

**H.P. 1335 - L.D. 1850**

**Resolve, To Establish the Commission To Strengthen the Adequacy and Equity of Certain Cost Components of the School Funding Formula**

**Sec. 5. Duties. Resolved:** That the commission shall examine the reports and related work products presented to the Joint Standing Committee on Education and Cultural Affairs during the 126th Legislature as part of the independent review of the Essential Programs and Services Funding Act conducted pursuant to Resolve 2011, chapter 166 and shall develop a plan to strengthen the adequacy and equity of the following cost components included in the Essential Programs and Services Funding Act and other related education statutes.

**2. Support for economically disadvantaged students; Title I funds.** As part of the review and analysis of the cost components related to strengthening support for economically disadvantaged students, including the provision of funding under Title I of the federal Elementary and Secondary Education Act of 1965, 20 United States Code, Section 6301 et seq., referred to in this resolve as "Title I," and resources to provide extra help for struggling students, such as extended school days and summer school programs, the commission shall:

A. Collect school administrative unit spending data on the number of Title I teachers and education technicians in order to update the staffing ratios in the essential programs and services funding formula;

B. Conduct an analysis of the updated data collected on student-teacher and student-education technician staffing ratios in the essential programs and services funding formula in order to separate the groups of teachers into the following categories: classroom teachers, Title I teachers and teacher leaders or instructional coaches;

C. Develop a plan for adjusting the costs of the essential programs and services funding formula to account for the separate costs of classroom teachers, Title I teachers, education technicians and teacher leaders or instructional coaches;

**D. Conduct research and analysis of the structures, programs, costs and achievement impacts of evidence-based practices in other states related to extended school day and summer school programs and also analyze examples of extended school day and summer school programs provided by school administrative units in the State;**

E. Develop 2 or more models for funding and evaluating extended school day and summer school programs for inclusion in the essential programs and services funding formula; and

F. Project the financial impact of the adjustments under this subsection to the essential programs and services funding formula.

# Extended Day Program Support for Struggling Students

## I. Research on Extended Day Learning Opportunities

- School-aged youth are more likely to be unsupervised and at heightened risk of engaging in high-risk behaviors between 3:00 and 6:00 pm (Afterschool Alliance, 2013; Fight Crime, Invest in Kid, 2003).
- One study suggests that approximately 15% (8.4 million) of school-aged youth participate in afterschool programs; however, more than double that number (18.5 million) would participate in high quality afterschool activities if they were available (Afterschool Alliance, 2009). Between third and fifth grade, students' participation in afterschool programs declines, and there is evidence of increased self-care (Posner & Vandell, 1999).
- A cost-benefit analysis estimates that for every \$1 invested in out of school time programming, there is a \$10.51 return on investment, stemming from increased economic productivity and decreased crime and welfare costs (Newman, Smith, & Murphy, 2001).
- In a review of 35 studies, Lauer and her colleagues (2006) identify the strongest positive effect of afterschool program participation on math and reading for low income, at-risk youth, which is estimated at 1/10 of a standard deviation. Similarly, Posner and Vandell (1999) found that students who spent time in structured, academic programs after school experienced increases in their academic performance and decreases in disciplinary infractions.
- In a review of 9 rural out of school time programs, Harris, Malone, and Sunnanon (2011) found that the majority of the programs resulted in overwhelmingly positive outcomes for youth across various domains, including academic achievement, youth development, prevention of risky behaviors, and work force preparation.
- The provision of a universally free breakfast program was connected to increases in academic and psychosocial outcomes for participating youth (Murphy, Pagano, Nachmani, Sperling, Kane, & Kleinman, 1998). Additionally, the provision of breakfast decreases the experiences of food insecurity for low-income students (Bartfield & Ahn, 2011).
- Youth who participate in extramural programs exhibit improved healthy behaviors and positive outcomes, such as higher rates of exercise (Harrison & Naravan, 2003), increased motivation and self-efficacy (Mahoney, Larson, & Eccles, 2005), and increased civic engagement (Zaff, Moore, Paillo, & Williams, 2003).
- Youth involvement in extramural activities has been shown to curb participation in risk behaviors, such as school dropout (Mahoney, 2000), fighting (Linville & Huebner, 2005), and substance use (Harrison & Naravan, 2003).

- Extended learning opportunities provide a potential opportunity for students to connect with academics beyond the restraints of the traditional teaching methods employed in their classrooms. In contrast to traditional classrooms, afterschool programming provides a potential space for alternative learning strategies, which encourage the development of diverse skills in participating youth (NIOST, 2009).
- In their review of effective afterschool programs, Durlak and his colleagues (2007) identified a framework of characteristics: sequenced, active, focused, and explicit (SAFE). By this, the authors suggest that the types of learning opportunities must be sequenced to develop students' skills gradually and effectively, students must actively engage with learning materials (counter to drill and kill techniques), the content of the program must be focused on skills development, and the targeted learning outcomes must be explicit in the curriculum.
- A review of 9 rural programs identified particular challenges to participation germane to rural areas (Harris, Malone, and Sunnanon, 2011). First, rural programs often demonstrated lower rates of participation as compared to the suburban and urban alternatives. For example, previous research found that only 12% of rural youth participated in afterschool programs, as compared to 21% of suburban and 30% of urban youth. Depressed participation numbers were the result of a range of factors, including limited access to engaging programs and restricted transportation options. Additionally, there is evidence that there were fewer designated funds for afterschool program in rural areas. The fewest 21<sup>st</sup> Century Community Learning Center grants were awarded to rural schools and districts, and there were limited private funds available. Cumulatively, these impact both program development and sustainability. Finally, the authors note that it is especially difficult to recruit and sustain quality staff in rural areas. This is due to the combination of a limited workforce pool and restricted resources to pay afterschool practitioners competitive wages and to provide them with continuing professional development to enhance their practice.

## II. Estimated Costs of Extended Day Programs

### A. Picus model

The evidence-based model proposed by Picus and associates is built on the assumption that extended day programs would run every day that school is in session, and would require an equivalent of 25% of an average teacher's salary. Participation assumptions are similar to those for summer programs, at 50% of the number of students eligible for free and reduced priced lunch.

**Table 1: Picus EB Model Extended Day Program Costs**

Program Description	5 days per week, 2 hours per day, entire school year
Participation Estimate	50% of the 86,865 FRPL eligible students will participate (43,433)
Cost Basis	1 teacher per class of 15 participants, working at 25% of full time = 1 FTE teacher for 60 participating students and per 120 total FRPL eligible students
Cost Per Student	\$997 per participant
Total Cost	86,865 FRPL / 120 = 724 teachers needed 724 @ \$50,243 <sup>a</sup> mean FT salary x 19% benefit rate <b>= \$43.29M</b>

### B. National data estimates

National cost estimates available in prior research by RAND and the Wallace Foundation. The research incorporated a variety of program models, including academic, non-academic, and mixed emphases. For the model below, the participation rate mirrors the assumptions of the Picus EB model, but the time estimate more closely reflects the hours observed in Maine programs (i.e. 4 days per week instead of 5, first and last weeks off). As with summer programs, costs per student are higher in high school than for elementary school.

**Table 2: National Extended Day Program Cost Estimates  
(based on published research)**

Program Description	Est. 2 hours per day, 4 days/week, 34 weeks/yr (270 hours)	
Participation Estimate	50% of the 86,865 FRPL eligible students will participate (43,433), estimated as 28,957 K-8 students and 14,476 teens	
	K-8	High School
Cost Basis	\$4 per hour per student	\$8 per hour per student
Cost Per Participating Student	\$1,080 x 28,957 = \$31.3M	\$2,160 x 14,476 = \$31.3M
Total Cost	<b>= \$62.6 M</b>	

Maine Program Cost Estimates: Information available for 2 programs with explicit academic components

*Program 1: Elementary students*

2 hours per day, Monday – Thursday, 32 weeks (256 hours total)

\$90,500 per year for 50 students attending regularly

Cost: \$1810 per student or \$7 per hour per student

*Program 2: Middle and high school students*

2 hours per day, Monday – Thursday (number of weeks not given; estimated at 34 weeks)

\$195,000 per year for 90 regular attendees and 250 total students served over the year

Cost: \$ 780 per total student served at any level of participation, or \$2160 per regular participant; \$8.00 per regular participant/hour, or \$3 per total students served/hour.

For this cost model, participation levels are again estimated at 50% of the total number of students eligible for free and reduced price lunch. Program intensity reflects the actual practice found in both Maine-based programs. Note that the actual cost estimates for elementary students are substantially higher than the national cost estimates per student per hour. The high school cost estimate is from the high end of the range reflecting regular participation, as this is consistent with the national costs. The wide range in per-student costs depending on how “enrollment” is defined reflects the variation in how students are targeted and counted in participant data.

**Table 3: Maine-based Extended Day Program Cost Estimates**

Program Description	2 hours per day, 4 days/wk, 34 weeks/yr (270 hours)	
Participation Estimate	50% of the 86,865 FRPL eligible students will participate (43,433), estimated as 28,957 K-8 students and 14,476 teens	
	K-8	High School
Cost Basis	\$7 per hour per student	\$8 per hour per student
Cost Per Participating Student	\$1,890 x 28,957 = \$54.7M	\$2,160 x 14,476 = \$31.3M
Total Cost	<b>= \$ 86.0 M</b>	