

Prismatic Perspectives

Class Scheduling



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Overview

Education is a labor-intensive undertaking, particularly at the secondary level where student interests vary widely and classes are offered by subject. Personnel costs (salaries and benefits) typically consume 80 percent or more of the average school district budget. In 2009-10 nationally, personnel costs were exactly 80 percent.[1] While we have noticed this trending down in recent years in some districts, as they hold salaries constant and pass along some of the burden from increased healthcare costs to employees, even keeping personnel costs at 80 percent does not leave much room in the budget for classroom technology, fresh paint in the hallways, or royalty fees for the music for the Pirates of the Caribbean halftime show.

Looking deeper, we find that 55 percent of the typical district budget is for teachers.[2] And yet, scheduling at the secondary level is often an area school districts overlook in the annual battle to balance the budget. Too often, we find that:

- Secondary scheduling begins with the question, "How many teachers do we have?" rather than, "How many teachers do we need?" This leads school administrators to offer five sections of Biology I when there is only student demand for three sections.

- Secondary scheduling includes erroneous (and typically unwritten) assumptions that AP or other higher level classes should be small. This ignores the fact that the average class size in college is usually much bigger than 10 students, so holding that AP class enrollment down actually makes the experience less like college.
- Secondary scheduling typically holds onto some courses while at the same time creating barriers to adding new courses. The high school will have some sort of class size minimum before a new course can be added to the course catalog, but does not hold older classes to the same standard. Thus, a teacher may be unable to get the requisite 15 students needed to add a Broadcast Journalism class, but Underwater Basket Weaving continues to be offered every year, even though the class size is typically five.
- Secondary scheduling assumes that the "best" way to teach a particular subject is face-to-face, even if it means that the Latin III class will only have three students (which translates into a tremendous per-student teacher expense for that class"). This ignores the explosion of viable online alternatives. It also ignores the strong trend among colleges and universities to require online coursework. Way back in 2009, nearly 30 percent of college students took at least one course online.[3] We know anecdotally that number has continued to grow.

[1] Digest of Education Statistics, Table 214.

[2] Ibid.

[3] Class differences: Online education in the United States, 2010

So what should a district be doing to ensure it is as efficient as possible in secondary scheduling? First, they should consider such questions as:

- How do teacher workloads vary? Is the variation in teacher workload acceptable and in students' best interests?
- How are typically low enrollment subject areas staffed?
- How is technology deployed to extend the reach of the existing teacher workforce?

Second, school administrators, district administrators, and school board members should discuss and develop a district philosophy on secondary class sizes, along with the associated costs. District leaders could determine that the desired class size varies by subject (e.g., Algebra 1 versus a foreign language class), by sequence (e.g., Spanish I versus Spanish II), or by type (e.g., remedial versus AP English). Leaders should embrace online or other alternatives for typically low enrollment face-to-face classes. Leaders should also consider offering some typically low enrollment courses every other year, rather than every year, as a way to increase the average class size.



What have we found when we applied this perspective to data from some of our clients? We found a potential for significant savings in some districts, such as:

- For a large district (top 20 in the nation), Prismatic reviewed teacher staffing standards and course enrollment at all schools. We found opportunities for significant schedule compression at the high school level for low-enrollment courses. We recommended that the district eliminate its extremely low-enrollment AP courses in favor of its existing robust Virtual High School, which already offered AP courses taught by district teachers. We estimated this would yield an annual savings of approximately \$3 million.
- For an Arkansas district with 15,000 students, Prismatic analyzed secondary scheduling (middle, junior, and high) and the impact on staffing. We found efficient staffing processes in the middle schools, but room for improvement in the junior high and high schools. We made recommendations for retooling the scheduling processes that would lead to a reduction in teacher FTE costs of at least \$2 million per year.
- For a Virginia district with 5,500 students, Prismatic completed class size analysis, including middle/high scheduling and low-enrollment classes. Among other things, we found three sections of Agriculture Ecology, with a combined enrollment of just 29 and nine sections of World Geography with an average enrollment of just 17. We made recommendations to improve secondary class sizes/scheduling that would yield a minimum of \$250,000 in annual savings.
- For a medium-sized district in Oklahoma, Prismatic analyzed the impact of the course scheduling process on class sizes and number of teacher FTEs. We identified a number of classes with extremely low enrollments, including multiple low-enrollment sections for the same course. Prismatic recommended revamping the course scheduling process to reduce the need for some teacher FTEs. We have completed this same type of analysis in more than 20 other Oklahoma school districts, often finding potential savings from better scheduling, adoption of class enrollment thresholds, and strategic use of online coursework for subjects in which only a few students have interest.

**We hope you found this resource useful!
Don't forget to check out the rest of the Perspectives series.**

**If you have any questions, or if you are interested in learning more about
how Prismatic can help you, please contact us at
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