high school.

Figure 1. To what extent does your school support the following?

Teacher questionnaire: % of teachers who responded with “to some extent” or “to a great extent” on a scale of 1-4, with 1 = not at all, 2 = to a small extent, 3 = to some extent, 4 = to a great extent



As with the recent dedication of additional resources to promote work-study habits, Pittsfield has identified other systemic components that may require further adjustments to fully align with PBL. For instance, school policies regarding student participation in athletics and other extracurricular privileges are still based on traditional categories of passing vs. failing instead of progress towards competency. As a result, even students who teachers described as being on-pace and demonstrating a level of effort that would eventually lead to competency can find themselves disqualified from extracurricular activities. Staff noted that this policy reinforces a detrimental expectation that students should be able to demonstrate competency throughout the school year, rather than gradually progressing towards competency via months of ongoing practice and revision. Pittsfield's policy on extracurricular eligibility provides an example of the complexity of shifting to a PBL environment, in which longstanding practices may need to be reexamined to gauge their compatibility with new models of student pacing and assessment.

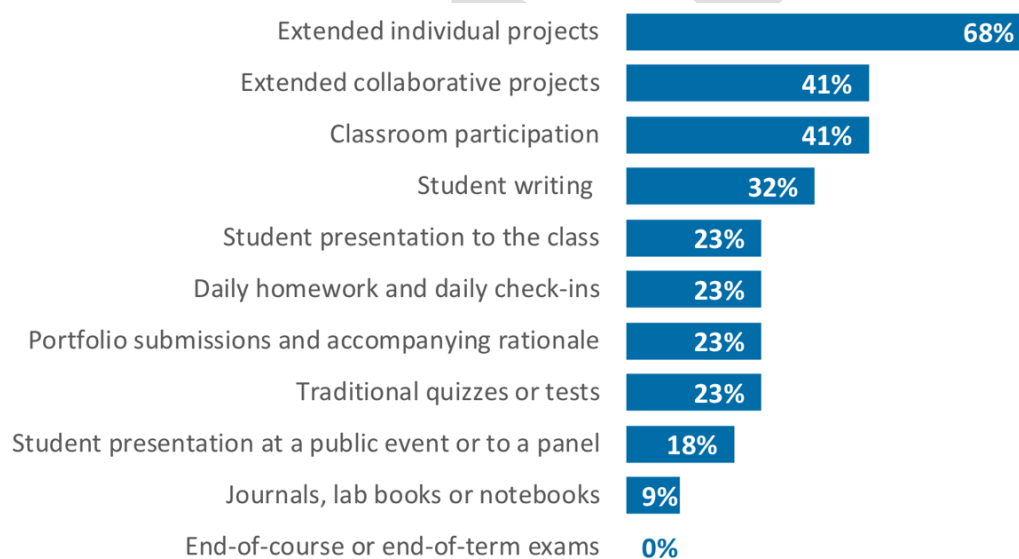
Assessment practices remained centered around performance-based tasks, including Pittsfield's participation in New Hampshire's pilot of PACE. Teachers and administrators seemed to value the theory and philosophy behind PACE, which aligns with PBL due its use of authentic, complex tasks to assess student competency. Observations of the administration of PACE assessments during the past two years suggest that the assessments require high cognitive demand, creative

thinking, and the application of knowledge and skills. Despite PACE’s potential, the assessment was viewed by teachers and administrators as presenting logistical challenges. Both administering and scoring PACE required a significant investment of teachers’ time. In addition, the content and timing of the assessments didn’t always align with classroom curriculum. Perhaps more importantly, some teachers have not found the results particularly useful for improving classroom instruction. However, it’s also possible that some of these challenges are associated with the pilot process and will be resolved in the future design of PACE.

Performance-based and project-based assessment practices were prevalent at the classroom level. Data from the teacher questionnaire mirrored last year’s results, with extended individual projects, extended collaborative projects, and classroom participation identified as the three most important methods of assessing student proficiency (see Figure 2). The popularity of project-based learning was also apparent during interviews and observations. Teachers in a range of subjects mentioned their use of projects for assessment, and we observed several classes in which students worked on or presented individual projects.

Figure 2. Three most important assessment methods for assessing student proficiency

Teacher questionnaire: % of teachers who selected each assessment method as one of their three most important for assessing student proficiency



Despite the prevailing emphasis on extended projects and classroom participation as a form of assessment, only about one-third of teachers “agreed” or “strongly agreed” with the statement, “Most teachers in my school have similar ideas about how student work should be assessed” (see Figure 3). This figure spiked to approximately 60 percent in 2014, but has since returned to the same rate as reported at the beginning of DLSC. The decline in teachers’ perceptions of a unified vision for assessment echoes some of the shifts described above in other measures of perceptions of school support for certain components of PBL. It may be the case that teachers generally agree on the most important methods of assessment, but are less unified regarding how those assessments should be scored and interpreted. In interviews, one staff member

shared a perspective that, “Everybody interprets [the grading system] slightly differently. Rubrics are still slightly different.” Another explanatory factor could be the high rate of turnover in recent years, which has led to an increase in the number of new teachers who may still be adjusting to Pittsfield’s approach to assessment.

For students, PBL typically involves advancing to new competencies upon demonstrating proficiency and incorporating teacher feedback into new iterations of assignments. In Pittsfield, findings are mixed on the extent to which students experienced these practices in their classes. Over the past year, the frequency with which students moved on to new work upon demonstrating competency declined somewhat in math, but remained fairly steady in English and science (see Figure 4). Compared to other DLSC sites, however, math and English values for “I move on to new work when I can show what I have learned” were among the lowest, suggesting that students do not perceive their pacing in these courses as associated with their readiness to advance. This finding may be connected to comments we heard from some interviewees about the ongoing challenge of structuring courses to accommodate students at varying levels and of competency.

Figure 3. Most teachers in my school have similar ideas about how student work should be assessed.

Teacher questionnaire: % of teachers who agree or strongly agree on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, 5 = strongly agree

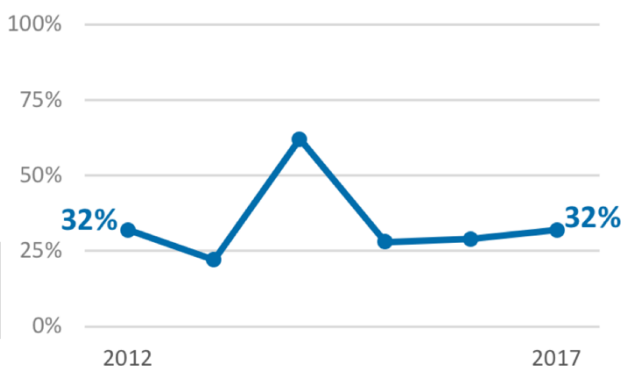
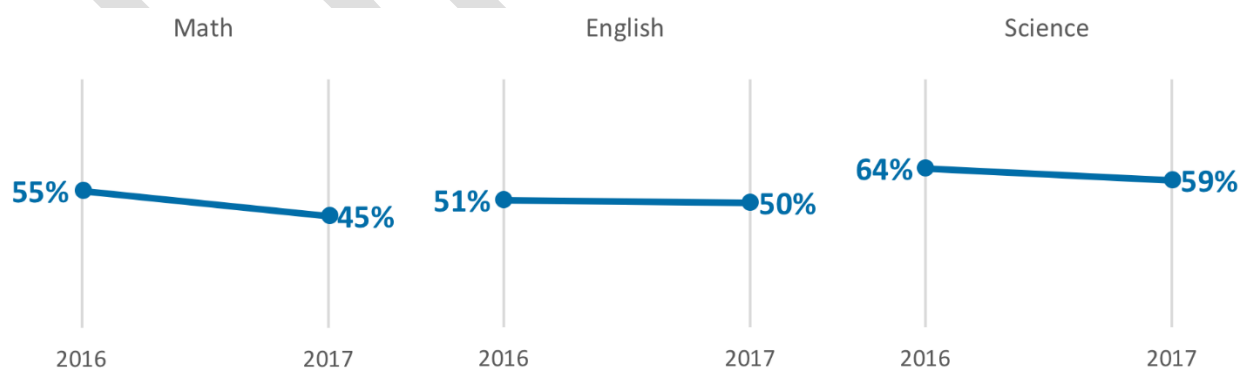


Figure 4. I move on to new work when I can show what I have learned.

Student questionnaire: % of students who agreed or strongly agreed on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, and 5 = strongly agree

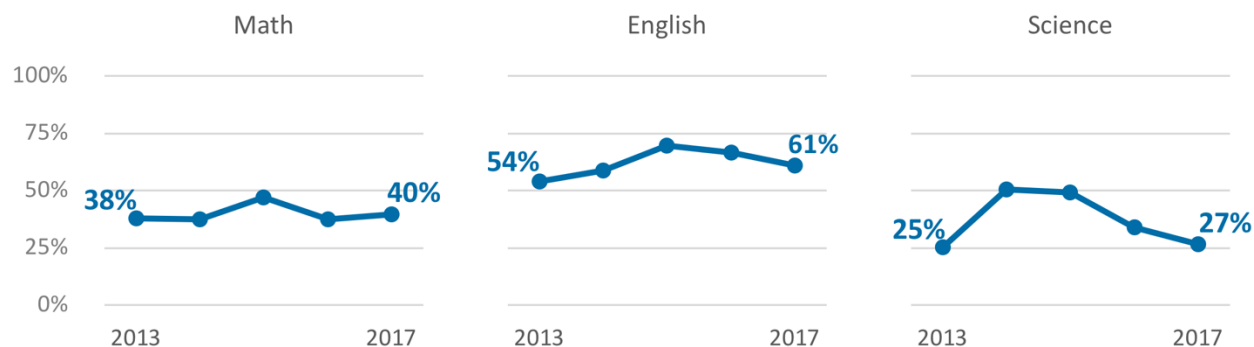


Outcomes for the item, “I have to revise my work based on feedback from my teacher” pointed to further differences between subject areas, with notably higher rates of agreement for English than for math or science (see Figure 5). Across all subjects, the frequency with which students reported revising their work in 2017 was about the same as reported during the first

year of student data collection in 2013. The absence of sustained change implies that the adoption of competencies has not necessarily resulted in increased expectations for students to incorporate revisions into assignments.

Figure 5. I have to revise my work based on feedback from my teacher.

Student questionnaire: % of students who responded with often or every day on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = every day



Instruction and Classroom Activities

Topic Summary

Data from the teacher questionnaire suggested that SCL was integral to teachers' approaches to classroom instruction. The frequency with which Pittsfield teachers reported incorporating activities that involved components of SCL was often among the highest compared to other DLSC sites. Findings from both questionnaires indicated that teacher-centered instruction was uncommon, with class time more often dedicated to student progress on work products. However, evidence from both classroom observations and the student questionnaire implied that students may experience SCL activities more frequently in some classes than in others.

Classroom technology was primarily seen as a tool for students to conduct internet research or create products such as papers or presentations. These activities were present in some classroom observations, in which students used technology to work on long-term projects with elements of SCL, such as researching a topic of interest. Still, Pittsfield sees potential for current and future technology resources to play an even greater role in instruction. Towards this end, the district technology team has started to formulate long-term plans to advance the use of technology for student learning.

Strategies

During the 2016-17 school year, curriculum was one of three professional development strands for Pittsfield teachers, which covered topics such as rubrics, assessment validation, and review of student work. For the first time, teachers were asked to identify a curriculum goal to work towards during the school year. Teachers' goals ranged from creating "learning menus" to increase student choice to working with departmental colleagues on curriculum alignment.

Work to bolster Pittsfield's capacity to employ classroom technology was also underway, as the district technology team initiated a long-term planning process to assess needs and develop a

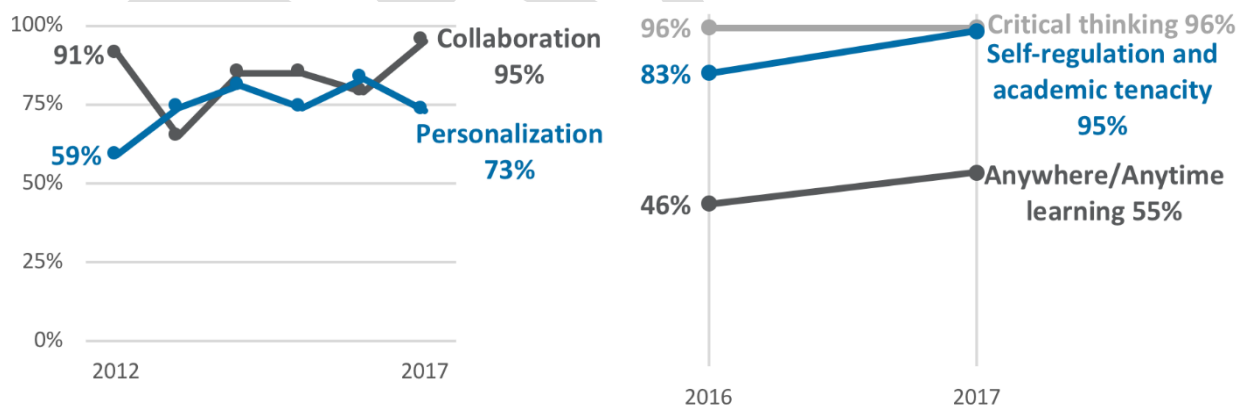
vision for technology's role in supporting student learning. To inform its plans, the team collected data from teachers and developed a logic model with outcomes emphasizing student ownership and achievement. In addition to improving overall infrastructure, school leaders also hope to add staff with the level of expertise necessary to enable reliable technology use. While 1:1 iPads were still distributed to students, many teachers also took advantage of Chromebooks, which are available to classrooms via Chromebook carts.

Detailed Findings

The majority of teachers reported that SCL-aligned instruction was a regular feature of their classrooms. Among most items asking teachers how often they provided instruction that required various components of SCL, such as collaboration or personalization, the percentage of Pittsfield's teachers who responded with "often" or "all the time" was generally higher than other DLSC sites (see Figure 6). Moreover, values for almost all of these items were higher in 2017 compared to baseline measurements, suggesting that teachers have increasingly incorporated SCL into their classroom instruction over the course of the initiative. During our site visit, we observed some classes with strong potential to support SCL, many of which involved students working on or presenting long-term projects for which they had ample flexibility to choose topics of interest and even methods of demonstrating competency. However, most observed classrooms provided only "some" evidence of potential to support SCL, and a few offered only "limited" potential, suggesting that further support may be necessary to encourage all teachers to fully adopt SCL practices.

Figure 6. In your classroom over the past year, how often did you provide instruction that required...

Teacher questionnaire: % of teachers who responded with "often" or "all the time" on a scale of 1-4, with 1 = never, 2 = occasionally, 3 = often, 4 = all the time



Data from both the teacher and student questionnaires provided strong evidence that teacher-centered instructional practices are the exception rather than the rule in Pittsfield. Eighty percent of teachers indicated that it was either unimportant or minimally important to “provide instruction through extended formal presentation/lecture.” Similarly, results from a set of items asking teachers how often students listened to a teacher presentation/lecture, took notes, or participated in teacher-led discussions indicated that these activities occurred less frequently than at any other point during the evaluation (see Figure 7). Outcomes from the student questionnaire corroborated the finding that classroom lectures are uncommon, with less than 30 percent of students reporting that their math, English, and science teachers spent half the class time or more giving lectures/presentations either “often” or “every day”. Students indicated that other traditional activities, such as working independently on textbook or worksheet questions, were also relatively rare in both English and science. Values for these items were some of the lowest across DLSC sites for both the teacher and student questionnaire, lending further support to the claim that teacher-centered activities are fairly infrequent.

Figure 7. How often have students engaged in the following types of activities?

Teacher questionnaire: % of teachers who responded with “often” or “every day” on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = every day

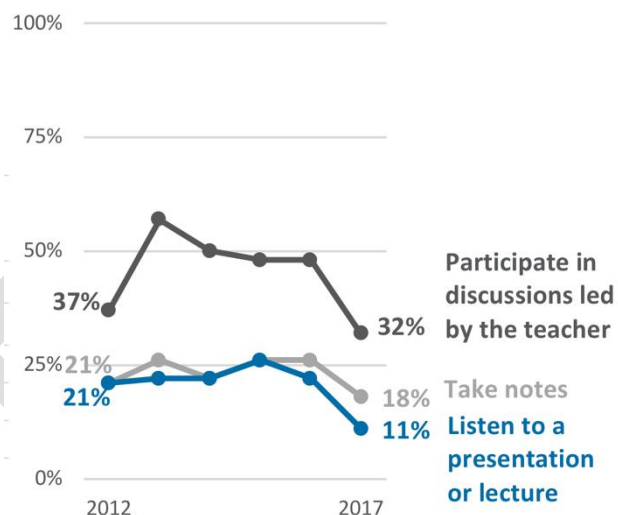
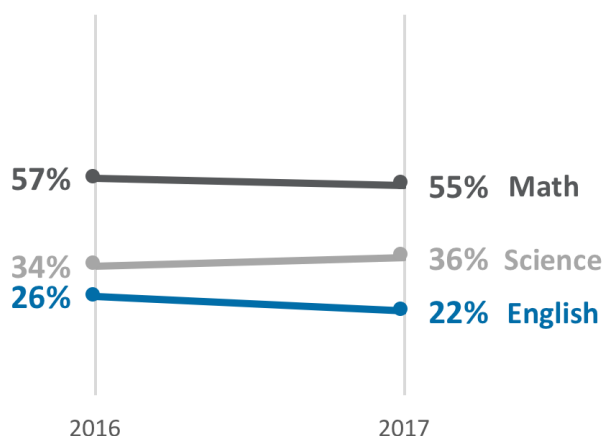
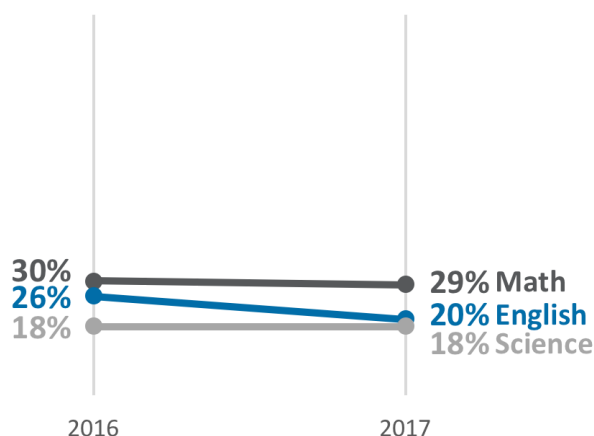


Figure 8. How often do the following things happen in your classes?

Student questionnaire: % of students who responded with “often” or “every day” on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = every day

The teacher spends half the class time or more giving lectures or presentations.

I work independently on textbook or worksheet questions.



In place of traditional instructional activities, findings suggested that most teachers regularly allocated a substantial amount of class time for students to work on assignments, projects, or other learning tasks. At least half of responding teachers reported that students in their classes engaged in the following activities either “often” or “every day”: work together in pairs or small groups on an assigned task, work individually on an assigned task, or work on solving a real-world problem or conducting a hands-on experiment. A relatively high percentage of teachers said the same for the frequency with which students “design or implement their own investigations or research projects”, placing Pittsfield above all other DLSC schools on this measure (see Figure 9). In general, these results aligned with our observation data. Although a few observed classes incorporated lectures and note-taking, the majority dedicated a significant amount of time for students to make progress on projects, assignments, or other work products.

Figure 9. How often have students engaged in the following types of activities?

Teacher questionnaire: % of teachers who responded with “often” or “every day” on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = every day

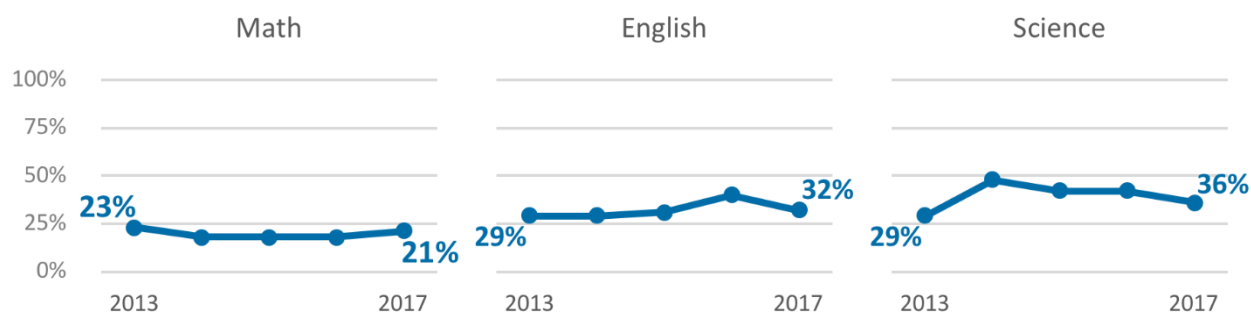


Although teacher questionnaire outcomes suggested an emphasis on real-world problems, hands-on experiments, and research projects, student questionnaire data presented a somewhat different picture. The percentages of students who said they “learn about things that connect to life outside the classroom” and “work on problems based on real-world examples” either “often” or “every day” were generally lower than other DLSC sites for math, English, and science, suggesting that a notable proportion of students may not regularly see the applicability and relevance of their coursework.

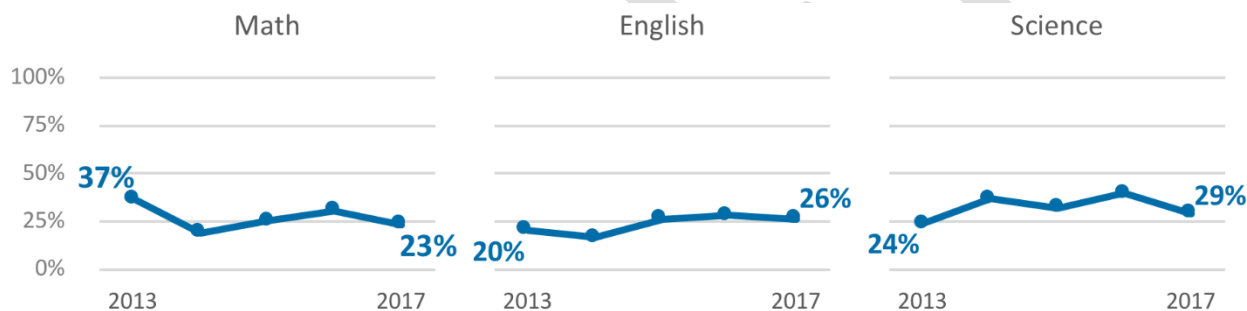
Figure 10. How often do the following things happen in your classes?

Student questionnaire: % of students who responded with “often” or “every day” on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = every day

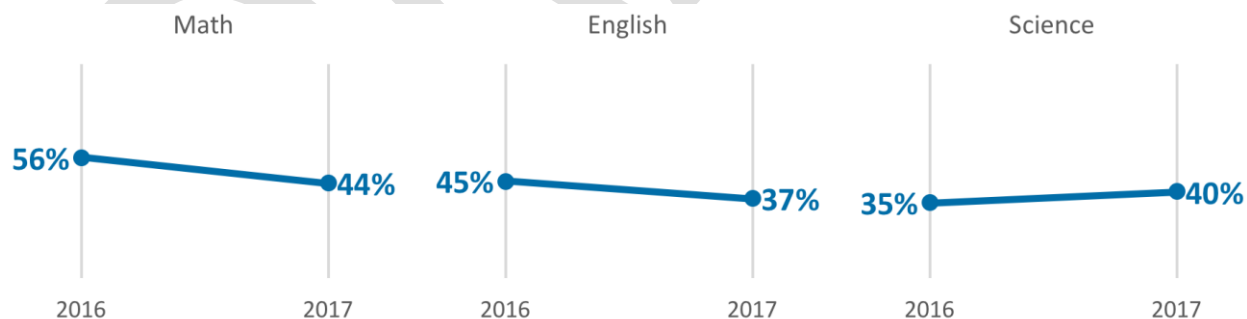
I learn about things that connect to life outside the classroom.



I work on problems based on real-world examples.



The teachers asks students to explain their answers.



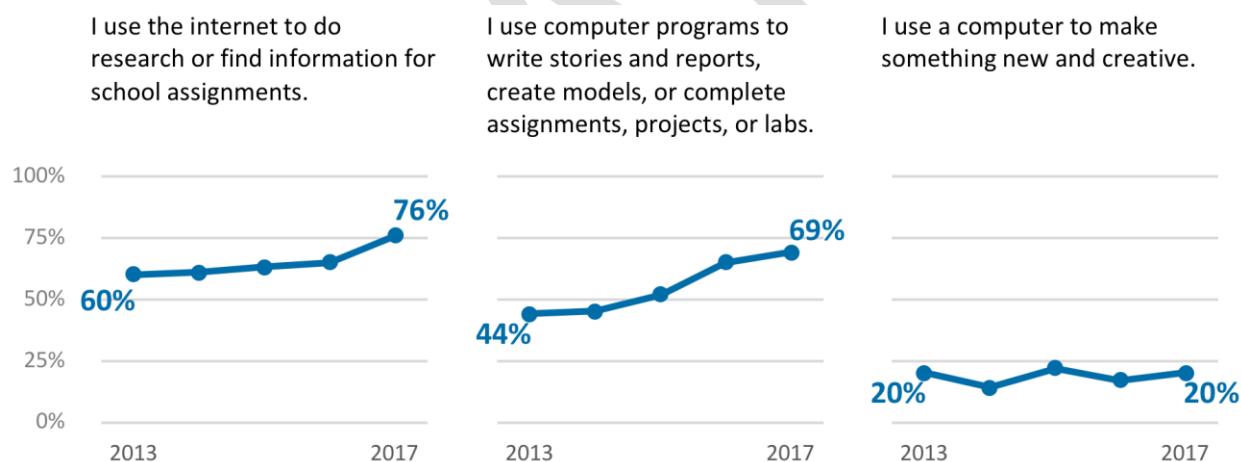
Other measures indicated that students may not have sufficient opportunities to engage with teachers and fellow students in ways that could enhance their understanding of course material and the quality of work products demonstrating competency. Less than half of teachers reported that students “explained their reasoning or defended a position orally or in writing” either “often” or “every day,” (see Figure 9) while a similar percentage of students reported the same about their math, English and science courses (see Figure 10). The outcomes of several items from both the student and teacher questionnaire suggested that students receive

feedback less frequently than most other DLSC sites. Expanding the number of opportunities for students to receive feedback and check their understanding could support students' ability to confidently and consistently advance toward competency.

Trend data from the student questionnaire indicated that the frequency with which students used technology to conduct internet research and create products such as written papers or presentations has grown steadily over the course of the initiative (see Figure 11). Our classroom observations also provided evidence of students using technology to locate and evaluate information from the internet, compose research papers with word processing software, and deliver PowerPoint presentations. The frequency with which students reported using technology to "make something new and creative" has remained fairly flat over time. Although Pittsfield provided students with 1:1 iPads, we most often observed students using desktop computers in the library or computer lab. Teachers also noted that the school's Chromebook carts are popular among the faculty.

Figure 11. How often do you do the following things using computers or technology in your classes?

Student questionnaire: % of students who responded with "often" or "every day" on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = every day



Outcomes from the student questionnaire suggested that the extent to which students use technology to personalize instruction changed little during the two years in which the evaluation has collected data on these items (see Table 2). Despite the relatively flat trend data, a majority of students either "agreed" or "strongly agreed" with most statements related to the use of technology to personalize learning.

Table 2. I use technology in my classes to...

Student questionnaire: % of students who agree or strongly agree on a scale of 1-4, with 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree

	2016	2017
Move at my own pace on class assignments	68%	71%
Access challenging course content	67%	57%
Pursue topics I'm interested in	77%	76%
Support my learning anytime, anywhere	75%	76%
Collaborate with other students on class assignments	71%	70%
Communicate on social media or do things other than my school work	65%	64%
Submit assignments	86%	86%

Personalization

Topic Summary

Pittsfield is viewed as an inclusive environment, in part because there is great flexibility for student pathways towards graduation and for student voice in what they learn and how they demonstrate competency. Opportunities for personalized learning are available to students via Learning Studios, Extended Learning Opportunities (ELOs), courses at Concord Regional Technical Center, and dual enrollment programs. Data from the teacher questionnaire underscored the high priority teachers placed on personalizing instruction, with results suggesting that teachers in Pittsfield emphasized personalized learning more than most DLSC sites.

Results from the student questionnaire provided a different perspective on personalization, indicating that the extent to which students have voice and choice in the classroom varied by subject area. Findings also raised possible concerns about the frequency with which students receive targeted scaffolding to support their individual learning needs.

Strategies

As in past years, Pittsfield maintained several programs that provided student choice and flexible pathways towards graduation. Most of these programs were developed or expanded through DLSC, including a robust ELO program, Learning Studios, dual enrollment opportunities with nearby community colleges, and online coursework. Pittsfield also continued to commit time during each day to an advisory period, which remained a credit-earning requirement for students.

The ELO Coordinator, during her second year in the role, revised major components of the program in 2016-2017 to increase the rigor of student learning experiences. The rubrics and competencies for ELOs were redesigned to include an additional element of "professionalism," and the expectation that student presentations include ample evidence of reflection and achievement of competency through their ELO experience. Student presentations of learning still included a teacher, community partner, family, and peers. The program revisions were intended to put greater emphasis on "those life skills that they need after [high school] that

aren't assessed in the classroom.” In response to reduced enrollment in ELOs, the coordinator also developed a non-credit bearing “ELO-lite” learning opportunity that allowed students to participate in out-of-school learning without the requirements of a full ELO. In addition to facilitating career exploration, Pittsfield also saw ELOs as a way to support competency fulfillment, particularly for those students who have not been successful in a traditional classroom setting.

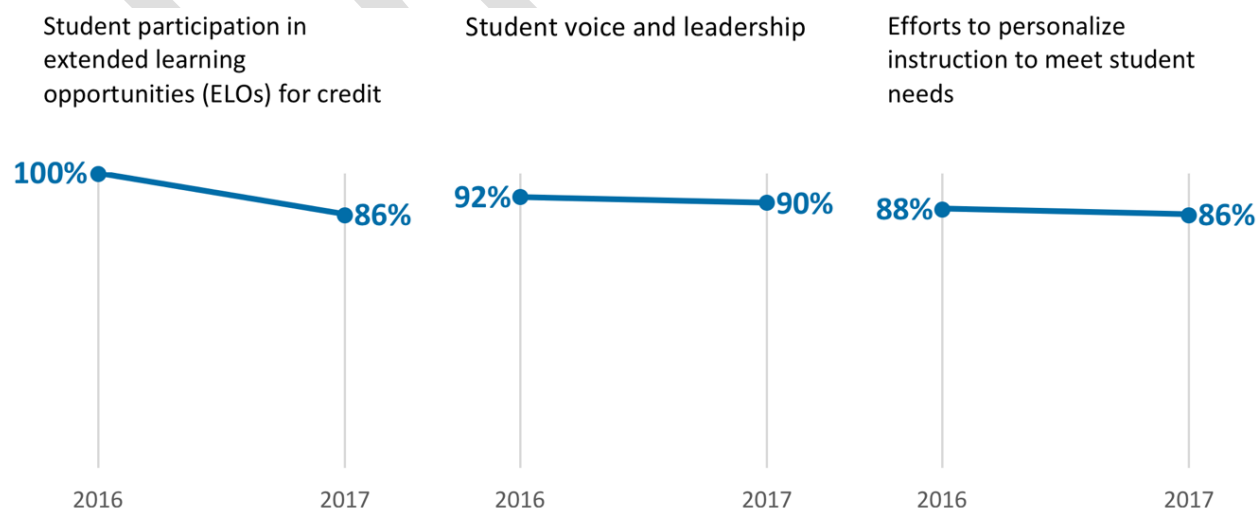
Teachers have a strong sense of personalization and many strategies are in place to support student choice in instruction in most courses. In interviews and observations, several teachers provided examples of how personalization has become a core feature of the selection of instructional tasks and demonstration of competency in courses. Examples were provided from across subject areas, including mathematics, English, and physical education, with teachers describing expanded opportunities for student “voice and choice”. In some classrooms, students and teachers are increasingly interpreting rubrics as “task neutral”, allowing considerable flexibility for students to decide how they will provide evidence of competency.

Detailed Findings

Data from the teacher questionnaire suggested that school structures and individual teachers placed a high priority on providing students with personalized learning experiences. In fact, results for almost all teacher questionnaire items related to personalization situated Pittsfield at or near the top in comparison to other DLSC schools. In response to questions asking about school-level support for personalization, teachers indicated that Pittsfield continued to champion personalized learning both in and out of the classroom through ELOs, opportunities for student voice and leadership, and personalized instruction (see Figure 12). Perceived support for student participation in ELO’s did experience a modest decline over the past year, which is likely associated with the overall decrease in ELO enrollment.

Figure 12. To what extent does your school support the following?

Teacher questionnaire: % of teachers who indicated “to some extent” or “to a great extent” on a scale of 1-4, with 1 = not at all, 2 = to a small extent, 3 = to some extent, 4 = to a great extent



Evidence from the teacher questionnaire further indicated that personalization was a key feature of teachers' approach to classroom instruction. Asked how often they provided instruction that required personalization, 73 percent of teachers responded with "often" or "all the time" (see Figure 6). This figure represents an overall increase from the beginning of the initiative and is one of the highest values across DLSC schools. During interviews, a teacher noted the change in opportunities for personalization and the perceived effect on students:

I think there's a lot more choice in classrooms....whenever I debrief a unit, the very first thing they say [is], we like that you gave us a choice...of the presentation or the topic or whatever it is, and that is such a simple thing that I think really changes the way they think about things.

Moreover, 95 percent of teachers reported that it was "quite important" or "most important" to their instruction to "differentiate activities or instruction to meet individual students' needs" and to "make connections between content or activities and students' personalized learning pathways." One interviewee described her thinking on the teacher's role in helping students relate course curriculum to their own goals and interests:

Part of personalizing has to mean that the teacher is understanding and having those conversations with the kid about where they are. So, the teacher is helping the kid pick things. It's not just 'here's a list of options, pick randomly'....That's not necessarily personalizing instruction. You need to help the kid think about 'I know you're into this. How does this tie into this?' And it's just, the conversations, the kind of ownership and agency that the kids take and the kind of conversations you have with the kids about stuff has changed.

Findings from the student questionnaire about voice and choice in the classroom varied by subject area. Items assessing the frequency with which students were encouraged to assume ownership over their learning indicated that these opportunities had a stronger presence in English classes compared to science and math, with the largest gaps between English and math (see Figures 13 and 14). In fact, compared to other DLSC sites, student agreement with the item, "the teacher involves students in making decisions about their coursework" was one of the highest for English courses but lowest for math.

Figure 13. The teacher involves students in making decisions about their classwork.

Student questionnaire: % of students who agree or strongly agree on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, 5 = strongly agree

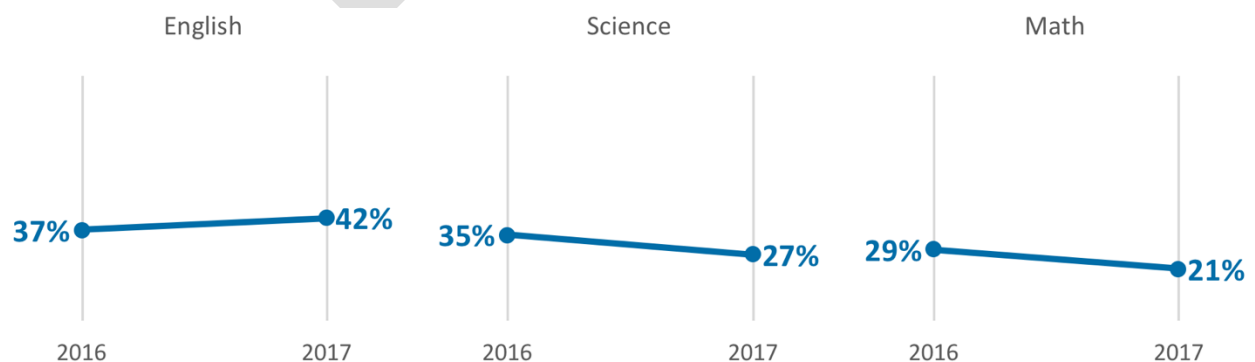
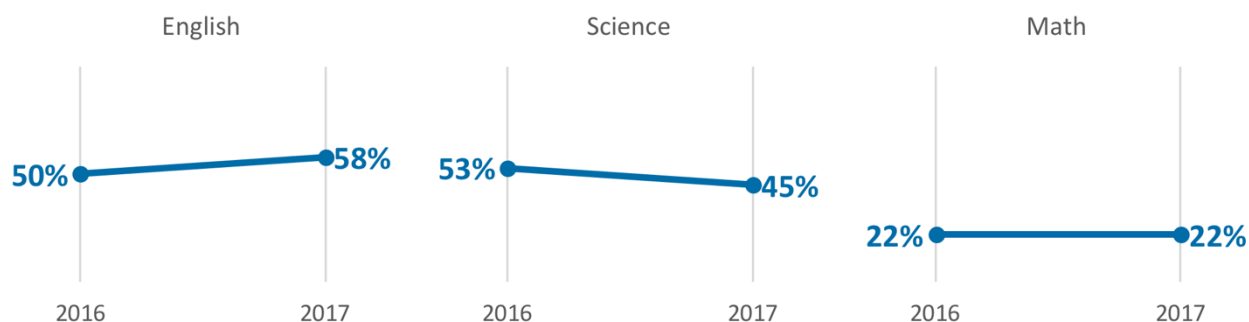


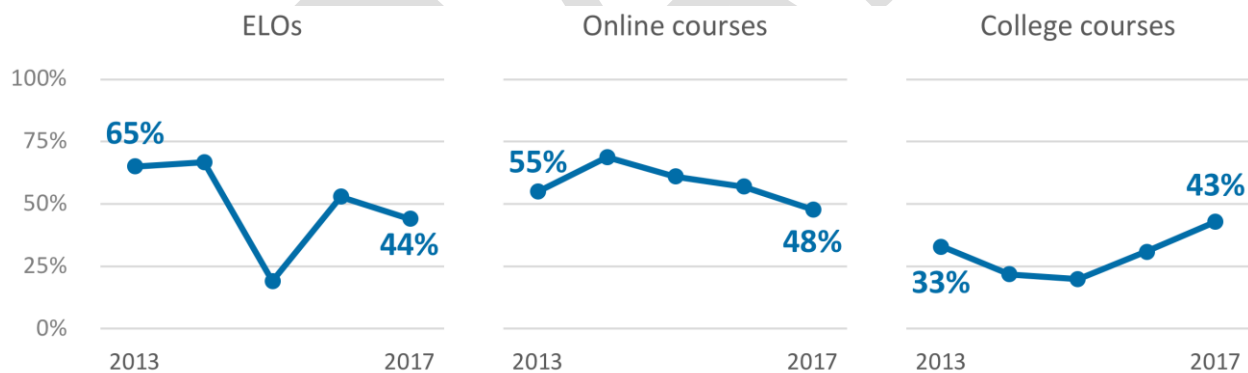
Figure 14. I get to choose how I show the teacher what I have learned.

Student questionnaire: % of students who responded with “often” or “every day” on a scale of 1-5, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = every day



Beyond the classroom, students reported widespread participation in personalized learning pathways, evidenced by participation rates of 40 percent or more in alternative learning opportunities such as ELO’s, online courses, and college courses (see Figure 15). The majority of responding students—68 percent—participated in at least one of these opportunities, while 17 percent took advantage of all three. During our site visit, Pittsfield’s college and career readiness staff discussed efforts to inform students about the benefits of dual enrollment, which may account for the rise in college course enrollment over the past year.

Figure 15. Percentage of students who participated in alternative learning opportunities



Although ELO participation fell somewhat between 2016 and 2017, the ELO coordinator described extensive efforts to increase the level of rigor alongside the amount of individual support provided to ELO participants. The coordinator described how, in her role, she is able to provide consistent, highly personalized support to students to achieve competency:

It’s such an independent course of action....so managing their time, meeting their deadlines, really kind of helping them to establish those. Coaching them through some of those things that they’re struggling with is really where my focus has been, while pushing them to achieve a little bit more.

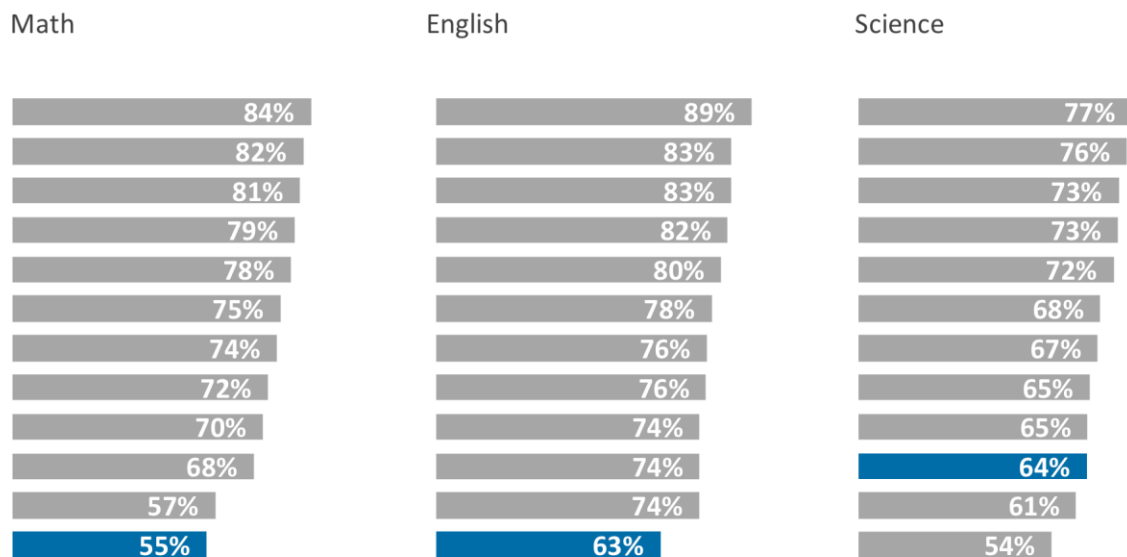
This statement touches upon observations made by several other staff members in separate interviews, in noting that the system of student-centered learning requires individualized support and strong relationships between students and staff to achieve success. Some teachers expressed concerns about the demands that had arisen in their experiences with personalized learning when each student is expected to manage their progress without deadlines or sufficient support. One teacher commented that the absence of implementation of work-study habits left a void that placed further demands on teachers who adopted personalized learning strategies. It created the circumstance where students were doing work that required work-study skills but needed to develop those skills simultaneously.

Pittsfield's ELO program is explicitly constructed to provide this level of support, but some classroom settings are challenged to reach this level, as evidenced by outcomes from the student questionnaire related to instructional scaffolding and personalized academic guidance. The percentage of students who agreed with statements such as "The teacher gives me the help I need when I'm stuck" and "The teacher assigns work that is appropriately challenging" were among the lowest across DLSC sites, particularly in math and English (see Figure 16 X). Moreover, trend data for items assessing teacher support have remained relatively flat since the beginning of the initiative, with 2017 values among the lowest in DLSC (see Figure 17).

Figure 16. How strongly do you agree or disagree with the following statements about your classes?

Student questionnaire: % of students who agree or strongly agree on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, 5 = strongly agree

The teacher gives me the help I need when I'm stuck.



The teacher assigns work that is appropriately challenging.

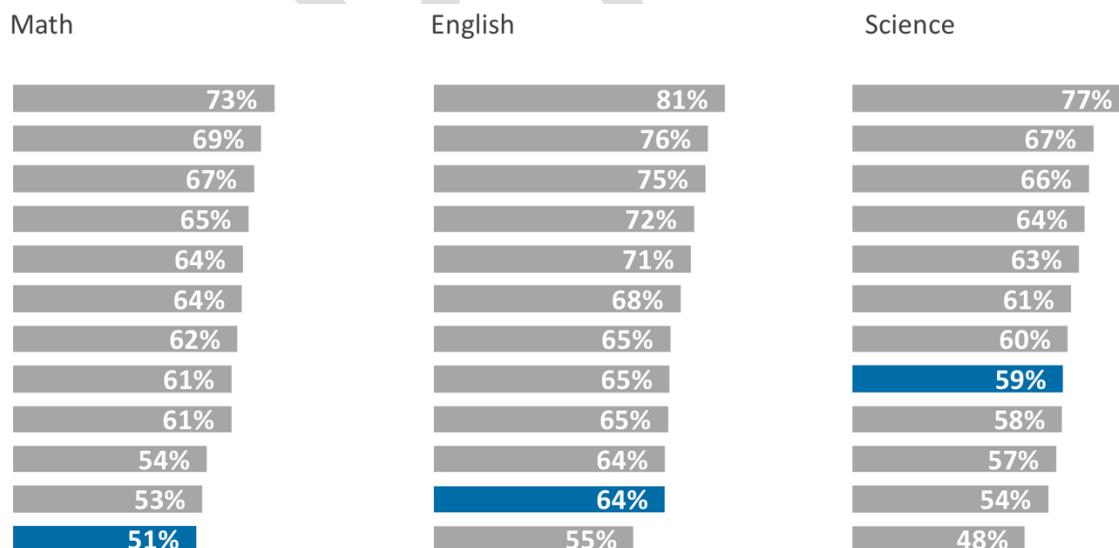
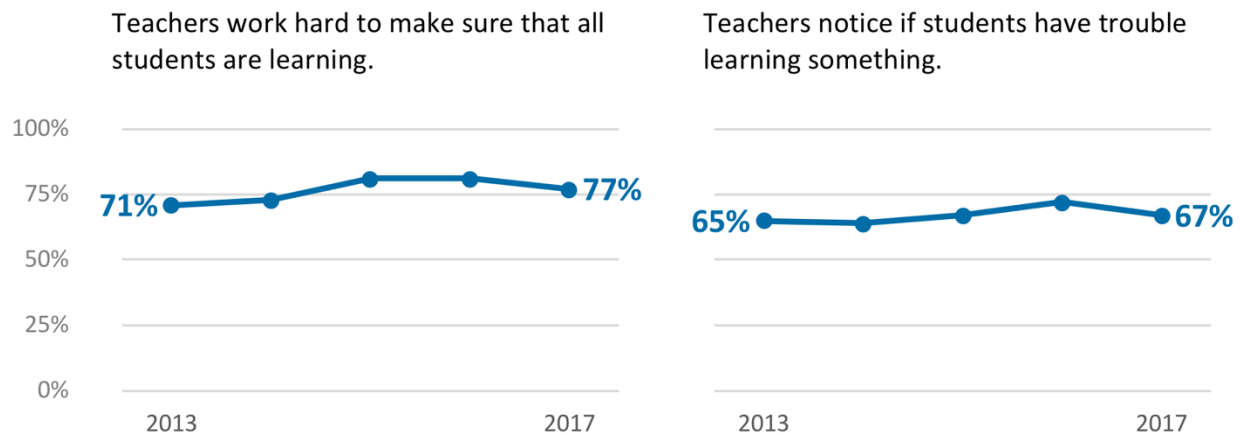


Figure 17. Thinking about your school, how strongly do you agree or disagree with the following statements?

Student questionnaire: % of students who agree or strongly agree on a scale of 1-4, with 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree



During advisory, some of this personalized support occurs, as students have individual and group check-ins with advisors about their progress towards competencies in coursework. However, staff comments indicated that the current advisor structure is likely insufficient to provide the level of individualized scaffolding and support necessary for the level of personalization that is needed.

Collaborative Culture and Professional Learning

Topic Summary

Pittsfield has dedicated time each week for teachers to collaborate and participate in professional development, both as an entire staff and within grade-level teams. There is also a system in place to facilitate mentoring and guidance for teachers who are new to the district. Despite sizable annual turnover in recent years, the school has retained a core group of administrators and teachers who are committed to SCL. However, turnover may have been a contributing factor to the recent decline in several measures of collaborative culture observed in the teacher questionnaire results. There was also a sense among some staff that, although teachers have generally coalesced around a theory and vision for PBL and SCL, there are still different interpretations about how these frameworks translate into concrete classroom practices.

Data suggested that teachers' satisfaction was mixed regarding professional development opportunities and activities. Teachers reported substantial increases in the amount of time allocated for working with colleagues during professional development and for reflecting on implications for instruction. Increases in these measures were accompanied by downward trends in items related to teachers' ability to personalize their professional development and interest in pursuing professional development related to SCL.

Strategies

Pittsfield retained "Late Start Wednesdays" as weekly professional development for all staff. During the site visit, we observed a well-designed session in which teachers assessed the school's capacity in a range of areas related to SCL, organized around the Great Schools Partnership's Global Best Practices tool. Working in small groups, teachers identified and discussed Pittsfield's strategies and systems to advance various aspects of SCL, such as equity, leadership, and personalization. Teachers also applied the Global Best Practice's rubric to arrive at a rating signifying Pittsfield's current level of effectiveness in each component. Throughout the activity, teachers' conversations demonstrated a high level of engagement and thoughtfulness.

The leadership team at Pittsfield continued to review and revise the system of teacher professional learning in an effort to provide more feedback and support to classroom teachers. The teacher evaluation program was expanded this past year to include a curriculum goal, focused on classroom instruction, in addition to existing professional goals, which emphasize individual skills and capacities. Examples of curriculum goals ranged from developing "learning menus" for the expansion of student choice in demonstrating competency, to collaborating with departmental colleagues on curriculum alignment. In addition, the leadership team expressed an interest in providing teacher feedback through the department chairs in an effort to allow the Dean to focus her coaching work on teachers in their first years in the district as well as to provide greater support related to subject matter expertise.

With a high rate of turnover, Pittsfield has also focused on strengthening its onboarding process to support new teachers. Incoming teachers receive three to four days of training in the summer and attend monthly new teacher seminars during the school year. The site has tried a

few models of induction and currently provides 1:1 mentoring to new teachers for three months, followed by a bank of hours that new teachers can spend to get support from teachers with in-depth knowledge of areas of interest or need.

Detailed Findings

Collaborative culture strengths are found among administrators and teachers. The leadership team continues to work together effectively to monitor and assess progress and to make decisions based on consensus. Teachers share a sense of camaraderie, particularly among those teachers who have been in the district for several years. These teachers convey a sense of pride and ownership over student-centered learning at Pittsfield.

However, collaboration and collegiality between these two groups—the administration and faculty—is less consistent. For example, teachers and the administrative team may at times hold different expectations for professional development priorities and methods of implementing new initiatives. As a result, Pittsfield contains several engaged and thoughtful staff members throughout the district, but due to differing viewpoints, cohesive fulfillment of district goals for SCL-activities and daily instruction can be challenging.

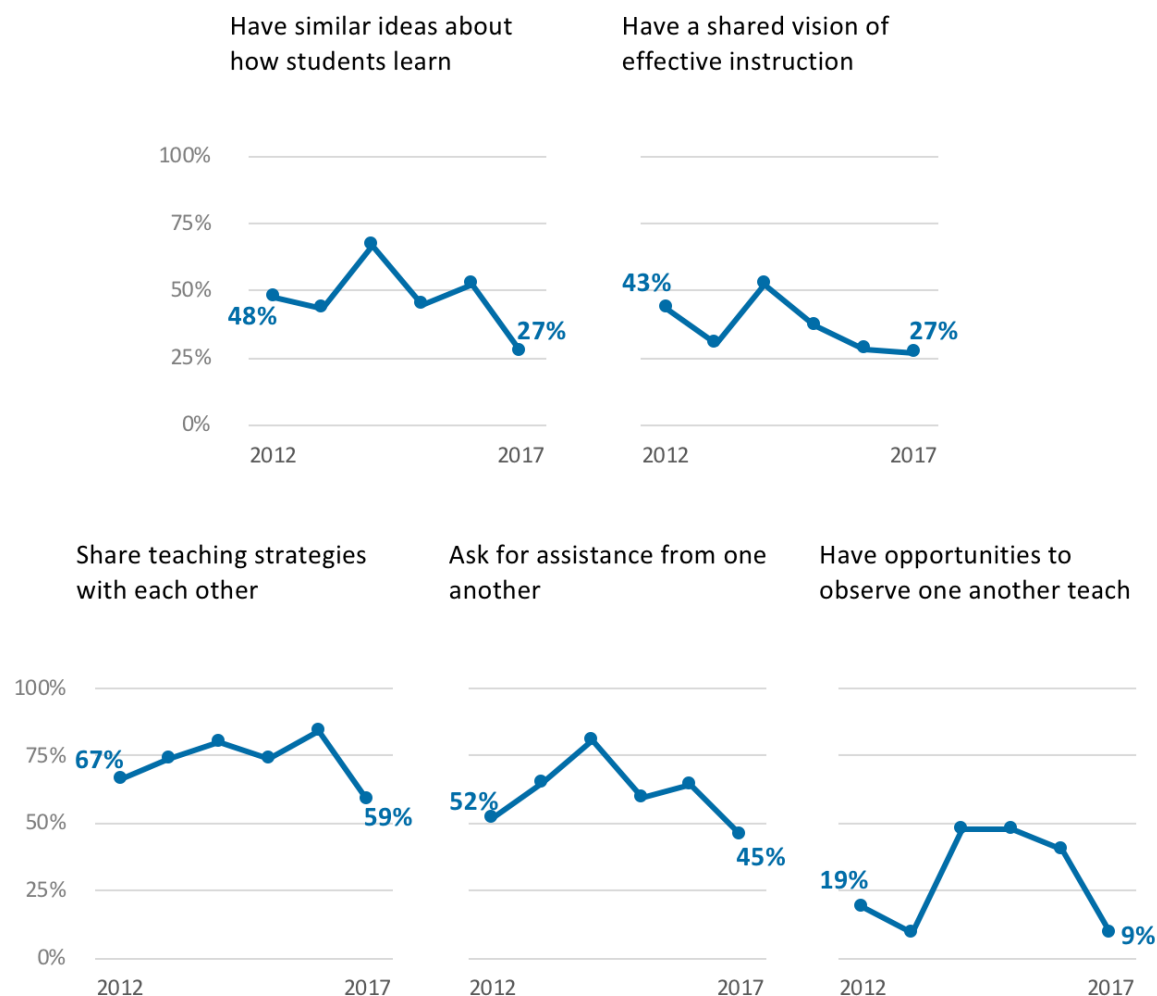
Pittsfield’s system of student-led conferences provides an example of the successes and challenges that are emblematic of the school’s culture. Student-led conferences have been in place for several years, in which students lead a presentation of their personal goals and progress for their advisor, family members, and others. Students organize their presentations with the guidance of their faculty advisor, using a common seven-point agenda. Since the introduction of student-led conferences, family attendance at conferences has soared and students use the opportunity to reflect on their personalized learning plans.

The success of the leadership team and various teachers in designing and implementing student-led conferences throughout the school illustrates how these groups work effectively to develop and introduce activities that are well-aligned for student-centered learning. Last spring, however, site leaders attended several student-led conferences and were surprised to find broad variation among teachers in how the conferences were organized and presented, despite the common agenda. Their observations led to concerns that the level of variation limited the quality of the conferences as a student learning experience. As a result, site leaders predicted that student-led conferences would be an area for future professional development and support, despite the prior assumption that conference practices were an established across the faculty.

Evidence of increased divergence in teachers’ beliefs about instruction was also present in results from the teacher questionnaire. Statements measuring the extent to which teachers maintained a common vision for instruction have trended downwards since 2014, suggesting divergence in the ways teachers view student learning and appropriate pedagogy (see Figure 18). A similar pattern existed in items appraising the frequency with which teachers learned from each other through conversations and observations.

Figure 18. Most teachers in my school...

Teacher questionnaire: % of teachers who agree or strongly agree on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, 5 = strongly agree



During our site visit, teachers and administrators recognized the importance of reclaiming a strong unified vision for SCL and PBL, particularly in the translation of theory to daily classroom practice. In separate interviews, staff commented that initial activities around competencies had set a clear path for implementation. However, as the work of competencies became more integrated into daily instruction and assessment, a sense of uncertainty and inconsistency among teachers emerged, with concerns that this contributed to confusion among students about how to succeed in competency-based courses. Staff noted different interpretations among teachers in how to assess student progress towards competency as well as differences in how to organize and lead competency-based instruction.

The challenges have been exacerbated by persistent turnover among staff, which resulted in teachers who are experienced in PMHS's PBL model replaced with teachers who are new to the district and its PBL structures and approaches. Said one teacher,

We're not always in the same place. Not on the big picture stuff, the theory stuff that you put in your mission and vision statement, we're all 'yeah, we agree with that'. The problem is what do we actually mean. Boots on the ground. What does that actually look like in the classroom?

In interviews, teachers' views about the professional development program were mixed. Some teachers noted that there had been increased flexibility in the professional development programs, which allowed teachers to find alternative learning opportunities outside of the school or not attend a professional development session if they already had developed skills in that area. Other teachers expressed concerns that the professional development program was organized around "one-shot" workshops that received little follow up or ongoing support.

Data from the teacher questionnaire about satisfaction with professional development reflected the differing opinions we heard during our site visit. On the one hand, there has been strong upward movement in the extent to which teachers reported opportunities to work with colleagues during professional development and to reflect upon their learning (see Figure 20). Compared to other DLSC sites, support for statements measuring these factors was among the highest. Positive shifts in these items could be associated with Pittsfield's incorporation of Late Start Wednesdays, although it is less clear why these figures would have spiked so dramatically during the past year. One item for which levels of agreement have remained comparatively high is, "In my school, I am encouraged to experiment with my teaching" (see Figure 19), which echoes comments from an administrator about teachers' appreciation of the amount of discretion autonomy they have in the classroom.

Figure 19. To what extent do you agree or disagree with the following statements?

Teacher questionnaire: % of teachers who agree or strongly agree on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, 5 = strongly agree

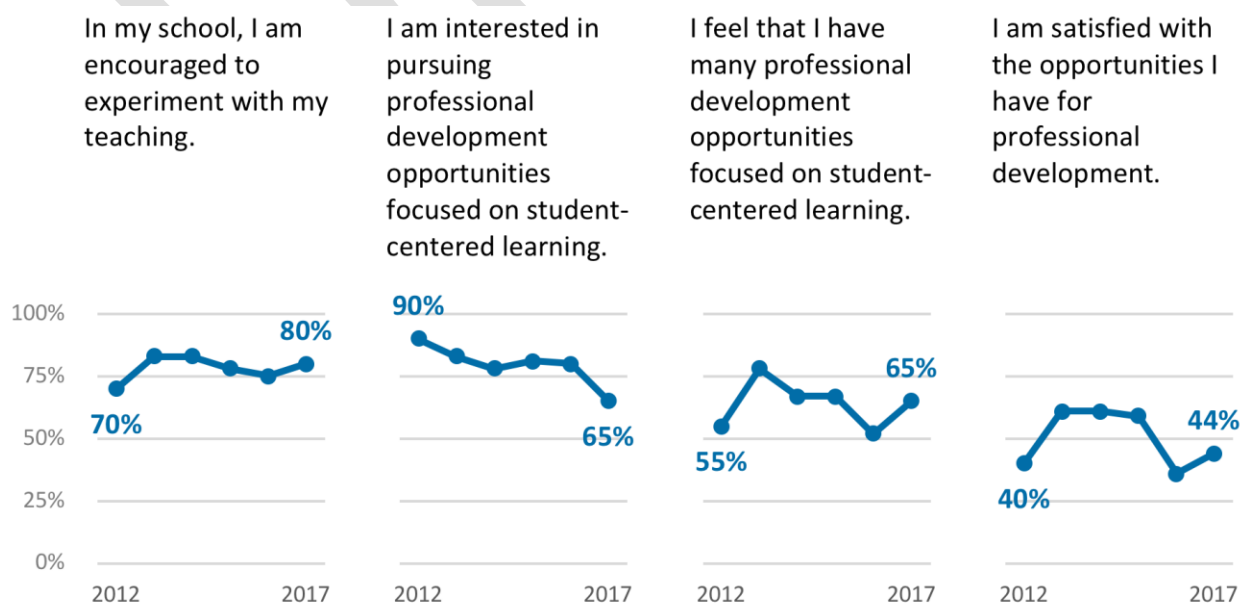
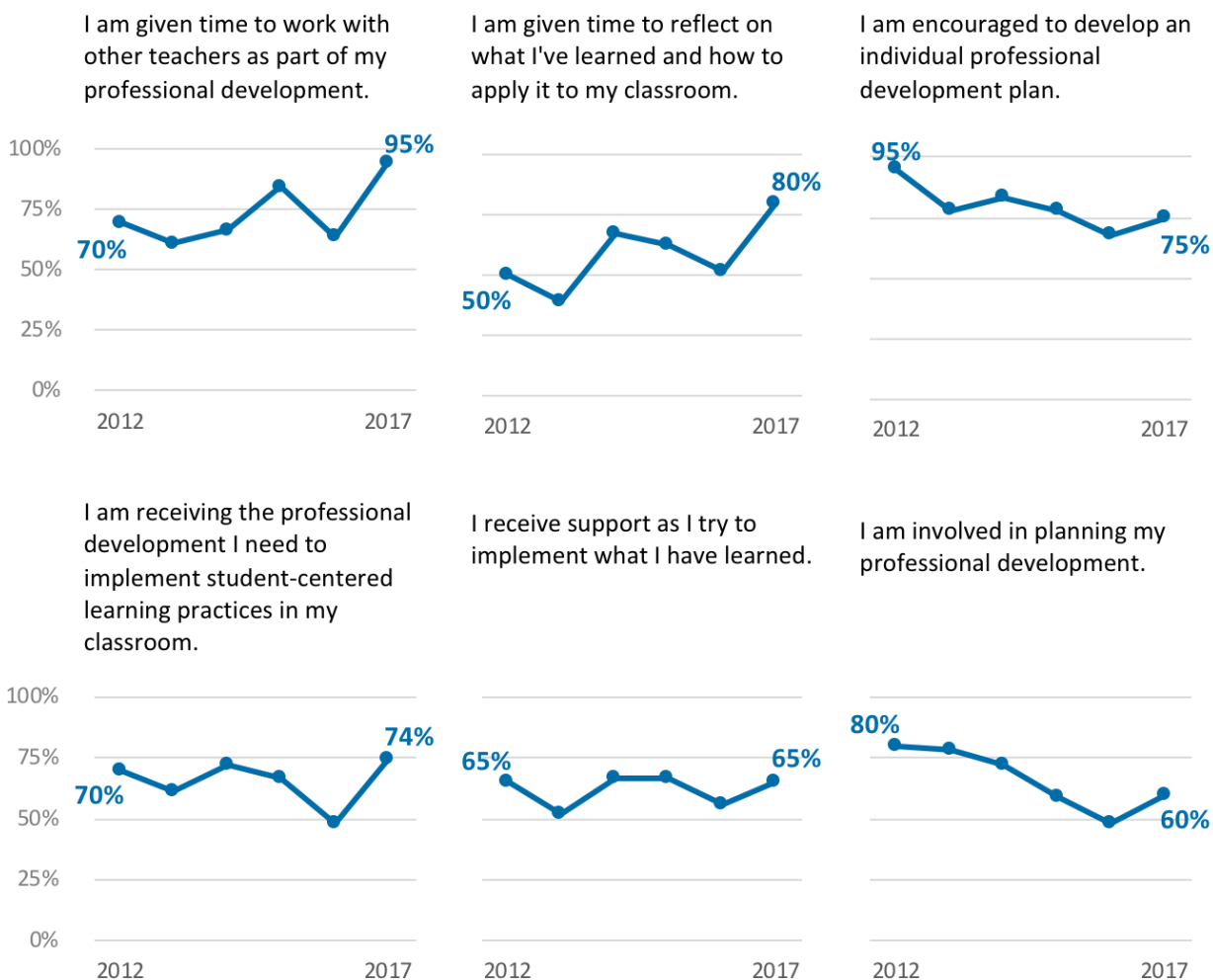


Figure 20. To what extent is each of the following statements true?

Teacher questionnaire: % of teachers who indicated “to some extent” or “to a great extent” on a scale of 1-4, with 1 = not at all, 2 = to a small extent, 3 = to some extent, 4 = to a great extent



Measured values on some teacher questionnaire items have decreased substantially since the beginning of the initiative. The percentage of teachers who indicated that they are involved in planning their professional development and encouraged to develop an individual professional development plan either “to some extent” or “to a great extent” has trended downwards over time, yet remains higher than the same values for most other DLSC schools. Teachers’ level of interest in pursuing professional development focused on student-centered learning has also steadily decreased since the beginning of the initiative. However, the gradual decline in interest could possibly be attributed to some teachers feeling confident in their ability to implement SCL after several years of school-wide focus on SCL-related strategies.

To explore possible associations among professional learning and teachers' readiness to lead SCL-aligned instruction, we conducted correlation analyses between items related to collaborative culture and professional development and items related to teachers' preparation to implement various components of SCL. The results identified several positive, statistically significant correlations of a moderate magnitude between items assessing the extent to which teachers work together ("Most teachers in my school work together to plan curriculum and/or instruction" and "I am given time to work with other teachers as part of my professional development") and the extent to which teachers felt prepared to lead instruction that requires collaboration, personalization, and self-regulation and academic tenacity (see Table 3). This pattern suggests that teachers who more strongly perceived and experienced opportunities to collaborate with colleagues also tended to report higher levels of readiness to incorporate SCL in their classrooms.

Table 3. Teacher Questionnaire. 2017. Correlational Analyses.

	Preparation to lead instruction that requires:			
	Collaboration	Personalization	Critical thinking or problem solving	Student self-regulation and academic tenacity
Most teachers in my school work together to plan curriculum and/or instruction.	.509*	.554**	--	.536*
I am given time to work with other teachers as part of my professional development.	.564**	.567**	.455*	.542*

Pearson Coefficient Shown.

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Academic Mindset and Tenacity

Topic Summary

Several interviews with teachers and administrators involved discussions of "work-study habits", "executive functioning", and "21st century learning skills"—terms that encompass students' ability to self-regulate their learning and behavior, persist through challenging tasks, and demonstrate a growth mindset. Comments shared by staff indicated that Pittsfield is acutely aware of the critical role these skills play in a student-centered learning environment, and is currently formulating approaches to bolster students' ability to assume a greater level of ownership over their education. Measures of academic mindset and students' perceptions of high expectations were often lower for Pittsfield than for other DLSC sites, with trends generally decreasing or remaining flat.

During the 2015-16 school year, an initiative was underway to create rubrics for the uniform assessment of work-study competencies across classrooms and subject areas. This effort was

placed on hold during the past year due to limited capacity to support ongoing rubric development and deployment alongside other priorities.

Detailed Findings

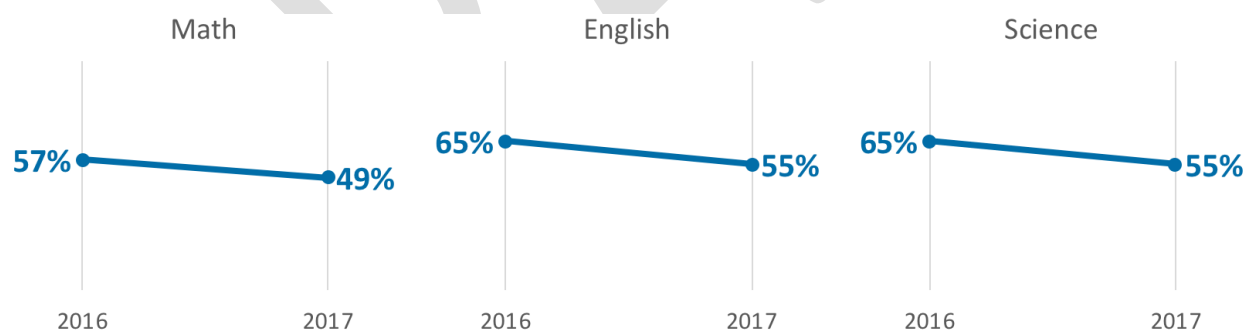
The 2016-17 evaluation cycle marked the second year of data collection for most student questionnaire items related to academic mindset and tenacity. Outcomes for many items experienced a slight to moderate decline over the past year. In comparison to other DLSC sites, values were often among the lowest, suggesting that this may be a particularly challenging area for Pittsfield.

Responses to questions about perseverance and personal expectations in math, English, and science indicated a decrease in students' confidence in their ability to succeed in these courses. Across all three subject areas, the percentage of responding students who agreed or strongly agreed with the statements, "When the work gets difficult, I don't give up" and "I believe I can succeed in achieving the learning goals in this class" declined by about ten percentage points during the past year (see Figure 21). With only two years of data available, findings should be interpreted cautiously. The evaluation will continue to monitor trend data for these items, which may provide further insight to distinguish a pattern from a one-year variation.

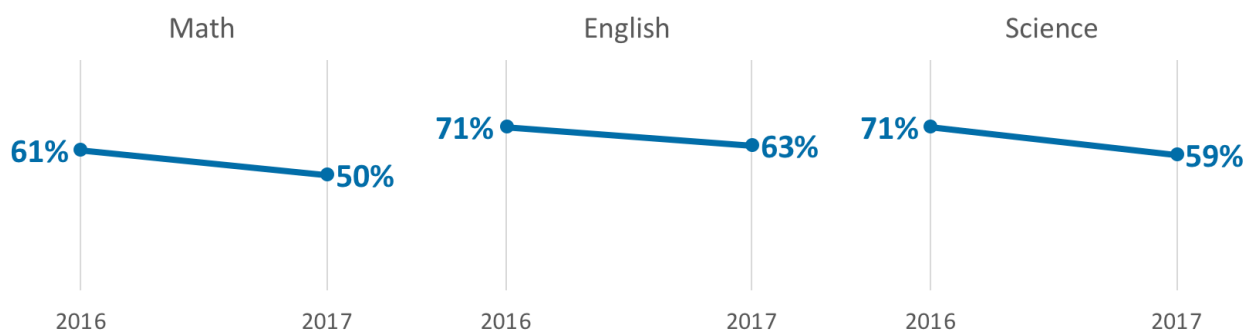
Figure 21. How strongly do you agree or disagree with the following statements about your classes?

Student questionnaire: % of students who agree or strongly agree on a scale of 1-5, with 1 = strongly disagree, 2 = disagree, 3 = neutral or mixed, 4 = agree, 5 = strongly agree

When the work gets difficult, I don't give up.



I believe I can succeed in achieving the learning goals in this class.



There is also evidence to suggest that a considerable portion of Pittsfield's students and teachers do not perceive high expectations as a part of Pittsfield's academic culture. In 2017, only about half of responding teachers agreed or strongly agreed with the item, "My school supports the expectation that all students can reach high standards", a notable decrease from 2016 and one of the lowest values in comparison to other DLSC sites (see Figure 22). Data resulting from items asking about students' perception of the extent to which teachers and administrators hold high expectations have varied little over time. However, Pittsfield's values are lower than most other DLSC schools for these items, suggesting that the communication of high expectations to students is an area that warrants further attention in the site.

Figure 22. My school supports the expectation that all students can reach high standards.

Teacher questionnaire: % of teachers who responded with "to some extent" or "to a great extent" on a scale of 1-4, with 1 = not at all, 2 = to a small extent, 3 = to some extent, 4 = to a great extent

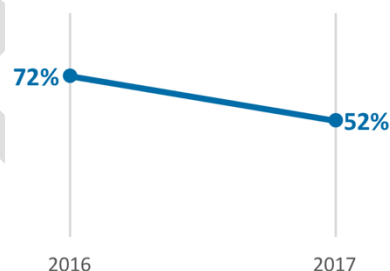
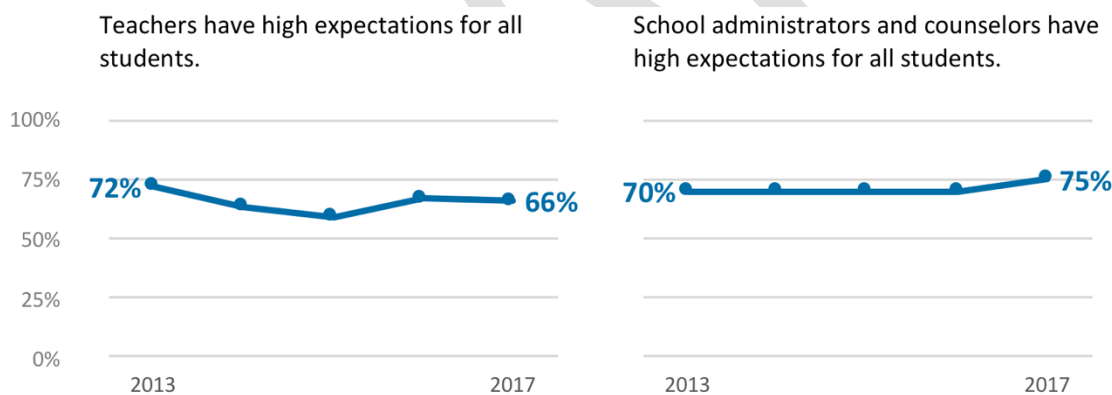


Figure 23. Thinking about your school, how strongly do you agree or disagree with the following statements?

Student questionnaire: % of students who agree or strongly agree on a scale of 1-4, with 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree



School administrators, expressing a heightened awareness of the effects of academic mindset and expectations on student achievement and ownership, see these as important areas to attend to moving forward. Said one staff member,

Our hypothesis at this point, is that kids aren't able to access some of the freedoms that we've given them, some of the choices that we've given them, because they don't have the executive function or the social emotional skills that allow them the capacity to do that... if you don't have some of those basic, you know, kind of organizational skills, self-direction, self-motivation, all those kinds of things that you really need in order to partake in those choices, then what's the point, you know? I think we're—that's where we are right now, is okay, now, how do we support those kids so that they can actually take advantage of those options and rise to that, the level of a higher standard.

Equity

Topic Summary

Pittsfield's demographic profile, along with interviews and observations conducted by the evaluation over multiple years, indicate that Pittsfield has a high-needs student population. Conversations with a range of stakeholders indicated that, while equity has been a focus in Pittsfield over the course of the initiative, there was greater emphasis on issues of equity during the 2016-17 school year. It is likely that involvement in DLSC has been a factor in elevating equity as a concern at the school. The heightened focus on student-centered learning has led to greater attention to personalization and targeted student supports, which has informed discussions of equity more broadly in the school and how to help each student succeed. Analyses of student questionnaire outcomes by student subgroups found several statistically significant differences in the experiences of students with and without IEPs. While results for some items suggested that aspects of personalization were more prevalent for students with an IEP, several differences indicated that other components of SCL were less common for IEP students.

Detailed Findings

During our site visit, staff shared that there is now greater understanding, interest, and attention to issues of equity in Pittsfield. During the 2016-17 school year, equity was identified as one of three main strands for teacher professional development. A staff member estimated that teachers participated in approximately four or five sessions focusing on different components of equity, such as learning disabilities, socioemotional learning, and the role of nutrition in academic achievement. Universal Design for Learning (UDL) resources were also introduced, which some teachers used to revise their unit templates. An administrator explained that the professional development sessions were designed with the overall goal of increasing classroom personalization by expanding teachers' awareness of inequities and ability to provide equitable supports to meet students' needs.

At the leadership level, school administrators have increasingly relied on the framework of trauma-informed schools to guide their understanding of how Pittsfield can support students who have suffered adverse childhood experiences. The school has also explored student survey data to better understand the extent of stressful or traumatic events experienced by the student body. In addition, Pittsfield offered a learning studio course on Social Identity in which students developed an interactive exhibit to facilitate dialogue about the connection between equity and topics like class, gender, race/ethnicity, disabilities, and social mobility.

While the above examples illustrate recent activities in the site surrounding equity, the transition to competencies has raised complicated questions about how best to design PBL-structures that promote equitable outcomes for all students. For instance, Pittsfield's current competency recovery system highlights concerns about the availability of equitable supports for struggling students. Most students with outstanding competencies are responsible for independently completing a competency recovery plan. Teachers play a role in helping students develop such plans, but students are generally responsible for executing it on their own. Although Pittsfield designed this process with the positive intention of reducing the need for

students to repeat entire courses, there is a growing recognition that the level of self-sufficiency required to complete competency recovery plans poses a significant hurdle for many students. Absent ongoing support from teachers and a community of peers, students often find it challenging to make consistent progress. This is a challenge also found in other DLSC sites that have transitioned to competency-based systems, which require recreating an effective system to help students fulfill outstanding competencies, thereby paving a clear path forward to graduation.

For students with IEPs, teachers and administrator expressed mixed viewpoints about the implications of PBL. One staff member noted that PBL has increased the amount of time IEP students spend developing key skills that allow them to demonstrate competency. In addition, participation in long-term assessments like PACE has boosted some students' confidence in their ability to complete complex tasks. However, there are some concerns about whether it is appropriate and fair to maintain the same expectations for competency fulfillment among both IEP and non-IEP students. Echoing concerns shared by staff in other sites, one interviewee pointed out that, "some [IEP] kids would literally never graduate" under such a system. At the same time, staff seemed equally wary that excessive modifications or lack of rigor could prevent students with an IEP from fulfilling their academic potential. These concerns are echoed in other DLSC sites that are currently implementing PBL systems as well.

Analysis of the student questionnaire by subgroups found numerous statistically significant differences between the experiences of students with and without IEPs. While some comparisons suggested that elements of personalization were present to a greater degree for students with IEPs, many others indicated that opportunities to collaborate, receive feedback, engage with real-world problems, and make decisions about classwork were less frequent for IEP students (see Appendix A). Where these differences in classroom experiences existed, they were often present across all three subject areas—math, English, and science—suggesting that the dissimilarities were not limited to particular classrooms. It should be noted that, in previous years, similar analyses found only a limited number of significant differences between IEP and non-IEP students. While this year's findings may warrant concern, next year's evaluation data could provide more insight as to whether these outcomes are part of a longer-term pattern or a one-time variation.

Subgroup analyses revealed fewer differences between students who are eligible and ineligible for free- or reduced-price lunch. Free- or reduced-price lunch students reported lower levels of agreement for two items: "I complete my homework on time" and, for science, "When the work is difficult, I don't give up". The limited number of statistically significant differences between FRL and non-FRL students continues a trend from previous years suggesting that student experiences and outcomes measured by the student questionnaire do not differ substantially between the two groups. Among measures of student engagement, a significant difference was present for only one item ("I complete my homework on time") in 2017, compared to five items in 2014. The absence of numerous significant differences between FRL and non-FRL students in 2015, 2016, and 2017 suggests that gaps in student engagement between these groups have been reduced or eliminated since the evaluation first conducted subpopulation analyses in 2014.

Student Engagement and Outcomes

Topic Summary

Results from the teacher questionnaire suggested that teachers maintained high levels of involvement with the DLSC initiative in 2016-17. Furthermore, the percentage of teachers who reported an associated impact on their instruction was one of the highest values within DLSC, implying that teachers perceive that their classroom practices have shifted as a result of DLSC activities.

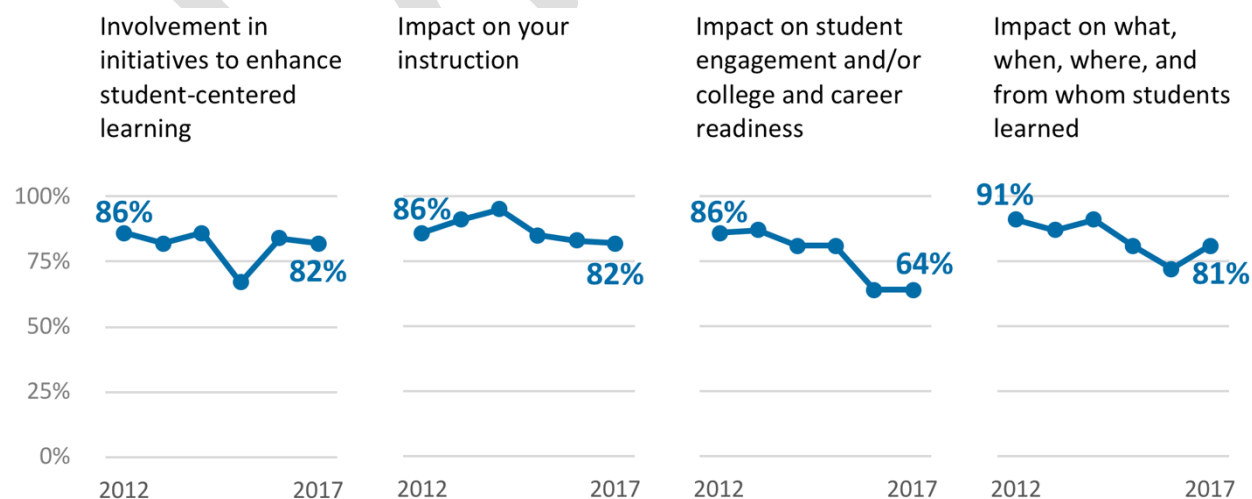
Data from both the teacher and student questionnaire pointed to the absence of sustained effects of DLSC on student engagement. Teachers reported a lower level of impact on student engagement than in early-to-mid years of the initiative, a finding corroborated by the outcomes for most student questionnaire items related to engagement, for which 2017 values were about the same as those recorded during baseline measurements in 2013. In comparison to other DLSC sites, Pittsfield's student engagement values for many items were relatively low.

Detailed Findings

Outcomes from the teacher questionnaire about teachers' involvement with district initiatives to enhance student-centered learning were relatively consistent with previous years, in which over 80 percent of teachers usually reported "moderate" or "substantial" levels of involvement (see Figure 24). Not surprisingly, correlation analyses found that teachers who reported higher levels of involvement with DLSC also reported higher levels of preparedness to lead instruction that required collaboration and personalization. There were also positive, statistically significant correlations of a moderate magnitude between teachers' involvement and several items indicating the extent to which teachers incorporated SCL-aligned activities into classroom instruction.

Figure 24. Teachers' level of involvement with and perceived impact of student-centered learning initiatives during the past year

Teacher Questionnaire: % of teachers who responded with "moderate" or "substantial" on a scale of 1-4, with 1 = none, 2 = minimal, 3 = moderate, 4 = substantial



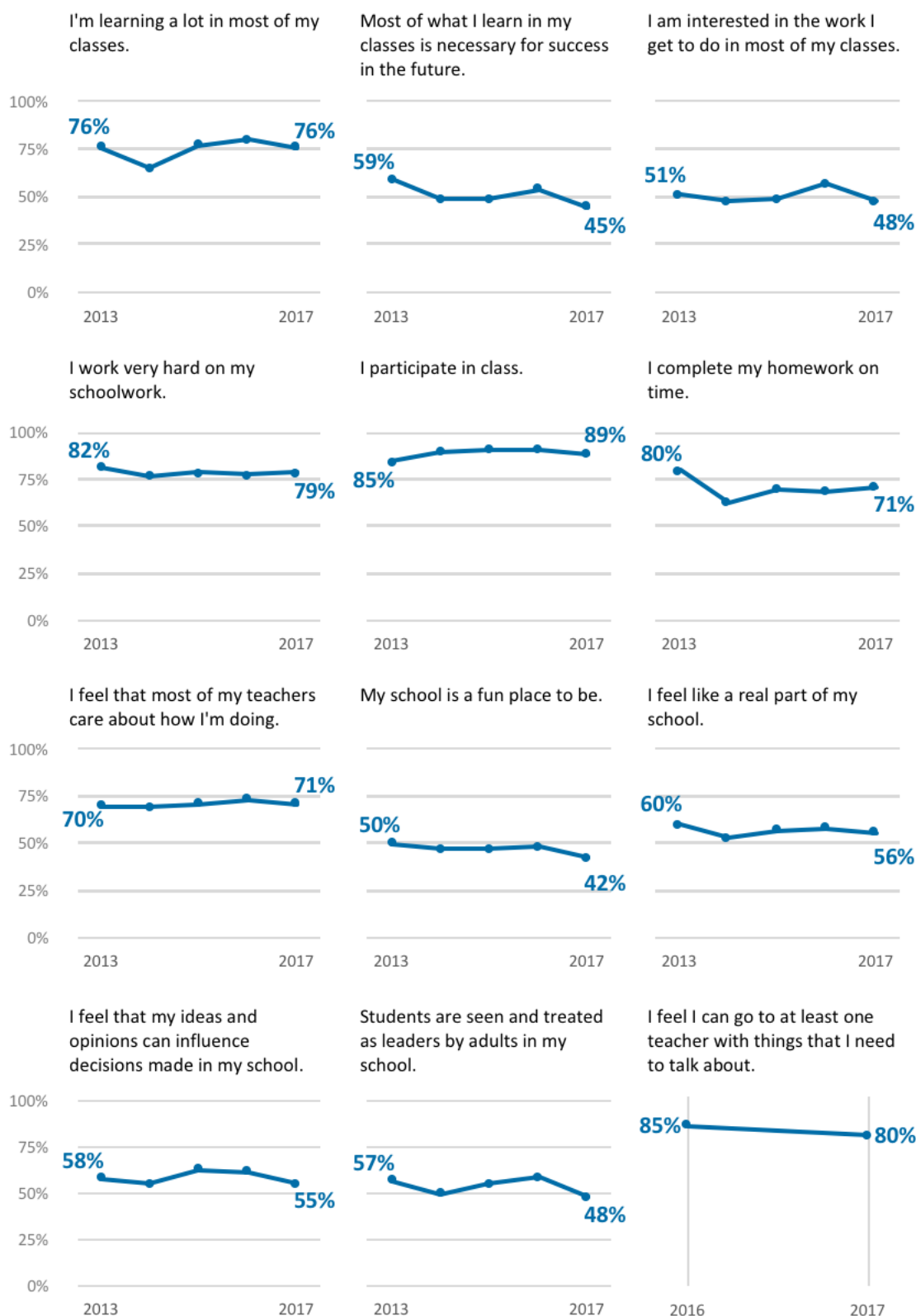
Teachers' perceptions of the impact of DLSC during the 2016-17 school year were mixed. The percentage of teachers who reported a "moderate" or "substantial" impact on their instruction remained relatively high at 82 percent, which was one of the highest values observed across DLSC sites. Impressions of the initiative's effects on "what, when, where, and from whom students learned" also increased over the past year. The largest change was observed in teachers' perceived impact on student engagement and/or college and career readiness, which was at its lowest level since the start of the initiative.

While findings from the student questionnaire did not match teachers' impressions of a substantial decline in engagement, almost all items indicative of students' academic and socioemotional engagement have remained relatively flat or slightly decreased over time (see Figure 25). In comparison to other DLSC sites, Pittsfield's values for student engagement were often among the lowest, similar to 2016, with particularly large gaps between Pittsfield and other sites for the items, "My school is a fun place to be", "Most of what I learn in my classes is necessary for success in the future", and "I am interested in the work I get to do in most of my classes."

The one item that has experienced a more substantial change since the beginning of the initiative is, "Most of what I learn in my classes is necessary for success in the future", for which the percentage of students who agreed or strongly agreed was notably lower than at the start of DLSC. Context for this change may be provided by data on students' post graduate plans, which suggests that students may have widely varying expectations for the types of learning experiences that will benefit them after high school. Post-graduation statistics from Pittsfield's class of 2016 show that approximately 40 percent of graduates enrolled in higher education, 40 percent went directly to the workforce, and the remaining 20 percent were about evenly divided between trade school or the military. While Pittsfield offers flexibility for students to determine their own path to graduation, particularly for a small school, the decline in this item implies that students may not see the relevance of all of their coursework for their lives after high school. This finding also raises questions about the extent to which students are accessing the opportunities Pittsfield offers to personalize their education, such as ELOs, which can often be tailored to individual interests and post-secondary goals.

Figure 25. How much do you agree with the following?

Student questionnaire: % of students who agree or strongly agree on a scale of 1-4, with 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree



Correlations between items related to engagement and other questionnaire items pointed to a moderate association between several measures of engagement and measures of teacher and adult support. Although none of the coefficients were particularly high, a pattern of statistically significant correlations was apparent, pointing to a possible association between the extent to which students experience a supportive school environment and the extent to which they are academically and socioemotionally engaged with school. With the caveat that correlations do not imply the existence of a causal relationship, these results may lend support to one administrators' comment that, "it's all about relationships" in aspiring to cultivate a positive school environment.

Table 4. Student Questionnaire. 2017. Correlational Analyses.

	Most of what I learn in my classes is necessary for success in the future.	I am interested in the work I get to do in most of my classes.	Students are seen and treated as leaders by adults in my school.	When course work is hard, I keep trying.
Teachers work hard to make sure that all students are learning.	--	.355**	--	.308**
Teachers notice if students have trouble learning something.	.420**	.309**	.383**	--
Teachers and counselors provide support in helping students prepare for life after graduation.	.328**	.329**	--	--

Pearson Coefficient Shown.

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In addition to continuing its focus on relationship building, Pittsfield is pursuing other strategies to strengthen markers of student engagement, such as regular attendance and participation in school organizations. Site leaders formed an attendance team to monitor attendance data and proactively reach out to students at risk for chronic absenteeism. The team has also developed incentives and a system of recognition for students with strong attendance records. Pittsfield also began holding monthly assemblies, each featuring a different student organization, with the goal of building interest in and awareness of opportunities for students to assume leadership roles and impact the broader school community.

Long-term Outcomes

Data on long-term outcomes theorized to be aligned with SCL were mixed. The percentage of students scoring proficient or higher on both the ELA and mathematics portions of the SAT increased slightly, but math proficiency lagged behind New Hampshire's statewide rate (see Tables 7 and 8). Changes in both the dropout rate and average daily attendance were positive, with fewer dropouts and a higher attendance rate (see Tables 6 and 9).

Other outcomes suggested that students may continue to face obstacles in advancing to post-secondary education. The four-year graduation rate declined between 2015 and 2016, with 2016 rates approximately 30 percentage points lower than the statewide rate (see Table 5). This decrease may be associated with the shift to PBL, in which students are expected to master every competency to fulfill graduation requirements, with attainment of proficiency determining the pace towards graduation. In addition, almost 25% of Pittsfield's 2016 cohort opted to complete the HiSET, New Hampshire's high school equivalency test. The substantial proportion of HiSET test-takers implies that some students may see the HiSET as more attainable or appealing than fulfilling the competency requirements to earn a diploma. Less than half the class of 2016 planned to enroll in a four- or two-year college following graduation, with most opting to enter the workforce instead (see Table 10).

Findings in this section should be interpreted with caution. For several outcomes, the most recently available data reflect the 2015-16 school year, whereas much of this report focused on student experiences during the 2016-17 year. Moreover, due to Pittsfield's relatively small enrollment, some measures, such as graduate rates, can fluctuate substantially from year to year

Table 5. Pittsfield Four-Year Cohort Graduation Rate

	Graduation Rate 2013–14	Graduation Rate 2014–15	Graduation Rate 2015–16
Pittsfield High School	72%	71%	57.5%
State-Wide	89%	88%	88%

Note. Source: State of New Hampshire Department of Education Website
<http://education.nh.gov/data/dropouts.htm>

Table 6. Pittsfield High School Dropout Rate

	Annual Dropout Rate 2013–14	Annual Dropout Rate 2014–15	Annual Dropout Rate 2015–16
Pittsfield High School	3%	4%	2.5%
State-Wide	1%	1%	1%

Note. Source: State of New Hampshire Department of Education Website
<http://education.nh.gov/data/dropouts.htm>

Table 7: ELA, % of grade 11 students scoring proficient or above, as measured by the SAT

	2015-2016		2016-2017	
	Pittsfield High School (N=19)	State-Wide	Pittsfield High School (N=26)	State-Wide
All Students	53%	66%	56%	65%
Gender				
Male	**	63%	63%	62%
Female	55%	69%	50%	68%
Race/Ethnicity				
White	56%	68%	59%	66%
Family Income				
Not Economically Disadvantaged	54%	Not available***	70%	Not available***
Economically Disadvantaged	**	44%	**	42%

Note. Source: State of New Hampshire Department of Education Website

<http://www.education.nh.gov/instruction/assessment/index.htm>

https://www.education.nh.gov/instruction/assessment/documents/sat_prelim_2016_2017_state.pdf

** Data not provided because sample size is fewer than 11 students

*** Data not provided at state level

Table 8: Math, % of grade 11 students scoring proficient or above, as measured by the SAT

	2015-2016		2016-2017	
	Pittsfield High School (N=19)	State-Wide	Pittsfield High School (N=26)	State-Wide
All Students	16%	40%	20%	43%
Gender				
Male	**	42%	27%	44%
Female	9%	38%	14%	41%
Race/Ethnicity				
White	17%	42%	21%	44%
Family Income				
Not Economically Disadvantaged	23%	Not available***	25%	Not available***
Economically Disadvantaged	**	20%	**	21%

Note. Source: State of New Hampshire Department of Education Website

<http://www.education.nh.gov/instruction/assessment/index.htm>

https://www.education.nh.gov/instruction/assessment/documents/sat_prelim_2016_2017_state.pdf

** Data not provided because sample size is fewer than 11 students

*** Data not provided at state level

Table 9. 2012-2015 Average Daily Attendance Rate

	Average Daily Attendance 2012–2013	Average Daily Attendance 2013–2014	Average Daily Attendance 2014–2015	Average Daily Attendance 2015–2016
Pittsfield High School	90%	87%	87%	89%
State	94%	93.5%	93.5%	95%

Note. Source: State of New Hampshire Department of Education Website
<http://education.nh.gov/data/attendance.htm>

Table 10. Plans of High School Completers in the Class of 2016

	Pittsfield	State
4-Year College	16%	50%
Less than 4-year College	29%	23%
Work	52%	17%
Military	3%	3%
Unemployed	0%	1%
Unknown	0%	6.0%

Note. Source: State of New Hampshire Department of Education Website
<http://education.nh.gov/data/dropouts.htm>

Conclusions

Several years of data collection on SCL related activities in Pittsfield were considered when assessing site progress towards DLSC goals. Key conclusions are detailed here, which highlight important lessons and considerations for the future work of the site in DLSC and may provide guidance to the field as more districts invest in SCL related policies and teaching environments.

Strong systems of student supports as a prerequisite for student-centered learning. Over the course of the DLSC initiative, Pittsfield has repeatedly demonstrated and described its dedication to implementing PBL and strengthening student ownership. Several schoolwide programs and policies reflecting SCL and PBL as priorities have been in place for multiple years, a finding confirmed through interviews, observations, and student focus groups. Competencies and rubrics are used across the district to guide grading and assessment, including the recent expansion of PBL to the elementary school. Programs to support student ownership and personalization are also well-established, including ELOs, Learning Studios, Site Council, Justice Committee, and student-led conferences. Teachers reported some of the highest values across DLSC sites for the frequency with which they provided instruction that required SCL-related activities, such as personalization, collaboration, critical thinking, and self-regulation. Assessment practices in many classrooms were also aligned with SCL, evidenced by the high level of importance many teachers placed on extended projects to assess student competency, combined with the comparatively low emphasis on tests, homework, and exams. Data further implied that traditional, teacher-led instruction was fairly infrequent, with class time more often dedicated to supporting students as they made progress on work products or other learning activities.

Despite the depth of its commitment to SCL and the scope of change detailed by staff in multiple data sources, Pittsfield has yet to see a substantial portion of its students seize the opportunities to take charge of their education. Seeking to understand this discrepancy, teachers and administrators theorized that, in order for SCL to succeed, intentional structures to foster students' work-study habits, metacognitive skills, and strong relationships with school staff need to be in place. Student-centered learning and, especially, competency-based learning place higher demands on students than what might be experienced in more traditional academic settings. Students are often expected to identify topics of interest to focus on, along with methods they plan to employ to demonstrate their learning. The shift from daily homework and regular tests to long-term projects requires the ability to manage both one's time and multi-step projects. Moreover, the amount of academic material to be mastered increases, as students are required to demonstrate proficiency in each and every competency. While learning environments based on SCL and PBL may offer greater potential for students to explore their interests and leave high school with a comprehensive set of skills, Pittsfield illustrates the necessity of developing a strong system of personalized student supports to match the level of expectations for students.

There are several ways in which Pittsfield has provided these types of supports—for example, through its advisory program and professional development for teachers focused on topics such as socioemotional skills and universal design for learning. However, there is also a sense that students could be more successful if other systems, such as the competency-recovery process and school-wide activities related to work-study habits, had been developed and implemented from the start with struggling students in mind. The site's experience with competency-recovery plans, in particular, underscores the importance of designing structures that proactively anticipate the challenges experienced by students who face obstacles in assuming agency over their coursework. One interviewee described these students and the importance of prioritizing their needs:

...students who aren't making it to graduation, students that are graduating without a plan, without...a map of their support to get them where they want to go....If we're not putting them at the forefront, then it's still not going to work for them.

With an enrollment of less than 200 students in grades 9-12, class sizes are generally small, a factor that should enable targeted instructional scaffolding and frequent communication between students and teachers. Yet Pittsfield's values for student questionnaire items related to classroom scaffolding and support were some of the lowest in comparison to other DLSC sites, suggesting that additional strategies may be needed to strengthen the extent to which teachers differentiate instruction and activities to meet students' individual needs.

The complexity of PBL implementation as a "wicked problem." Pittsfield's experiences in its shift to PBL suggest that the pursuit of systemic change to conventional school structures and paradigms might best be understood as a "wicked problem." That is, a multifaceted problem with no one clear cause or solution, in which stakeholders with differing perspectives must navigate through unstable conditions and resources. In Pittsfield, as in some other DLSC sites, the transition to PBL has revealed intertwined connections between competencies and various other systemic components, such as classroom instruction, assessment design, grading, pacing,

post-secondary planning, the structure of the school day, and technology platforms, among others. As has been observed in Pittsfield, despite strong efforts to develop a cohesive vision for PBL and inform the community about its redesign, it is extremely difficult to unite all stakeholders in their expectations for the implementation of competencies or the implications for student pacing.

The district has invested sustained attention and effort to address many of the systemic aspects described above through professional development, policy changes, organizational restructuring, and community involvement. Despite these endeavors, attempts to address any one of the linked components of PBL have often resulted in further challenges. This pattern of unanticipated consequences is also symptomatic of a wicked problem, and speaks to the complexity of the shift to PBL. For example, the adoption of competency-based grading in Pittsfield has left some teachers uncertain how to account for student pacing in assessment practices. Likewise, the implementation of competency recovery processes defined a course of action through which students can fulfill unmet competencies, but simultaneously highlighted the need to provide additional supports to help students complete competency recovery plans. Similar types of predicaments have emerged (and are likely to continue to emerge) in other districts that incorporate PBL, suggesting that systems change efforts should be accompanied by an awareness of the potential for wicked problems to arise and a willingness to adapt to changing conditions, such as through the use of continuous improvement strategies.

Balancing state and local influence on SCL implementation. Following statewide elimination of the Carnegie unit in 2005, New Hampshire's Department of Education has worked closely with districts and school leaders to develop a variety of resources, networks, and pilot programs to aid schools in the transition to PBL and SCL. While in some cases the state has led the design of these supports, it has just as often provided flexibility for Pittsfield and other districts to implement their own vision of PBL and SCL. New Hampshire has also looked to Pittsfield and its peers to share best practices and lessons learned for districts seeking to adopt similar educational models.

The site's participation in New Hampshire's piloting of PACE is one example of this dynamic, with the state describing PACE as a "reciprocal accountability system" that aims to balance local, district-level control with state-wide accountability². Pittsfield was recruited by the state to participate in the piloting of PACE, in recognition of the advancements that had occurred in the district around PBL. As part of the pilot process, PACE asks Pittsfield teachers to administer one "common" multi-district task per assessment area, but also relies on several "local" assessment tasks, which are developed by Pittsfield teachers for Pittsfield students. By integrating both common and local tasks into PACE, New Hampshire has taken steps to develop a PBL-aligned assessment system that balances state-level oversight with school-level independence in measuring student competency.

Beyond joining the PACE pilot, Pittsfield has contributed its knowledge of and experience with SCL to other statewide initiatives, further illustrating the role individual schools have played in

² New Hampshire Department of Education: <https://www.education.nh.gov/assessment-systems/documents/guide.pdf>

New Hampshire's endorsement of personalized, competency-based education. For instance, Pittsfield's former ELO coordinator drew on her involvement with Pittsfield's ELO program to co-author materials designed to provide guidance for ELO initiatives in other districts. Additionally, a Pittsfield staff member served on a Work Study Practices committee formed by the Department of Education to develop work-study practices for schools throughout the state. In these examples, New Hampshire has proved a possible model of advancing SCL through shared ownership and collaborative learning between the state and local districts.

Common Indicators. For a second year, the evaluation collected common indicator data on outcome measures related to two broad categories: students' level of college and career readiness and systems level change. Similar to prior discussions that only include two years of data, common indicator data should be interpreted with caution, especially considering the small sample size for some indicators. With this caveat in mind, we can begin to examine initial trends in the data.

Results for college and career readiness indicators were mixed. Mean SAT scores increased over the past year, especially for the reading and writing subtests. The 2016-17 SAT outcomes pointed to a gender gap between males and females, with a higher percentage of males meeting or exceeding the state's criteria for proficiency in both math and ELA. Composite items based on student questionnaire data indicated that students in most subgroups reported lower levels of classroom scaffolding, with particularly notable declines among males and IEP students. There was little change in student perceptions of teacher and adult support, with the exception of IEP students, for whom mean response values trended upward. While data regarding post-secondary enrollment was somewhat limited, available measures indicated a decrease in the percentage of students who enrolled in college immediately following high school or within the first year after graduation. Due to the small sample size for college enrollment data, these outcomes should be viewed with caution.

Trends for indicators related to systems-level change were also inconclusive. Among teachers, composite measures of collaborative culture decreased, while changes in mean response values related to instructional scaffolding and personalization were mixed. Student questionnaire items regarding assessment experiences signaled a decline in the number of quizzes and tests administered in math, English, and science. However, students in all three subjects also reported a decrease in the frequency with which they moved on to new work upon demonstrating competency. Most indicators of student access to rigorous content either declined or remained unchanged, although trends were slightly more positive for FRL students.