The Pythagoras School
Minerva School District, Virginia*

This is one of four state and 11 district case study papers from the Center on Education Policy (CEP) describing expanded learning time (ELT) initiatives. The major findings from all of the case studies are presented in the CEP summary report Expanded Learning Time: A Summary of Findings from Case Studies in Four States.

Key Findings

- **The strong relationship between district and school officials was a significant factor in Pythagoras’ successful implementation of expanded learning time.** Minerva school district officials and Pythagoras school leaders have a long history of collaboration, according to officials from both.

- **Transportation was one of the biggest challenges to implementing expanded learning time in Pythagoras.** District and school leaders were able to overcome this challenge by using some extra time between the bus drop-off/pick up times and the school start/end times for instruction, which meant that the existing bus schedules did not have to be changed. This solution also fit within teachers’ existing contract.

- **Teachers found the expanded learning time to be useful.** One school official commented that math teachers have tried to continue to increase learning time or improve the use of time above and beyond the district and school requirements.

Background

The Pythagoras School is one of 11 schools in Virginia’s Minerva County school district, which enrolls roughly 2,000 students. Pythagoras serves students in grades pre-K through 7 (see table 1 for more school information). The school first expanded the learning day under its School Improvement Grant (SIG) when the leadership was able to find an extra 30

*To encourage frank responses from local interviewees, we have used pseudonyms for the case study districts and schools and for individuals interviewed in these sites. For the state-level interviewees, however, we have used the individuals' real names.
minutes within the regular school day by adding 15 minutes before and 15 minutes after school.

Table 1. Pythagoras School information

<table>
<thead>
<tr>
<th>Grades*</th>
<th>PreK-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locale*</td>
<td>Rural</td>
</tr>
<tr>
<td>Racial demographics*</td>
<td>Predominately White</td>
</tr>
<tr>
<td>Percentage free and reduced lunch**</td>
<td>Roughly 75%</td>
</tr>
<tr>
<td>Total students</td>
<td>Fewer than 500 students</td>
</tr>
<tr>
<td>Student to teacher ratio*</td>
<td>Fewer than 20 students per teacher</td>
</tr>
<tr>
<td>Has or had a school improvement grant</td>
<td>YES</td>
</tr>
<tr>
<td>SIG intervention model</td>
<td>Transformation</td>
</tr>
<tr>
<td>21\textsuperscript{st}CCLC in 2013-14</td>
<td>YES</td>
</tr>
<tr>
<td>Has been or is a priority school under state waiver</td>
<td>YES</td>
</tr>
</tbody>
</table>

*From CCD Public school data 2010-11, 2011-12 school years.

**From Virginia Department of Education, 2014

Note: To protect the anonymity of schools all figures are approximations.

The most significant factor that shaped expanded learning time in Pythagoras was transportation. Since students already experienced long travel times in the mornings and afternoons due to the school's remote location, district leaders were concerned about requiring students to leave their homes earlier and return later. As a result, ELT was formatted to fit within the existing busing schedule in order to offer students longer learning opportunities while respecting family schedules.

Expanded Learning Time Strategies

The Minerva district and school leaders we interviewed define ELT as additional instructional time given to students before, during, or after school.

Pythagoras expanded its instructional time within the regular school day by 30 minutes, adding 15 minutes in the morning and 15 minutes in the afternoon. This was the most ideal option because it aligned the school day with the existing busing schedule and because teachers were already required to be in the building during the expanded timeframe. Prior to SIG, Pythagoras had a bell schedule that was similar to the other schools in Minerva, which meant that the instructional day started at 8:30a.m. and ended at 3:15p.m. Buses in Minerva dropped Pythagoras students first then traveled the 20-30 minutes to drop students at the High school. Thus under the existing bust schedule, students arrived at Pythagoras much earlier than districtwide start time of 8:30. Upon receipt of the SIG grant, school leaders expanded the learning time at Pythagoras by starting the instructional day at 8:15 in the morning and ringing the bell at 3:30 in the afternoon. Ms. Vargas, the school principal, elaborated on both the bus schedule and teacher time requirements:

On buses: Our busing is tied in with the high school schedule. So our students
are dropped off much earlier because it takes 20 to 30 minutes to get to the high school... We have those students [at Pythagoras] and are able to feed them breakfast and then still begin announcements at 8:10 so we can begin our instructional day at 8:15. And then in the afternoon those high school buses don’t really roll in there until about 3:40, so we’re able to get our car riders and our walkers on out the door and out of the way for safety reasons before those high school buses roll in.

On teacher time requirements: The teachers were required to be there [at Pythagoras] at 8:00 anyway, so that just means that they had a little less planning time in the mornings to get things ready. It didn’t really affect their day that much. In the afternoon... as soon as they bring the students up for bus duty, then the bus duty teachers load the buses. And so the ones that are here that are not on bus duty still get to leave at 3:30. So it didn’t affect their contract in any way.

In addition to expanding the school day by 30 minutes with the SIG award, Pythagoras also brought in fully qualified teachers to tutor students in English and math. At the time of the interview, the school no longer received SIG funding—the three-year grant ended in September 2013—but school and district staff have worked to maintain the tutoring program. The tutors are now funded by the State of Virginia under a Standards of Quality (SOQ) grant. Vargas credits some of the school’s progress on the state tests to the tutors, whom she says have been "tremendously helpful."

Pythagoras also made use of its federal 21st Century Community Learning Centers (CCLC) funding to provide low-achieving students with extra assistance. Originally, the tutoring services offered under the Title I and 21st CCLC programs worked in unison.† When Pythagoras met the state’s annual measurable objectives (AMO) for student achievement and became fully accredited, the school was no longer required to offer tutoring through Title I, and therefore 21st CCLC became the sole afterschool tutoring program. Vargas praised the 21st CCLC for allowing “so many things for students to take advantage of—enrichment opportunities that are hard to build in on just the regular school day. We also have an hour homework session in the afterschool program with highly qualified teachers to help.” Pythagoras chose not to take advantage of the flexibility in Virginia’s Elementary and Secondary Education Act waiver to use 21st CCLC funds to expand the school day because the school and district leadership felt that the 21st CCLC funding was more effectively used to support a traditional afterschool program.

Funding

Expanding learning time in the rural community of Minerva came with unique challenges, including taking on the new endeavor with fewer Title I dollars. Due to declining federal appropriations for Title I and other factors, the Minerva School District lost eight positions

† Under the No Child Left Behind Act, schools that had missed their AMOs were required to offer tutoring services to struggling students.
over the last few years. The district has “taken a hit on the federal funding side,” said one interviewee, and what was left of the federal Title I resources was used to maintain the district’s current staffing levels.

During the planning process for the SIG and ELT initiatives, school and district leaders sought to make sustainable changes that the school would have the funding and capacity to maintain even with possible budget cuts and the loss of SIG funds when the grant ended. “We were always keeping sustainability in the front of our minds because if we enact new policies that can only be supported through the SIG grant, then what are we going to do when it’s gone?” said Vargas. The federal 21st CCLC grant has provided some support even when other funds have diminished—which contributes to reason that both district and school leaders did not use 21st CCLC fund for ELT during the regular school day.

Minerva does receive some state funding that can be used district-wide, including Standards of Quality (SOQ) funding (see box A). The Minerva school district has used the SOQ prevention, intervention, and remediation funds to continue some of the initiatives, like tutoring and ELT, that were started under Pythagoras’ recently expired SIG. One district official noted that “we really, really rely on that money [the SOQ funding]” to sustain programs that had been previously been funded with the SIG.

**Box A. Standards of Quality Funding**

Virginia’s Standards of Quality (SOQ) funding is the state’s largest direct aid program to K-12 education. The SOQ budget of $5.3 billion in fiscal year 2014 amounted to 88.5% of all state education funding. The SOQ funds require a local matching effort that equaled $3.3 billion in FY 2014; remedial summer school is the only SOQ program that does not require a local effort. Local education agencies are allowed to exceed their minimum local effort requirement, and most do so.

SOQ funding is provided through 11 different state budget accounts. These accounts include a prevention, intervention, and remediation account. The Virginia constitution explains that prevention, intervention, and remediation funds “may be used to support programs for educationally at-risk students as identified by the local school board” (22.1-253.13:2.E).

Note: The information in this box was collected from the Virginia Department of Education (2013), the Virginia General Assembly Legislative Information System (n.d), Verstegen & Jordan (2007), and Verstegen & Barclay (2011).

**School Context**

All interviewees cited the longstanding collaborative relationship between school and district leaders in Minerva School District as a strength. One district official described how the school and district leaders worked as a team to design the expanded learning opportunities at Pythagoras:

*The three of us in particular had a lot of input, we did a lot of collaboration . . .*
Input from all of us went into that decision . . . We worked very, very well together, I think; [we] collaborated and got the best we could get for what money we had and where we were and what we needed.

Not only did the district and school leaders collaborate with each other, but they also had a strong working relationship with the Virginia Department of Education’s Office of School Improvement. One district official spoke very highly of the leadership at the state level:

> We are also able to talk with [the Virginia State Director of the Office of School Improvement] and her staff any time we have questions or concerns about any of our programs . . . especially with the four core areas. [She] is a wealth of information to us. She is a friend of Minerva County, I think, and we appreciate the relationship that we’ve built with her and she’s built with us.

Similarly, a collaborative relationship also existed between the Pythagoras School leadership and the teachers. As already noted, Principal Vargas frequently communicated with district leaders and also promoted strong cooperation at the school level. Vargas cited the school’s grade level meetings as a central component of the school’s academic success. During these meetings, teachers are given time for professional development and common planning while students take classes such as music or physical education or go to the school library. Vargas also discussed the collaboration involved in implementing ELT:

> Now my teachers are even begging me for more time for math, and we’re trying to carve out more and more time during the school day to get extra math in, and they’re coming up with some pretty creative ways to get that done. I’m of the philosophy that if you present me with a good idea I’ll be willing to look at it. I’m not the one that can make all the decisions of the building; it has to be a shared agreement. So when they [teachers] provide input then they seem to happier with it as well.

One district official also credited Vargas with making changes in Pythagoras’ environment to foster student learning: “[Vargas] has worked very diligently to change the culture to where it’s about the kids and about them being engaged in the classroom, and teaching from bell to bell, and teaching the right things the right way.”

When it came to expanding learning time, the district leaders worked to stay within the parameters of their local school board policies. Since the district and school leaders were able to add time within the existing bus schedule and teacher contract, they did not have to change any policies or establish any new requirements.

Since the changes to the schedule were already aligned to the busing schedule, school officials did not conduct an extensive parental outreach campaign. To notify parents of the shift in the length of the school day, school leadership used letters and printed the new start and end times in the student handbook. They also placed a notice on a message board near Pythagoras’ main office at the beginning of the school year.
Interviewees also suggested that another school initiative at Pythagoras may have been a factor in the success of ELT. Before receiving the SIG, the Pythagoras School actively sought out and employed extra teachers. Unlike other schools in the district, Pythagoras has full-time teachers in physical education and music, a librarian, and a guidance counselor (the case study participants refer to these personnel as specialty teachers). The presence of full-time specialty teachers allow for a rotating student schedule that gives core teachers more time for common planning and grade level meetings. The school also brought in one extra teacher for core subjects in 6th and 7th grade. One district official explained the benefits of these extra staff:

*Even the year before, or two years before the SIG grant...we actually staffed the 6th and 7th grade with four core area teachers. We could have done that with three and still maintained SOQ requirements, but we felt...that we needed a specialist in each of the four core areas, plus we had our specialty teachers that would be there full time. So it's really worked out well for Ms. Vargas and her staff to have those extra teachers...because, again, those [math, reading, science, and social studies] classes are a little smaller.*

### Challenges

Pythagoras did face some challenges in implementing ELT, but most of the challenges were due to the school’s location and rather than opposition from parents or school personnel.

As noted above, one district official reported that Pythagoras used “some unique, innovative” means for successfully overcoming the challenge of transportation. In the end, students were able to gain 30 minutes of ELT without having to get on their bus earlier or arrive home later.

Another challenge to ELT at Pythagoras is the inclement weather. A district leader noted that one year schools were closed for 29 days because of weather in the remote county. At the time of the interview, the district had already lost two school days before Thanksgiving due to snow.

Finding and keeping qualified teachers has also been a challenge in implementing ELT perhaps due in part to the district’s rural location. Pythagoras has had difficulty finding certified teachers to work during the school day and in the afterschool programs. Vargas commented on the issue:

*I think one of the biggest challenges is just finding highly qualified teachers to teach in the before or after school hours. We've found lots of retired teachers. Some would work [out], some would not, but I think that's probably our greatest challenge as far as [the] 21st Century afterschool program.*
Although the district has found the necessary tutors, one district leader acknowledged that no extra tutors are available if additional positions were needed.

Progress with ELT

School leaders, teachers, and students at Pythagoras have worked to successfully improve students’ standardized test scores in the past few years. District and school leaders attribute the success to many different factors, one of which is ELT. Vargas noted that the school has been accredited by the state for multiple years and has reached its annual measurable objectives for students overall (as distinct from meeting the AMOs for specific subgroups of students). Both of these accomplishments are “huge successes,” said Vargas. Before Pythagoras received a SIG and implemented its ELT program, the school was not fully accredited. However, Vargas credits the school’s recent academic success to more than ELT:

*I think it is multiple factors. It’s the expanded learning time before and after school. The during-the-day tutors help tremendously. The grade level meetings, being able to have those, to look at specific data for a specific student. The RTI [Response to Intervention] that we put in place the past couple of years . . . We’re part of the PBIS [Positive Behavior Interventions and Supports] for behavior support. So there’s just a multitude of things that we have put in place before, during, and continu[ing] after SIG.*

Despite not being able to directly link ELT to student academic success, both district and school leaders view ELT as a valuable tool for improving student achievement and developing the whole student, as discussed in greater detail in the next section.

Perceptions of ELT

When district and school leaders spoke about the effectiveness of ELT as a school improvement strategy, they referred to both the increase in instructional time during the school day and the quality of instruction. Vargas noted that while ELT did contribute to academic success, it also allowed students to experience activities beyond studying core academic subjects that were difficult to schedule during the regular school day without the expanded time:

*Part of the afterschool program allows for homework help, and then there’s work on specific fields, plus it gives the students enrichment time as well. With budget constraints, the art program had been cut, and this gives those students time to express themselves artistically as well. We also try to provide some field trips and bring in programs to expose students to some of the cultural aspects. With the free and reduced lunch percentages that we have, a lot of parents are not able to provide that for their children. So it gives them a well-rounded afterschool experience . . .*
The afterschool tutoring program benefited student and parents because students were able to get the extra support they needed in the school setting. Vargas explained:

And being able to help especially the older students with the homework help, and we do have highly qualified people in there helping with that. That helps them and their parents, because a lot of times I get calls from parents [who say], “I don't know how to do this 7th grade math.” So having that time with that professional in there to help them with those specific skills has greatly increased our math scores.

Overall, school and district officials spoke favorably about the ELT requirements embedded within the SIG program. They reported it was one among many key aspects of their overall school improvement plan at Pythagoras. Thus, they have worked to try and sustain these programs beyond the three-year grant by using state SOQ funding and 21st CCLC afterschool programs.

References


