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Analysis of Essential Programs and Services Components: FY 2020 Final Report

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Analysis of Essential Programs and Services Components: FY 2020 Final Report

Supplies & Equipment and Specialized Services Components

Report to

Maine Department of Education

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Essential Programs and Services (EPS) Final Report, FY 2020 Supplies & Equipment and Specialized Services Components

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Summary Assessment of Adequacy and Policy Options for EPS Supplies & Equipment and Specialized Services Components

Background

The Maine Education Policy Research Institute's (MEPRI's) FY 2020 contract with the Maine Department of Education included the review of six funding components that are allocated on a per-pupil basis. The six components, and their FY2019 per pupil allocations, were:

- 1. Supplies and equipment (\$378 PK-8; \$521 9-12)
- 2. Professional Development (\$65)
- 3. Instructional Leadership Support (\$29)
- 4. Student Assessment (\$49)
- 5. Instructional Technology (\$107 PK-8; \$322 9-12)
- 6. Co- & Extra-Curricular Learning (\$40 PK-8; \$125 9-12)

The first of the per-pupil amount components—supplies and equipment—is the largest, comprising more than the remaining five elements combined (referred to collectively as the "specialized services" components).

When conducting these individual reviews, MEPRI was also tasked with taking an overarching look at these components and making recommendations for combining, eliminating, and/or otherwise restructuring them in order to streamline the EPS cost model. This section of the report provides the results of the summary cross-component analysis, along with our recommendations. The individual component reviews are compiled in subsequent sections.

The FY2020 component review cycle also included a synthesis of Charter School findings culled from the various recent MEPRI reports, and preliminary analyses related to the Career and Technical Education funding model. The Charter School and CTE findings have been compiled as separate stand-alone reports.

Cross-Component Analysis

Total Allocation and Expenditure

In aggregate, the combined allocation in these six components was greater than expenditures by \$7.9 million. Thus, these components taken as a whole are adequate to corresponding recent spending. In some areas, especially Supplies and Equipment, allocations were higher than spending. In others, notably Instructional Technology, allocations were lower than spending. This suggests that a rebalancing or reorganization of the per-pupil allocation amounts may not only streamline the formula but also improve the fit of the EPS model to current educational practice.

Table 1. Estimated FY2019 Allocation and Expenditure by ComponentEstimated Totals (Smillions)

| | Estimated Totals (villimens) | | | |
|---|------------------------------|-------------|------------|-----------|
| | Allocation | Expenditure | Difference | Adequate? |
| Supplies & Equipment | \$76.3 | \$46.0 | \$30.3 | Yes |
| Specialized Services | | | | |
| 1. Professional Development | \$11.8 | \$12.1 | -\$0.4 | No |
| 2. Instructional Leadership Support* | \$5.2 | \$3.6 | \$1.6 | Yes |
| 3. Student Assessment | \$8.9 | \$6.3 | \$2.5 | Yes |
| 4. Instructional Technology** | \$31.3 | \$51.8 | -\$20.5 | No |
| 5. Co- & Extra-Curricular Learning*** | \$12.0 | \$17.6 | -\$5.7 | No |
| Total Specialized Services | \$69.2 | \$91.5 | -\$22.4 | No |
| Total Supplies & Equipment and Specialized Services | \$145.5 | \$137.5 | \$7.9 | Yes |

^{*}Expenditure in the broader financial category of Improvement of Instruction totaled 20.1 million, \$117 per pupil, including non-personnel costs of \$2.3 million, \$13 per pupil.

Per-pupil Allocation and Expenditure

The per-pupil allocations and expenditures for each of these EPS components and corresponding financial areas are summarized below in Table 2. Each individual component, including the methods for our analysis, is discussed in detail in the report sections that follow this introductory cross-case summary.

^{**}Instructional Technology does not include hardware and software expenditure of \$75 per pupil for PK-8 and \$142 for 9-12, estimated total of \$17.3 million.

^{***}Expenditure listed is 100% of co-curricular expenditure plus 10% of extra-curricular net expenditure.

Table 2. FY2019 Per-Pupil Allocation and Expenditure by Component (in \$)

| | Level | Allocation | Expenditure | Difference |
|---|-------|------------|-------------|------------|
| Cumling & Equipment | PK-8 | 378 | 231 | 147 |
| Supplies & Equipment | 9-12 | 521 | 307 | 214 |
| Specialized Services | | | | |
| 1. Professional Development | PK-12 | 65 | 67 | -2 |
| 2. Instructional Leadership Support* | PK-12 | 29 | 20 | 9 |
| 3. Student Assessment | PK-12 | 49 | 35 | 14 |
| 4 Instructional Technology** | PK-8 | 107 | 278 | -171 |
| 4. Instructional Technology** | 9-12 | 322 | 306 | 16 |
| 5 Ca & Extra Curricular Lagraina*** | PK-8 | 40 | 39 | 1 |
| 5. Co- & Extra-Curricular Learning*** | 9-12 | 125 | 229 | -104 |
| | PK-8 | 147 | 317 | -170 |
| Total Specialized Services | 9-12 | 447 | 535 | -88 |
| | PK-12 | 143 | 122 | 21 |
| Total Specialized Services and Supplies & | PK-8 | \$525 | \$548 | -23 |
| Total Specialized Services and Supplies & | 9-12 | 968 | 842 | 126 |
| Equipment | PK-12 | 143 | 122 | 21 |

^{*}Expenditure in the broader financial category of Improvement of Instruction totaled 20.1 million, \$117 per pupil, including non-personnel costs of \$2.3 million, \$13 per pupil.

Note that in the area of Instructional Technology, the allocation for 9-12 students appears to be adequate to meet schools' expenditures, but substantially lower allocation for each PK-8 student does not. The Instructional Technology report provides substantial detail on the history of that funding component and its interaction with the Maine Learning Technology Initiative (MLTI). Likewise, the structure of the co-curricular and extracurricular learning component is more complex than other per-pupil components. The EPS formula is only intended to cover a fixed portion (10%) of extra-curricular costs, which influences the evaluation of adequacy. The component review provides a more complete comparison of allocations to spending.

Policy Options

The total funding allocated through these six components is adequate to meet recent expenditures. However, the adequacy of the individual components varies, with some allocating more than schools are spending, and some allocating less. We therefore recommend that these components be restructured to streamline the overall EPS model while maintaining the overall

^{**}Instructional Technology does not include hardware and software expenditure of \$75 per pupil for PK-8 and \$142 for 9-12, estimated total of \$17.3 million.

^{***}Expenditure listed is 100% of co-curricular expenditure plus 10% of extra-curricular net expenditure.

level of resources. Table 3 provides a summary of the recommendations and options presented across each of the individual reports of findings.

Table 3. Summary of EPS Per-Pupil Component Reviews & Recommendations

| Key Findings | Policy Options / Recommendations |
|---|---|
| I. Supplies and | d Equipment |
| This component provides for non-personnel school costs in Regular Instruction, Special Education, Student & Staff Support, and School Administration. (The personnel costs in these areas are allocated through to personnel ratios and benefits percentages.) Expenditures for both PK-8 and 9-12 grade levels were well below the 2019 EPS perpupil allocation (\$231 vs. \$378 for PK-8, \$307 vs. \$521 for 9-12). | Keep Supplies & Equipment as a separate EPS component, even if other components are combined. Either (a) keep the same allocation or (b) reduce the allocation to equal actual expenditures while increasing the allocations for instructional technology and instructional staff support. |
| II. Specialize | ed Services |
| A. Co- and Extra-Cu | urricular Activities |
| This component corresponds to part of the instruction budget category rather than support. For PK-8, the EPS allocation matched comparable expenditure, i.e., 100% of co-curricular plus 10% of extra-curricular. For 9-12, the allocation was below comparable expenditure. Between 2015 and 2019, grade 9-12 spending increases continued to outpace inflation | Keep Co-Curricular & Extra-Curricular Activities as a separate EPS component, even if other components are combined. If current levels of co- and extra-curricular activities are deemed necessary to give students equitable opportunity to achieve the Maine Learning Results, then an increase in the 9-12 EPS allocation may be warranted. |
| B. Instructiona | l Technology |
| Instructional technology expenditures for 9-12 students, excluding hardware and software, were below the EPS allocation. PK-8 expenditures of \$278 per pupil, however, were above the EPS allocation of \$107. Hardware and software costs continue to be funded outside of the annual EPS operating allocation. | Increase PK-8 allocation to achieve funding adequacy. Match increases in the PK-8 allocation with decreases in allocations for overfunded components including Supplies & Equipment. Reassess the value of the required technology plans and consider ending targeting provision. Continue to monitor the adequacy of non-EPS state funding for hardware and software. Explore opportunities for regional instructional technology services. |

| Vov. Find | ings | Policy Ontions / Pesammandations |
|--|---|--|
| Key Find | | Policy Options / Recommendations seed combined component) |
| Three EPS components | • | Combine the three components to create a |
| | | |
| Leadership Support, St | | broader EPS component, Instructional Staff |
| and Professional Devel | • | Support. |
| a budget category calle | ed stail support or | Set the allocation of the new component |
| support of instruction. | | equal to actual per-pupil expenditure. |
| | C.1. Instructional Lea | |
| The Instructional Leader | • • | Keep allocation or reduce to equal |
| relatively small and na | | expenditure, or |
| Expenditures were below | | Expand scope to include all improvement |
| in SAUs that provided s | | of instruction activities and increase |
| instructional leadership | 0. | allocation accordingly, or |
| | | Combine Instructional Leadership Support |
| | | with PD and Student Assessment to form |
| | | School Staff Support. |
| | C.2. Professional | Development |
| Unlike prior years, actu | ıal expenditure was | Match EPS allocation to actual including |
| slightly higher than the | EPS allocation | school administrator PD. |
| The comparison did no | t include PD | Include tuition reimbursement benefits in |
| expenditure for school | administrators. | the EPS Benefits Ratios component while |
| The EPS component incomposition | cludes funding for | removing them from the PD component. |
| tuition reimbursement | benefits, which are | [Note: requires recalculation of Benefits |
| categorized as an instr | uctional expenditure. | percentages.] |
| _ | • | Combine PD with Instructional Leadership |
| | | Support and Student Assessment to form |
| | | School Staff Support. |
| | C.3. Student A | |
| Expenditure was below | the EPS allocation. | Keep allocation or reduce to equal |
| The original purpose of | | expenditure, or |
| as a separate EPS comp | | Combine Student Assessment with PD and |
| additional funding for | • | Instructional Leadership Support to form |
| comprehensive local as | - | School Staff Support. |
| which are no longer re | • | • • |
| | 1 | |

The estimated cost or savings of the various policy options are presented in Table 4 below. Additional details on these calculated values are included as Appendix A. Appendix B provides another depiction of these cost categories using Maine's budget category accounting framework.

Table 4. Aggregate Cost of Recommended Changes

| Component | Recommended Option | | Per-Pupil Allocation | Estimated Cost/(Savings) \$millions |
|---|-----------------------|---------------------|----------------------------|-------------------------------------|
| Supplies & Equipment | SE2 | Update to Actual | PK-8: \$218 9-12: \$294 | (32.6)* |
| Instructional Technology | IT2 | Update to Actual | PK-8: \$278 9-12: \$306 | 20.5 |
| Co-Curricular & Extracurricular Learning | CE1 | Status Quo | PK-8: \$40 9-12: \$125 | - |
| School Staff Support | SSS | Combine and Enhance | PK-12: \$221 | 14.1 |
| Aggregate Net Cost of Recommended Options | | | 3.0 | |

^{*}If School Staff Support is added as a category, its non-personnel costs should be removed from the Supplies & Equipment component, which lowers the per-pupil amounts from \$231 to \$218 for PK-8 and from \$307 to \$294 for 9-12 students and increases the estimated cost savings by \$2.3 million from \$30.3 million to \$32.6 million.

| Estimated Total Cost | \$3.0 million |
|----------------------|---------------|
| State Share at 55% | \$1.7 million |
| Local Share at 45% | \$1.3 million |

Appendix A. Cost Estimate Calculations

| | | Per-Pupil | Per-Pupil | Estimated |
|-----------|---|-------------------------------------|--------------------|----------------|
| | Option | Allocation, | Allocation, | Cost/(Savings) |
| | - | PK-8 | 9-12 | \$millions |
| | Supplies | & Equipment | | 1 |
| SE1 | Status Quo | PK-8: \$378 | 9-12: \$521 | - |
| SE2 | Update to Actual | PK-8: \$231 | 9-12: \$307 | (30.3) |
| | Instructio | nal Technology | , | . , |
| IT1 | Status Quo | PK-8: \$107 | 9-12: \$322 | - |
| IT2 | Update to Actual | PK-8: \$278 | 9-12: \$306 | 20.5 |
| IT3 | Enhance (Include Hardware and Software*) | PK-8: \$353 | 9-12: \$448 | 37.8 |
| * The MLT | I program, which is separate fro | om EPS, current | tly provides fund | ing for |
| | al technology hardware and soft | | <i>y</i> 1 | 0.0 |
| | Co-curricular & E | xtracurricular . | | |
| CE1 | Status Quo | PK-8: \$40 | 9-12: \$125 | - |
| CE2 | Update to Actual* | PK-8: \$39 | 9-12: \$229 | 5.7 |
| *Based on | 100% of co-curricular expendit | ure plus 10% of | extracurricular | expenditure |
| | Profession | al Developmen | t | |
| PD1 | Status Quo | \$ | 665 | - |
| PD2 | Update to Actual | \$ | 667 | 0.4 |
| PD3 | Enhance (Include School Administrators) | \$69 | | 0.7 |
| SSS | Combine three components | (See Instructional Staff Support be | | oport below) |
| | Studen | t Assessment | | , |
| SA1 | Status Quo | \$49 | | - |
| SA2 | Update to Actual | \$35 | | (2.5) |
| SSS | Combine three components | (See Instru | uctional Staff Sup | oport below) |
| | Instructional | Leadership Sup | pport | |
| ILS1 | Status Quo | \$29 | | - |
| ILS2 | Update to Actual | \$ | \$20 | |
| | Enhance (change to | | | |
| ILS3 | Improvement of | \$117 | | 16.0* |
| | Instruction)* | | | |
| SSS | Combine three | (See Sc | hool Staff Suppo | ort below) |

^{*}If enhanced to Improvement of Instruction or if School Staff Support is added as a category, its non-personnel costs may be removed from the Supplies & Equipment component, which would increase the estimated cost savings of updating the Supplies & Equipment Component by \$2.3 and partially offset the \$16.0 million cost of enhancing this component.

Combined Component: School Staff Support

| | Option | Per-Pupil Allocation | Estimated Cost/(Savings) \$millions |
|-----|----------------------|--|-------------------------------------|
| SQ | Status Quo | PD: \$65 SA: \$49 ILS:\$29 Total: \$143 | - |
| SSS | Combine and Enhance* | \$221 | 14.1 |

^{*}To include all Improvement of Instruction costs and to include school administrator professional development. (The total of \$221 equals \$69 for PD plus \$35 for student assessment plus \$117 for improvement of instruction.)

Appendix B: Conceptual Framework for EPS by Financial Category

| Financial Category | Corresponding EPS Components | |
|--|------------------------------------|----------------------|
| Financial Category | Personnel | Other |
| Regular Instruction: | - | |
| Regular Instruction Programs | Teacher, Tech Salary & Benefits | Supplies & Equipment |
| Alternative Education | reactier, recti Salary & Belletics | Supplies & Equipment |
| PK-2 Instruction Programs | K-2 | |
| English as a 2nd Language | LEP | |
| Gifted and Talented | Gifted & Taler | nted |
| Special Education Instruction: | Special Education Model | Supplies & Equipment |
| CTE Instruction: | CTE Mode | l |
| Other instruction* | Co- & Extra-curr | icular |
| Student and staff support: | | |
| Student Support Services | | |
| Attendance and Social Work | ? | Supplies & Equipment |
| Guidance Services | Guidance Salary & Benefits | Supplies & Equipment |
| Health Services | School Nurse Salary & Benefits | Supplies & Equipment |
| Instructional Technology | Instructional Tech | nnology |
| Other Student Support Services | ? | Supplies & Equipment |
| Staff Support Services | | |
| Improvement of Instruction | Instructional Leadership Support | Supplies & Equipment |
| Instructional Staff Training | Professional Develo | pment** |
| Library Services | Librarian, Tech Salary & Benefits | Supplies & Equipment |
| Student Assessment | Student Assess | ment |
| System administration: | System Administ | tration |
| School administration: | School Admin Salary & Benefits | Supplies & Equipment |
| Transportation and buses: | Student Transport | ation*** |
| Facilities maintenance: | Operation & Maintena | nce of Plant |
| Debt service | none | |
| All other expenditures, including school | | |
| lunch: | none | |

^{*}Post-secondary enrollment and summer school do not correspond to an EPS component.

Note: The **additional pupil weight for economic disadvantaged students** does not correspond to any particular financial category. The **Salary Matrices** and **Regional Adjustment** apply to School Personnel Salaries.

^{**}The EPS Professional Development component includes tuition reimbursement for instructional staff, which is an employee benefits cost within the Instruction financial category.

^{***}Buses are funded outside the EPS cost model.

EPS Component Report of Findings: Professional Development

Background

Professional Development is an Essential Programs and Services (EPS) component in the category of Specialized Services. The EPS Committee of the Maine State Board of Education found that "sustained professional development is key to helping staff acquire and maintain the new skills and knowledge necessary for continually improving curriculum, instruction and assessment practices." (SBOE, 1998) The EPS Committee established that some professional development must be local and should be funded within the EPS model, while others programs may be more effective at the state or regional level and should be funded outside of the EPS Model. The component provides funding for district-level programs. The EPS Committee recommended a funding rate of \$50 per student. The EPS allocation in 2019, which includes annual increases for inflation, was \$65.

The EPS Professional development component includes support for school instructional staff, including teachers, educational technicians, guidance counselors, and librarians. Professional development costs for district level staff are covered under other model components including system administration and transportation. Costs for non-instructional school staff, notably school administrators, are not specifically included in the components of the EPS cost model (Silvernail, 2011).

Methodology

Data

An analysis of expenditures of Maine School Administrative Units (SAUs) was conducted using fiscal year 2019 data. Expenditure data was provided to MEPRI by the Maine Department of Education (MDOE) as reported by Maine SAUs and extracted using similar queries to past component reviews. Query information can be found in Appendix A.

Enrollment data was used to calculate per-pupil amounts. The October attending counts for the 2018-19 school year were obtained from the Maine Department of Education website. Per-pupil expenditures were calculated on a statewide basis, aggregating all expenditures and dividing by the corresponding statewide attending enrollment.

The data represent all Maine public SAUs with attending students and professional development expenditures. State operated education organizations, such as Education in Unorganized Territories, the Maine School of Science and Mathematics, and Long Creek Youth Development Center, were not included. Additionally, Maine Indian Education units receive substantial federal funding and were excluded. Charter schools were analyzed separately.

Analysis

Professional development expenditures by category were analyzed, including percentages and amounts per pupil. Per-pupil expenditures were compared to the EPS per-pupil allocation. The range was also identified. Changes in per-pupil expenditures were also analyzed. In addition, an analysis of expenditure by SAU size was conducted.

Findings

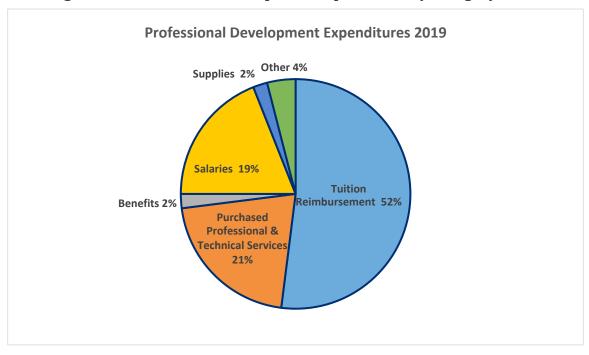
Expenditure by Category

A breakdown of professional development expenditures by category may be seen in Table 1 and Graph 1. Tuition reimbursement for all instructional personnel at \$35 per pupil accounted for 52% of professional development expenditure. Expenditure on purchased professional and technical services was \$14 per pupil, 21% of the total. Salaries and Employee Benefits together made up \$15 per student and 21% of the total. Supplies and other expenses were \$4 per pupil.

Table 1: Expenditures by Category

| Description | Expenditure | Percent of Total | Statewide Per-Pupil Expenditure |
|---|--------------|---------------------|---------------------------------------|
| Tuition Reimbursement | \$5,698,194 | 52% | \$35 |
| Purchased Professional & Technical Services | \$2,259,945 | 21% | \$14 |
| Salaries | \$2,102,015 | 19% | \$13 |
| Employee Benefits | \$261,025 | 2% | \$2 |
| Supplies | \$183,412 | 2% | \$1 |
| Other | \$480,080 | 4% | \$3 |
| Total | \$10,984,671 | 100% | \$67 |

Figure 1: Professional Development Expenditure by Category, 2019



Per-Pupil Expenditure Compared to EPS Per-Pupil Allocation

In 2019, Professional Development expenditures were reported by 178 SAUs. The per-pupil expenditure or \$67 was slightly above the EPS per-pupil allocation of \$65, and shown in Table 3.

Table 3: Professional Development Expenditures
Compared to EPS FY 2019

| | FY 2019 |
|--------------------------|--------------|
| SAUs | 178 |
| Total Expenditure | \$10,984,671 |
| Attending Enrollment | 164,920 |
| Per Pupil Expenditure | \$67 |
| EPS Per-pupil Allocation | \$65 |

Change Over Time

From FY 2010 to FY 2019, expenditures on professional development increased faster than the EPS per-pupil allocation, as seen in Table 4. Spending on professional development increased 45% from 2010 to 2019 compared to the EPS inflation-based increases of 16%. As a result, on a statewide basis, the per-pupil expenditure was around 3% greater than the EPS allocation in FY 2019.

Table 4: Professional Development Expenditures from FY 2010 to FY 2019

| | FY 2010 | FY 2015 | FY 2019 |
|--------------------------|-------------|-------------|--------------|
| SAUs | 146 | 167 | 178 |
| Total Expenditure | \$7,992,374 | \$9,392,432 | \$10,984,671 |
| Attending Enrollment | 172,132 | 168,170 | 164,920 |
| Per Pupil Expenditure | \$46 | \$56 | \$67 |
| EPS Per-pupil Allocation | \$56 | \$61 | \$65 |

Variation

The per-pupil spending on Professional Development by SAUs ranged from \$0.27 to \$754. Graph 2 below shows the per pupil expenditures compared to the EPS per-pupil allocation (vertical line). More than half (54%) of SAUs spent less than or equal to the EPS

per-pupil allocation. The median per pupil expenditure was \$59, which is below the EPS per-pupil allocation of \$65.

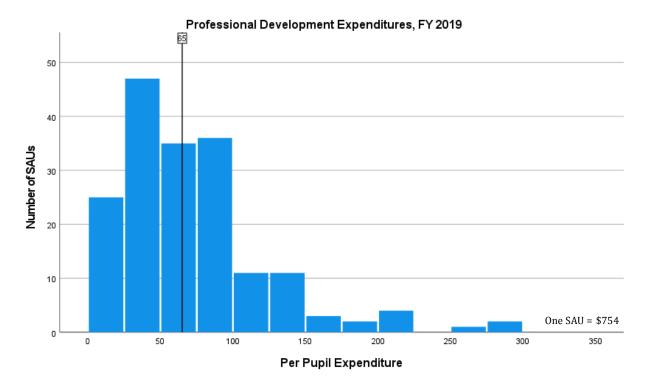


Figure 2: Dispersion of Professional Development Expenditures, FY 2019

By SAU Enrollment Size

Expenditures in each size grouping were equal to or somewhat greater than the EPS allocation. As may be seen in Table 3, schools with fewer than 300 attending students had a per-pupil expenditure 22% higher than the EPS per-pupil allocation. Per pupil expenditures of schools with 300 to 1200 attending students was 8% higher. Schools with over 1,200 students had expenditure equal to the per-pupil allocation.

Table 3: Professional Development Expenditures by Size, FY 2019

| | <300 | 300-1,200 | >1,200 | |
|---|-----------|-------------|-------------|--------------|
| | Attending | Attending | Attending | All SAUs |
| | Students | Students | Students | |
| Number of SAUs with reported expenditures | 75 | 48 | 55 | 178 |
| Total Expenditure | \$755,904 | \$2,160,570 | \$8,068,198 | \$10,984,671 |
| Attending Enrollment | 9,618 | 30,673 | 124,629 | 164,920 |
| Aggregated Per Pupil Expenditure | \$79 | \$70 | \$65 | \$67 |
| EPS Per-Pupil Allocation | \$65 | \$65 | \$65 | \$65 |

By Grade Level

Spending on professional development by grade level was roughly proportional to the student population of SAUs reporting expenditures. The PK-8 grade level accounted for 69% of the professional development spending and had 71% of the students. Grades 9-12 accounted for 31% of the professional development expenditures and 29% of students. The EPS allocation does not vary by grade level.

Charter Schools

All charter schools operating in 2019 reported professional development expenditures which totaled \$69,990. The statewide per pupil expenditure was \$29, which is less than the \$67 reported statewide for local SAUs. The per-pupil expenditure for virtual charter schools was \$15.

Table 1: Charter School Expenditure on Professional Development, FY 2019

| | In-person Charter Schools | Virtual Charter Schools | All Charter Schools |
|---|------------------------------|----------------------------|------------------------|
| Number of SAUs with reported expenditures | 7 | 2 | 9 |
| Total Expenditure | \$57,930 | \$12,060 | \$69,990 |
| Attending Enrollment | 1,628 | 826 | 2,454 |
| Per-Pupil Expenditure | \$36 | \$15 | \$29 |
| EPS Per-pupil Allocation | \$65 | \$65 | \$65 |

Charter schools used purchased professional services to provide the bulk of their professional development. Purchased professional employee training and development represented 77% of the total expenditure, travel represented 20% with the remaining 2% of spending on books. No tuition reimbursement or employee salaries and benefits were reported.

Table 2: Charter School Professional Development Expenditure by Category, FY 2019

| | Expenditure | Per-Pupil Cost | Percent of Total |
|------------------------------------|-------------|----------------|------------------|
| Purchased Professional Development | \$54,209 | \$22 | 77% |
| Travel - Professional Development | \$14,106 | \$6 | 20% |
| Books and Periodicals | \$1,676 | \$.68 | 2% |
| Total | \$69,990 | \$29 | 100% |

Discussion and Policy Considerations

While in prior reviews, the EPS allocation has been greater than the actual expenditures for professional development for school instructional personnel, in the current review, actual expenditures were slightly higher than the EPS allocation. A small increase in the per-pupil allocation may be necessary to maintain adequacy in this component.

Because the allocation is no longer greater than expenditures, explicitly adding school administrative personnel professional development to the component and to the comparison expenditure queries may improve the overall adequacy of the cost model and the helpfulness of the required component reviews.

An option to improve the alignment of the EPS cost model components to the expenditure categories in the accounting handbook and model chart of accounts is to include instructional staff tuition reimbursement within the employee benefits percentages rather than the professional development component. Teacher tuition reimbursement is included in the financial and budget category for instruction, whereas teacher professional development is included in staff support. Realigning would improve the ability to compare budget summaries to EPS allocations by category.

Furthermore, MEPRI is recommending combining several components into a larger Instructional Staff Support component. The components include Instructional Leadership Support and Student Assessment as well as Professional Development. As this policy option involves multiple EPS components and thus is beyond the scope of the individual component reviews, a more detailed description of this proposal and its cost are forthcoming separately from MEPRI.

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Appendix A, Professional Development

Expenditure Query Filters for EPS Component Review for Professional Development

| Profession | al Development (PD) for | Instructional Staff | | |
|----------------|--|--|--|--|
| | Query 1 | Query 2 | Query 3 | Query 4 |
| SAUs | 105 | 151 | 97 | 68 |
| \$Total | \$5,903,187 | \$4,87,585 | \$184,894 | \$89,899 |
| Fund | 1000 General Fund | 1000 General Fund | 1000 General Fund | 1000 General Fund |
| Program | 0000 Overhead | 1100 Regular Elementary; 1120 K-2; 1121 Pre-K; | 0000 Overhead | 0000 Overhead |
| | | 1122 4-Year-Old; 1200 Regular Secondary | | |
| Function | 2213 Instructional Staff Training | 1000 Instruction | 2120 Guidance | 222 <u>0</u> Library and Media |
| Object | all | 2510 Tuition Reimbursement Professionals; 2520 Tuition Reimbursement Aides/Assistants 3300 PD Services; 3310 Training on Assessment 5810 Travel for PD | 2510 Tuition Reimbursement Professionals; 3300 PD Services; 3310 Training on Assessment; 5810 Travel for PD | 2510 Tuition Reimbursement Professionals; 2520 Tuition Reimbursement Aides/Assistants; 3300 PD Services; 3310 Training on Assessment; 5810 Travel for PD |
| Cost Center | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/ Regional; 950 Elementary Grades; 990 Secondary Grades | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/ Regional; 950 Elementary Grades; 990 Secondary Grades | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/ Regional; 950 Elementary Grades; 990 Secondary Grades | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/ Regional; 950 Elementary Grades; 990 Secondary Grades |

EPS Component Report of Findings: Instructional Leadership Support

Background

When the Essential Programs & Services (EPS) cost model was being developed, the EPS Committee determined that implementing the Maine Learning Results would require leadership to coordinate curricula within classrooms, across grade levels, and across schools in an SAU (Maine State Board of Education, 1999). Resources were also deemed necessary to provide leadership during the development and implementation of comprehensive local assessment systems that were being developed at the time. These responsibilities were deemed above and beyond what is provided in EPS for the administration and management of schools and School Administrative Units (SAUs). It was also concluded that providing this support for leadership on a per-pupil, non-targeted basis would allow SAUs the most flexibility to determine what type of leadership they need and at what position and grade level. Support for Instructional Leadership was initially set at \$20 per pupil, rising to \$25 in 2015 and \$29 in 2019.

Methodology

To determine the adequacy of the EPS allocation under the Instructional Leadership component, MEPRI researchers conducted an analysis of relevant spending patterns of Maine's public School Administrative Units and compared them to the EPS per-pupil funding allocation. Spending variation and trends were also analyzed, as was spending in SAUs of different sizes. The analyses were conducted using the same methods as the 2017 Instructional Leadership Component Review (Morris & Johnson, 2017).

Data

Expenditure data detail was provided by the Maine Department of Education from the financial data system as reported by Maine SAUs for Fiscal Year 2018-19. Unlike many EPS components, Instructional Leadership Support does not correspond closely to an entire functional category or subcategory of expenditure data. The model comparison for instructional leadership support instead relies on identifying relevant accounting codes—

in this case, several kinds of stipend expenditures. Expenditures for four types of instructional leadership stipends were included in the analysis: Department Head, Curriculum Work, Teacher Leader, and Teacher Mentor. A breakdown of these expenditures appears in Table 1 below. A more detailed description of the account codes included in the expenditure data query can be found in Appendix A.

Table 1: Instructional Leadership Expenditure by Object Code, FY 2019

| Description | Expenditure | Percent of Total |
|-------------------------|-------------|------------------|
| Department Head Stipend | \$360,814 | 27% |
| Curriculum Work Stipend | \$ 318,578 | 24% |
| Teacher Leader Stipend | \$580,684 | 44% |
| Teacher Mentor Stipend | \$ 61,472 | 5% |
| Total | \$1,321,548 | 100% |

Instructional leadership stipend expenditures were reported by 33 SAUs, which represent only 17% of Maine's local public districts. This number is lower than for most EPS components reviewed due to the lack of a closely corresponding financial category. In the EPS school model, educational leadership is provided by paying extra stipends to educational leaders. Thus, only SAUs who fulfilled the instructional leadership function by providing stipends were considered in this analysis. School districts that provide instructional leadership support through a different mechanism, such as by hiring dedicated staff who are not fulfilling a leadership role on top of a classroom teaching position, are not captured by this definition and therefore not included in the analyses.

Educational organizations operated by the state—magnet schools, Long Creek Youth Development Center, and Education in Unorganized Territories—were excluded from the analysis. These organizations are funded fully and directly by the state, not through the EPS funding allocation model. Maine Indian Education units receive substantial federal funding and were also excluded from the analysis as their spending patterns may not be comparable. One public charter school reported instructional leadership stipend expenditures and was considered separately.

Analysis

A statewide per-pupil amount was calculated by dividing the total statewide expenditure by the total attending pupils, which produces an accurate picture of per-pupil costs at the state level. The attending student counts used to calculate per-pupil expenditures were obtained from the MDOE NEO database. Only SAUs reporting instructional leadership stipends were included in the student counts.

Findings

As may be seen in Table 2, Maine's public School Administrative Units spent \$1,321,548 on instructional leadership stipends in fiscal year 2019. The statewide perpupil spending was \$20, approximately one third less than the EPS rate of \$29.

Table 2: Per Pupil Expenditures on Instructional Leadership, FY 2019

| | 2019 |
|---------------------------------|-------------|
| Number of SAUs | 33 |
| Total Expenditures | \$1,321,548 |
| Attending Enrollment | 64,602 |
| Per-Pupil Expenditure Statewide | \$20 |
| EPS Per-Pupil Allocation | \$29 |

Variation

Instructional leadership stipend expenditures varied significantly, ranging from less than \$1 per pupil to \$113 per pupil. Of the SAUs reporting instructional leadership stipend expenditures, 61% spent at or below the EPS per-pupil allocation, while 39% spent above the EPS per-pupil allocation. The median SAU per-pupil spending, which is another way of looking at average spending, was \$17, slightly below the \$20 statewide per-pupil spending and substantially below the EPS per-pupil allocation of \$29.

Change Over Time

Table 3 shows a history of expenditures and EPS allocations from 2010 through 2019. From Fiscal Year 2010 to Fiscal Year 2019, statewide per-pupil spending increased

by six dollars, or 43%. During the same period, the EPS per-pupil allocation also increased by six dollars due to an annual inflation factor being applied. The EPS per-pupil allocation remained above both the statewide per-pupil expenditure and the median throughout the period.

Table 3: Instructional Leadership compared with prior years

| | 2010 | 2015 | 2019 | |
|---------------------------------|-------------|-------------|-------------|--|
| Number of SAUs | 45 | 34 | 33 | |
| Total Expenditures | \$1,200,639 | \$1,254,032 | \$1,321,548 | |
| Attending Enrollment | 85,923 | 66,056 | 64,602 | |
| Per-Pupil Expenditure Statewide | \$14 | \$19 | \$20 | |
| EPS Per-Pupil Allocation | \$23 | \$25 | \$29 | |

By District Size

Few small and very small SAUs reported instructional leadership stipend expenditures, as may be seen in Table 5. Those that did reported notably higher per-pupil spending than the statewide per-pupil expenditure: \$36 for districts under 300 pupils and \$44 for districts between 300 and 1,200 attending students, compared to \$20 statewide.

Table 5: Instructional Leadership by Size

| | Very Small (<300) | Small (300-1,200) | Medium and Large (>1,200) | All SAUs |
|----------------------------------|-------------------|-------------------|------------------------------|----------|
| Number of SAUs | 6 | 3 | 24 | 33 |
| Per-Pupil Expenditure by Size | \$36 | \$44 | \$20 | \$20 |
| Median SAU Per-Pupil Expenditure | \$28 | \$14 | \$17 | \$17 |

Charter Schools

Charter schools were examined separately. One charter school reported instructional leadership stipend expenditures, \$1,340 for teacher-leader stipends. That amounted to \$6.50 per pupil, considerably below the \$29 EPS rate.

Discussion and Policy Considerations

The Instructional Leadership component is relatively small and has a narrow purpose. Part of the original purpose was to support the development local assessment systems, which are no longer being required (see also the report of findings for the student assessment component). The analysis has shown, based on the comparison of EPS perpupil allocations to actual expenditures, that the Instructional Leadership component appears adequate to its narrowly tailored purpose. Actual expenditures within the SAUs studied are consistently well below the EPS allocation. Keeping the status quo or reducing the allocation to equal actual expenditures would result in adequate resources for the narrow purposes of this EPS component as it is currently defined.

There are at least two policy options, which are not mutually exclusive, other than keeping the status quo or reducing the allocation to equal actual expenditures. First, the Instructional Leadership Support component could be replaced with a broader component, such as Improvement of Instruction, which would correspond to an established financial category. A second option, either instead of or in addition to the first option, would be to combine several smaller components into one. A specific example, the Professional Development, Student Assessment, and Instructional Leadership Support (or Improvement of Instruction) components could be combined into a single Instructional Staff Support component. Further analysis of these options, which involve multiple EPS components, is addressed in a summative report of FY2020 component reviews.

References

- Maine State Board of Education, (1999) Essential Programs and Services: Equity and Adequacy in Funding to Improve Learning for All Children. Augusta, ME: Essential Programs and Services Committee.
- Morris, L. & Johnson, A. (2017). Analysis of Essential Programs and Services Components: Instructional Leadership Support. Gorham, ME: University of Southern Maine, Maine Education Policy Research Institute.

Appendix A, Instructional Leadership

| In | Instructional Leadership Support Query | | |
|----------------------|---|--|--|
| Number of SAUs | 33 | | |
| Total Expenditure | \$1,321,548 | | |
| Fund | 1000 General Fund | | |
| Program | 0000 Overhead; 1100 Regular Elementary; 1120 K-2; 1121 Pre-K; 1122 4-Year-Old; 1200 Regular Secondary; 4100 ELL; 4200 Alternative | | |
| Function | 1000 Instruction; 2200-2212, 2214-2219 Improvement of Instruction/Curriculum; 2220-2225 Library | | |
| Object | 1510 Department Head Stipend; 1520 Curriculum Stipend; 1560 Teacher Leader Stipend; 1570 Teacher Mentor Stipend | | |
| Cost Center | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/Regional; 900-945 Systemwide; 950 Elementary Grades; 990 Secondary Grades | | |

EPS Component Report of Findings: Student Assessment

Background

Student assessment was determined by the Maine State Board of Education to be among the Essential Programs and Services (EPS) necessary for all Maine students to achieve academic success. The EPS committee of the State Board envisioned that schools would "create comprehensive local assessment systems which contain multiple assessments and measures of student performance" School districts were to be responsible for certifying that students achieved the Maine Learning Results. While state assessments such as the Maine Educational Assessments may be used for this purpose, they cover few subject areas. Thus, the committee felt that SAUs would need to develop comprehensive assessment systems that were "valid, fair and defensible." Following a review of the local assessment systems in 2006, the mandate for developing these systems was repealed.

In order to cover the costs of developing local assessment systems, the EPS taskforce initially set the per-pupil rate for the component at \$100 per student. Once the mandate for local assessment systems was rescinded, the rate dropped to \$40 in FY 2008². The per-pupil rate for FY 2019 for all grade levels is \$49.

Student Assessment funds are targeted, which means SAUs may receive assessment funds only if they are in compliance with state and federal law, rules, and regulations on assessments. All SAUs have been receiving student assessment funding. The original intent of the targeted EPS components was that SAUs would receive funds "only if there were evidence that the funds would be spent on (the) program." (Silvernail, 2011).

¹ The Essential Resources Needed to Improve Student Equity in Achieving the Learning Results Standards. Pg. 23.

² Silvernail, et al; Review of Selected Components in the Essential Programs and Services Funding Formula, 2011-12, MEPRI, January, 2012

Methodology

Data

SAU expenditure detail from the 2018-19 schools year was provided by the Maine Department of Education. Assessment-related expenditures include salaries, benefits, supplies and equipment, dues and fees, purchased professional and technical services, purchased property services and other related services. A detail listing of the query used to identify student assessment expenditures is available in Appendix A.

The data represent all Maine School Administrative Units (SAUs) with attending students and assessment expenditures. Enrollment data was used to calculate per-pupil amounts. The October attending count for the 2018-19 school year was taken from the Maine Department of Education website.

State funded educational organizations such as magnet schools, education in unorganized territories and Long Creek Youth Development Center were excluded. Maine Indian Education units, which receive substantial federal funding, were excluded. Charter schools were analyzed separately.

Analysis

Per-pupil expenditures were calculated on a statewide basis, summing all expenditures and dividing by the corresponding statewide attending enrollment. To analyze variation across the state, a per-pupil amount for each SAU was calculated and used to determine the median and range of spending and to generate histograms. The changes in expenditure and allocation from 2010 to 2019 were also examined.

Findings

A total of \$4.1 million was spent on Student Assessment in 2019. Fifty-six percent of SAUs reported assessment expenditures, representing 69% of Maine's public school students. This is in line with previous reviews. A t-test (p<.01) showed a statistically significant difference in the enrollment size of SAUs reporting assessment costs compared to those not reporting assessment costs. The average student enrollment of SAUs reporting

assessment costs was 1,151, which was nearly double the average enrollment of SAUs not reporting assessment costs (661 students). Statewide per-pupil spending of \$35 was below the EPS allocation of \$49.

Table 1: Assessment Expenditures, FY 2019

| | FY2019 |
|---|-------------|
| Number of SAUs with reported expenditures | 103 |
| Total Expenditure | \$4,098,127 |
| Attending Enrollment | 118,587 |
| Per-pupil Expenditure | \$35 |
| Per-pupil EPS Allocation | \$49 |

Expenditures by Category

Table 2 presents a breakdown of expenditures by category. Salaries and employee benefits were 57% of assessment costs. Supplies & equipment comprised 14% of assessment costs. Dues and fees represented 1% of assessment spending. Purchased professional services accounted for 22%, and purchased property services and other purchased services represented 6%.

Table 2: Assessment Expenditures by Category, 2019

| Description | Total | Per-pupil | % of Total |
|--|-------------|-----------|------------|
| Salaries | \$1,898,703 | \$16 | 46% |
| Employee Benefits | 447,912 | \$4 | 11% |
| Supplies & Equipment | \$595,546 | \$5 | 14% |
| Dues and Fees | \$45,105 | \$.38 | 1% |
| Purchased Professional and Technical Services | \$886,266 | \$7 | 22% |
| Purchased Property Services and Other Purchased Services | \$224,595 | \$2 | 6% |
| Total | \$4,098,127 | \$35 | 100% |

Variation

Table 3 compares the statewide per-pupil expenditure, median SAU per-pupil expenditure, and range of spending for those districts that reported assessment expenditures. The range of per-pupil spending varied from \$1.66 to \$165 per-pupil. Slightly more than half (54%) of the SAUs spent less than \$20 per-pupil. At the other end of the

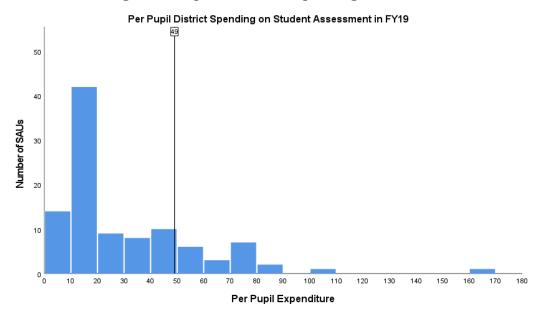
range, two SAUs spent more than \$100. Twenty percent of SAUs spent more than the EPS allocation of \$49 per-pupil, and the remaining 80% spent less.

Table 3: Variation in Assessment Expenditure, FY 2019

| | Per-pupil |
|--------------------------------|--------------|
| | Expenditure |
| Statewide Expenditure | \$35 |
| SAU Median Expenditure | \$19 |
| Range of SAU level Expenditure | \$1.66-\$165 |
| Per-pupil EPS Allocation | \$49 |

Graph 1 below shows the distribution of SAU per-pupil expenditure on assessment in comparison to the EPS allocation of \$49 represented by the vertical line.

Figure 1: Dispersion of SAU spending on Assessment, FY 2019



Change in Spending Over Time

Table 4 shows changes in spending over time. The statewide per-pupil expenditure has risen 30% since 2015 and 35% since 2010. From 2010 to 2019, per-pupil expenditure was consistently below the EPS allocation. The median per-pupil expenditure fluctuated between \$16 and \$19. The comparable CPI inflation rates were 19% from 2010 to 2019 and 8% from 2015 to 2019, indicating that spending on assessment has outpaced inflation.

Table 4: Comparison of Assessment Expenditures by Fiscal Year

| | FY2010 | FY2015 | FY2019 |
|---------------------------------|--------|--------|--------|
| Per-pupil Expenditure Statewide | \$26 | \$27 | \$35 |
| Median Per-pupil SAU level | \$19 | \$16 | \$19 |
| Per-pupil EPS Allocation | \$41 | \$45 | \$49 |

Charter Schools

Comparison with Local SAUs

Table 5 compares charter school spending with local SAUs. Assessment costs were reported for six of the nine charter schools. The statewide per-pupil expenditure was \$25, varying from \$3.36 to \$59. This is lower than the \$35 per-pupil spending of other SAUs. Given the small number of charter schools with relevant expenditure data, these differences may not be significant.

Table 1: Assessment Expenditures, Charter Schools Compared with SAUs, 2019

| | In-person Charter Schools | Virtual Charter Schools | All Charter Schools | Local SAUs |
|--|---------------------------------|-------------------------------|------------------------|---------------|
| Number of SAUs Reporting Expenditures | 4 | 2 | 6 (60%) | 103 |
| Attending Enrollment | 1,097 | 826 | 1,923 | 118,587 |
| Total Expenditure | \$11,521 | \$37,028 | \$48,549 | \$4,098,127 |
| Average Per-pupil Expenditure | \$11 | \$45 | \$25 | \$35 |
| Range Per-pupil SAU | \$3-\$15 | \$32-\$59 | \$3-\$59 | \$1.66-\$165 |

Charter School Spending by Category

Assessment-related expenditures of charter schools can be seen in Table 6. Purchased professional and technical services made up 10% of total expenditures. Purchased property services 34% and other purchased services 40% of assessment expenditures and general supplies 17%. No assessment-related salary or benefit expenses were reported by charter schools, unlike the spending pattern for local SAUs.

Table 2: Charter School Assessment Costs by Category, 2019

| Description | Amount | % of Total |
|---|----------|------------|
| Purchased Professional and Tech. Services | \$4,855 | 10% |
| Purchased Property Services | \$16,390 | 34% |
| Other Purchased Services | \$19,250 | 40% |
| General Supplies | \$8,054 | 17% |
| Total | \$48,549 | 100% |

Discussion and Policy Considerations

An examination of actual expenditures of \$35 on student assessment supports the conclusion that the EPS per-pupil amount of \$49 for the Student Assessment Component is adequate or more than adequate. That said, it may be possible to improve the EPS cost model by considering a broader change involving the Student Assessment component.

There was a reason Student Assessment was originally designed as a separate, targeted component. It was considered necessary because of the new statutory mandate for SAUs to develop local assessment systems. Using past actual expenditures for student assessment would have underestimated the additional needs for fulfilling the new requirements, therefore a separate component with a per-pupil allocation higher than prior actual expenditures was adopted in the EPS cost model, and funds were targeted.

Between the implementation of the EPS funding model for the 2005-06 Fiscal Year and now, the situation has changed. The requirement to develop Comprehensive local assessment systems no longer applies and there is no longer a specific reason to conclude that statewide actual expenditures would be inadequate for the student assessment needs. Thus it would not be inappropriate to update the EPS allocation to reflect prior statewide actual expenditures, adjusted for inflation. There is also no longer a specific reason to retain Student Assessment as a separate, targeted category subject to additional state review. Instead, we propose combining it with other appropriate components into a broader and non-targeted Instructional Staff Support component that would be more aligned to Maine's model chart of accounts and financial reporting system. Further discussion of this proposal is forthcoming in the final report of FY2020 component reviews.

Appendix A, Student Assessment

| Student Assessment Query | | |
|--------------------------|---|--|
| SAUs | 103 | |
| \$Total | \$4,098,127 | |
| Fund | 1000 General Fund | |
| Program | 0000 Overhead | |
| Function | 2240 Student Assessment | |
| Object | All | |
| Cost Center | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/Regional; 900-945 Systemwide; 950 Elementary Grades; 990 Secondary Grades | |

EPS Component Report of Findings: Supplies and Equipment

Background

In 1997 The Essential Programs and Services (EPS) Committee of the State Board of Education was charged with identifying the resources needed for all Maine students to achieve the Maine Learning Results and to estimate the cost of providing those resources. The EPS committee noted supplies and equipment were necessary to support school personnel in instruction, curriculum, student and staff services, and school administrative functions and thus included supplies and equipment as a component of the EPS cost model. Examples of school supplies and equipment expenditures include but are not limited to: instructional supplies, books, periodicals, equipment used in classrooms and school offices, repairs, communications, dues and fees. Supplies and equipment for district services are funded through their respective district-level EPS components rather than this school-level component.

The EPS per-pupil allocations are determined separately for grades PK-8 and 9-12. The original FY 2006 per-pupil allocation was set at \$285 for grades PK-8 per-pupil and \$430 for grades 9-12. These rates have been increased annually using an inflation factor and the FY2019 EPS per-pupil allocations were \$378 for PK-8 and \$521 for grades 9-12.

Methodology

Data

An analysis of expenditures of Maine School Administrative Units (SAUs) was conducted using fiscal year 2019 data. Expenditure data detail was provided to MEPRI by the Maine Department of Education (MDOE) as reported by Maine SAUs and extracted using similar queries to past component reviews. Query information can be found in Appendix A.

Supplies and equipment for regular instruction, special education instruction, guidance, health, library services, improvement of instruction, and school administration are included in this component. Supplies and equipment for instructional programs for

Career and Technical Education, English Language Learners, and co-and extra-curricular activities are funded in those components and not included in this analysis. Likewise, supplies and equipment for instructional technology, professional development, student assessment, system administration, student transportation, and operation and maintenance of plant are included in their respective EPS components.

State operated education organizations including magnet schools and Education in Unorganized Territories are not funded through the EPS cost model and were excluded from the analysis. Maine Indian Education was also excluded as it receives significant funding from the federal government and may not have typical spending patterns. Charter schools were considered separately.

Analysis

Expenditures were analyzed on a per-pupil basis, to allow for comparison to EPS per-pupil amounts. A statewide per-pupil expenditure was calculated by dividing the statewide expenditure by the statewide attending enrollment. The EPS model funds supplies and equipment for grades PK-8 and 9-12 at different rates. Thus, expenditures at those grade levels are analyzed separately for comparison. Spending was analyzed at the SAU level and examined for the impact of outliers. This, along with the median per-pupil expenditure gives a more complete picture of spending patterns. SAU spending patterns were compared with prior years. In addition to expenditures by grade level, analysis was done on expenditures by budget category and subcategory, and types of supplies or equipment. As was done in the 2017 component analysis, additional analysis was done on the impact of size on SAU per-pupil expenditure.

Findings

Maine's regular public schools spent \$43.5 million on Supplies and Equipment in FY 2019, approximately \$253 per-pupil. A breakdown of these expenditures by type of service or commodity is shown in Table 1. In 2019, the largest percentage of expenditures was 31% on instructional supplies. Books and periodicals followed at 20% of the total.

Equipment purchases were 7% of the total and the amounts spent on other purchased supplies was 13%. Supply-related services were smaller portions of the total.

Table 1: Supplies and Equipment Expenditures by Service or Commodity FY 2019

| Description | Amount | Per-pupil | Percent |
|--------------------------|--------------|-----------|---------|
| Instructional Supplies | \$13,522,038 | \$79 | 31% |
| Books & Periodicals | \$8,769,861 | \$51 | 20% |
| Other Supplies Purchases | \$5,607,000 | \$33 | 13% |
| Equipment | \$3,071,834 | \$18 | 7% |
| Repair & Maintenance | \$2,534,616 | \$15 | 6% |
| Rentals | \$2,547,004 | \$15 | 6% |
| Communications | \$2,295,082 | \$13 | 5% |
| Dues and Fees | \$2,922,600 | \$17 | 7% |
| Travel | \$1,008,259 | \$6 | 2% |
| Printing & Binding | \$414,843 | \$2 | 1% |
| Other | \$776,173 | \$5 | 2% |
| Total | \$43,469,310 | \$253 | 100% |

Supplies and Equipment by Budget Category

Table 2 below shows spending by budget category. The majority of spending on supplies and equipment was for regular instruction (\$27.1 million, 62% of the total, \$157 per pupil). Supplies and Equipment for special education totaled \$3.2 million (7% of the total, \$19 per pupil). Student and staff support comprised \$6.6 million (15% of the total, \$38 per pupil) and school administration also \$6.6 million (15% of the total, \$39 per pupil). Figure 1 is a visual representation including the percentages.

Table 2: Supply Expenditures by Budget Category, FY 2019

| Budget Category | Expenditure | Per-pupil | Percent |
|-------------------------|--------------|-----------|---------|
| Regular Instruction | \$27,075,759 | \$157 | 62% |
| Special Education | \$3,183,440 | \$19 | 7% |
| Student & Staff Support | \$6,585,017 | \$38 | 15% |
| School Administration | \$6,625,094 | \$39 | 15% |
| Total | \$43,469,309 | \$253 | 100% |

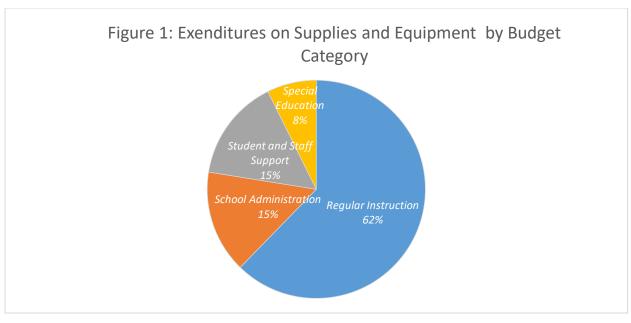


Table 3 provides a breakdown by sub-category of the \$6.6 million spent on supplies and equipment for student and staff support. Of this, 85% was spent on staff support and 15% on student support. The largest sub-category by spending was, library and media, which comprised half of the total. Improvement of instruction and curriculum development, the second largest, comprised 30.5% of the supply expenditures for Student and Staff Support.

Table 3: Supplies and Equipment Expenditures on Student and Staff Support

| | Total | Per-pupil | Percent |
|--------------------------|-------------|-------------|----------|
| | Expenditure | Expenditure | of Total |
| Student Support | | | |
| Guidance | \$628,405 | \$3.65 | 9.5% |
| Health | \$284,470 | \$1.65 | 4.3% |
| Other Student Support | \$93,286 | \$.54 | 1.4% |
| Staff Support | | | |
| Instruction & Curriculum | \$2,008,580 | \$11.68 | 30.5% |
| Library & Media | \$3,265,663 | \$18.99 | 49.6% |
| Other Staff Support | \$304,614 | \$1.77 | 4.6% |
| Total | \$6,585,018 | \$38.28 | 100% |

Per-Pupil Expenditure Compared to EPS Per-Pupil Allocation

Expenditures for both PK-8 and 9-12 grade levels were below the 2019 EPS Per-Pupil Allocation. The statewide average expenditure of \$231 per-pupil for grades PK-8 is \$147 less than the EPS per-pupil allocation of \$378. The statewide average of \$307 for grades 9-12 is \$214 less than the per-pupil allocation of \$521. Table 4 compares expenditures to EPS allocation by grade level.

Table 4: Supplies and Equipment Expenditures Compared to EPS Allocation

| | PK-8 | 9-12 | Total | |
|---------------------------------|--------------|--------------|--------------|--|
| Number of SAUs | 185 | 109 | 188 | |
| Total Expenditure | \$28,453,620 | \$15,015,690 | \$43,469,310 | |
| Attending Enrollment | 122,988 | 48,999 | 171,987 | |
| Per-pupil Expenditure Statewide | \$231 | \$307 | \$253 | |
| EPS Per-pupil Allocation | \$378 | \$521 | \$419* | |

^{*}Average weighted by enrollment

Variation

The per-pupil expenditures for Supplies and Equipment vary across the state. For PK-8, the SAU per-pupil expenditures ranges from \$69 to \$3,515, with a median of \$250. For 9-12, the SAU per-pupil expenditures on Supplies and Equipment ranged from \$149 to \$2,544, with a median of \$331. At the PK-8 grade level, 80% of Maine SAUs spent at or below the EPS per-pupil allocation of \$378. Similarly, 86% of SAUs spent at or below the per-pupil allocation of \$521 at the 9-12 grade level.

Table 5: Variation in Supplies and Equipment Expenditures Compared to EPS Allocation

| | PK-8 | 9-12 |
|----------------------------------|---------|---------|
| | | |
| Per-Pupil EPS Allocation | \$378 | \$521 |
| Per-Pupil Expenditure | \$231 | \$307 |
| Median SAU per-pupil expenditure | \$250 | \$331 |
| Lowest per-pupil expenditure | \$69 | \$149 |
| Highest per-pupil expenditure | \$3,515 | \$2,544 |

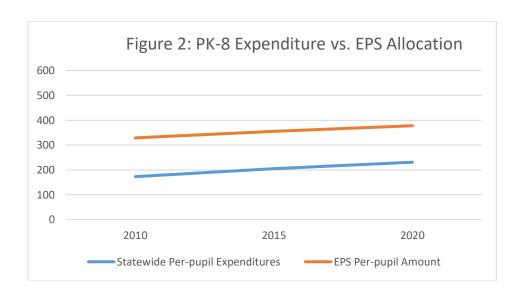
Change over time

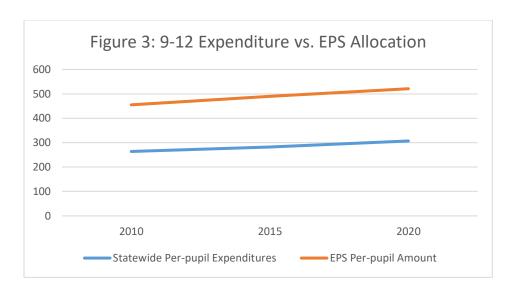
Statewide per-pupil expenditures have remained below EPS per-pupil allocations for both PK-8 and 9-12 during the entire period from 2010 to 2019. Table 5 as well as Figures 2, 3, and 4 show the changes over time. The EPS per-pupil allocations have been adjusted annually by an inflation factor. In the nine years from 2010 to 2019, statewide per-pupil expenditures increased 33% from \$173 to \$231 for PK-8. For 9-12, the increase was 16% from \$264 to \$307. Overall, the increase was 11% from \$201 to \$253.

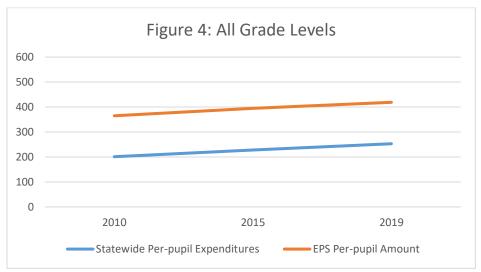
Table 5: Per-pupil Expenditures on Supplies and Equipment FY 2010, 2015 & 2019

| | FY 2010 | FY 2015 | FY 2019 |
|---------------------------------|---------|---------|---------|
| Grades PK - 8 | | | |
| Per-pupil Expenditure Statewide | \$173 | \$205 | \$231 |
| EPS Per-pupil Amount | \$329 | \$355 | \$378 |
| Grades 9 - 12 | | | |
| Per-pupil Expenditure Statewide | \$264 | \$282 | \$307 |
| EPS Per-pupil Amount | \$455 | \$490 | \$521 |
| Grades PK - 12 | | | |
| Per-pupil Expenditure Statewide | \$201 | \$228 | 253 |
| EPS Per-pupil Amount | \$365* | \$395* | 419* |

^{*}Average weighted by enrollment







Comparison by School Size

Table 6 compares PK-8 per-pupil expenditures by size. There is a statistically significant difference in the district per-pupil expenditure between districts with fewer than 300 attending students and larger districts. (ANOVA, p>.001). SAUs with fewer than 300 attending students have a statewide per-pupil expenditure of \$340 which is 52% higher than the \$223 statewide per-pupil expenditure of larger districts. Expenditures in each category are below the EPS allocation of \$378 per pupil.

Table 6: Supplies and Equipment Expenditures by Size, PK-8

| PK-8 | Enrollment <300 | Enrollment 300-1,200 | Enrollment >1,200 | Total |
|---------------------------------|--------------------|-------------------------|----------------------|--------------|
| Number of SAUs | 81 | 46 | 58 | 185 |
| Total Expenditure | \$2,985,591 | \$5,653,842 | \$19,814,187 | \$28,453,620 |
| Attending Enrollment | 8,783 | 22,450 | 91,755 | 122,988 |
| Statewide Per-pupil Expenditure | \$340 | \$252 | \$216 | \$231 |
| Lowest Per-pupil Expenditure | \$90 | \$69 | \$97 | \$69 |
| Highest Per-pupil Expenditure | \$3,515 | \$607 | \$411 | \$3,515 |

Table 7 compares grades 9-12 per-pupil expenditures by size. There is a statistically significant difference in SAU per-pupil expenditure by size. (ANOVA, P<.001). SAUs with fewer than 300 attending students have a statewide per-pupil expenditure of \$497 compared with \$401 for SAUs between 300-1,200 and \$282 for SAUs with more than 1,200 students. Expenditures in each category are below the EPS allocation of \$521 per pupil.

Table 7: Supplies and Equipment Expenditures by Size, Grades 9-12

| 9-12 | Enrollment <300 | Enrollment 300-1,200 | Enrollment >1,200 | Totals |
|---------------------------------|--------------------|-------------------------|----------------------|--------------|
| Number of SAUs | 16 | 36 | 57 | 109 |
| Total Expenditure | \$502,591 | \$3,296,802 | \$11,216,296 | \$15,015,690 |
| Attending Enrollment | 1,012 | 8,223 | 39,764 | 48,999 |
| Statewide Per-pupil Expenditure | \$497 | \$401 | \$282 | \$307 |
| Lowest Per-pupil Expenditure | \$269 | \$149 | \$157 | \$149 |
| Highest Per-pupil Expenditure | \$2,544 | \$827 | \$533 | \$2,544 |

Charter Schools

Maine public charter schools were analyzed separately. Charter schools, including virtual charter schools, may have different operating models than a typical local school, which may result in different per-pupil expenditures on items such as supplies and equipment. As seen in Table 8, total supplies and equipment expenditure was \$1.5 million or \$594 per pupil. The statewide charter school PK-8 per-pupil expenditure was \$627 and

the 9-12 per-pupil expenditure was \$574. These are higher than the respective EPS allocations of \$378 (PK-8) and \$521 (9-12).

Table 8: Charter School Expenditures on Supplies and Equipment, FY 2019

| | | FY 2019 | |
|-------------------------------|-----------|-----------|--------------|
| | PK-8 | 9-12 | All Charters |
| Number of Charter Schools | 6 | 7 | 9 |
| Total Expenditure | \$557,343 | \$899,137 | \$1,456,480 |
| Attending Enrollment | 888 | 1,566 | 2,454 |
| Per-Pupil Expenditure | \$627 | \$574 | \$594 |
| Median Per-Pupil Spending | \$435 | \$559 | \$396 |
| Lowest Per-pupil Expenditure | \$215 | \$92 | \$215 |
| Highest Per-pupil Expenditure | \$1,536 | \$1,372 | \$1,419 |

In-Person Charter Schools Compared to Virtual Charter Schools

A comparison between in-person and virtual charter school PK-8 expenditures is shown in table 9. In-person charter schools had a per-pupil expenditure of \$348 and a median expenditure of \$374, both slightly below the EPS amount of \$378. The per-pupil expenditure of virtual charter schools was \$1,434 and a median of \$1,423, likely reflecting a different operating model than local schools and in-person charter schools.

Table 9: In-person and Virtual Charter School Expenditures on Supplies and Equipment, PK-8

| | In-Person Charter Schools | Virtual Charter Schools | All Charter Schools |
|-------------------------------|------------------------------|----------------------------|------------------------|
| Number of SAUs | 4 | 2 | 6 |
| Total Expenditure | \$230,333 | \$327,010 | \$557,343 |
| Attending Enrollment | 660 | 228 | 888 |
| Per-pupil Expenditure | \$348 | \$1,434 | \$627 |
| Median Per-pupil Spending | \$374 | \$1,423 | \$254 |
| Lowest Per-pupil Expenditure | \$215 | \$1,311 | \$215 |
| Highest Per-pupil Expenditure | \$458 | \$1,536 | \$1,536 |

The comparison at the high school level is shown in Table 10. In-person charter schools per-pupil and median expenditures were \$310 and \$374 respectively, both less

than the EPS allocation of \$521. Virtual charter school per-pupil and median spending was \$987 and \$993 respectively, both above the EPS allocation, likely reflecting a different operating model than local schools and in-person charter schools.

Table 10: In-person and Virtual Charter School Expenditures on Supplies and Equipment, 9-12

| | Regular Charter Schools | Virtual Charter Schools | All Charter Schools |
|---------------------------------|----------------------------|----------------------------|------------------------|
| Number of SAUs | 5 | 2 | 7 |
| Total Expenditure | \$300,146 | \$598,991 | \$899,137 |
| Attending Enrollment | 968 | 598 | 1,566 |
| Statewide Per-pupil Expenditure | \$310 | \$987 | \$574 |
| Median Per-pupil Spending | \$374 | \$993 | \$559 |
| Lowest Per-pupil Expenditure | \$92 | \$614 | \$92 |
| Highest Per-pupil Expenditure | \$781 | \$1,372 | \$1,372 |

Discussion and Policy Considerations

The EPS Supplies and Equipment component provides funding for non-personnel school operating costs related to regular instruction, special education, guidance, health, library services, improvement of instruction, and school administration. Each of these areas also has personnel ratios and benefits allocated in the EPS model to cover their costs. Based on a comparison of EPS per-pupil allocation to actual expenditure, the Supplies and Equipment component is shown to be at least adequate, as expenditure has been consistently below the allocation. Either keeping the status quo or reducing the allocation to equal actual expenditures would result in adequate resources for supplies and equipment in the areas covered by this specific component when considered by itself.

MEPRI does not recommend reducing the Supplies and Equipment component allocation unless the inadequacy of other components of the cost model is addressed at the same time. A reduction in the Supplies and Equipment component may be paired with increases in the areas of instructional technology and instructional staff support, which are examined more closely in other EPS component reports of findings. Additionally, the non-personnel costs associated with instructional technology may be incorporated into the Supplies and Equipment component, which would result in a smaller reduction in the perpupil allocations. Further analysis and cost estimates of these options, which involve multiple EPS components, will be addressed in a summative report of FY2020 component reviews.

Appendix A, Supplies and Equipment

| | Supplies and Equipment | | | |
|----------------|--|---|--|--|
| | Query 1 (system) | Query 2 (support) | Query 3 (instruction) | |
| SAUs | 157 | 188 | 188 | |
| \$Total | \$3,687,302 | \$11,608,999 | \$28,173,008 | |
| Fund | 1000 General Fund | 1000 General Fund | 1000 General Fund | |
| Program | 0000 Overhead; 1 <u>000</u> Regular Elementary & Secondary Education; 2500 Special Programs Administration | 0000 Overhead; 1000 Regular Elementary & Secondary Education; 2000 Special Programs (Exclude: 2900 Gifted & Talented); 4200 Alternative Education | 0000 Overhead; 1000 Regular Elementary & Secondary Education; 2000 Special Programs (Exclude: 2900 Gifted & Talented); 4200 Alternative Education | |
| Function | 2190 Other Support Services – Student; 2210 Improvement of Instruction; 2212 Instruction & Curriculum Development; 2220 Library and Educational Media; 2290 Other Support Services Instructional Staff; 2330 Special Area Administration | 20 <u>00</u> Support Services; 21 <u>00</u> Support Services— Student; 22 <u>00</u> Support Services— Instruction (Exclude: 2212 Instruction & Curriculum; 2213 Instructional Staff Training; 223 <u>0</u> Instruction Related Technology; 2240 Student Assessment); 2400 School Administration; | 1 <u>000</u> Instruction; | |
| Object | See Below | See Below | Same as Query 2 except Exclude: 4320 Tech Related Repair; 4330 Software Repairs & Maintenance; 4430 Rental of Computers; 4432 Rental of Software; 6500 Technology-Relate Supplies; 7340, 7341 Technology Hardware; 7350, 7351 Technology Software | |
| Cost Center | 900-945 Systemwide | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School | |

Object Codes Included:

40<u>00</u> Purchased Property Services; 41<u>00</u> Utility Services; 42<u>00</u> Cleaning Services; 43<u>00</u> Repair & Maintenance Services; 44<u>00</u> Rentals (*Exclude 4410 Renting Land and Buildings; 4411 Renting Land and Buildings—Lease Purchases, 4450 Renting Land and Buildings—Lease Agreements; 4451 Renting Land and Buildings—Lease Purchase Agreements)*

50<u>00</u> Other Purchased Services; 52<u>00</u> Insurance (Other Than Employee Benefits); 53<u>00</u> Communications; 54<u>00</u> Advertising; 55<u>00</u> Printing and Binding; 5800 Travel (except 5810 Travel for Professional Development; 5830 Adult Education Travel to State Meetings)

60<u>00</u> General Supplies; 61<u>00</u> Instructional Supplies (except 6150 CTE Minor Capital Equipment and 6190 CTE Supplies); 64<u>00</u> Books & Periodicals; 65<u>00</u> Technology-Related Supplies; 66<u>00</u> Audiovisual supplies; 69<u>00</u> Other Supplies (except 6950 Graduation Supplies Adult Education)

70<u>00</u> Property; 73<u>00</u> Equipment

81<u>00</u> Dues & Fees (except 8130 Adult Education Testing Site Fees; 8140 School Board Conference Fees; 8160 Charter School Commission Fee); 8900 Miscellaneous Expenditures

Object Codes *Not* Included:

4410 Renting Land and Buildings; 4411 Renting Land and Buildings—Lease Purchases; 4450 Renting Land and Buildings—Lease Agreements; 4451 Renting Land and Buildings—Lease Purchase Agreements; 4500 Construction Services

51<u>00</u> Student Transportation Services; 56<u>00</u> Tuition; 57<u>00</u> Food Service Management; 5810 Travel for Professional Development; 5830 Adult Education Travel to State Meetings

6150 CTE Minor Capital Equipment; 6190 CTE Supplies; 62<u>00</u> Energy; 63<u>00</u> Food; 67<u>00</u> Student Transportation Vehicle Parts & Supplies; 68<u>00</u> Construction Supplies; 6950 Graduation Supplies Adult Education

71<u>00</u> Land; 72<u>00</u> Buildings; 74<u>00</u> Infrastructure; 75<u>00</u> Intangible assets; 79<u>00</u> Depreciation and Amortization

80<u>00</u> Debt Service & Miscellaneous; 8130 Adult Education Testing Site Fees; 8140 School Board Conference Fees; 8160 Charter School Commission Fee; 8200 Judgments Against the SAU; 83<u>00</u> Debt Related Expenditure/Expenses; 8500 Co-curricular, Extra-curricular, and Field Trip Transportation

EPS Component Report of Findings: Instructional Technology

Background

Instruction Technology EPS Component

When the Essential Programs and Services (EPS) funding model was being developed, the EPS of the State Board of Education held that "technology resources are key to equalizing access to worldwide learning resources for all Maine schools and students" to help students achieve the *Learning Results* (MSBOE, 1998). The committee stated that the EPS Model should cover the annual operating costs of personnel, training and support for teachers, and maintenance of devices and infrastructure, and that the purchase of hardware and software should be treated as capital investments and funded outside the EPS Model. The initial allocation was \$175 per pupil for all grade levels. Beginning in FY 2006, the allocation was changed to \$83 per pupil in grades K-8 and \$252 per pupil in grades 9-12 (Silvernail, 2011). Per-pupil allocations were then adjusted for inflation annually and in FY 2019 were \$107 and \$322, respectively. Instructional Technology is a targeted component of the EPS model. In order to receive funds, SAUs are required develop and submit an appropriate plan describing how instructional technology will support students in meeting the Maine Learning Results.

State funding and support for technology hardware and software is provided through the Maine Learning Technology Initiative (MLTI) rather than the EPS operating cost allocation. MLTI began in 2002 by providing laptop computers to all Maine 7th and 8th graders and the instructional support to SAUs that was needed to integrate technology to improve student learning. The program has since expanded to include other grades and other types of devices. In 2021 the program experienced a major shift to "MLTI 2.0" with changes to the underlying model for procuring and leasing devices. Additional information on the history of the MLTI program is available in Appendix B.

Methodology

Data

SAU expenditure detail from the 2018-2019 school year was provided by the Maine Department of Education. The Instructional Technology component of the EPS model funds personnel costs for maintenance, training, and support related to instructional technology. Because capital costs of purchasing, replacing, or leasing equipment, including computer hardware and software were not originally intended to be included in this component, researchers analyzed SAU expenditures both including and excluding the cost of computer hardware and software. Instructional Technology expenditures were selected using queries and methods similar to those used in previous reviews of this component. Query information appears in Appendix A.

Enrollment data was used to calculate per-pupil amounts. The October attending count for the 2018-19 school year was obtained from the Maine Department of Education website.

All Maine School Administrative Units (SAUs) with Instructional Technology expenditures and attending students were included in the analysis. State operated education organizations, such as Education in Unorganized Territories, the Maine School of Science and Mathematics, and Long Creek Youth Development Center, were not included. Additionally, Maine Indian Education units receive substantial federal funding and were excluded. Charter schools were analyzed separately.

A note on expenditure data by grade level. The per-pupil expenditures in this review were calculated for the PK-8 and 9-12 grade levels for comparison to the PK-8 and 9-12 EPS per-pupil allocations. Some SAUs reported technology expenditures using systemwide cost center codes rather than being split by grade level. A breakdown of expenditures by cost center is shown in Table 1. More than half of the instructional technology expenditures (52%) were reported systemwide. In all, 55% of the PK-8 expenditures and 45% of the grades 9-12 expenditures were reported as systemwide costs. For the analysis in this component review, systemwide expenditures were allocated to grade levels proportionally according to attending enrollment by grade level.

Table 1: Expenditure by Cost Center

| Cost Center Gradespan | Expenditure | Percent |
|-----------------------|--------------|---------|
| PK-8 specific | \$19,207,543 | 29% |
| 9-12 specific | \$11,980,460 | 18% |
| PK-12 Systemwide | \$34,041,849 | 52% |
| Total | \$65,229,852 | 100% |

Analysis

Per-pupil expenditure was calculated on a statewide basis, summing all SAU expenditures and dividing by the corresponding statewide attending enrollment. Grade levels PK-8 and 9-12 were analyzed separately, both with and without hardware and software, and compared to their respective EPS allocations. Five SAUs at the PK-8 level and two at the 9-12 level had no instructional technology expenditure other than hardware and software. These SAUs appear in the calculations including hardware and software but not in the calculations excluding hardware and software.

To analyze variation across the state, a per-pupil amount for each SAU was calculated and used to determine the median and range of spending and to generate histograms. The changes in expenditure and allocation from 2010 to 2019 were also examined.

Findings

Table 2 lists instructional technology expenditures by category and includes hardware and software purchases and rentals. Personnel costs, i.e., salaries and benefits, were 52% of reported expenditures with purchased professional services at 4% for a total of 56%. Maintenance, supplies, equipment and miscellaneous comprised 44% of total instructional technology spending, over half of which was hardware and software purchases and rentals.

Table 2: Expenditure by Category Including Hardware and Software

| Description | Amount | Percent of Total | Per-pupil Expenditure |
|--|--------------|------------------|--------------------------|
| Salaries | \$25,725,015 | 39% | \$150 |
| Employee Benefits | \$8,544,236 | 13% | \$50 |
| Purchased Prof & Technical Services | \$2,486,333 | 4% | \$14 |
| Computer and Software Repair & Maintenance | \$3,337,762 | 5% | \$19 |
| Computer and Software Rentals | \$6,592,288 | 10% | \$38 |
| Supplies | \$5,313,224 | 8% | \$31 |
| Equipment- Technology Hardware | \$8,528,896 | 13% | \$50 |
| Equipment- Technology Software | \$1,087,122 | 2% | \$6 |
| Other Purchased Property Services | \$1,049,423 | 2% | \$6 |
| Other Purchased Services | \$905,481 | 1% | \$5 |
| Other Equipment | \$1,069,880 | 2% | \$6 |
| Miscellaneous | \$590,192 | 1% | \$3 |
| Total | \$65,229,852 | 100% | \$380 |

Capital purchase or replacement of technology hardware and software was not considered to be part of the Instructional Technology EPS component. This decision determined the initial funding for the technology component and its further adjustments. Table 3 shows a breakdown of instructional technology hardware and software costs. A total of \$16.2 million was spent on the purchase and rental of computer hardware and software and represents 25% of the total instructional technology expenditure of 65.2 million.

Table 3: Hardware and Software Expenditures

| Description | Amount | Percent of Total | Per-pupil Expenditure |
|--------------------------------|--------------|---------------------|--------------------------|
| Computer and Software Rentals | \$6,592,288 | 41% | \$38 |
| Equipment- Technology Hardware | 8,528,896 | 53% | \$50 |
| Equipment- Technology Software | 1,087,122 | 7% | \$6 |
| Total | \$16,208,306 | 100% | \$94 |

As shown in Table 4, when hardware and software purchases and rentals were excluded, salaries and benefits made up 69% of instructional technology spending. An additional 5% was spent on purchased professional and technical services, 7% on repairs and maintenance and 11% on supplies.

Table 4: Expenditure by Category Excluding Hardware and Software

| Description | Amount | Percent | Per-pupil Expenditure |
|--|--------------|---------|--------------------------|
| Salaries | \$25,725,015 | 52% | \$150 |
| Employee Benefits | \$8,544,236 | 17% | \$50 |
| Purchased Prof & Technical Services | \$2,486,333 | 5% | \$15 |
| Computer and Software Repair & Maintenance | \$3,337,762 | 7% | \$19 |
| Supplies | \$5,313,224 | 11% | \$31 |
| Other Purchased Property Services | \$1,049,423 | 2% | \$6 |
| Other Purchased Services | \$905,481 | 2% | \$5 |
| Equipment excluding Hardware and Software | \$1,069,880 | 2% | \$6 |
| Miscellaneous | \$590,192 | 1% | \$3 |
| Total | \$49,021,546 | 100% | \$286 |

Comparison of Expenditure to EPS Allocation

EPS allocations were compared to expenditures including and excluding spending on hardware and software purchases and rentals. As can be seen in Table 5, when hardware and software are included, the statewide average per-pupil spending on instructional technology at the PK-8 grade level was \$353, which is \$246 more than the EPS per-pupil rate of \$107. At the 9-12 grade level the average per-pupil spending was \$448, which is \$126 more than the EPS per-pupil allocation of \$322.

When hardware and software purchases and rentals were excluded, PK-8 spending of \$278 per pupil was \$171 higher than the EPS allocation of \$107. Grade level 9-12 expenditures of \$306, however, were below the per-pupil allocation of \$322.

Table 5: Statewide Expenditures Including and Excluding Hardware and Software, and Compared to EPS Allocations, FY 2019

| | • | ardware and ware | Excluding Ha | |
|---------------------------------|--------------|---------------------|--------------|--------------|
| | PK-8 | 9-12 | PK-8 | 9-12 |
| Number SAUs | 180 | 110 | 175 | 108 |
| Total Expenditure | \$43,266,455 | \$21,963,397 | \$34,085,188 | \$14,936,359 |
| Attending Enrollment | 122,707 | 48,995 | 122,472 | 48,865 |
| Statewide Per-pupil Expenditure | \$353 | \$448 | \$278 | \$306 |
| EPS Per-pupil Allocation | \$107 | \$322 | \$107 | \$322 |

Variation in Spending

The range of per-pupil instructional technology expenditure among Maine SAUs both including and excluding hardware may be seen in Table 6. Including hardware and software, the range of spending was between \$2 and \$1,171 per-pupil at the PK-8 level. The median per-pupil expenditure was \$355, which was comparable to the statewide per-pupil expenditure of \$353. The range of spending for grades 9-12 was between \$76 and \$1,157 per-pupil and the median per-pupil expenditure was \$473, which was slightly higher than the statewide per-pupil amount of \$448.

Excluding hardware and software, spending at the PK-8 level ranged from \$4 to \$1,064 and the median per-pupil expenditure was \$282. For Grades 9-12 per-pupil spending ranged between \$15 and \$869 and the median was \$316.

Table 6: Variation in Instructional Technology Expenditure
Including and Excluding Hardware and Software

| | Including Hardware and Software | | ū | lardware and tware |
|---------------------------------|---------------------------------|--------------|-------------|-----------------------|
| | PK-8 | 9-12 | PK-8 | 9-12 |
| Statewide Per-pupil Expenditure | \$353 | \$448 | \$278 | \$306 |
| Median Per-pupil Spending | \$355 | \$473 | \$282 | \$316 |
| Range of Per-pupil Spending | \$2-\$1,171 | \$76-\$1,157 | \$4-\$1,064 | \$15-\$869 |

Figure 1 is a histogram of SAU PK-8 per-pupil spending for instructional technology. For comparison, the EPS per-pupil allocation of \$107 is shown as a vertical line within the graph. At the PK-8 grade level, 21 SAUs (12%) spent less than the EPS allocation.

Figure 1: Variation in Per-pupil Instructional Technology Expenditure PK-8 Including Equipment

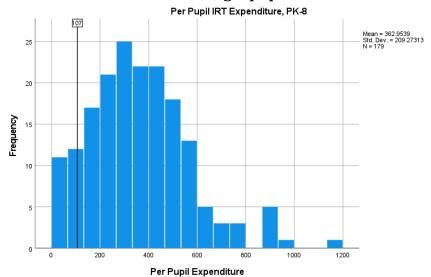
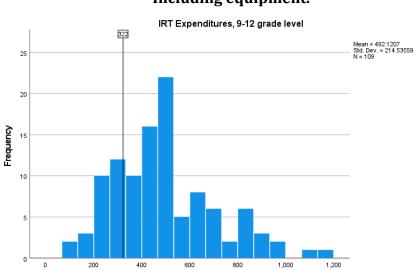


Figure 2 below is a histogram of SAU per-pupil expenditures on technology at the 9-12 grade level with a comparison line representing the EPS allocation of \$322. At the 9-12 grade level, 25 SAUs (23%) spent less than the instructional technology allocation.



Per Pupil

Figure 2: Instructional Technology Expenditures 9-12 Including equipment.

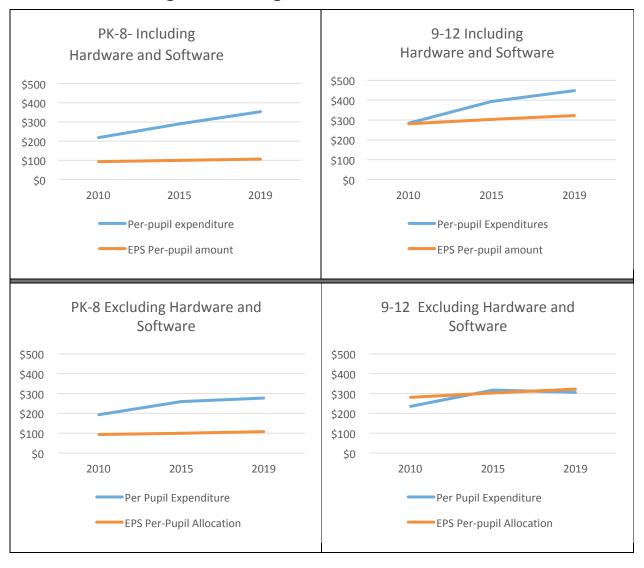
Spending over Time

Instructional technology expenditures were reviewed on a per-pupil basis, compared to historical data and to EPS allocation by grade level. Expenditure data over time, including and excluding hardware and software, may be seen in Table 7 and Figure 3. Expenditures for instructional technology have consistently increased faster than the EPS per-pupil allocation, widening the gap between spending and the EPS allocation, especially at the PK-8 level. Between 2015 and 2019 spending increased 22% at the PK-8 level and 14% at the 9-12 level, more than double the rate of increase in the EPS allocation. In the nine-year period from 2010 to 2019 the average instructional technology expenditure at the PK-8 level including hardware and software increased 83%, while the EPS allocation increased 15%. Grades 9-12 showed a similar trend. The average expenditure increased 91%, while the EPS per-pupil allocation increased 15%. When hardware and software expenditures are excluded, the story is different. At the PK-8 level, the gap between expenditure and allocation widened. At the 9-12 level, the allocations were closer to the actual expenditure, and can be seen in the lower right portion of Figure 3.

Table 7: Spending Over Time, Including and Excluding Hardware and Software

| | Including Hardware and software | | | | | | Ex | cluding | Hardwa | re and | softwa | re e |
|--------------------------|---------------------------------|-------|-------|-------|-------|-------|-------|---------|--------|--------|--------|-------|
| | | PK-8 | | | 9-12 | | | PK-8 | | | 9-12 | |
| | 2010 | 2015 | 2019 | 2010 | 2015 | 2019 | 2010 | 2015 | 2019 | 2010 | 2015 | 2019 |
| Per-pupil Expenditure | \$218 | \$290 | \$353 | \$284 | \$393 | \$448 | \$193 | \$260 | \$278 | \$235 | \$317 | \$306 |
| EPS Per-pupil Amount | \$93 | \$100 | \$107 | \$281 | \$303 | \$322 | \$93 | \$100 | \$107 | \$281 | \$303 | \$322 |

Figure 3: Per-Pupil Expenditure and EPS Allocation, Including and Excluding Hardware & Software, PK-8 & 9-12



Charter Schools

When hardware and software are included in analysis, 88% of charter school instructional technology expenditures went towards the purchase and rental of computer software and hardware, including 73% (\$305 per-pupil) as rental and 15% (\$61) as purchases.

Purchased professional and technical services made up 7% (\$30 per-pupil) of expenditures. The remaining expenditures were for supplies, other purchased services and purchased property services.

Table 9: Instructional Technology Expenditures Including Hardware and Software, Charter Schools FY 2019

| Description | Expenditure | Per-pupil Spending | Percent |
|---|-------------|-----------------------|---------|
| Computer Hardware & Software Rental | \$748,280 | \$305 | 73% |
| Computer Hardware & Software Purchases | \$ 149,969 | \$61 | 15% |
| Purchased Professional & Technical Services | \$72,711 | \$30 | 7% |
| Supplies | \$ 20,813 | \$8 | 2% |
| Other Purchased Property Services | \$5,760 | \$2 | 1% |
| Other Purchased Services | \$ 30,851 | \$13 | 3% |
| Total | \$1,028,384 | \$419 | 100% |

As may be seen in Table 10, if computer software and hardware are excluded, charter schools spent \$53 per pupil on instructional technology. This is considerably below the \$286 spent statewide per non-charter pupil.

Table 10: Expenditure by Category, Excluding Hardware and Software

| Description | Expenditure | Per-pupil Spending | Percent |
|---|-------------|-----------------------|---------|
| Purchased Professional & Technical Services | \$72,711 | \$30 | 56% |
| Supplies | \$20,813 | \$8 | 16% |
| Purchased Property Services | \$5,760 | \$2 | 4% |
| Other Purchased Services | \$ 30,851 | \$13 | 24% |
| Total | \$130,135 | \$53 | 100% |

In-Person and Virtual Charter Schools Compared

As one would expect and as may be seen in Table 11 below, virtual charter schools spent more on technology than in-person charter schools, \$1,025 compared to \$218 at the PK-8 level. Both amounts are greater than the EPS allocation of \$107 per pupil.

Table 11: Grades PK-8 Charter Schools FY 2019 Instructional Technology Expenditures Including Hardware and Software

| | In-person Charter Schools | Virtual Charter Schools | All Charter Schools |
|--------------------------------|------------------------------|----------------------------|------------------------|
| Number of Charter Schools | 4 | 2 | 6 |
| Attending Enrollment | 660 | 228 | 888 |
| Total Expenditure | \$143,803 | \$233,835 | \$377,638 |
| Per-pupil Expenditure | \$218 | \$1,026 | \$425 |
| Range of Per-pupil Expenditure | \$17-\$752 | \$662-\$1,337 | \$17-\$1,337 |
| EPS Per-pupil Allocation | \$107 | \$107 | \$107 |

As with the PK-8 grade level, virtual charter schools spent more on technology than in-person charter schools at the high school level too, \$888 compared to \$123. Per-pupil spending of \$123 at in-person charter schools was less than the EPS amount of \$322. At virtual charter schools, per-pupil spending of \$888 was greater than EPS.

Table 12: Grades 9-12 Charter Schools FY 2019 Instructional Technology Expenditures Including Hardware and Software

| | In-person Charter Schools | Virtual Charter Schools | All Charter Schools |
|-----------------------------|---------------------------------|-------------------------------|------------------------|
| Number of Charter Schools | 5 | 2 | 7 |
| Attending Enrollment | 968 | 598 | 1,566 |
| Total Expenditure | \$119,440 | \$531,306 | \$650,746 |
| Per-Per pupil Expenditure | \$123 | \$888 | \$416 |
| Range of Per-pupil Spending | \$29-\$316 | \$606-\$1,170 | \$29-\$1,170 |
| EPS Per-pupil Allocation | \$322 | \$322 | \$322 |

Discussion and Policy Considerations

Adequacy of EPS Allocation. Based on a comparison of actual instructional technology expenditures, excluding hardware and software, it appears that the 9-12 EPS allocation of \$322 per pupil is adequate compared to expenditures of \$306. However, the PK-8 allocation of \$107 per pupil, compared to expenditures of \$278, may need to be increased to achieve funding adequacy. Because of the additional cost of updating the EPS per-pupil allocation, MEPRI recommends updating the Instructional Technology allocation simultaneously with other components, especially Supplies and Equipment.

As described in a separate report of findings, while instructional technology expenditures have increased in recent years, non-technology supplies and equipment expenditures have declined, which has resulted in an EPS allocation for supplies and equipment in excess of actual expenditures. A companion MEPRI report presents a more detailed description of the policy options in multiple EPS components as well as their combined costs.

Targeted funds: The Department of Education provides substantial technical, logistical, and financial support to SAUs for instructional technology through MLTI, EPS, and other programs. EPS Instructional Technology cost allocation is targeted, which means that to receive the funds SAU personnel must update and submit technology plans to the state continue. It may be appropriate to evaluate the net benefit of the technology plan process and the targeting of the Instructional Technology EPS component.

Hardware and software. Hardware and software costs continue to be funded outside of the annual EPS operating allocation. The adequacy and equity of MTLI funding and other state grant programs outside the EPS funding formula should continue to be monitored and reviewed.

A ubiquitous computing classroom environment with each student having a device was a novel approach when EPS was implemented but is now standard. At some point, it may be appropriate to move the funding for instructional technology hardware and software into the EPS allocation, in other words to reduce or replace the non-EPS grants by

increasing the EPS per-pupil allocation. *The adequacy of current policy of funding* instructional technology hardware and software outside the EPS annual operating cost model should continue to be monitored and reviewed.

Appendix A, Instructional Technology

| | Instructional Technology Data Query | | | | |
|-------------|---|---|--|--|--|
| | Query 1 | Query 2 | | | |
| Fund | 1000 General Fund | 1000 General Fund | | | |
| Program | 0000 Overhead; | 1100 Regular Elementary; 1120 K-2; 1121 Pre-K; 1122 4-Year-Old; 1200 Regular Secondary | | | |
| Function | 223 <u>0</u> Instruction Related Technology | 1 <u>000</u> Instruction; | | | |
| Object | Exclude: 4311 Copier Service Agreement; 4440 Rental of Equipment; 4445 Copier Rental; 5200 Insurance; 6600 AV Supplies; 9000 Transfers/Other | 4320 Tech Related Repair; 4330 Software Repairs & Maintenance; 4430 Rental of Computers; 4432 Rental of Software; 6500 Technology-Relate Supplies; 7340, 7341 Technology Hardware; 7350, 7351 Technology Software | | | |
| Cost Center | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/Regional; 900-945 Systemwide; 950 Elementary Grades; 990 Secondary Grades | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/Regional; 900-945 Systemwide; 950 Elementary Grades; 990 Secondary Grades | | | |

Appendix B: History of MLTI Program

- **2002** Maine Learning Technology Initiative (MLTI) began. Each 7th and 8th grader and eligible faculty was provided with an Apple laptop.
- **2009** The program was expanded to allow districts to lease laptops, at local expense, for students in grades 9-12. Districts that opted in were provided laptops for the eligible 9-12 staff.
- 2012 MLTI expanded to allow choices from multiple vendors. Contracts were awarded to both Apple and HP, with iPad (MacOS) and laptop (Windows) device options available at no additional cost to the district. A MacBook laptop option was also available at a state-subsidized lease rate.
- **2017** The program began a four-year transition to a grant structure. As lease agreements with vendors expired, districts were provided \$200 per year for each student and staff member in grades 7-8, and for eligible staff in grades 9 through 12.
- **2020 (June)** With all leases now expired, the Department of Education designated school year 2020-21 as a *Bridge Year*. Continued support by the Department included transfers of ownership or buy-out options for SAUs with leased devices (depending on the cohort). Also included was continued MLTI support for devices, professional development and infrastructure.

MLTI 2.0

In 2020-21, an advisory board was established to design the next phase of the MLTI program, known as MLTI 2.0. Beginning September 2021, qualifying units receive public per-pupil allocations for eligible student populations from MLTI 2.0. Devices are purchased from state contracts. SAUs not receiving funds for devices are provided the opportunity to purchase them from state negotiated contracts at local expense.

- MLTI 2.0 will be phased in over 2 years with 7th & 8th grades funded in 2021-22 and two additional contiguous grades in 2022-23 and 2023-24.
- Districts are provided an annual allocation, based on the number of eligible students and educators, to purchase state-approved 1:1 personal computing devices from a menu of state contracts. Districts are able to purchase additional devices for non-MLTI grades at local expense.
- WiFi will continue to be provided at no cost to districts through the Maine Schools and Library Network. Responsibility for WiFi system maintenance and support will transfer to the SAUs in 2022-23.
- A professional development program implemented and managed by the Department will provide classroom-level coaching support to increase local capacity to integrate technology, create engaging educational experiences, and to focus on identified high-need areas as determined by the MLTI 2.0 professional learning plan. MLTI 2.0 staff will increase to include five distinguished teachers to support these efforts.

EPS Component Report of Findings: Co-curricular & Extra-curricular Activities

Background

Co- and extra- curricular activities are offered outside the curriculum, usually after school. The Maine School Financial Accounting Handbook defines co-curricular and extra-curricular activities as activities and programs that add to the educational experience of students but are not related to educational activities and take place outside the traditional classroom. Co-curricular activities may be programs such as band, academic clubs, choir, and honor societies, and intramural sports. Extra-curricular activities are defined as interscholastic athletic programs.

The original Essential Programs and Services (EPS) Committee of the State Board of Education believed that "Co-curricular and extra-curricular participation by students is important to their academic, physical and social development," (MSBOE, 1998) and agreed that these activities might provide more equitable opportunities for all children, throughout Maine, to achieve the Learning results.

Some SAUs collect revenue from co-curricular & extra-curricular. Revenues may include proceeds from admissions to school sponsored activities such as concerts, sports games, and pay-to-play programs, student organization membership dues, and revenues from student stores and vending machines.

Data from a survey of districts during the 1996-97 school year were used by the task force to determine the original allocations. The average net cost (expenditures minus revenues) of co-curricular and extra-curricular activities combined for grades K through 8 was \$24.47 and for grades 9 through 12, the average cost was \$57.17. Thus, the EPS allocation was set at \$25 per elementary pupil and \$58 per secondary pupil.

The rates were modified in 2006 after a more in depth review to identify specific extra-curricular and co-curricular programs and associated costs. The EPS Committee determined that although it might be argued that co-curricular activities may be related to the achievement of the *Learning Results*, the educational benefit of extra-curricular

activities to the *Learning Results* was less direct. As a result, the recommendation to the legislature was that EPS fund 100% of the cost of co-curricular activities and 10% of the cost of extra-curricular activities. The recommendation was approved and went into effect in FY 2006. (Silvernail, 2011). The resulting FY 2006 K-8 per-pupil allocation was \$28 per student and 9-12 was \$97 per student. With adjustments for inflation, the 2019 per-pupil allocation was \$40 for PK-8 and \$125 for 9-12.

Methodology

Data

SAU expenditure and revenue detail from the 2018-2019 school year was provided by the Maine Department of Education. Co- and extra-curricular-related expenditures include salaries, benefits, supplies & equipment, transportation, purchased professional and technical services and other related services. Revenues include proceeds from admissions to school sponsored activities such as concerts, sports games, and pay-to-play programs. Student organization membership dues, student stores, and revenues from vending machines are also included. Revenues were deducted from extracurricular expenditure to compute a net extracurricular expenditure. A description of the queries can be found in Appendix A.

Enrollment data was needed to calculate per-pupil amounts. The October attending count for the 2018-19 school year was obtained from the Maine Department of Education website. Per-pupil expenditures were calculated on a statewide basis, summing all expenditures and dividing by the corresponding statewide attending enrollment. Grade levels PK-8 and 9-12 were analyzed separately.

The data represent all Maine SAUs with attending students and co- and extracurricular expenditures; districts with no reported relevant expenditures are not included. State operated education organizations, such as Education in Unorganized Territories, the Maine School of Science and Mathematics, and Long Creek Youth Development Center, were not included. Additionally, Maine Indian Education units receive substantial federal funding and were excluded. Charter schools were analyzed separately.

Analysis

The Co-curricular & Extra-curricular Activities Component of the Essential Programs and Services per-pupil allocation was originally equal to 100% of co-curricular activity expenditure plus 10% of extra-curricular activity net expenditure. This quantity is referred to here as the *comparable net expenditure*.

To monitor the adequacy of the EPS allocation, the statewide per-pupil expenditure and the comparable net expenditure were compared to the EPS per-pupil allocation. To assess variation in spending across the state, median SAU per-pupil expenditure and the range of per-pupil expenditure were calculated. To examine changes in spending over time, 2019 expenditures were compared to the 2015 spending and to the EPS per-pupil rate. Differences in expenditure by SAU enrollment size were also examined.

Findings

Expenditure by Category

At the PK-8 grade level, the combined co-curricular and extra- curricular activity expenditure was \$13.6 million. Of this total, 74% (68% plus 6%) was spent on salaries and benefits. Supplies and equipment made up 9%, and an additional 6% was spent on purchased professional and technical services. Transportation costs were 7% of the total. Table 1 shows the breakdown of expenditures by category.

Table 1: Co-curricular & Extra-Curricular Activity Expenditure, PK-8

| Description | Amount | Per-pupil Expenditure | Percent |
|--|-------------|---------------------------------|---------|
| Salaries | \$9,208,122 | \$75 | 68% |
| Employee Benefits | \$788,809 | \$6 | 6% |
| Supplies & Equipment | \$1,183,833 | \$9 | 9% |
| Transportation | \$894,434 | \$7 | 7% |
| Purchased Professional and Technical Services | \$847,412 | \$7 | 6% |
| Other | \$680,608 | \$6 | 5% |
| Total | 13,603,218 | \$111 | 100% |

The total co-curricular and extra-curricular expenditure at the high school level was \$42.7 million. As may be seen in Table 2, salaries and benefits made up 67% of the total, supplies and equipment were 9%, purchased professional and technical services 8%, travel and transportation 7% and other expenses made up 8% of the total expenditure.

Table 2: Co-curricular & Extra-Curricular Activity Expenditure, Grades 9-12

| Description | Amount | Per-pupil Expenditure | Percent of Total |
|---|--------------|--------------------------|---------------------|
| Salaries | \$25,428,570 | \$519 | 60% |
| Employee Benefits | \$3,155,254 | \$64 | 7% |
| Supplies & Equipment | \$3,902,186 | \$80 | 9% |
| Transportation | \$3,154,046 | \$64 | 7% |
| Purchased Professional and Technical Services | \$3,554,139 | \$73 | 8% |
| Other | \$3,472,012 | \$71 | 8% |
| Total | 42,666,207 | \$871 | 100% |

Expenditure Compared to EPS Allocation

Table 3 shows the expenditure amounts for co-curricular and extra-curricular activities, revenue, and total net of revenue as well as the comparable net expenditure at the PK-8 level. The comparable net expenditure is compared to the subsidy amount. In FY 2019, the statewide comparable net expenditure was \$39 per pupil, which is similar to the EPS Allocation of \$40.

Table 3: Co-curricular & Extra-curricular Activity Expenditure and Revenue for Maine Public Schools in 2019, Grades PK-8

| | Co-Curricular Expenditure | Extra- Curricular Expenditure | Co- and Extra- Curricular Revenue | Net Expenditure | Comparable Net Expenditure* |
|-----------------------------------|------------------------------|-------------------------------------|--|--------------------|-----------------------------------|
| Number of SAUs | 163 | 163 | 16 | 175 | 175 |
| Expenditure | \$3,798,978 | \$9,804,240 | (\$286,546) | \$13,316,672 | \$4,750,748 |
| Enrollment K-8 | 122,584 | 122,584 | 122,584 | 122,584 | 122,584 |
| Per-Pupil Expenditure | \$31 | \$80 | (\$2) | \$109 | \$39 |
| EPS Allocation | | | | | \$40 |
| Range of Per-Pupil Expenditure | \$4-\$381 | \$3-\$473 | (\$1-\$99) | \$7-\$550 | \$3-\$381 |

^{*} Comparable Net Expenditure = 100% Co-Curricular + 10% (Extra-Curricular-Revenue)

The comparable net expenditure for co-curricular and extra-curricular activities varied from \$3 to \$381 per pupil. Graph1 displays the range of comparable net expenditure as a histogram. The EPS allocation is shown as a vertical line. Around half of SAUs (54%) had comparable net expenditures equal to or below the EPS allocation.

Graph 1: Co-curricular & Extra-curricular Activity Comparable Net Expenditures, PK-8, FY 2019

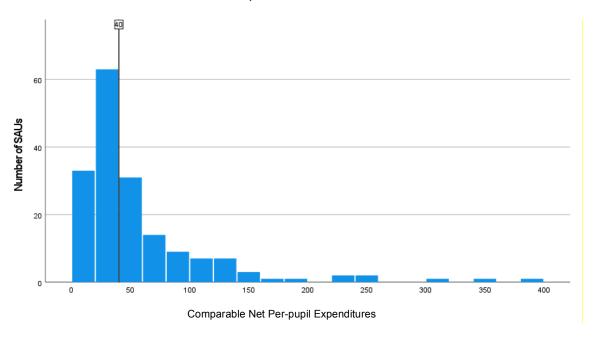


Table 4 shows the expenditure amounts for co-curricular and extra-curricular activities, revenue, and total net of revenue as well as the comparable net expenditure at the 9-12 grade level. The comparable net expenditure is compared to the subsidy amount. The EPS allocation for grade 9-12 expenditures was \$125 in FY 2019. The statewide comparable net per-pupil expenditure was \$229, which was 83% higher than the EPS allocation.

Table 4: Co-curricular & Extra-curricular Activities Expenditures Grades 9-12

| | Co- Curricular | Extra- Curricular | Co and Extra- Curricular Revenue | Total Net of Revenue | Comparable Net Expenditure* |
|-----------------------------------|-------------------|----------------------|---|-------------------------|-----------------------------------|
| Number of SAUs | 106 | 106 | 50 | 109 | 109 |
| Expenditure | \$7,872,733 | \$34,793,474 | (\$1,171,296) | \$41,494,911 | \$11,234,951 |
| Enrollment 9-12 | 48,995 | 48,995 | 48,995 | 48,995 | 48,995 |
| Per-pupil Expenditure | \$161 | \$710 | (\$24) | \$847 | \$229 |
| EPS Allocation | | | | | \$125 |
| Range of Per-pupil Expenditure | \$49-\$1,094 | \$349-\$3,152 | (\$7-\$1,171) | \$342- \$3,152 | \$86-\$1,094 |

^{*} Comparable net expenditure=100%Co-Curricular + 10% (Extra-Curricular-Revenue)

Graph 2 below shows the range of comparable net expenditure as a histogram. The EPS allocation is shown as a vertical line. Comparable net per-pupil expenditures ranged from \$86 to 1,094. Most SAUs (94%) spent more than the EPS allocation. The median comparable net per-pupil expenditure was \$226, over 80% higher than the EPS rate. The cost of co-curricular activities averaged \$162 per-pupil, which is 30% over the EPS rate.

20 0 125 250 375 500 625 750 875 1,000 1,125 Comparable Net Per-pupil Expenditures

Graph 2: Co-Curricular & Extra-Curricular Comparable Net Expenditures, 9-12

The 50 SAUs reporting co-curricular & extra-curricular activity revenue had an aggregate enrollment of 26,976 students and collected \$43 per-pupil. The median per-pupil revenue was \$39. The revenue was not a significant percentage of their expenditures. Only five SAUs collected revenue of 10% or more of their co-curricular and extra-curricular activity spending.

Change Over Time

Table 5 below shows comparable net expenditure totals from 2015 and 2019 at the PK-8 grade level. The comparable net per-pupil expenditure increased from \$34 to \$39 which is similar to the EPS allocation of \$40.

Table 5: Co-curricular & Extra-curricular Activity Comparable Net Expenditure, PK-8 FY 2015 & 2019

| | FY 2015 | FY 2019 |
|--------------------------------------|-------------|-------------|
| Number of SAUs | 162 | 175 |
| Comparable Net Expenditure | \$3,993,190 | \$4,750,748 |
| Attending Students K-8 | 118,082 | 122,584 |
| Comparable Net Per-pupil Expenditure | \$34 | \$39 |
| EPS Per-pupil Allocation | \$36 | \$40 |

Table 6 shows the comparable net total and per-pupil expenditure for FY 2015 and FY 2019. At the 9-12 grade level, the comparable net per-pupil expenditure for co-curricular & extra-curricular activities grew from \$190 to \$229 between FY 2015 and 2019, an increase of 20%. The EPS allocation inflation adjustment was 7% during the same period. Comparable net expenditure was greater than the EPS allocation in both years.

Table 6: Co-curricular & Extra-curricular Activity Comparable Net Expenditure, 9-12, FY 2015 & 2019

| | FY 2015 | FY 2019 |
|--------------------------------------|-------------|--------------|
| Number of SAUs | 102 | 109 |
| Comparable Net Expenditure | \$9,569,101 | \$11,234,951 |
| Attending Students 9-12 | 50,384 | 48,995 |
| Comparable Net Per-Pupil Expenditure | \$190 | \$229 |
| EPS Per-pupil Allocation | \$117 | \$125 |

Size

Table 7 shows the statewide average, medians and range of co-curricular & extracurricular activities expenditures by SAU enrollments. There was a statistically significant difference between the comparable net per-pupil expenditure for very small (fewer than 300 attending students) and larger SAUs (1,200 or more students). (ANOVA, p<.001) The difference in comparable net per-pupil expenditure between small and medium-large SAUs is not statistically significant.

Table 7: Co-curricular & Extra-curricular Activities Expenditure by Enrollment, PK-8

| | Very Small (< 300) | Small (300-1,200) | Medium & Large (> 1,200) | Total |
|---|-----------------------|----------------------|--------------------------------|-------------|
| Number of SAUs | 71 | 46 | 58 | 175 |
| Comparable Net Expenditure | \$582,815 | \$1,084,261 | \$3,083,673 | \$4,750,748 |
| Enrollment PK-8 | 8,379 | 22,450 | 91,755 | 122,584 |
| Comparable Net Per-Pupil Expenditure | \$70 | \$48 | \$34 | \$39 |

At the 9-12 grade level, there was a statistically significant difference in per-pupil comparable net expenditure between very small SAUs and larger SAUs (ANOVA, p<.05). The SAU per-pupil comparable net expenditure was not significantly different between small (300-1,200 attending students) and medium-large SAUs (>1,200 students).

Table 8: Co-curricular & Extra-curricular Activities Expenditures by Enrollment, 9-12

| | Very Small (< 300) | Small (300- 1,200) | Medium & Large (> 1,200) | Total |
|---|-----------------------|--------------------------|--------------------------------|--------------|
| Number of SAUs | 16 | 36 | 57 | 109 |
| Total Comparable Net Expenditure | \$375,927 | \$2,279,400 | \$8,579,624 | \$11,234,951 |
| Enrollment 9-12 | 1,012 | 8,219 | 39,764 | 48,995 |
| Comparable Net Per-pupil Expenditure | \$371 | \$277 | \$216 | \$229 |

Charter Schools

At the PK-8 grade level, three in-person charter schools and both virtual charter schools reported co-curricular and extra-curricular expenditures as shown in Table 9. The per-pupil expenditure for co-curricular activities was \$70, and the per-pupil expenditure for extra-curricular activities was \$6. No charter schools reported co-curricular or extra-curricular revenue for the PK-8 grade level. The comparable net per-pupil expenditure, defined as 100% of co-curricular plus 10% of extra-curricular, was \$70, which is more than the EPS allocation of \$40.

Table 9: Charter School Expenditure on Co-curricular & Extra-Curricular Activities PK-8

| | Co-Curricular | Extra- Curricular | Comparable Net Expenditures* |
|-----------------------|---------------|----------------------|---------------------------------|
| Number of SAUs | 3 | 4 | 5 |
| Total Expenditure | \$52,514 | \$3,946 | \$52,909 |
| Enrollment K-8 | 753 | 753 | 753 |
| Per-pupil Expenditure | \$70 | \$5 | \$70 |
| EPS Allocation | | | \$40 |

^{*100%} Co-Curricular + 10% Extra-Curricular. No charter schools had revenue at the PK-8 grade level.

Five charter schools had co-curricular & extra-curricular activities expenditures at the 9-12 grade level, including three in-person charter schools and both virtual charter schools. The expenditure was \$146. Three in-person charter schools and one virtual charter school had expenditures for extra-curricular activities at the 9-12 grade level. The per-pupil expenditure was \$11. Two charter schools had co-curricular & extra-curricular activities revenue at the 9-12 grade level. The per-pupil revenue was \$23. The aggregated combined modified per-pupil expenditure was \$145, which was more than the EPS allocation of \$125.

Table 10: Charter School Expenditure on Co and Extra-Curricular Activities 9-12

| | Co-Curricular | Extra- Curricular | Co and Extra- Curricular Revenue | Comparable Net Expenditures* |
|-----------------------|---------------|----------------------|--|------------------------------------|
| Number of SAUs | 4 | 4 | 2 | 5 |
| Total Expenditure | \$181,588 | \$13,914 | (\$28,470) | \$180,132 |
| Enrollment 9-12 | 1,246 | 1,246 | 1,246 | 1,246 |
| Per-pupil Expenditure | 146 | 11 | (23) | \$145 |
| EPS Allocation | | | | \$125 |

Discussion and Policy Considerations

At the PK-8 level, the EPS per-pupil allocation is greater than the actual comparable net expenditure, defined as 100% of Co-curricular activity expenditure plus 10% of extracurricular activity expenditure. At the 9-12 grade level, however, the EPS allocation is well

below the actual comparable net expenditure. If current levels of co-curricular activities, together with a portion of extra-curricular activities, are deemed necessary to give students equitable opportunity to achieve the Maine Learning Results, then an increase to the EPS allocation may be warranted.

While MEPRI is recommending combining several of the Specialized Services EPS components into a single Instructional Staff Support component, we recommend keeping Co-Curricular & Extra-Curricular Activities separate. Expenditures for co-curricular and extra-curricular activities are classified in the financial and budget category of Other Instruction, not Student & Staff Support. Therefore, retaining a separate Co-Curricular & Extra-Curricular Activities EPS component will facilitate comparisons of EPS allocations to budgets and expenditures by category.

References

- Silvernail, D. L. (2011) History and Developments of Maine's Essential Programs and Services Program. Report to Joint Standing Committee on Educational and Cultural Affairs, Maine State Legislature. Maine Education Policy Research Institute, University of Southern Maine.
- State Board of Education (1999) Essential Programs and Services : Equity and Adequacy in Funding to Improve Learning for All Children.

Appendix A: Co- and Extra-curricular Activities Description of Data Queries

| | 5. Co-Curricular and Extra-curricular Expenditure | | | |
|----------------|--|---|--|--|
| | Elementary Query | Secondary Query | | |
| SAUs | 180 | 116 | | |
| \$Total | \$13,659,678 | \$42,942,262 | | |
| Fund | 1000 General Fund | 1000 General Fund | | |
| Program | 91 <u>00</u> Elementary Co-Curricular Activities; 92 <u>00</u> Elementary Extra-Curricular/ Interscholastic Athletics | 95 <u>00</u> Secondary Co-Curricular Activities; 95 <u>00</u> Secondary Extra-Curricular/ Interscholastic Athletics | | |
| Function | 1 <u>000</u> Instruction; 2330 Special Area Administration; 27 <u>00</u> Transportation | 1 <u>000</u> Instruction; 2330 Special Area Administration; 27 <u>00</u> Transportation | | |
| Object | All except 9 <u>000</u> Other/Transfers | All except 9 <u>000</u> Other/Transfers | | |
| Cost Center | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/Regional; 900-945 Systemwide; 950 Elementary Grades | 010-190 Elementary School; 200-290 Middle school; 300-380 Secondary School; 500 Other/Regional; 900-945 Systemwide; 990 Secondary Grades | | |

| | Co-Curricular and Extra-curricular Revenue | | | |
|---------|--|--|--|--|
| | Elementary Query | Secondary Query | | |
| SAUs | 16 | 55 | | |
| \$Total | \$286,546 | \$1,365,055 | | |
| Fund | 1000 General Fund | 1000 General Fund | | |
| Revenue | 1701 Elementary Co and Extra Curricular Activity Receipts; 1711 Elementary Event Admission Receipts; 1731 Student Organization Membership Dues and Fees – Elementary; 1791 Other Activity Revenue – Elementary | 1702 Secondary Co and Extra Curricular Activity Receipts; 1712 Secondary Event Admission Receipts; 1732 Student Organization Membership Dues and Fees – Secondary; 1792 Other Activity Revenue – Secondary | | |