Report to the Joint Standing Committees on Education And Cultural Affairs and Appropriations and Financial Affairs and Governor Janet T. Mills

24 October 2020

Maine School of Science and Mathematics
A Residential Community of Academic Excellence

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Maine School of Science and Mathematics

Dear Committee Members and Governor Mills,

Pursuant to TITLE 20-A SECTION 8205, please accept this letter and attached documents for the reporting requirements of the Maine School of Science and Mathematics. The contents of this report incorporate the necessary elements outlined in subsections 15 and 16 of the statue establishing the school. This report will discuss the general status of the school, benchmarks and methods of assessing student progress, benchmarks and methods of assessing progress in the professional development of teachers, along with our audited financial report for the school year 2019-2020.

While MSSM has just celebrated its twenty-fifth anniversary, this will be the first annual legislative report submitted by the Maine School of Science and Mathematics. The Board has implemented procedures so that key reporting obligations like this are not overlooked in the future. The Board regrets all of the missed opportunities to share MSSM's successes throughout the years with the Legislature. Given that this is our first annual report, the report will cover some historical information to present a better understanding of MSSM and its role in cultivating diverse students from across Maine into the nation's top math and science students.

MSSM is now focused on answering the question of how MSSM can better meet the needs of the State of Maine regarding the STEM education of high school students. How can MSSM's historically strong residential programming be leveraged into a sustainable school that reaches the maximum number of Maine students. To this end, MSSM has completed a recent strategic planning process and is currently working on a business plan. We look forward to exploring a more sustainable MSSM with you all soon.

Please contact me if you have any questions or need additional information.

Respectfully,

David R. Ferguson
Chair, Board of Trustees and Parent of a 2017 MSSM Graduate

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PDF of Report available at: https://www.mssm.org/annual_report/2020

Executive Summary

The Maine School of Science and Mathematics has been a school of academic excellence available to all Maine students for over 25 years. Its students have demonstrated that all students, when given the opportunity, can compete and excel on both national and international stages. MSSM has a strong residential program which can be leveraged to support STEM education across the State of Maine. The State has been investing in higher education STEM programs to secure its economic future. MSSM is poised to provide a crucial channel of secondary students from ALL regions of the state who can matriculate into these higher education programs and seed our STEM economy. MSSM is positioned to be the STEM high school for Maine's high-achieving students, with a focus on helping all Maine's local districts provide their students with the most advanced science and math classes.

The Maine School of Science and Mathematics was created during a time of economic uncertainty caused by the closing of Loring Air Force Base. The vision that let the State to make the investment in a STEM Magnate Residential High School at that time is the same vision that is needed today. It is the same vision that will invest in expanding the MSSM investment to support high school STEM education in Maine.

Overview of MSSM

Mission

The Maine School of Science and Mathematics (MSSM) brings together and helps a group of Maine's most academically motivated high school students from across all regions of the state. Through their MSSM experience, these Maine students become innovative, well-rounded scholars with the ability to develop, investigate, and communicate critical ideas that improve the human condition and benefit the state of Maine. The school builds and shares a rigorous curriculum that exceeds state educational standards while emphasizing connections between science, mathematics, and the humanities. MSSM extends its mission by fostering a statewide, year-round community of innovative learners that includes many of Maine's students, educators, and the general public.

History

MSSM is a public residential magnet high school chartered and funded by the Maine State Legislature. A residential community committed to the pursuit of academic excellence, MSSM provides an extensive and challenging curriculum in science, mathematics, technology, and the arts and humanities.

MSSM was created by the 116th Maine Legislature in 1995 and is a member of the **National Consortium of Secondary STEM Schools**. The Maine School of Science and Mathematics opened with a pioneer class in 1995. At that time, it was only the eleventh statewide residential

magnet school specializing in mathematics and science education in the United States and the only school of its kind in New England. Both remain true today.

While MSSM students come from diverse backgrounds, one common purpose prevails: the enthusiasm, desire, and commitment to, learning. The challenging curriculum and stimulating environment create an ongoing learning experience with students working, studying, and socializing with classmates who share similar interests and goals.

For a more in depth look at the history of MSSM, please review the 20th Anniversary Publication attached as Appendix G.

Vision

MSSM achieves its mission by:

- Providing a rigorous, immersive, student-centered curriculum that emphasizes the connections between math, science, and the humanities; including post-AP courses; and culminating in opportunities for authentic research and community service.
- Presenting students with supportive opportunities to realize their personal and professional aspirations in Maine both through nurturing, challenging on-campus programs and through partnerships with research and higher education institutions throughout the state and beyond.
- Creating a supportive, residential environment and academic community that promotes personal development, leadership, service, and academic success.
- Developing programs to inspire younger students while also serving as a professional development partner for Maine's teaching community.

Philosophy

The administration, faculty, staff and Board of Trustees of the Maine School of Science and Mathematics (MSSM) are committed to providing academic excellence for all our students, who arrive at MSSM form diverse parts of the state and with diverse academic preparation. Our students excel because they are willing to embrace the opportunity MSSM provides them; they dedicate themselves to both the academic rigor and residential program. Graduates of MSSM have experienced a well-defined curriculum based upon academic standards fostering both academic discipline and honesty.

All students live in residence to fully participate in this intensive programming with students who share similar interests. The nurturing of this educational community – the integration of the academic and residential components – is crucial to success at MSSM. Students are responsible for taking advantage of the academic and extra-curricular pursuits available at

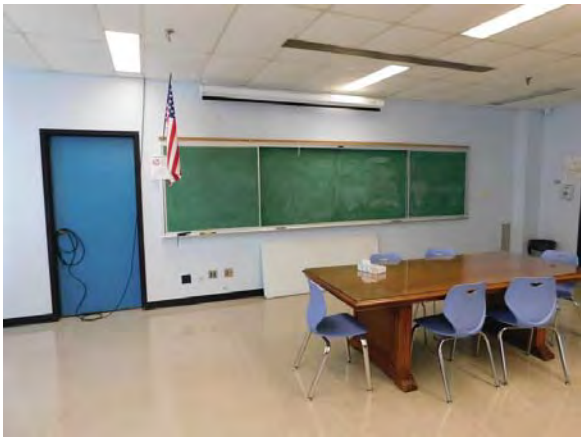
MSSM and for supporting community members in both their academic and personal development.

This MSSM philosophy has been distilled by the MSSM community into two key works: The Definition of a Mission Appropriate Student and the Portrait of an MSSM Graduate, which are attached as Appendix E and F, respectively.

General Status of MSSM

MSSM is at an inflection point.

The Maine School of Science and Mathematics was formed, in part, to take advantage of the suddenly surplus space available in Limestone with the closure of Loring Air Force Base in 1994. The opportunity to partner with Limestone was the key to the creation of MSSM. MSSM was able to use existing classroom and lab space in the Limestone High School building (which now houses Limestones K-8 program as their high school kids are tuitioned to other districts) and was able to renovate the existing Limestone Elementary School building into its only dormitory.



Typical MSSM classroom space

Unfortunately, those same spaces that were of good quality in 1995 when MSSM opened have not been updated or renovated and are past their useful lifespan. MSSM pays an annual lease to Limestone for the use of its academic space, and any payment above the operating costs of the building are used by Limestone to offset their own costs, with little leftover for re-investment into the facilities. MSSM does own its dormitory space, and while investments have been made to maintain it, the dorm lacks needed informal meeting spaces, like music practice spaces, smaller student lounges and appropriate housing for residential instructors. In addition, the size of the dorm prevents MSSM from serving any additional students, which the Board views as a key to lowering our per student cost. MSSM is able to achieve an enrollment of around 140 only by the extensive use of triple and quad dorm rooms. These types of crowded accommodations do not properly support our students social/emotional learning.

Student Room, Double

Student Lounge,
Dorm Building

Despite these challenges, MSSM has continued to provide an exceptional academic experience to its residential students. It has consistently been ranked one of the top high schools in the country and was ranked the Number 2 high school overall in 2019 by US News and World Report. We are proud of what Maine has achieved through its investment in MSSM, but we know more Maine students could benefit with an increased investment in MSSM. With all MSSM has been able to achieve for Maine using surplus physical facilities, imagine what MSSM could do for Maine students in purposely built spaces.

In the 2018-2019 academic year MSSM undertook a strategic planning process that resulted in

the Board approved plan that is included at Appendix I to this report. That plan focused on strengthening its residential program, expanding its impact across Maine and enhancing its capital, both people and facilities. As the Board and MSSM administrative team have worked to implement this plan, the need for MSSM to be doing more to support STEM education around Maine is clear and will be discussed further in the Professional Development of Teachers section. To effectively provide that needed support, MSSM needs to have more resources it can dedicate to those efforts. That will require either additional annual state funding or finding a sustainable business model for MSSM which will support those efforts.

It is clear to the Board that MSSM needs to have serious discussions with its owner, the State of Maine regarding those plans. To facilitate those discussions, the MSSM Board of Trustees chartered a Business Planning Committee (charter attached as Appendix K) to review the existing strategic plan and to create a vision for what a sustainable MSSM could look like. MSSM looks forward to the conclusion of Phase One of that process and to the discussions about MSSM that will follow.

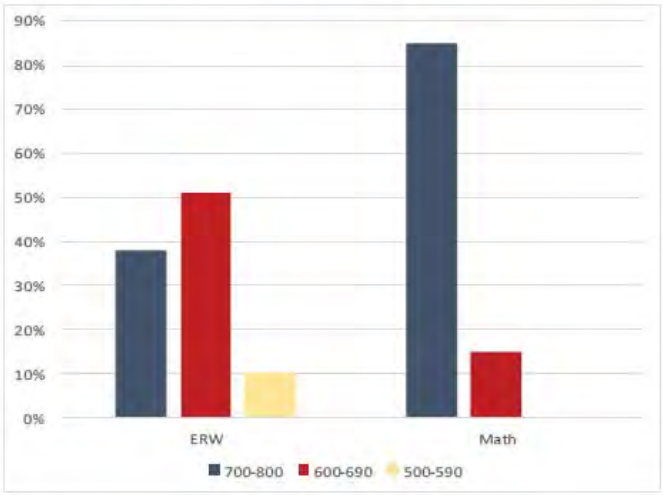
BENCHMARKS AND ASSESSMENT

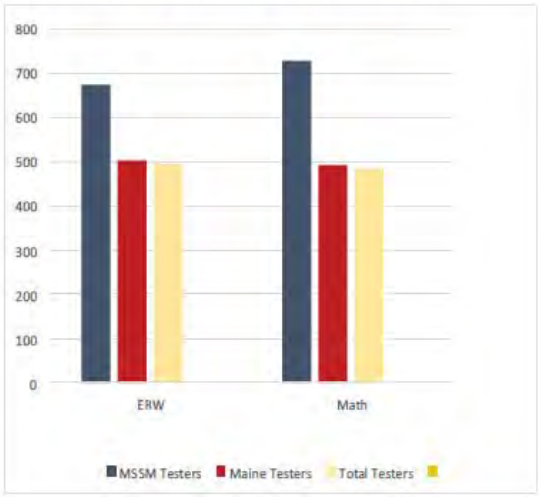
Academic Achievement

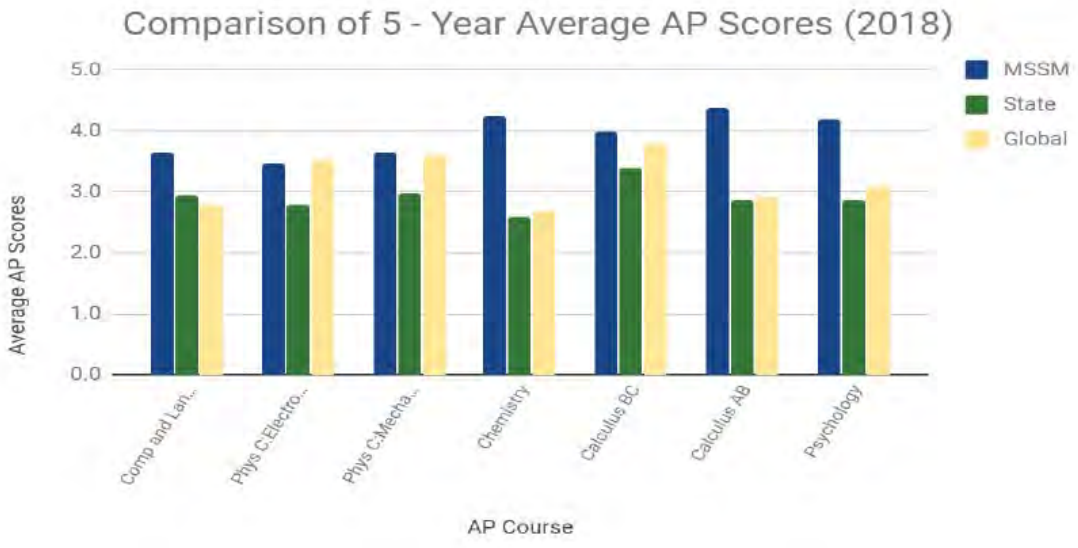
The residential academic program remains the strength of MSSM. For those students who embrace its rigorous standards, MSSM surrounds them with a cohort of motivated, curious and dedicated learners. In 2019-2020 MSSM enrolled 140 students in grades 9-12 from all over the State of Maine. You can see MSSM's history of educating students from all corners of the State if you review the Maps of Students by County attached as Appendix C. This academic success is attributed firstly to the Maine State education system which builds the foundation to life-long learning within our students, next to the Faculty and Staff of MSSM who thrive in an environment where the students are pushing to do and learn more, where questions are encouraged and where answers are discovered in a collaborative process. This type of teaching has demonstrated success in test scores, competitions and college placements.

The school profile sheets for the three years, which are attached as Appendix B, show that success at MSSM is not dependent on any one cohort of students, but on the program itself. Almost all of MSSM's classes are either AP classes or classes that are eligible for college credit though our agreement with The University of Maine at Presque Isle. MSSM has been approved by the UMPI accreditors as an instructional site, with its classes taught by MSSM faculty to count toward the issuance of an Associates Degree. More and more MSSM graduates are leaving high school with an associate's degree, able to enroll in college as a Junior. About one third of MSSM graduates enroll immediately in a Maine college or university. A large number of other graduates enroll in science and engineering schools like MIT, WPI, Rensselaer Poly Tech and many others. For an in depth look at where MSSM graduates have matriculated, please see Appendix D.

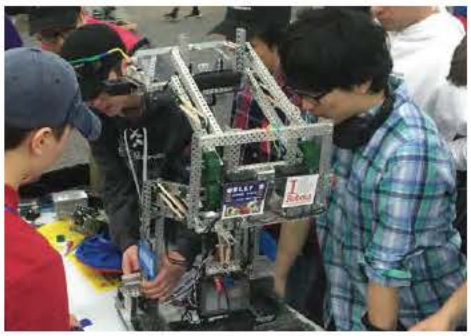
In 2019 MSSM students took 129 Advanced Placement tests and the mean score was a 4.0 out of 5, which demonstrates their mastery of the material. On the SAT test, one hundred percent of MSSM students achieve a 600 or better on the Math SAT, with more than 85% of them scoring above a 700. The humanities are not neglected at MSSM either with 85% of the students scoring above 600 on the evidence-based reading and writing(ERW)SAT as well.







Outside awards and competitions demonstrate that Maine students prepared at Maine's magnet school can compete with and excel among students from around the world in a diverse range of activities. If you review the 2019 – Year of Success publication attached as Appendix H, you will read about the MSSM math team which took first place for the 5th consecutive year at the state tournament, the MSSM team which won the State Science Bowl, the 2 VEX robotics teams that competed at the World Tournament, the SeaPerch team which place first in engineering design at the national SeaPerch Challenge, the MSSM Jazz combo who medaled at the State Jazz Competition and so much more.



Professional Development of Teachers

In accordance with the Strategic Plan and MSSM's operating statute, MSSM has been reaching outside itself to support teachers throughout the state. MSSM has been an active participant in the Central Aroostook Council on Education which is a partnership between local schools and UMPI which supports teaching, learning and leadership success. MSSM faculty and staff have both attended CACE events and have served as presenters for some of the programs.

To expand MSSM's support for STEM education in Maine, David Pearson, Executive Director, secured a grant from the Jack Kent Cooke Foundation which will support the first three years of an educators' camp. This camp was to kick off in the summer of 2020, but its launch was pushed back a year due to the ongoing Covid-19 situation. This camp will allow up to 60 Maine teachers to receive continuing education in STEM topics with most of the teaching being done by MSSM faculty, graduates or other MSSM affiliated people.

The Board recognized that this is an area of weakness for MSSM right now. Both the Strategic Plan and the current Business Planning Committee work has a strong emphasis on ways MSSM can support local districts and STEM educators. However, as MSSM is currently funded, every one of these initiatives require us to raise outside capital to purse them, which has hampered our efforts to do more outreach like this.

Finances

Attached as Appendix A are the audited financial statements for 2019-2020. You will also find the Board approved budget for 2020-2021. This Budget was a very difficult one for the Board to pass. At its December 2019 Board meeting the Board of Trustees directed the finance and facilities committee to prepare a budget that did not have any revenue from non-Maine resident students. In prior years, MSSM enrolled anywhere from 5-9 non-Maine students who paid full tuition as well as room and board to MSSM. That revenue was used to support a level of programming above what the State's annual appropriation allowed.

Another activity MSSM has historically conducted is a STEM focused summer camp. Each year over 400 middle school students arrive in Limestone to experience a week of summer camp focused on STEM and fun! The MSSM summer camp has become a strong recruitment funnel with a majority of each entering class having spent at least one week as a summer camper. In addition to the outreach component of summer camp, the camp usually added supplemental revenue to the MSSM budget. MSSM was unable to hold its traditional summer camp in 2020, but it did offer a free, online summer session which was well received.

The directive from the Board to base revenue only on Maine students resulted in an approved budget that is 14% less than the prior year's budget, a reduction of over $800,000. Discussions in early March with the Committee on Education and Cultural Affairs highlighted the struggles MSSM was having in balancing its budget. While those discussions did not result in increased funding for MSSM, due to the emergency shutting of the legislature, it did kick off the process which has lead to the creation of the Business Planning Committee and its work in developing pathways to a sustainable MSSM.

APPENDIX A

Audited Financial Statement for 2019-2020

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

FINANCIAL STATEMENTS

JUNE 30, 2020

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MAINE SCHOOL OF SCIENCE AND MATHEMATICS

MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2020

UNAUDITED

The management of the Maine School of Science and Mathematics (MSSM) is providing the following discussion and analysis of the financial activities for the year ended June 30, 2020. The MSSM is a component unit of the State of Maine located in Limestone, Maine.

Report Layout

The management's discussion and analysis is intended to make reports more understandable, easier to read, comprehensible and to explain significant changes and financial positions between the current and prior year.

Financial Highlights

- Total net position decreased by $157,877 due to an increase in governmental activities of $37,106 and a decrease in business-type activities of $194,983.
- Total revenues of $5,665,403 are comprised of $4,024,817 in governmental activities revenues and business type revenues of $1,640,586.
- MSSM had total expenditures of $5,823,280.
- Business-type revenues were adversely impacted by the COVID-19 pandemic. In March 2020 the school transitioned to remote learning and all students were sent home. As a result room and board charges for the months of April and May were refunded.

USING THE BASIC FINANCIAL STATEMENTS

This annual report consists of two distinct series of financial statements: government-wide and fund statements.

Government-wide Financial Statements

The government-wide financial statements are designed to show the School as a sum of its significant fund activities. The Statement of Net Position and Statement of Activities provide information about the governmental-type activities of the whole school, presenting both an aggregate view of School finances and a longer-term view of those finances.

While this report contains a breakdown of funds used by the School to provide programs and activities, the view of the School as a whole looks at all the financial transactions and asks the question "how did we do financially during the fiscal year 2020?" The Statement of Net Position and Statement of Activities provide the basis for answering this question.

These statements include all assets and liabilities using the accrual basis of accounting similar to the accounting system used by most private sector companies. The basis of accounting takes into account all of the current year's revenues and expenses regardless of when cash was received or paid.

These two statements report MSSM's net position and changes in the School's net position. This change is important because it tells the reader that, for the School as a whole, if the financial position of the School has improved or diminished.

Fund Financial Statements

Fund financial reports provide the next level of detail. For governmental funds, these statements tell how services were financed in the short-term as well as what remains for future spending. The fund financial statements also look at the School's most significant funds with all other non-major funds presented in total in a single column.

Fund financial reports provide detailed information about the School's major funds. The School uses many funds to account for a multitude of financial transactions. However, these fund financial statements focus on the School's most significant funds. The School's only major governmental fund is the General Fund and has one major special revenue fund, the Jack Kent Cooke Foundation fund.

Most of the School's activities are reported in governmental funds, which focus on how monies flow into and out of those funds and the balances left at fiscal year-end for spending in future periods. These funds are reported using an accounting method called modified accrual accounting, which measures cash and all other financial assets that can readily be converted to cash. The governmental fund statements provide a detailed short-term view of the School's general government operations and the basic services it provides. Governmental fund information helps determine whether there are more or fewer financial resources that can be spent in the near future to finance educational programs. The relationship (or difference) between governmental activities (reported in the Statement of Net Position and the Statement of Activities) and the governmental funds is reconciled in the financial statements.

The Summer Camp Program, Cost of Residential Life and International Business Transactions will appear in the Proprietary (Enterprise) Funds. These funds use the same basis of accounting as business-type activities; therefore, these statements will essentially match the information in the statements for the School as a whole.

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2020

UNAUDITED

THE SCHOOL AS A WHOLE

In the Statement of Net Position and the Statement of Activities, the School is divided into two distinct kinds of activities:

Governmental Activities – Most of the School's programs and services are reported here including instruction, support services, operations and finance, and extracurricular activities.

Business-type Activities – These services are provided on a charge for goods or services basis to recover all of the expenses of the goods or services provided. For the year ended June 30, 2020 the School's Summer Camp Program, Cost of Residential Life and International Business Transactions are reported as business activities.

The Statement of Net Position provides the prospective of the School as a whole. Table 1 provides condensed data of the Statements of Net Position for the fiscal years ended 2020 and 2019.

Table 1

Net Position
(in thousands)

	Governmental		Business-Type		Total	
	2020	2019	2020	2019	2020	2019
Current assets	338	564	15	452	353	1,016
Due from other funds	467	233			467	233
Net capital assets	3,103	3,223			3,103	3,223
Total Assets	3,908	4,020	15	452	3,923	4,472
Deferred outflows	114	155	16	58	130	213
Current Liabilities	223	259	37	117	260	376
Due to other funds			467	233	467	233
Long-term Liabilities	306	267			306	267
Total Liabilities	529	526	504	350	1,033	876
Deferred inflows	185	379	125	562	310	941
Net Position						
Investment in capital assets, net	3,100	3,153			3,100	3,153
Restricted	2	3			2	3
Unrestricted	206	114	(598)	(402)	(392)	(288)
	3,308	3,270	(598)	(4	2,710	2,868

Table 2 shows the changes in net position for the fiscal years 2020 and 2019.

Table 2

Changes in Net Position
(in thousands)

	Governmental		Business-Type		Total	
Revenues:	2020	2019	2020	2019	2020	2019
Program Revenues						
Tuition & fees	308	389	1,641	1,992	1,949	2,381
Grants and contributions	98	141			98	141
General Revenues						
State subsidy	3,615	3,615			3,615	3,615
Interest	3	3			3	3
Other	1	23			1	23
Total Revenues	4,025	4,171	1,641	1,992	5,666	6,163
Program Expenses:						
Instruction	1,543	1,560			1,543	1,560
Support Services	540	568			540	568
Administration	970	874			970	874
Financial aid	259	307			259	307
Operation of School	626	610			626	610
Summer camp			401	397	401	397
Residential life			1,137	1,320	1,137	1,320
IBT			231	174	231	174
Other	117	288			117	288
Total Operating Expenses	4,055	4,207	1,769	1,891	5,824	6,098
Loss on property held for sale		(146)				(146)
Transfers	67	64	(67)	(64)		
Change in Net Position	37	(118)	(195)	37	(158)	(81)

The Statements of Cash Flows are included, which discloses net cash provided by, or used in operating activities, noncapital financial activities, and from capital and related financing activities. From these statements, the reader can obtain comparative information on the sources and uses of cash for the reported year.

Governmental Activities for the School as a Whole

The Statement of Activities reflects the cost of program services and charges for services and sales, grants, and contributions offsetting those services. The statement shows the total cost of services and the net cost of services. It identifies the cost of these services supported by unrestricted subsidies from the State of Maine and other revenue.

The state subsidy was the major source of revenue for governmental activities at 90%. Various grants provided 2% of the governmental revenues while charges for services made up 8% of total revenues.

The Schools' Funds

MSSM's governmental funds are accounted for using the modified accrual basis of accounting. Total governmental funds had revenues and other financing sources of $4,024,817 and expenditures of $3,834,969. This resulted in an increase in the fund balance of $189,848.

General Fund Budgeting Highlights

MSSM's budget is prepared according to Maine law and is based on accounting for certain transactions on a basis of cash receipts and disbursements. The most significant budgeted fund is the general fund.

Capital Assets

At the end of fiscal year 2020, MSSM had $2,837,177 invested in buildings and improvements, equipment and vehicles, net of accumulated depreciation. During the 2019-20 school year the School purchased capital assets at a cost of $62,828. These additions were offset by depreciation expense of $182,441. Note #4 shows capital assets, net of accumulated depreciation.

Debt

As of June 30, 2020, MSSM's long-term debt consisted of a bond payable. Total outstanding balance on the bond was $2,687 as of June 30, 2020. Note #5 provides additional detail on long-term debt.

Challenges and Opportunities for the Future

One of our major challenges is finding ways to decrease the deficit in CRL - Cost of Residential Life. There are many factors that affect the bottom line in that fund including enrollment fluctuation, building costs and staffing costs. We have also encountered some recent facilities challenges in the academic building that have taken significant time and resources to correct.

Opportunities include development of alternative revenue streams and increased visibility, specifically through a new Distance Education Program in partnership with grant funds from the Jack Kent Cooke Foundation. We have continued to improve our school's presence in the media through a focus on public relations. Our summer camp program continues to be an excellent outreach for the goals of our organization.

Contacting the School's Financial Management

This financial report is designed to provide our citizens, taxpayers, and investors and creditors with a general overview of the School's finances and to show the School's accountability for the money it receives. Questions about this report or additional financial information need to be directed to David Pearson, Executive Director, at 95 High Street, Limestone, Maine 04750.

Chester M. Kearney
Certified Public Accountants

12 Dyer Street, Presque Isle, Maine 04769-1550
207 764-3171 Fax 207-764-6362

Barbara E. McGuire, CPA, CGMA
Timothy P. Poitras, CPA, CGMA

To the Board of Trustees of the
Maine School of Science of Mathematics

INDEPENDENT AUDITORS' REPORT

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the Maine School of Science and Mathematics, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the School's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United Sates. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund and the aggregate remaining fund information of the Maine School of Science and Mathematics, as of June 30, 2020, and the respective changes in financial position and cash flows, where applicable, thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages I through VI, budgetary comparison information on page 27 and the Schedule of employer's pension contributions and schedule of employer's share of net pension liability on page 28 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other information

Our audit was conducted for the purpose of forming an opinion on the financial statements which collectively comprise the Maine School of Science and Mathematics' basic statements as a whole. The accompanying supplementary information on pages 30 through 33 is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated September 28, 2020 on our consideration of the Maine School of Science and Mathematics' internal control over financial reporting and on our tests of compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Maine School of Science and Mathematics' internal control over financial reporting and compliance.

Other Reporting Required by the Maine School Finance Act

In accordance with the Maine School Finance Act, we have also issued our report dated September 28, 2020 on our consideration of the Maine School of Science and Mathematics' compliance with the requirements of the Maine School Finance Act. The purpose of that report is to describe the scope of our testing of compliance with the Maine School Finance Act.

Chester M. Kearney

Presque Isle, Maine
September 28, 2020

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENT OF NET POSITION

JUNE 30, 2020

	Governmental Activities	Business-type Activities	Total
Current Assets			
Cash and cash equivalents	$ 285,772	$ -	$ 285,772
Accounts receivable (net of allowance for doubtful accounts)	51,189	8,895	60,084
Prepaid expenses	946	6,387	7,333
Total current assets	337,907	15,282	353,189
Non-Current Assets			
Capital assets-net of accumulated depreciation	2,837,177	-	2,837,177
Property held for sale	265,900	-	265,900
Due from business-type activities	467,209	-	467,209
Total non-current assets	3,570,286	-	3,570,286
Total assets	3,908,193	15,282	3,923,475
Deferred outflows of resources			
Fiscal year 2020/21 expenditures	11,608	-	11,608
Pension related expenditures	101,981	-	101,981
Summer camp 2020 expenditures	-	15,933	15,933
Total deferred outflows of resources	113,589	15,933	129,522
Total assets and deferred outflows of resources	$ 4,021,782	$ 31,215	$ 4,052,997
Current Liabilities			
Accounts payable	90,318	29,567	119,885
Accrued expenses	18,645	-	18,645
Contracts payable	111,284	-	111,284
Deposits	-	6,985	6,985
Current portion of long-term debt	2,687	-	2,687
Total current liabilities	222,934	36,552	259,486
Long-term liabilities			
Long-term debt, net of current portion	-	-	-
Due to government activities	-	467,209	467,209
Pension liabilities	305,615	-	305,615
Total long-term liabilities	305,615	467,209	772,824
Total liabilities	528,549	503,761	1,032,310
Deferred inflows of resources			
Pension related inflows	76,548	-	76,548
Fiscal year 2020/21 revenues	108,806	-	108,806
Summer camp 2020 revenue	-	9,450	9,450
Food service contract	-	71,428	71,428
2020/21 room and board	-	44,010	44,010
Total deferred inflows of resources	185,354	124,888	310,242
Total liabilities and deferred inflows of resources	713,903	628,649	1,342,552
Net Position			
Net investment in capital assets	3,100,390	-	3,100,390
Restricted	1,805	-	1,805
Unrestricted	205,684	(597,434)	(391,750)
Total net position	$ 3,307,879	$ (597,434)	$ 2,710,445

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2020

Functions/Programs	Expenses	Program Revenue: Charges for Services	Program Revenue: Operating Grants and Contributions	Net (Expense) Revenue and Changes in Net Assets: Governmental Activities	Net (Expense) Revenue and Changes in Net Assets: Business-type Activities	Net (Expense) Revenue and Changes in Net Assets: Total
Governmental activities						
Instruction						
Teachers	$ 1,500,639	-	$ 11,350	$ (1,489,289)	-	$ (1,489,289)
Special Education	41,852	-	-	(41,852)	-	(41,852)
Student support services	540,072	-	73,780	(466,292)	-	(466,292)
Financial aid expense	258,047	-	13,000	(245,047)	-	(245,047)
Information and computer technology	192,874	-	-	(192,874)	-	(192,874)
Admissions	190,434	-	-	(190,434)	-	(190,434)
Board of trustees	16,501	-	-	(16,501)	-	(16,501)
Director's office	210,318	-	-	(210,318)	-	(210,318)
Operations, finance and administration	326,010	-	-	(326,010)	-	(326,010)
Public relations and development	33,492	-	-	(33,492)	-	(33,492)
Operation of school	561,540	307,834	-	(253,706)	-	(253,706)
Trafton Expense	64,739	-	-	(64,739)	-	(64,739)
Transportation	17,948	-	-	(17,948)	-	(17,948)
Pension expense	100,078	-	-	(100,078)	-	(100,078)
Total governmental activities	$ 4,054,544	$ 307,834	$ 98,130	$ (3,648,580)	$ -	$ (3,648,580)
Business-type activities						
Summer Camp	400,317	395,575	-	-	(4,742)	(4,742)
International business transactions	231,295	124,466	-	-	(106,829)	(106,829)
Cost of residential life	1,137,124	1,120,477	-	-	(16,647)	(16,647)
Total business-type activities	1,768,736	1,640,518	-	-	(128,218)	(128,218)
Total primary government	$ 5,823,280	$ 1,948,352	$ 98,130	$ (3,648,580)	$ (128,218)	$ (3,776,798)
General revenues:						
State subsidy				3,615,347	-	3,615,347
Interest income				2,495	68	2,563
Other				1,011	-	1,011
Total general revenues				3,618,853	68	3,618,921
Loss on property held for sale				-		-
Interfund transfers						
Debt service paid by Cost of residential life fund				66,833	(66,833)	
Change in net position				37,106	(194,983)	(157,877)
NET POSITION - JULY 1, 2019				3,270,773	(402,451)	2,868,322
NET POSITION - JUNE 30, 2020				$ 3,307,879	$ (597,434)	$ 2,710,445

See accompanying notes to basic financial statement

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

BALANCE SHEET

GOVERNMENTAL FUNDS

JUNE 30, 2020

	General Fund	Special revenue funds: Jack Kent Cooke Foundation - Major Fund	Special revenue funds: Non-Major Special Revenue Funds	Special revenue funds: Total Special Revenue Funds	Total Governmental Funds
Assets					
Cash and cash equivalents	$ 191,529	$ 94,243	$ -	$ 94,243	$ 285,772
Accounts receivable (net of allowances for doubtful accounts of $0)	15,875	-	35,314	35,314	51,189
Due from other funds	481,025	-	2,107	2,107	483,132
Total assets	688,429	94,243	37,421	131,664	820,093
Deferred outflows of resources					
Fiscal year 2020/21 expenditures	9,569	2,039	-	2,039	11,608
Total deferred outflows of resources	9,569	2,039	-	2,039	11,608
Total assets and deferred outflows of resources	$ 697,998	$ 96,282	$ 37,421	$ 133,703	$ 831,701
Liabilities					
Accounts payable	$ 81,342	$ 265	$ 8,711	$ 8,976	$ 90,318
Accrued expenses	18,645	-	-	-	18,645
Contracts payable	111,284	-	-	-	111,284
Due to other funds	1,807	-	14,116	14,116	15,923
Total Liabilities	213,078	265	22,827	23,092	236,170
Deferred inflows of resources					
Fiscal year 2020/21 revenues	-	96,017	12,789	108,806	108,806
Total deferred inflows of resources	-	96,017	12,789	108,806	108,806
Total liabilities and deferred inflows of resources	213,078	96,282	35,616	131,898	344,976
FUND BALANCES					
Restricted					
Grants	-	-	1,805	1,805	1,805
Unrestricted					
Unassigned	484,920	-	-	-	484,920
Total fund balances	484,920	-	1,805	1,805	486,725
Total liabilities, deferred inflows of resources and fund balances	$ 697,998	$ 96,282	$ 37,421	$ 133,703	$ 831,701

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE

GOVERNMENTAL FUNDS

FOR THE YEAR ENDED JUNE 30, 2020

		Special Revenue Funds			
	General Fund	Jack Kent Cooke Foundation - Major Fund	Non-Major Special Revenue Funds	Special Revenue Funds	Total Governmental Funds
REVENUES					
Federal and State assistance	$ 3,615,347		$ 70,980	$ 70,980	$ 3,686,327
Fees for services	307,834				307,834
Investment and interest earnings	2,495				2,495
Other	1,011	9,891	17,259	27,150	28,161
Total revenues	3,926,687	9,891	88,239	98,130	4,024,817
EXPENDITURES					
Current					
Instruction					
Teachers	1,456,645		17,350	17,350	1,473,995
Special education	41,852				41,852
Student support services					
College counseling	60,897				60,897
Health services	105,102				105,102
Academic support	194,774				194,774
Athletics	56,201				56,201
Other	42,019	9,891	71,304	81,195	123,214
Financial aid	257,247		800	800	258,047
Information and computer technology	192,874				192,874
Admissions	190,434				190,434
Board of trustees	16,501				16,501
Director's office	206,890				206,890
Operation, finance and administration	326,010				326,010
Public relations and development	33,492				33,492
Operation of school	459,393				459,393
Trafton expense	77,345				77,345
Transportation	17,948				17,948
Total expenditures	3,735,624	9,891	89,454	99,345	3,834,969
Net change in fund balances	191,063	-	(1,215)	(1,215)	189,848
FUND BALANCES - JULY 1, 2019	293,857	-	3,020	3,020	296,877
FUND BALANCES - JUNE 30, 2020	$ 484,920	$ -	$ 1,805	$ 1,805	$ 486,725

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

RECONCILIATION OF THE GOVERNMENTAL FUNDS' BALANCE SHEET

TO THE STATEMENT OF NET POSITION

JUNE 30, 2020

Total fund balance, governmental funds		$ 486,725
Amounts reported for governmental activities in the Statement of Net Position are different because:		
Capital assets used in governmental activities are not current financial resources and therefore are not reported in this fund financial statement, but are reported in the governmental activities of the Statement of Net Position.		3,103,077
Prepaid expenses are not reported in the fund financial statement		946
Liabilities, Deferred outflows of resources and deferred inflows of resources related to pensions are not included in the fund financial statement, but are included in the governmental activities of the Statement of Net Position.		
Deferred outflows of resources - pension related expenditures	$ 101,981	
Deferred inflows of resources - pension related inflows	(76,548)	
Pension liabilities	(305,615)	(280,182)
Some liabilities, (such as Notes Payable, and Long-term Compensated Absences), are not due and payable in the current period and are not included in the fund financial statement, but are included in the governmental activities of the Statement of Net Position.		(2,687)
Net Position of Governmental Activities in the Statement of Net Position		$ 3,307,879

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2020

Net change in fund balances - total governmental funds:		$ 189,848
Amounts reported for Governmental Activities in the Statement of Activities are different because:		
Increase in prepaid expense is not treated as current expense in the fund financial statements		116
Pension expense recovery reported under GASB #68 is not reported in the governmental funds		(100,078)
Governmental funds report outlays for capital assets as expenditures because such outlays use current financial resources. In contrast, the Statement of Activities reports only a portion of the outlay as expense. The outlay is allocated over the assets' estimated useful lives as depreciation expense for the period.		
Capital asset purchases/donations capitalized	$ 62,828	
Depreciation expense	(182,441)	(119,613)
Certain long-term liabilities are not due and payable from current financial resources and, therefore, are not reported in the funds:		
Principal payments on long-term debt	66,833	66,833
Change in net position of governmental activities		$ 37,106

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENTS OF NET POSITION

PROPRIETARY FUNDS

JUNE 30, 2020

	Enterprise Funds			
	Summer Camp	Cost of Residential Life	International Business Transactions	Total
Current assets				
Cash and cash equivalents	$ -	$ -	$ -	$ -
Accounts receivable, net of allowance for uncollectible accounts of $30,100 (Note #3)	7,780	-	1,115	8,895
Prepaid expenses	1,190	5,197	-	6,387
Due from other funds	-	-	740	740
Total current assets	8,970	5,197	1,855	16,022
Deferred outflows of resources				
Summer camp 2020 expenditures	15,933	-	-	15,933
Total deferred outflows of resources	15,933	-	-	15,933
Current liabilities				
Accounts payable	1,909	25,956	1,702	29,567
Deposits	-	6,985	-	6,985
Total current liabilities	1,909	32,941	1,702	36,552
Long-term liabilities				
Due to other funds	12,606	380,387	74,956	467,949
Total long-term liabilities	12,606	380,387	74,956	467,949
Total liabilities	14,515	413,328	76,658	504,501
Deferred inflows of resources				
Summer camp 2020 revenue	9,450	-	-	9,450
2020/21 tuition	-	-	-	-
Food service contract	-	71,428	-	71,428
2020/21 room and board	-	44,010	-	44,010
Total deferred inflows of resources	9,450	115,438	-	124,888
NET POSITION				
Unrestricted (deficit)	938	(523,569)	(74,803)	(597,434)
Total net position	$ 938	$ (523,569)	$ (74,803)	$ (597,434)

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

PROPRIETARY FUNDS

FOR YEAR ENDED JUNE 30, 2020

	Summer Camp	Cost of Residential Life	International Business Transactions	Total
REVENUES				
Fees for services	$ 394,325	$ 16,791	$ 124,466	$ 535,582
Room and board	-	1,039,260	-	1,039,260
Food contract	-	58,587	-	58,587
Other	1,250	5,839	-	7,089
Total operating revenues	395,575	1,120,477	124,466	1,640,518
OPERATING EXPENSES				
Salaries and benefits	161,739	396,523	81,550	639,812
Supplies	45,616	19,981	-	65,597
Rent	16,791	-	-	16,791
Heat and utilities	-	87,619	-	87,619
Repairs and maintenance	-	17,111	-	17,111
Contract services	74,279	477,986	38,666	590,931
Advertising	41,074	-	21,460	62,534
Transportation	-	79,054	-	79,054
Travel	11,859	653	11,784	24,296
Financial aid	37,975	-	57,000	94,975
Bad debt expense	100	42,650	-	42,750
Other operating costs	10,884	80,341	20,835	112,060
Total operating expenses	400,317	1,201,918	231,295	1,833,530
Operating income (loss)	(4,742)	(81,441)	(106,829)	(193,012)
NON OPERATING REVENUES (EXPENSES)				
Interest revenue	68	-	-	68
Interest expense	-	(2,039)	-	(2,039)
Total non-operating revenue (expenses)	68	(2,039)	-	(1,971)
Change in net position	(4,674)	(83,480)	(106,829)	(194,983)
Total net position - July 1, 2019	5,612	(440,089)	32,026	(402,451)
Total net position - June 30, 2020	$ 938	$ (523,569)	$ (74,803)	$ (597,434)

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENTS OF CASH FLOWS

PROPRIETARY FUNDS

FOR THE YEAR ENDED JUNE 30, 2020

	Summer Camp	Cost of Residential Life	International Business Transactions	Total
CASH FLOWS FROM OPERATING ACTIVITIES				
Received from fees	$ 91,820	$ 1,095,506	$ 124,382	$ 1,311,708
Other cash received	1,250	6,224	-	7,474
Payments for salaries and benefits	(161,739)	(396,523)	(81,550)	(639,812)
Payments to suppliers for goods and services	(198,061)	(883,557)	(148,153)	(1,229,771)
Net cash used in operating activities	(266,730)	(178,350)	(105,321)	(550,401)
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES				
Transfers from (to) other funds	(15,980)	179,889	70,279	234,188
Net cash provided by (used in) non-capital financing activities	(15,980)	179,889	70,279	234,188
CASH FLOWS FROM INVESTING ACTIVITIES				
Interest received	68	-	-	68
Interest paid	-	(2,039)	-	(2,039)
Net cash provided by (used in) investing activities	68	(2,039)	-	(1,971)
Net decrease in cash and cash equivalents	(282,642)	(500)	(35,042)	(318,184)
CASH AND CASH EQUIVALENTS - JULY 1, 2019	282,642	500	35,042	318,184
CASH AND CASH EQUIVALENTS - JUNE 30, 2020	$ -	$ -	$ -	$ -
Reconciliation of operating income to net cash provided by operating activities				
Operating income (loss)	$ (4,742)	$ (81,441)	$ (106,829)	$ (193,012)
Adjustments to reconcile operating income to net cash used in operating activities				
(Increase) decrease in the following assets				
Accounts receivable	43,370	42,644	29,916	115,930
Security deposits	-	-	-	-
Prepaid expenses	(40)	3,025	-	2,985
Decrease in deferred outflows of resources	41,721	-	-	41,721
Increase (decrease) in the following liabilities				
Accounts payable and other accrued liabilities	(1,164)	(81,187)	1,592	(80,759)
Deposits	-	385	-	385
Increase (decrease) in deferred inflows of resources	(345,875)	(61,776)	(30,000)	(437,651)
Net cash used in operating activities	$ (266,730)	$ (178,350)	$ (105,321)	$ (550,401)

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

STATEMENT OF FIDUCIARY NET POSITION

JUNE 30, 2020

	Agency Fund
ASSETS	
Cash and equivalents	$ 27,464
	27,464
	27,464
LIABILITIES	
Accounts payable	1,148
Due to student activity accounts	26,316
	27,464
NET POSITION	
Unrestricted	None
LIABILITIES AND NET POSITION	$ 27,464

See accompanying notes to basic financial statements

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

NOTES TO FINANCIAL STATEMENTS

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(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Maine School of Science and Mathematics is a public school providing a curriculum in advanced mathematics, science and humanities. The School provides a dormitory and a cafeteria for its students in order to enhance the educational experience of its students. The Maine School of Science and Mathematics is a component unit of the State of Maine as determined by generally accepted accounting principles.

The School's financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). The following is a summary of significant accounting policies used by the School.

Government-Wide Statements

The statement of net assets and the statement of activities display information about the School as a whole. These statements include the financial activities of the School as a whole, except the fiduciary activities. These statements distinguish between the governmental and business-type activities of the School. Governmental activities generally are financed through intergovernmental revenues and other non-exchange transactions. Business-type activities are financed in whole or in part by fees charged to external users.

In the government-wide Statement of Net Position the governmental and business-type activities are presented on a consolidated basis and are reported on the full accrual, economic resource basis, which recognizes all the long-term assets and receivables as well as long-term debt and obligations. The School's net position is reported in three parts – investment in capital assets net of related debt, restricted net assets and unrestricted net assets.

The statement of activities presents a comparison between direct expenses and program revenues for each function of the School's governmental activities. Direct expenses are those that are specifically associated with a program or function and, therefore, are clearly identifiable to a particular function. The School does not allocate indirect expenses to functions in the statement of activities. The Statement of Activities reduces gross expenses, including depreciation, by related program revenues, operating and capital grants. Program revenues must be directly associated with the function or School. Operating grants include operating-specific and discretionary grants. The School had no capital grants for the year ended June 30, 2020. Revenues that are not classified as program revenues, including state subsidies, are presented as general revenues.

The net costs by School are normally covered by general revenues. The government-wide focus is on the sustainability of the School as an entity and the change in the School's net position resulting from the current year's activities.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont'd.)

Fund Financial Statements

Fund financial statements provide information about the School's funds including its fiduciary fund. Each individual fund is considered to be a separate accounting entity. Each fund is accounted for by providing a separate set of self-balancing accounts which constitute its assets, liabilities, fund equity, revenues and expenditures. Separate statements for each fund category – governmental, propriety, if any, and fiduciary, if any, are presented.

Governmental-fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, only current assets and current liabilities generally are included on the balance sheet. Revenues are recognized when measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, claims and judgments and compensated absences, which are recognized as expenditures to the extent they have matured. General capital asset acquisitions are reported as expenditures in governmental funds. Proceeds from general long-term debt are reported as other financing sources. This approach differs from the manner in which the government-wide statements are prepared. For this reason a reconciliation is presented with brief explanations to identify the differences between the two sets of financial statements.

All proprietary funds are accounted for using the economic resources measurement focus as used in the government-wide statements. Propriety fund operating revenues, such as charges for services, result from exchange transactions associated with the principal activity of the fund. Exchange transactions are those in which each party receives and gives up essentially equal values. Non-operating revenues, such as subsidies and investment earnings, result from non-exchange transactions or ancillary activities.

The emphasis in fund financial statements is on the major funds in the governmental or business-type activities' categories. Non-major funds by category are summarized into a single column. GASB #34 sets forth minimum criteria based on the size of the funds for the determination of major funds. School management may also choose to designate additional funds as major funds based on other criteria. The non-major funds are combined in one column in the fund financial statements.

The following funds are reported as major funds by the School:

Governmental Funds

General Fund - To account for all financial resources except those required to be accounted for in another fund. The general fund is the School's operating fund.

Jack Kent Cooke Foundation -- Special revenue fund to account for grant funding provided by the foundation.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont'd.)

Proprietary Funds

Summer Camp and the Cost of Residential Life are considered major proprietary funds.

Formal budgetary accounting is employed as a management control for all funds of the School. Annual operating budgets are adopted and amended as necessary for the General Fund. Budgetary control is exercised at the department level. All unencumbered budget appropriations, except project budgets, lapse at the end of each fiscal year.

Encumbrances represent commitments related to unperformed contracts for goods or services. Encumbrance accounting is used where purchase orders, contracts and other commitments for the expenditure of resources are recorded to ensure that portion of the fund balance is utilized for its intended purposes. In the General Fund, for budgetary purposes, appropriations lapse at fiscal year-end except for that portion related to encumbered amounts. Encumbrances outstanding at year-end are reported as assignments of fund balance and do not constitute expenditures or liabilities because the commitment will be honored during the subsequent year.

GASB Statement No. 54, establishes a fund balance hierarchy based primarily on the extent to which a government is bound to observe constraints imposed upon the use of the resources reported in governmental funds. In the fund financial statements, fund balance is reported as follows:

- Non-spendable-Items that are either not in spendable form or legally or contractually required to remain intact. The School does not report any non-spendable fund balance.
- Restricted fund balance-Resources that have constraints imposed by either creditors, grantors, contributors or laws and regulations of other governments; or amounts that have very stringent conditions imposed by external parties or law.
- Unrestricted fund balance-Has 3 components:
  - Committed fund balance-Amounts with internally imposed restrictions mandated by the government's highest level of decision making authority which require action from that authority to be redeployed. In the case of the School this authority lies with the Board of Trustees.
  - Assigned fund balance-Amounts that are constrained by the government's intent that they will be used for specific purposes. Decision making authority with respect to these amounts lies with the Board of Trustees but is not reserved to the highest-level authority. The School has assigned the fund balance related to the summer camp program.
  - Undesignated fund balance-This is the residual balance of the general fund which represents the remaining fund balance after allocation to the other fund balance categories. It reflects resources that are available for further appropriation and expenditure for general governmental purposes.

When restricted and other fund balances are available for use, it is the School's policy to use restricted resources first, followed by committed, assigned, and unassigned amounts, respectively.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont'd.)

Basis of Accounting

Government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place.

Governmental-fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, claims and judgments and compensated absences, which are recognized as expenditures to the extent they have matured.

Proprietary funds use the full accrual basis of accounting. Differences in the accrual and modified accrual basis of accounting arise in the recognition of revenue and in the presentation of expenses versus expenditures. On the accrual basis of accounting, expenses are recognized at the time they are incurred.

Financial Statement Amounts

Cash and Temporary Investments

Available cash is deposited in interest bearing accounts to as great a degree as possible. These residual investments are classified for reporting purposes as cash and temporary investments. Earnings from these investments are reported by the applicable funds. Deposits with a maturity of three months or less are included in cash and temporary investments for financial reporting purposes.

Capital Assets

Capital assets purchased or acquired with an original cost of $2,500 or more are reported at actual or estimated historical cost. Contributed assets are reported at fair market value as of the date received. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other costs incurred for repairs and maintenance are expensed as incurred. Depreciation on all assets is provided on the straight-line method over the estimated useful lives of 5 to 10 years on equipment, 20 years for leasehold improvements and 50 years for buildings and improvements.

Deferred Outflows of Resources

The School reports decreases in net assets that relate to future periods as deferred outflows of resources in a separate section of its statement of net position. The School will not recognize the related expenditures until a future event occurs. The School's deferred outflows of resources are detailed in Note #6 and #7.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont'd.)

Deferred Inflows of Resources

The School reports a separate section for deferred inflows of resources. This separate financial statement element reflects an increase in net assets that applies to future periods. The School will not recognize the related revenues until a future event occurs. The School's deferred outflows of resources are detailed in Notes #6 and #7.

Operating Revenues and Expenses

Operating revenues consist of amounts generated directly from the primary activity of the School's proprietary funds. Operating expenses are necessary costs incurred to provide the goods or service that is the primary activity of the fund.

Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

New Accounting Policies

The School has adopted the provisions of Statement No. 88 of the Governmental Accounting Standards Board (GASB) Accounting Board – Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements. GASB 88 expands required disclosure for long-term debt and other long-term obligations. Adoption of this standard does not impact previously issued financial statements.

(2) CASH AND TEMPORARY INVESTMENTS

Deposits with financial institutions are subject to custodial credit risk. Custodial credit risk is the risk that in the event of a bank failure, the School's deposits may not be returned to it. The School's investment policy is to invest in regional banks and federal securities and to insure the funds to as great a degree as possible. The School's checking deposits at year-end were covered by Federal Depository Insurance Corporation (FDIC) or collateralized by U.S. Governmental Agency securities held in the School's name.

The School's cash is categorized to give an indication of the level of risk assumed by the School at year-end. These categories are defined as follows:

Category #1 - Insured or collateralized with securities held by the School or by its agency in the School's name.
Category #2 - Collateralized with securities held by the pledging financial institution's trust School or agent in the School's name.
Category #3 - Uncollateralized, which includes any bank balance that is collateralized with securities held by the pledging financial institution or by its trust School or agent but not in the School's name.

As of June 30, 2020 the School's entire balances are classified as Category 1.

(3) ACCOUNTS RECEIVABLE

Accounts receivable is reported net of the allowance for doubtful accounts. The School monitors individual accounts receivable and charges delinquent balances to the allowance for doubtful accounts when the following criteria are met:

- Account is over 120 days past due
- No attempt has been made by the student/customer to make payment arrangements
- No response has been given to the School's collection attempts

Allowance for doubtful accounts as of June 30, 2020 is as follows:

General fund	$ 0
Proprietary fund (Summer camp)	100
Proprietary fund (Cost of Residential Life)	30,000
	$30,100

Accounts receivable consists primarily of amounts due from students for room and board and other charges.

(4) CAPTIAL ASSETS

Capital asset activity for the year ended June 30, 2020 was as follows:

	Beginning Balance	Additions	Retirements	Ending Balance
Capital Assets Being Depreciated				
Buildings and improvements	3,680,862	42,003		3,722,865
Leasehold improvements	161,959			161,959
Equipment	791,171	2,660		793,831
Furniture and fixtures	291,420	18,165		309,585
Total at historical cost	4,925,412	62,828		4,988,240
Less Accumulated Depreciation				
Buildings and improvements	1,162,524	97,180		1,259,704
Leasehold improvements	35,541	10,797		46,338
Equipment	656,117	36,346		692,463
Furniture and fixtures	166,040	38,118		204,158
Total Accumulated Depreciation	2,020,222	182,441		2,202,663
Land (Not depreciated)	51,600			51,600
Construction in progress	0			0
Capital assets, net	2,956,790	(119,613)		2,837,177

Capital assets include a dormitory building that was taken out of service and is considered impaired. The building has been listed for sale and written down to its carrying value. See Note #13 for additional information.

(4) CAPTIAL ASSETS (cont'd.)

Depreciation expense was charged to functions in the statement of activities as follows:

Governmental activities:	
Instruction	26,644
Operation of school and dorms	152,369
Administration	3,428
	182,441

(5) LONG-TERM DEBT

As of June 30 long-term debt consisted of:

5.38% Bond payable in monthly installments of $1,868 in principal and interest, matures in 2020 secured by revenues, receivables and balances on deposit.	2,687
	2,687

Future long-term debt obligations are as follows for the year ended June 30, 2020:

	PRINCIPAL	INTEREST	TOTAL
2021	2,687	16	2,703
	2,687	16	2,703

Long-term debt activity for the year ended June 30, 2020 is as follows:

	Beginning Balance	Advances	Payments	Ending Balance
Bond payable	24,323		21,636	2,687
Capital lease – furniture	45,197		45,197	0
	69,520		66,833	2,687

(6) DEFERRED INFLOWS AND OUTFLOWS OF RESOURCES

Expenditures made for future school years and summer camps held after June 30 and expenditures related to Maine PERS are characterized as deferred outflows of resources.

The School receives advances of out of state tuition, room and board and other receipts, which have been characterized as deferred inflows of resources in the accompanying financial statements.

(7) EMPLOYEES' RETIREMENT PLAN

Teachers, some school secretaries, administrators, tutors, substitutes and education technicians are participants in the Maine Public Employees Retirement System (MainePERS). Some participants are included in the MainePERS Consolidated Participating Local Districts Plan (PLD) while others are part of the State Employees and Teacher Plan (SET). The School's executive director participates in social security and receives contributions of 7.65% of his salary toward a 403b plan.

The Maine Public Employees Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for PLDs Consolidated Plan. That report may be obtained by writing to Maine Public Employees Retirement System, 46 State House Station, Augusta, Maine 04333 or by calling (800) 451-9800.

PLD Plan

Benefits provided The plan provides retirement with annual cost-of living adjustments to plan members and beneficiaries. The plan provides defined retirement benefits based on the members' average final compensation and service credit earned as of retirement. Employees covered under this plan become vested after five years of service. For PLD members, normal retirement age is 65. The monthly benefit of members who retire before normal retirement age by virtue of having at least 25 years of service credit is reduced by a statutorily prescribed factor for each year of age that a member is below his/her normal retirement age at retirement. MainePERS also provides disability and death benefits which are established by contract with the PLD employers under applicable statutory provisions.

Upon termination of membership, members' accumulated employee contributions are refundable with interest, credited in accordance with statue. Withdrawal of accumulated contributions results in forfeiture of all benefits and membership rights. The annual rate of interest credited to members' accounts is set by the System's Board of Trustees and is currently 5%.

Description of Funding Policy - Participants contributed 7.35% of their wages to the plan in FY 19/20 and will contribute 7.35% in FY 20/21. The School contributed 10.0% of participant wages to the plan in FY 19/20 and will contribute 10.1% in FY 20/21.

(7) EMPLOYEES' RETIREMENT PLAN (cont'd.)

SET Plan

Plan Description - The SET plan is a cost sharing plan with a special funding situation established by the Maine State Legislature. MainePERS provides the retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. The authority to establish and amend benefit provisions rests with the Maine State Legislature.

Benefits provided -- The plan provides defined retirement benefits based on the members' average final compensation and service credit earned as of retirement. Employees covered under this plan become vested after five years of service. For SET plan members, normal retirement age is 60, 62 or 65. The monthly benefit of members who retire before normal retirement age by virtue of having at least 25 years of service credit is reduced by a statutorily prescribed factor for each year of age that a member is below his/her normal retirement age at retirement. MainePERS also provides disability and death benefits which are established by contract with the PLD employers under applicable statutory provisions.

Upon termination of membership, members' accumulated employee contributions are refundable with interest, credited in accordance with statue. Withdrawal of accumulated contributions results in forfeiture of all benefits and membership rights. The annual rate of interest credited to members' accounts is set by the System's Board of Trustees and is currently 5%.

Description of Funding Policy - Participants are required, by state statute, to contribute 7.65% of their compensation to the retirement system. For employees compensated through federal pass-through grants, the School contributes amounts determined by the State of Maine. The School is required to contribute toward the UAL of the plan and pay a percentage of payroll towards the administrative costs for federally funded teachers, which amounted to 14.954% in FY 19/20 (increasing to 14.96% in FY 20/21).

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions –

At June 30, 2020, the School reported a liability of $305,615 for its proportionate share of the Net Pension Liability, all of which was attributable to the PLD plan. The school's proportionate share of the SET liability was $0 while the State's proportionate liability attributed to the School was $1,972,184. The Net Pension Liability was measured as of June 30, 2019 and the total MainePERS pension liability used to calculate the School's Net Pension Liability was determined by an actuarial valuation as of that date. For the year ended June 30, 2020, the School recognized pension expense of $100,078 plus employer's amortization of change in proportionate share and differences between employer contributions and proportionate share of contributions.

(7) EMPLOYEES' RETIREMENT PLAN (cont'd.)

At June 30, 2020, the School reported deferred outflows of resources and deferred inflows of resources related to the PLD plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions subsequent to the measurement date	33,738	
Difference between expected and actual experience	36,186	
Difference between projected and actual earnings		76,548
Changes of assumptions	15,478	
Changes in proportion and differences between employer contributions and proportionate share of contributions	16,579	
	101,981	76,548

$33,738 is reported as deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ending June 30,	
2021	58,413
2022	(30,402)
2023	(2,530)
2024	(48)
	25,433

Discount Rate

The discount rate used to measure the collective pension liability was 6.75% for 2020. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and non-employer entity contributions will be made at the contractually required rates, actuarially determined. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments to the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following table shows how the collective net pension liability as of June 30, 2019, the measurement date, would change if the discount rate used was one percentage point lower or one percentage point higher than the current rate. The current rate is 6.75% for the PLD Consolidated Plan.

1% Decrease	Current Discount Rate	1% Increase
5.75%	6.75%	7.75%
$696,170	$305,615	$(59,713)

(7) EMPLOYEES' RETIREMENT PLAN (cont'd.)

Changes in Net Pension Liability

Changes in net pension liability are recognized in pension expense for the year ended June 30, 2020 with the following exceptions:

The difference between expected and actual experience with regard to economic or demographic factors were recognized in pension expense using a straight-line amortization method over a closed period equal to the average expected remaining service lives of active and inactive members in each plan. The first year is recognized as pension expense and the remaining years are shown as either deferred outflows of resources or deferred inflows of resources. For the measurement date of June 30, 2019 this was 5 years for the PLD plan.

Differences between projected and actual investment earnings were recognized in pension expense using a straight-line amortization method over a closed five-year period. The first year is recognized as pension expense and the remaining years are shown as either deferred outflows of resources or deferred inflows of resources.

Differences due to changes in assumptions about future economic or demographic factors or other inputs were recognized in pension expense using a straight-line amortization period equal to the average expected remaining service lives of active and inactive members in each plan. The actuarial assumptions used for the year ended June 30, 2020 valuation were based on the results of an actuarial experience study for the period of June 30, 2012 to June 30, 2015. The first year is recognized as pension expense and the remaining years are shown as either deferred outflows of resources or deferred inflows of resources. There were no changes in assumptions for the fiscal year ended June 30, 2020.

Differences resulting from a change in proportionate share of contributions and differences between total employer contributions and the employer's proportionate share of contributions are recognized as pension expense straight-line amortization method over a closed period equal to the average expected remaining service lives of active and inactive members in each plan. The first year is recognized as pension expense and the remaining years are shown as either deferred outflows of resources or deferred inflows of resources. Differences between total employer contributions and the employer's proportionate share of contributions and the employer's proportionate share of contributions may arise when an employer has a contribution requirement for an employer specific liability.

Rate of return

The long-term rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the largest asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2019 are summarized in the following table. Assets for each of the defined benefit plans are commingled for investment purposes.

(7) EMPLOYEES' RETIREMENT PLAN (cont'd.)

Asset Class	Target Allocation	Long-term expected real rate of return
Public equities	30.0%	6.0%
US Government	7.5	2.3
Private equity	15.0	7.6
Real assets:		
Real estate	10.0	5.2
Infrastructure	10.0	5.3
Natural resources	5.0	5.0
Traditional credit	7.5	3.0
Alternative credit	5.0	4.2
Diversifiers	10.0	5.9

(8) OTHER POST-EMPLOYMENT BENEFITS

The School participates in the MainePERS retiree group life insurance program. As of the program's June 30, 2019 measurement date, the School's proportionate share of the OPEB liability was $58,793. 100% of this liability is allocated to the State of Maine.

(9) BUILDING USE AGREEMENT

The School has entered into a one year building-use agreement with the Town of Limestone on July 1, 2019 which has provisions to renew annually. The agreement provides for the exclusive use of various classrooms and other areas in the schools by the Maine School of Science and Mathematics. Either party may terminate this agreement by providing a twelve-month written notice. During the 2019-20 school year the School paid $191,085 for the facility lease and $191,085 for operating and maintenance costs and custodial services. The parties have renewed the lease for the 2020-21 school year at a rate of $148,585 for the lease and $148,585 for maintenance costs and custodial services.

(10) CONCENTRATIONS

State funding

The School received approximately 90% of its operating revenue from state funding for the year ended June 30, 2020. The ability to continue its operations is dependent on continued appropriations from the State.

(11) INTERFUND BALANCES

Prior to the year ended June 30, 2012 the Summer Camp program and the Cost of Residential Life were accounted for in the School's General Fund. Beginning July 1, 2011 the School established proprietary funds to account for these activities, however capital assets and long-term debt related to the cost of the dormitory continue to be reported in the governmental activities rather than the business-type activities.

As of June 30, 2020, the Summer Camp fund owed the Governmental Activities $12,306, the Cost of Residential life fund owed the Governmental Activities $380,387 and the International Business Transactions fund owed the Governmental Activities $74,956 and the Cost of Residential Life Fund $720. No repayment terms have been established for the interfund balances, amounts due to the Governmental Activities fund are not expected to be repaid within the following year.

(12) SUBSEQUENT EVENTS

Management has evaluated subsequent events occurring through September 28, 2020, the date the financial statements were available to be issued.

(13) FAIR VALUE OF FINANCIAL INSTRUMENTS

The School has a number of financial instruments, none of which are held for trading purposes. The School categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The School also has a nonrecurring fair value measurement, for a closed dormitory building that is no longer used after the 2016-17 school year and therefore is considered to be impaired. The Board of Trustees has declared the building as surplus property and voted to sell the assets for the benefit of the School contingent upon approval by the State Legislature, which was granted in 2018. The building is listed as held for sale and recorded at its appraised value of $265,900. The appraisal is considered a level 3 input.

Considerable judgment is necessarily required in interpreting market data to develop the estimates of fair value, and, accordingly, the estimates are not necessarily indicative of the amounts that the School could realize in a current market exchange.

(14) TAXES

As a governmental entity, the School is not subject to Federal and State income taxes, accordingly it is not necessary to consider the effects of any uncertain tax positions.

The School is subject to Federal and State payrolls and is required to file the appropriate tax returns. Management believes that all required returns have been properly filed as of June 30, 2020. No examinations have been conducted by the Federal or State taxing authorities and no correspondence has been received from these authorities.

(15) LEASES

The School has entered into an operating lease agreement with the United States Department of Education where it leases 12 homes adjacent to its campus. The homes were formerly property of the United States Department of Defense and were subsequently transferred to the Department of Education. The terms of the lease are for 30 years with a total of $1 due to the lessor.

(16) COVID-19

The COVID-19 outbreak in the United States has caused business disruption through mandated and voluntary closings of multiple businesses. Management is presently evaluating the effect of the business disruptions on operations. The related financial impact and duration cannot be reasonably estimated at this time by management.

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

BUDGETARY COMPARISON SCHEDULE

GENERAL FUND

FOR THE YEAR ENDED JUNE 30, 2020

	Budgeted Amounts		Actual Amounts (Budgetary Basis)	Final Budget Favorable / (Unfavorable)
	Original	Final		
Resources (Inflows)				
Federal and State assistance	$3,615,347	$3,615,347	$ 3,615,347	$ -
Fees for services	419,774	419,774	307,834	(111,940)
Investment and interest earnings	2,400	2,400	2,495	95
Other	7,600	7,600	1,011	(6,589)
Amounts available for appropriation	4,045,121	4,045,121	3,926,687	(118,434)
Expenditures (Outflows)				
Instruction				
Teachers	1,540,229	1,540,229	1,456,645	83,584
Special education	39,737	39,737	41,852	(2,115)
Student support services				
College counseling	64,155	64,155	60,897	3,258
Health services	104,893	104,893	105,102	(209)
Academic support	214,258	214,258	194,774	19,484
Athletics	84,742	84,742	56,201	28,541
Student activities	59,447	59,447	42,019	17,428
Financial aid	325,000	325,000	257,247	67,753
Information and computer technology	189,530	189,530	192,874	(3,344)
Admissions	208,200	208,200	190,434	17,766
Board of trustees	13,280	13,280	16,501	(3,221)
Director's office	202,741	202,741	206,890	(4,149)
Operation, finance and administration	319,045	319,045	326,010	(6,965)
Public relations and development	41,457	41,457	33,492	7,965
Operation of school	475,766	475,766	459,393	16,373
Trafton expense	137,608	137,608	77,345	60,263
Transportation	25,033	25,033	17,948	7,085
Contingency	-	-	-	-
Total expenditures	4,045,121	4,045,121	3,735,624	309,497
Net increase in fund balances	-	-	191,063	191,063
BUDGETARY FUND BALANCE JULY 1, 2019			293,857	
BUDGETARY FUND BALANCE - JUNE 30, 2020			$ 484,920	

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

SCHEDULE OF EMPLOYER'S PENSION CONTRIBUTIONS

FOR THE YEAR ENDED JUNE 30, 2020

Measurement Date	Contractually Required Contribution	Contributions in Relation to Contractually Required Contribution	Contribution Deficiency (Excess)	Employer's Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
June 30, 2015	35,609	35,609	-	456,525	7.80%
June 30, 2016	45,509	45,509	-	479,042	9.50%
June 30, 2017	53,510	53,510	-	557,403	9.60%
June 30, 2018	61,162	61,162	-	611,615	10.00%
June 30, 2019	68,670	68,670	-	686,999	10.00%

Schedule is intended to show information for 10 years.
Additional years will be displayed as they become available.

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

SCHEDULE OF EMPLOYER'S SHARE OF NET PENSION LIABILITY

FOR THE YEAR ENDED JUNE 30, 2020

	Measurement Date: June 30, 2019	2018	2017	2016	2015
Employer's proportion of the Net Pension Liability (Asset)	0.099983%	0.096394%	0.090007%	0.07589%	0.00063162
Employer's proportionate share of the Net Pension Liability (Asset)	$ 305,615	$ 263,811	$ 368,780	$ 403,206	201,513
Employer's covered payroll	$ 686,699	$ 611,615	$ 557,403	$ 479,042	456,525
Employer's proportionate share of the Net Pension Liability (Asset) as a percentage of its covered employee payroll	44.50%	43.13%	66.16%	84.17%	0.441406276
Plan fiduciary net position as a percentage of the total pension liability	90.6%	91.1%	86.4%	81.6%	0 883

Amounts presented have a measurement date of June 30, 2019

Schedule is intended to show information for 10 years.

Additional years will be displayed as they become available.

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

NOTES TO GASB #68 REQUIRED SCHEDULES

FOR THE YEAR ENDED JUNE 30, 2020

Measurement Date: June 30, 2019

Only fiscal years 2015 - 2019 are reported. The School will continue to present information until a full ten year trend is compiled.

Changes of Benefit Terms include:

There were no benefit changes for the School employees in the employees' retirement plan.

Changes of Assumptions include:

The discount rate remained at 6.75% and the COLA increase remained at 2.20%.
The rate of inflation was 2.75%. 2.75% was also used by MainePers in its years ended June 30, 2018, 2017 and 2016.

Methods and assumptions used to determine contribution rates

Actuarial cost method	Entry age normal
Amortization method	A level percentage of payroll using a method where a separate twenty year closed period is estabilshed annually for the gain or loss for that year.
Asset valuation method	One-third of the investment return that is different from the actuarial assumption for investment return
Retirement age	60 or 65, depending on years of creditable service at certain dates
Investment rate of return	6.875% per annum compounded annually
Cost of living benefit increases	2.75% for 2019, 2.75% for 2018
Mortality	RP2014 Total Dataset Health Annuitant Mortality Table for males and females is used for active member and non disabled retirees. RP2014 Total Dataset Disabled Annuitant Mortality Table is used for all recipients of disability benefits.
Actual experience study period	July 1, 2005 to June 30, 2010

SUPPLEMENTARY INFORMATION

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

SCHEDULE OF ACTIVITIES ACCOUNT NON-OPERATING

JUNE 30, 2020

	BALANCE JULY 1, 2019	RECEIPTS	EXPENDITURES	BALANCE JUNE 30, 2020
CLUB				
A Capella Club	$ 150	-	-	$ 150
Art Club	4	-	-	4
Astronomy club	183	128	-	311
Book club	-	149	32	117
Boxing club	-	-	-	-
Civil Rights Club	416	-	-	416
Cooking Club	190	-	-	190
Club Seed Fund	9,290	278	1,150	8,418
Crime scene club	161	-	-	161
Cubing club	-	150	39	111
Ecology Club	2	-	-	2
French Club	640	234	422	452
Ginaz	150	-	-	150
Gardening Club	100	-	-	100
Girl Up Club	258	108	90	276
Go Club	-	300	271	29
Key Club	1,255	1,245	955	1,545
LARP Club	267	-	-	267
Literary Magazine	819	-	161	658
Lord of the Rings Club	(214)	-	-	(214)
Magic Club	231	-	-	231
Media Club	235	-	-	235
Mu Alpha Theta National Math Society	276	-	-	276
Prom Committee	2,879	1,979	1,470	3,388
Rocketry Club	14	-	-	14
Role Playing Theater	214	-	-	214
Role Playing	(25)	25	-	-
SAGA	-	453	161	292
Sea Perch Club	674	276	233	717
Soccer Club	1	-	-	1
Spanish Club	175	59	27	207
Student Senate	3,569	1,325	2,191	2,703
Student Senate Bottles	4,018	150	150	4,018
The Newspaper	-	100	-	100
Theater Club	108	59	30	137
VEX Robots	522	-	-	522
Vending-Office	63	-	-	63
Yearbook	-	65	10	55
	26,625	7,083	7,392	26,316
REPRESENTED BY:				
Checking accounts	26,325	7,083	6,244	27,164
Petty cash	300	-	-	300
Accounts payable	-	-	1,148	(1,148)
	$ 26,625	$ 7,083	$ 7,392	$ 26,316

Maine School of Science and Mathematics

Schedule of Expenditures of Federal Awards

Year Ended June 30, 2020

Federal Grantor Pass through Grantor Program Title	Federal CFDA Number	Pass-Through Grantor's Number	Award Amount	Revenues	Expenditures
U.S. Department of Education					
Direct Awards					
Small, Rural Schoo Achievement Program - 2019/20	84 358	N/A	$ 11,350	$ 11,350	$ 11,350
School Emergency Response to Violence (SERV)	81.184	N/A	59,630	59,630	59,630
				70,980	70,980
Total U.S. Department of Education				70,980	70,980
Tota expend tures of federal awards				$ 70,980	$ 70,980

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

YEAR ENDED JUNE 30, 2020

A. SIGNIFICANT ACCOUNTING POLICIES

The schedule of expenditures of federal awards includes the federal grant activity of Maine School of Science and Mathematics and is presented on the modified accrual basis of accounting. The information in this schedule is presented in accordance with the requirements of the Maine School Finance Act. Some amounts presented in the schedule may differ from amounts presented in, or used in the preparation, of the basic financial statements.

B. BASIS OF PRESENTATION

Reporting entity- The accompanying Schedule of Expenditures of Federal Awards presents the activity of federal financial assistance programs administered by the Maine School of Science and Mathematics, an entity as described in the notes to the financial statements.

Pass-through programs Where the School receives funds from a government entity other than the federal government (pass-through), the funds are accumulated based on the Catalog of Federal Domestic Assistance (CFDA) number advised by the pass-through grantor.

C. INDIRECT COSTS

Indirect costs are included in the reported expenditures to the extent such costs are included in the federal financial reports used as the source for the data presented.

D. MATCHING COSTS

Matching costs that represent the share of the Maine School of Science and Mathematics' share of certain program costs, if any, are not included in the Schedule of Expenditures of Federal Awards.

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

SCHEDULE OF RECONCILIATION OF FUND BALANCES PER MEDMS REPORTS TO FUND BALANCES PER FINANCIAL STATEMENTS

YEAR ENDED JUNE 30, 2020

	General Fund (1000)	Special Revenue Funds (2900)	Enterprise Funds (6000)	Totals
Balances per MEFS reports	$ 3,306,074	$ 1,805	$ (597,434)	$ 2,710,445
Revenue adjustments				
Expenditure adjustments				
Other adjustments Rounding				
Audited GAAP Basis Fund Balance	$ 3,306,074	$ 1,805	$ (597,434)	$ 2,710,445

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

JUNE 30, 2020

FINANCIAL STATEMENT FINDINGS

2020-001 Significant Deficiency – Grant Compliance

Condition and context: The School does not have an individual tasked with overseeing grant funding and compliance.

Criteria: Grant funding provided by the U.S. Department of Education and Maine Department of Education has compliance requirements that must be followed. These requirements include, but are not limited to, timely filing of annual applications and performance reports.

Cause: Management did not feel that grants were significant enough to need a person assigned to this role.

Effect: Because there was not an individual responsible for oversight, grant reports and applications were not filed on a timely basis. Grant funds that were earned were not claimed and were lost as a result.

Recommendation: We recommended that management assign one individual responsible for grant oversight. This includes oversight over filing of reports, expenditures and grant drawdowns.

Views of responsible officials and planned corrective actions: Management agrees and will .

ADDITIONAL REPORTS

Chester M. Kearney
Certified Public Accountants

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207 764 3171 Fax 207 764 6362

Barbara E. McGuire, CPA, CGMA
Timothy P. Poitras, CPA, CGMA

To the Board of Trustees of the
Maine School of Science and Mathematics

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Maine School of Science and Mathematics, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise Maine School of Science and Mathematics' basic financial statements and have issued our report thereon September 28, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Maine School of Science and Mathematics' internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Maine School of Science and Mathematics' internal control. Accordingly, we do not express an opinion on the effectiveness of Maine School of Science and Mathematics' internal control.

A *deficiency in internal control* exists when the design of or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs as item 2020-001 that we consider to be a significant deficiency.

Compliance and other matters

As part of obtaining reasonable assurance about whether Maine School of Science and Mathematics' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and which are described in the accompanying schedule of findings and questioned costs as item 2020-001.

Maine School of Science and Mathematics' Response to Findings

Maine School of Science and Mathematics' response to the findings identified in our audit are described in the accompanying schedule of findings and questioned costs. Maine School of Science and Mathematics' response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control over compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Chester M. Kearney

Presque Isle, Maine
September 28, 2020

Chester M. Kearney
Certified Public Accountants

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207-764-3171 Fax 207-764 6362

Barbara E. McGuire, CPA, CGMA
Timothy P. Poitras, CPA, CGMA

To the Board of Trustees of the
Maine School of Science and Mathematics

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH THE REQUIREMENTS OF THE MAINE SCHOOL FINANCE ACT

We have audited the financial statements of the Maine School of Science and Mathematics, as of and for the year ended June 30, 2020, and have issued our report thereon dated September 28, 2020.

The management of the Maine School of Science and Mathematics is responsible for the School's compliance with laws and regulations. In connection with the audit referred to above, we selected and tested transactions and records to determine the School's compliance with laws and regulations noncompliance with which could have a material effect on the financial statements of the School.

Title 20-A Sec 6051 requires certain written assurances with respect to school audits. Our audit of compliance with the laws and regulations consisted at a minimum the following:

1. A determination of whether or not the School has complied with budget content requirements pursuant to section 15693.
2. A determination of whether or not the School has complied with transfer limitations between budget cost centers pursuant to section 1485.
3. A determination of whether or not the School has exceeded its authority to expend funds.
4. A determination as to whether or not the annual financial data submitted to the School is correct.
5. A determination of whether or not the School was in compliance with applicable provisions of the Essential Programs and Services Funding Act.

The results of our tests indicate that, for the items tested, the School, complied with those provisions of Maine laws and regulations. Nothing came to our attention that caused us to believe that for the items not tested, the School was not in compliance with Maine laws or regulations.

Chester M. Kearney

Presque Isle, Maine
September 28, 2020

APPENDIX B

School Profile Sheets – 2018-2019, 2019-2020, 2020-2021

Maine School of Science and Mathematics

2018-2019 School Profile

The Maine School of Science and Mathematics (MSSM) was founded in 1995 by the Maine Legislature as a public, residential magnet school that serves talented and highly motivated high school students from across the state and around the world. For the 2018-2019 school year, MSSM serves 144 students in grades 9-12.

MSSM's academic year is divided into semesters with an additional January term providing opportunities for accelerated and specialty courses and internships.

David Pearson
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Deborah McGann
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Cindy Farley
Registrar
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Academic Rigor

Most courses at MSSM are taught at the college level, using college textbooks and curricular materials. MSSM has an agreement with The University of Maine at Presque Isle allowing students to receive college credit for a majority of MSSM courses that are taught beyond the AP level.

5-year AP Test Average	Number Tested	Mean Score
Science	250	4.0
Math	241	4.1
Humanities	235	3.9
Total for All Subjects	**726**	**4.0**

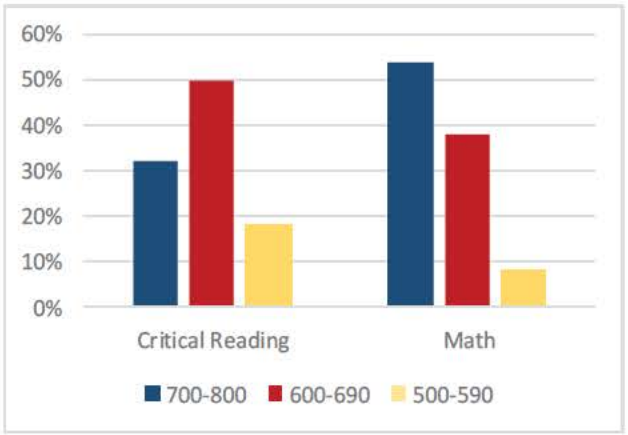
Advanced Placement courses are offered at MSSM in English Language & Composition, European History, Psychology, Calculus AB and BC, Statistics, Chemistry, and Physics C: Mechanics and Electricity & Magnetism.

MSSM students are motivated, talented and hard-working. In 2018 they took 141 Advanced Placement tests and demonstrated their mastery of college level material by achieving a mean score of 3.8 on the tests.

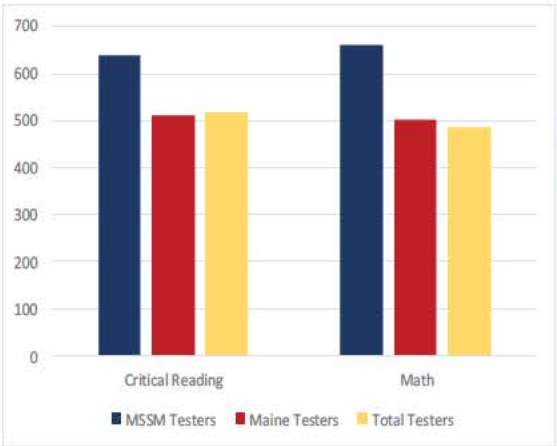
Grading is also done at the college level. Grades are not weighted despite the rigor of MSSM's curriculum and the demands placed on students.

MSSM is ranked by *U.S. News and World Report* as the #1 public high school in Maine, #19 high school in the U.S., #6 Magnet School in the U.S., and the #10 Stem School in the U.S.

Percentages of Students in SAT Score Ranges, Class of 2018



2018 SAT MSSM Compared to the State & Total Population



95 High Street | Limestone, Maine 04750 | Telephone (207) 325-3600 | Facsimile (207) 325-3340 | www.mssm.org | CEEB #200574

A Learning Community

MSSM is located in the town of Limestone (pop. 2,300) in a rural area near the northern tip of Maine, less than two miles from the Canadian Border. The nearest city, Bangor (pop. 33,000), is a three hour drive from MSSM, and the biggest city in our state, Portland (pop. 66,000), is almost six hours away. With these longer drive times, it is difficult for MSSM students to make college visits. Therefore interviews are most commonly completed via video conferencing.

Activities at MSSM range from Astronomy Club and Art Club to VEX Robotics and Key Club. MSSM requires two hours per week of community service from students, such as tutoring, assisting faculty, or serving as residential assistants. To emphasize academic collaboration over competition, MSSM records neither GPA nor class rank. The school's small size, residential nature, and cooperative academic environment combine to create a very tight-knit community of scholars.

MSSM offers sports for dedicated student athletes who wish to meet the challenges of participating in sports in addition to their studies. Students may participate in cross country, soccer, track, Nordic skiing, and volleyball.

Distinctive Academic Features and Awards

- Admission to MSSM is highly competitive. In addition to their academic ability (measured by grades, teacher recommendations, a writing sample and test scores) our students are selected on the basis of maturity, motivation, and ability to contribute positively to the residential environment.
- In 2018-2019, the student teacher ratio is 9:1.
- The academic year includes a January term which gives students the opportunity for intensive interdisciplinary classes, research opportunities, and internships.
- 92% of faculty hold advanced degrees. Many have significant private sector experience and have studied extensively in their fields.
- In 2014 & 2015, MSSM students received recognition at the Intel International Science & Engineering Fair (ISEF).
- Out of 38 students in the class of 2019, 8 will receive recognition in the 2018 National Merit Scholarship Program.
- For the fourth consecutive year, the MSSM math team took first place in the Maine State Math Meet. Team Ivory also won the regular season championship in the Maine Association of Math Leagues
- MSSM requires two years of world language and two years of social sciences.

Matriculation Summary: Classes of 2017 and 2018

Allegheny College	Maine Maritime Academy	U. of Maryland, College Park
Boston College	Mass. Institute of Technology	University of Mass., Amherst
Boston University	McGill University	University of New England
Bowdoin College	Mercer University	U. of New Hampshire, Manchester
Carnegie Mellon University	Mount Holyoke College	University of Maine
Champlain College	New College of Florida	University of Maine, Farmington
Clark University	Northpoint Bible College	University of Maine, Presque Isle
Clarkson University	Rensselaer Polytechnic Institute	University of Pittsburg
Colby College	Rochester Institute of Technology	University of Southern Maine
Cornell University	Smith College	University of Utah
Eckerd College	Stevens Institute of Tecchnology	University of Wisconsin, Madison
Embry-Riddle Aeronautical University	Suffolk University	Virginia Tech.
Emory University	Suny Korea	Williams College
Harvey Mudd College	Swarthmore College	Wittenberg University
Kenyon College	Syracuse University	Worcester Polytechnic Institute
Lehigh University	Tufts University	

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Maine School of Science and Mathematics

2019-2020 School Profile

The Maine School of Science and Mathematics (MSSM) was founded in 1995 by the Maine Legislature as a public, residential magnet school that serves talented and highly motivated high school students from across the state and around the world. For the 2019-2020 school year, MSSM serves 140 students in grades 9-12.

MSSM's academic year is divided into semesters with an additional January term providing opportunities for accelerated, specialty courses, and internships.

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Academic Rigor

Most courses at MSSM are taught at the college level using college textbooks and curricular materials. MSSM has an agreement with The University of Maine at Presque Isle allowing students to receive college credit for a majority of MSSM courses that are taught at or beyond the AP level.

Advanced Placement courses are offered at MSSM in Calculus AB and BC, Statistics, Chemistry, and Physics C: Mechanics and Electricity & Magnetism.

MSSM students are motivated, talented and hard-working. In 2019, they took 129 Advanced Placement tests and demonstrated their mastery of college level material by achieving a mean score of 4.0 on the tests.

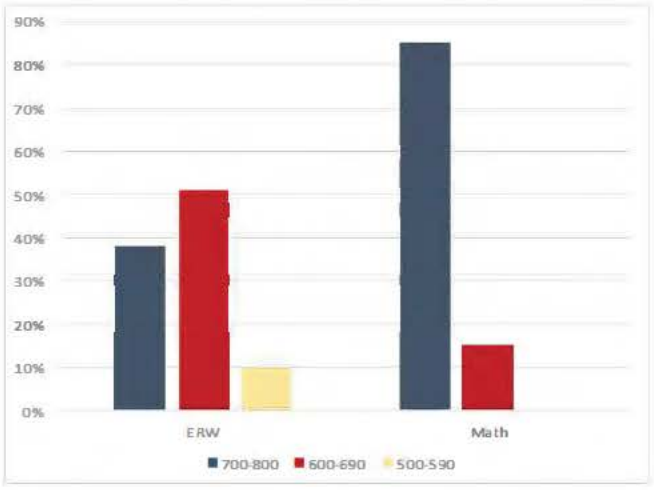
Grading is also done at the college level. Grades are not weighted despite the rigor of MSSM's curriculum.

5-year AP Test Average

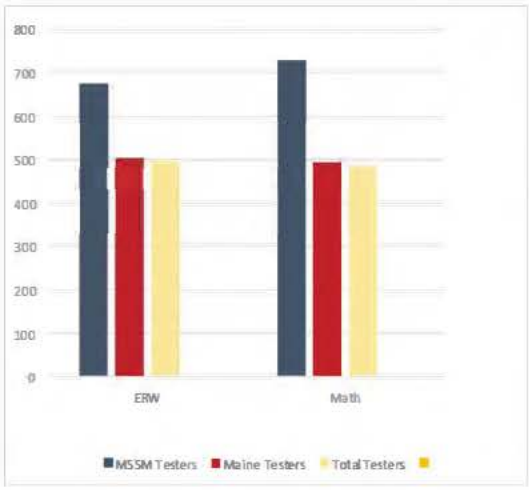
Subject	Number Tested	Mean Score
Science	40	3.7
Math	51	4.2
Humanities	32	3.9
Total for All Subjects	**123**	**3.9**

MSSM is ranked by *U.S. News and World Report* as the #1 High School in Maine, #2 High School in the U.S., #2 Magnet School in the U.S.

Percentages of Students in SAT Score Ranges, Class of 2019



2019 SAT MSSM Compared to the State & Total Population



NCSSS National Consortium of Secondary STEM Schools

A Learning Community

MSSM is located in the town of Limestone (pop. 2,300) in a rural area near the northern tip of Maine, less than two miles from the Canadian Border. The nearest city, Bangor (pop. 33,000), is a three hour drive from MSSM, and the biggest city in our state, Portland (pop. 66,000), is almost six hours away. With these longer drive times, it is difficult for MSSM students to make college visits. Therefore interviews are most commonly completed via video conferencing.

Activities at MSSM range from Astronomy Club and Art Club to VEX Robotics and Key Club. MSSM requires two hours per week of community service from students, such as tutoring, assisting faculty, or serving as residential assistants. To emphasize academic collaboration over competition, MSSM records neither GPA nor class rank. The school's small size, residential nature, and cooperative academic environment combine to create a very tight-knit community of scholars.

MSSM offers the dedicated student athlete an opportunity to engage in sports. Varsity teams currently include cross country, soccer, track, Nordic skiing, and volleyball.

Distinctive Academic Features and Awards

- Admission to MSSM is highly competitive. In addition to their academic ability (measured by grades, teacher recommendations, a writing sample and test scores) our students are selected on the basis of maturity, motivation, and ability to contribute positively to the residential environment.
- In 2019-2020, the student teacher ratio is 8:1.
- The academic year includes a January term which gives students the opportunity for intensive interdisciplinary classes, research opportunities, and internships.
- 92% of faculty hold advanced degrees. Many have significant private sector experience and have studied extensively in their fields.
- In March 2019, MSSM's jazz combo was awarded its first-ever medal at a state competition.
- MSSM wins 2019 Maine State Science Bowl Competition.
- The 2019 SeaPerch team placed first in the judging of the engineering design at the national SeaPerch Challenge at the University of Maryland.
- Out of 41 students in the class of 2020, nine will receive recognition in the 2019 National Merit Scholarship Program
- For the fifth consecutive year, the MSSM math team took first place in the Maine State Math Meet. They also won the regular season championship in the Maine Association of Math Leagues
- MSSM requires two years of world language and two years of social sciences.

Matriculation Summary: Classes of 2018 and 2019

Boston College	Maine Maritime Academy	Tufts University
Boston University	Mass. Institute of Technology	Univ. of California, Berkeley
Bowdoin College	McGill University	Univ. of California, San Diego
Carnegie Mellon University	Mercer University	Univ. of Detroit Mercy
Champlain College	Mount Holyoke College	University of Glasgow
Clarkson University	New York University	University of Mass., Amherst
Colby College	Northwestern University	University of Maine
Colorado School of Mines	Pomoma College	University of Maine, Presque Isle
Cornell University	Rensselaer Polytechnic Institute	University of Southern Maine
Eckerd College	Rochester Institute of Technology	University of the Pacific
Embry-Riddle Aeronautical University	Smith College	University of Wisconsin, Eau Claire
Grinnell College	Southern Methodist University	Washington Univ. St. Louis
Harvey Mudd College	Stevens Institute of Technology	Wellesley College
Husson University	Stony Brook University	Williams College
Lehigh University	Suffolk University	Worcester Polytechnic Institute
	The George Washington Univ.	

Maine School of Science and Mathematics

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MSSM's academic year is divided into semesters with an additional January term providing opportunities for accelerated, specialty courses, and internships.

On March 17, 2020, MSSM students departed campus and completed the year remotely. This fall, we have employed a hybrid opening. Half the student population is on campus and the other half are using state-of-the art remote teaching.

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MSSM students are motivated, talented and hard-working. In 2019, they took 129 Advanced Placement tests and demonstrated their mastery of college level material by achieving a mean score of 4.0 on the tests. Due to Covid-19, this is the most recent AP data available.

5-year AP Test Average

Subject	Number Tested	Mean Score
Science	40	3.7
Math	51	4.2
Humanities	32	3.9
Total for All Subjects	**123**	**3.9**

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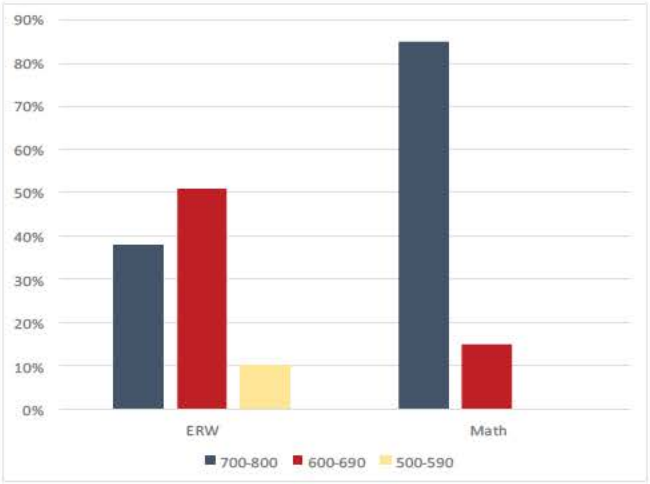

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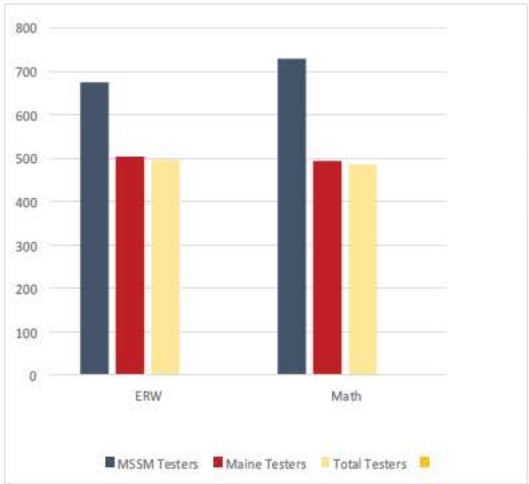

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- The MSSM math team consistently places first in the Maine State Math Meet.
- MSSM requires two years of world language and two years of social sciences.

Matriculation Summary: Classes of 2019 and 2020

Bennington College	Maine Maritime Academy	Univ. of Detroit Mercy
Boston University	Mass. Institute of Technology	University of Glasgow
Bowdoin College	New York University	Univ. of Illinois, Urbana-Champaign
Brown University	Northeastern University	University of Mass., Boston
Carleton College	Olin College of Engineering	University of Maine
Carnegie Mellon University	Paul Smith's College of Arts/Sciences	University of Southern Maine
Champlain College	Pomoma College	University of St. Andrews
Colby College	Rensselaer Polytechnic Institute	University of the Pacific
Colorado School of Mines	Rochester Institute of Technology	University of Wisconsin, Eau Claire
Culinary Institute of America	Southern Methodist University	Vanderbilt University
Embry-Riddle Aeronautical University	Stevens Institute of Technology	Washington Univ., St. Louis
George Washington University	Stony Brook University	Wellesley College
Georgetown University	The College of Wooster	Wheaton College, Massachusetts
Grinnell College	Univ. of California, Berkeley	Willamette University
Husson University	Univ. of California, San Diego	Worcester Polytechnic Institute

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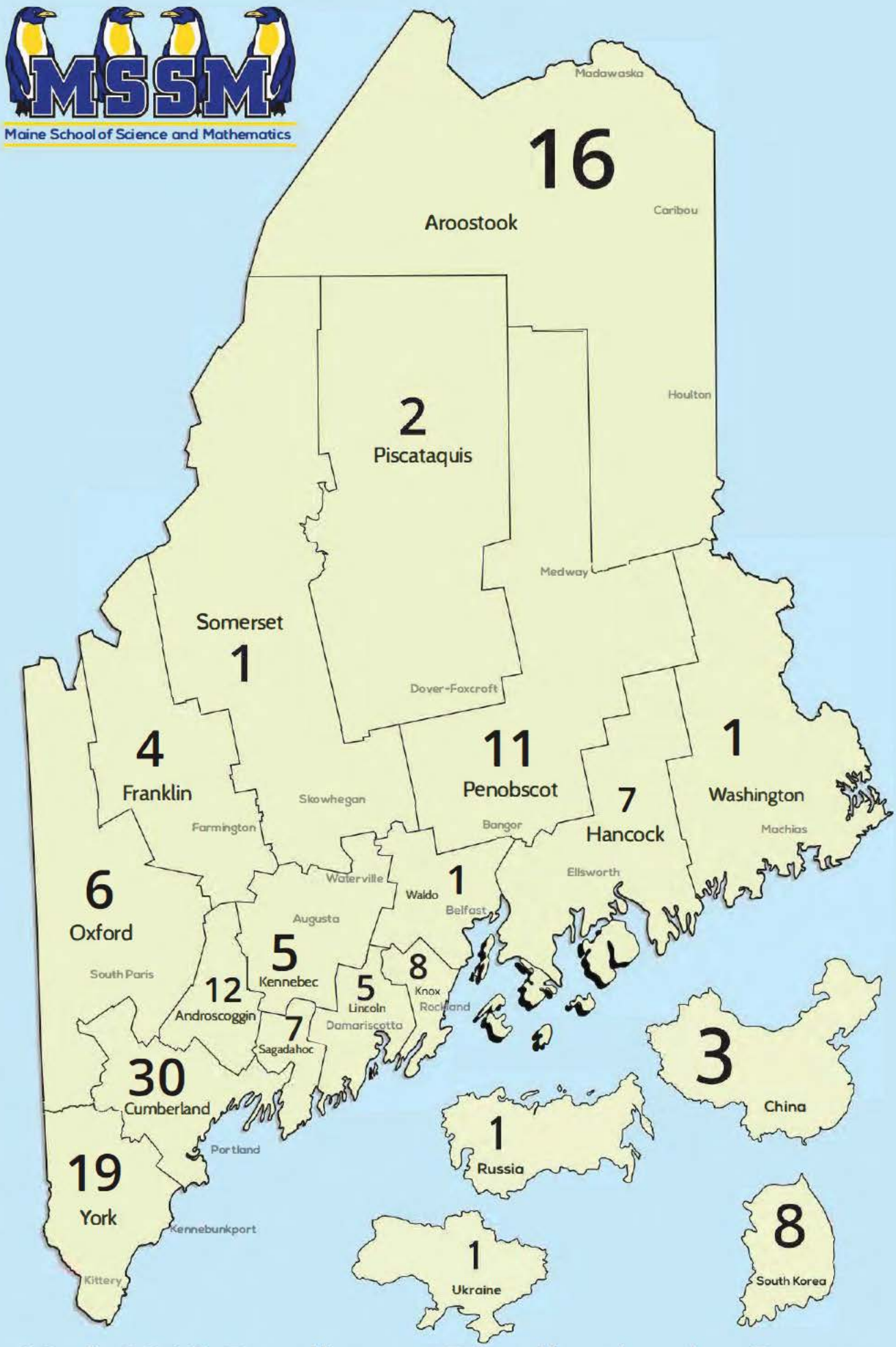
APPENDIX C

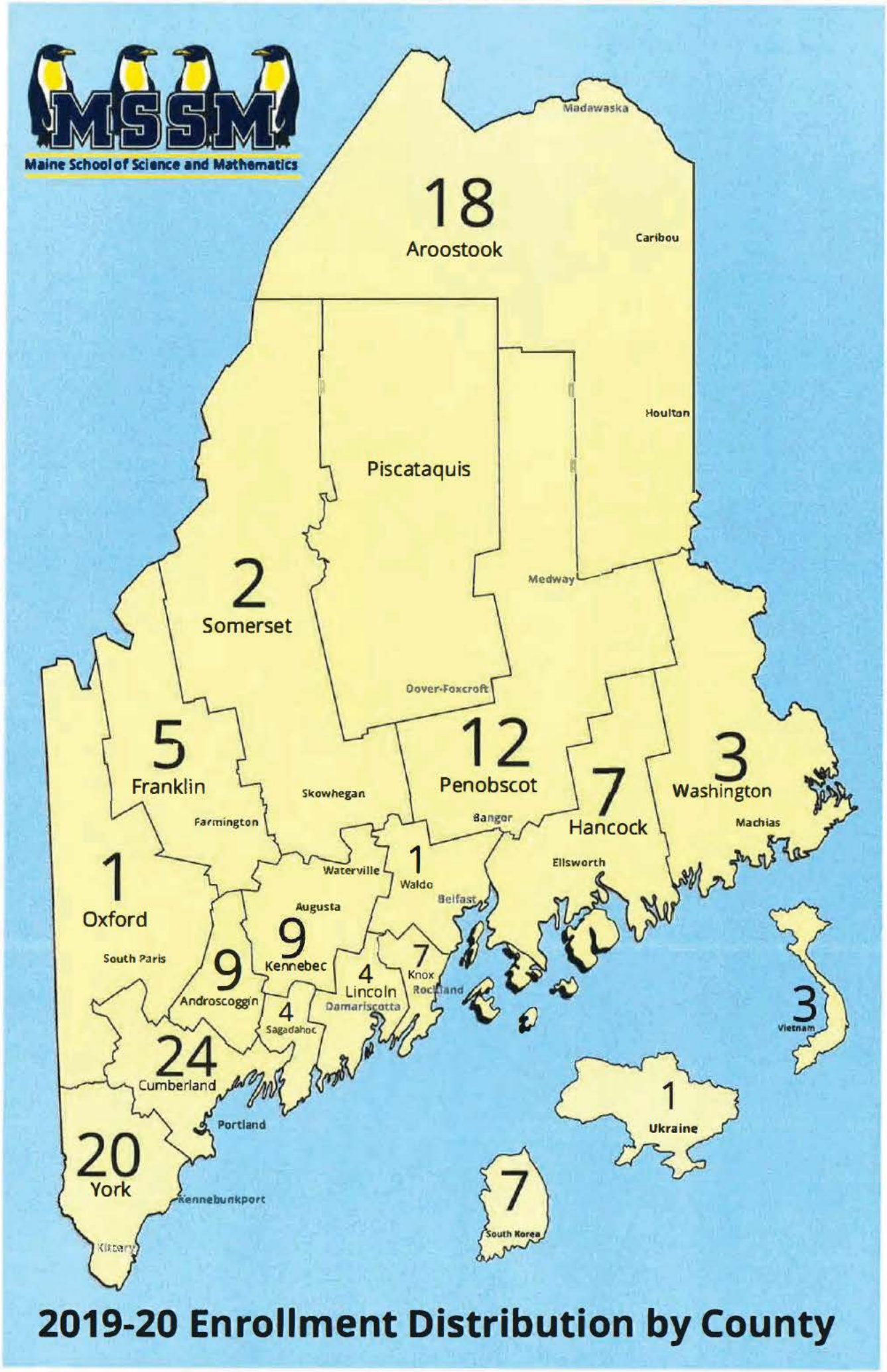
Map of Students by County – 2015-2021

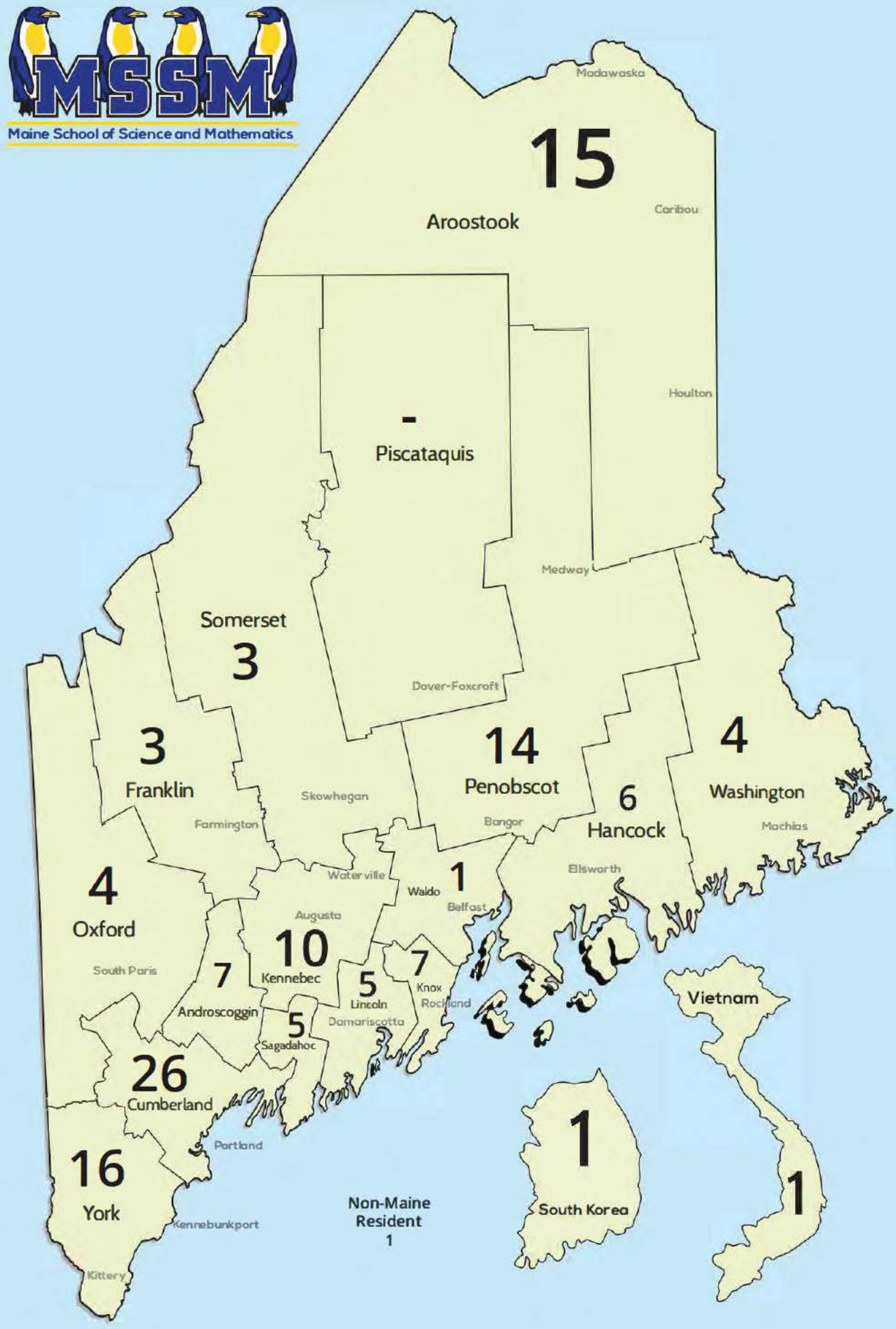
2015-2016 Enrollment Distribution by County

2016-2017 Enrollment Distribution by County

2017-2018 Enrollment Distribution by County


Maine School of Science and Mathematics
16
Aroostook
Madawaska
Caribou
2
Piscataquis
Houlton
Medway
Somerset
1
Dover-Foxcroft
4
Franklin
Farmington
Skowhegan
11
Penobscot
Bangor
7
Hancock
Ellsworth
1
Washington
Machias
6
Oxford
South Paris
Waterville
Augusta
Waldo
1
Belfast
5
Kennebec
12
Androscoggin
5
Lincoln
8
Knox
Rockland
Damariscotta
7
Sagadahoc
30
Cumberland
Portland
19
York
Kennebunkport
Kittery
1
Russia
3
China
1
Ukraine
8
South Korea
2018-2019 Enrollment Distribution by County


MSSM
Maine School of Science and Mathematics
18
Aroostook
Madawaska
Caribou
Houlton
Piscataquis
2
Somerset
Medway
Dover-Foxcroft
5
Franklin
Farmington
Skowhegan
12
Penobscot
Bangor
7
Hancock
Ellsworth
3
Washington
Machias
1
Oxford
South Paris
Waterville
Augusta
1
Waldo
Belfast
9
Kennebec
9
Androscoggin
4
Lincoln
Damariscotta
7
Knox
Rockland
4
Sagadahoc
24
Cumberland
Portland
20
York
Kennebunkport
Kittery
3
Vietnam
1
Ukraine
7
South Korea
2019-20 Enrollment Distribution by County



2020-2021 Enrollment Distribution by County

APPENDIX D

List of Colleges Attended by MSSM Graduates - 2010-2020

College	MSSM Graduating Year
Allegheny College	2011, 2016, 2017
Arizona State University, Tempe	2015
Bard College	2014
Bentley University	2011
Boston College	2015, 2016, 2018
Boston University	2010 (2), 2017, 2019, 2020 (2)
Bowdoin College	2010, 2012, 2013, 2018 (3), 2019, 2020 (2)
Brandeis University	2012, 2015
Brown University	2014, 2015 (2), 2020 (2)
Cal Poly, San Luis Obispo	2013
Carnegie Mellon University	2012 (2), 2016, 2018 (2), 2019
Case Western Reserve University	2010, 2012
Champlain College	2012, 2013, 2015, 2017, 2018, 2019
Clark University	2018
Clarkson University	2010, 2011, 2016, 2018
Colby College	2012, 2013, 2015 (2), 2016, 2017 (2), 2018 (2), 2019 (2), 2020 (2)
Colgate University	2012
College of the Atlantic	2013
Colorado School of Mines	2016, 2019, 2020
Columbia University in the City of New York	2016
Cornell University	2012, 2015, 2018
Creighton University	2010
Culinary Institute of America	2020
Dartmouth College	2013, 2016
Drew University	2015
Drexel University	2010, 2011, 2015
Duke University	2015
Eckerd College	2018
Elizabethtown College	2011
Elon University	2016
Embry-Riddle Aeronautical University - Daytona Beach	2011, 2017, 2018, 2019, 2020
Emory University	2017
Farmingdale State College	2011
Florida Institute of Technology	2013 (3), 2016
George Washington University	2019
Georgetown University	2020
Georgia Institute of Technology - Main Campus	201
Georgia Southern University	2011
Gordon College	2013
Grinnell College	2019
Hamilton College	2016
Hampshire College	2013
Hartwick College	2012
Harvard College	2011
Harvey Mudd College	2018

Haverford College	2012, 2016
Husson University	2013, 2019
Illinois Institute of Technology	2016 (2)
International Christian University	2015
Johns Hopkins University	2016
Juniata College	2016
Kenyon College	2017
Lehigh University	2013, 2018
Macalester College	2020
Maine Maritime Academy	2010, 2016, 2018, 2019
Massachusetts College of Pharmacy and Health Sciences (MCPHS)	2011
Massachusetts Institute of Technology	2014 (2), 2015 (3), 2017, 2018, 2020 (2)
McGill University	2015 (2), 2018
Mercer University	2018
Miami University - Oxford	2016
Moravian College	2010, 2016 (2), 2014, 2015
Mount Allison University	2011 (2), 2016
Mount Holyoke College	2010, 2018
Mount Ida College	2012
New College of Florida	2017
New York University	2019
Northeastern University	2010 (2), 2011 (3), 2012, 2014, 2016, 2020
Northpoint Bible College	2017
Northwestern University	2015, 2016 (2), 2019
Notre Dame of Maryland University	2016
Olin College of Engineering	2020
Pacific University	2013
Paul Smiths College of Arts and Science	2020
Pennsylvania State University	2015
Pepperdine University	2014
Pomona College	2019
Princeton University	2014, 2016
Queens College of the CUNY	2011
Reed College	2010
Rensselaer Polytechnic Institute	2010 (2), 2011, 2012, 2013 (3), 2014, 2015, 2016 (2), 2017, 2018 (3), 2019
Rhodes College	2011
Rochester Institute of Technology	2012 (2), 2013 (2), 2014 (2), 2015, 2016, 2017, 2018 (2), 2020
Russell Sage College	2010
Rutgers University - New Brunswick	2011
Saint Anselm College	2016
Scripps College	2016
Sewanee: The University of the South	2011
Simmons University	2013
Skidmore College	2014

Smith College	2018
Southern Methodist University	2019
St. Lawrence University	2011, 2012
Stetson University	2012, 2013
Stevens Institute of Technology	2014, 2018, 2020
Stony Brook University, State University of New York	2012, 2015, 2019
Suffolk University	2015, 2018
SUNY Korea	2017
Swarthmore College	2017
Syracuse University	2017
Temple University	2016
The College of Wooster	2020
The Glasgow School of Art	2016
The Ohio State University	2012
Tufts University	2011, 2012, 2015, 2017, 2018
Union College - Schenectady	2015
United States Air Force Academy	2015, 2016
United States Coast Guard Academy	2020
United States Military Academy	2010
Unity College	2020
University of British Columbia	2012
University of California, Berkeley	2019
University of California, San Diego	2019
University of Central Florida	2011
University of Colorado Boulder	2015
University of Detroit, Mercy	2019
University of Glasgow	2019
University of Illinois at Urbana- Champaign	2015
University of Maine at Augusta	2010
University of Maine at Farmington	2011, 2013(2), 2014, 2017
University of Maine at Orono	2010 (5), 2011 , 2012 (5), 2013 (6), 2014 (2), 2015 (7), 2016 (9), 2017 (3), 2018 (5), 2019 (6), 2020 (6)
University of Maine at Presque Isle	2012, 2014, 2018
University of Maryland - College Park	2017
University of Massachusetts - Amherst	2015, 2017, 2018
University of Massachusetts - Boston	2020
University of Minnesota - Twin Cities	2013, 2016
University of New England	2014, 2016, 2017 (1)
University of New Hampshire, Durham	2013
University of New Hampshire, Manchester	2017
University of North Carolina, Wilmington	2011
University of Oxford	2011
University of Pittsburgh	2017 (2)
University of Rochester	2012, 2013
University of South Florida	2011
University of Southern Maine	2011, 2013, 2015, 2018(2), 2019 (2)

University of St. Andrews	2015, 2020
University of Sussex	2011
University of the Pacific	2019
University of Utah	2018
University of Wisconsin - Eau Claire	2019
University of Wisconsin - Madison	2017
Vanderbilt University	2020
Vassar College	2016
Villanova University	2013
Virginia Tech	2017
Washington University in St. Louis	2019
Wellesley College	2015, 2019
Wells College	2015
Wentworth Institute of Technology	2011 (3), 2012
Wesleyan University	2010
Wheaton College - Massachusetts	2012, 2016, 2019
Willamette University	2013, 2020
Williams College	2018
Wittenberg University	2017
Worcester Polytechnic Institute	2010, 2011 (2), 2012, 2014, 2015, 2016 (2), 2017 (2), 2018 (2), 2019

APPENDIX E

Definition of a Mission Appropriate Student

MAINE SCHOOL OF SCIENCE AND MATHEMATICS
Mission Appropriate Student

You may be an MSSMer if you are...

An Enthusiastic Learner:
You love to learn. Whether in the classroom, on your own or with a group of friends, you possess a passion for the pursuit of knowledge, a deeper understanding of the world around you, and, by virtue of this, a more intimate understanding and knowledge of yourself.

Honest and Respectful:
You fervently believe in the value of honesty in everything you say and do, while recognizing and appreciating the existence of other perspectives. You respect the ideas of others, and you actively support a safe environment that fosters the open exchange of competing beliefs.

Independent yet Community-Minded:
You are confident in your own thoughts, but you accept your peers as they are and see them as individual contributors, each in their own way, to your shared community. You eagerly engage in team activities that strengthen inter-personal relationships and that contribute to a culture of mutual support and respect among your peers.

How MSSM Students think of themselves.....

Students at MSSM frequently quip, when asked about their peers, that "these are my people." Put another way, MSSMers share a dogged loyalty to each other, whereby they jealously guard each other's ability to be unique and independent. They are individual contributors to an extended-school family who share in community events, like wing nights, ski trips, game shows, trips with RI's, etc., and projects, including problem sets and presentations, and, at their core, share the same underlying goal: the pursuit of truth and knowledge.

Relationships, which are essential to the academic and social pursuit at MSSM, between students, teachers and staff create gateways for new opportunities in student driven research. Students go out of their way to advance their knowledge through research courses, individual tutorials, grant funding applications and experiential and inquiry-based learning, not out of obligation, but the love of education and the thrill that comes from learning something new.

Attribution

This definition was established in a community-wide process in the Spring of 2020, involving the active engagement of the students, parents, alumni, faculty, staff and the Board of Trustees of the Maine School of Science and Mathematics.

APPENDIX F

Portrait of an MSSM Graduate

Maine School of Science and Mathematics

Portrait of a Graduate

MSSM's mission is to create educated citizen-leaders who will benefit their communities in the state of Maine and beyond. At MSSM, you will share many experiences with your classmates, building strong personal bonds that will last long after your graduation. This Portrait describes the values that the school holds dear and that we as a community hope that you will learn to appreciate and respect as you engage in the MSSM experience. By your graduation, you will:

Mastery

Gain a depth of knowledge in many subjects, and you will gain skills in discovery, analysis, and critical thinking, enabling you to be an effective problem solver. You will learn how to articulate your conclusions. in spoken and written communications, enabling you to effectively convey your thoughts for the benefit of others.

Resilience

Appreciate the immense power and sense of accomplishment that come from persistence, and from the development of a curious and creative mind. You will seek challenges every day from which you will gain self-confidence and the ability to face adversity.

Self-awareness

Understand your strengths and your weaknesses, and you will assume full responsibility for your words and your deeds. This self-awareness will enable you to be considerate as you encounter differences and challenges faced by others.

Engagement

Learn the value of active participation in community building. You will come to appreciate that each individual can contribute to shared objectives in different ways through innovation, collaboration, and leadership, and that the coming together of these different skills makes for a more effective and robust community.

Purpose

Graduate from MSSM with a sense of purpose that shapes your goals and guides your life decisions. Your MSSM experience will give you unique advantages and opportunities. You understand the importance of giving back to others, including people and communities who have enabled your success.

Attribution

This definition was established in a community-wide process in the Spring of 2020, involving the active engagement of the students, parents, alumni, faculty, staff, and the Board of Trustees of the Maine School of Science and Mathematics.

APPENDIX G

20th Anniversary Publication

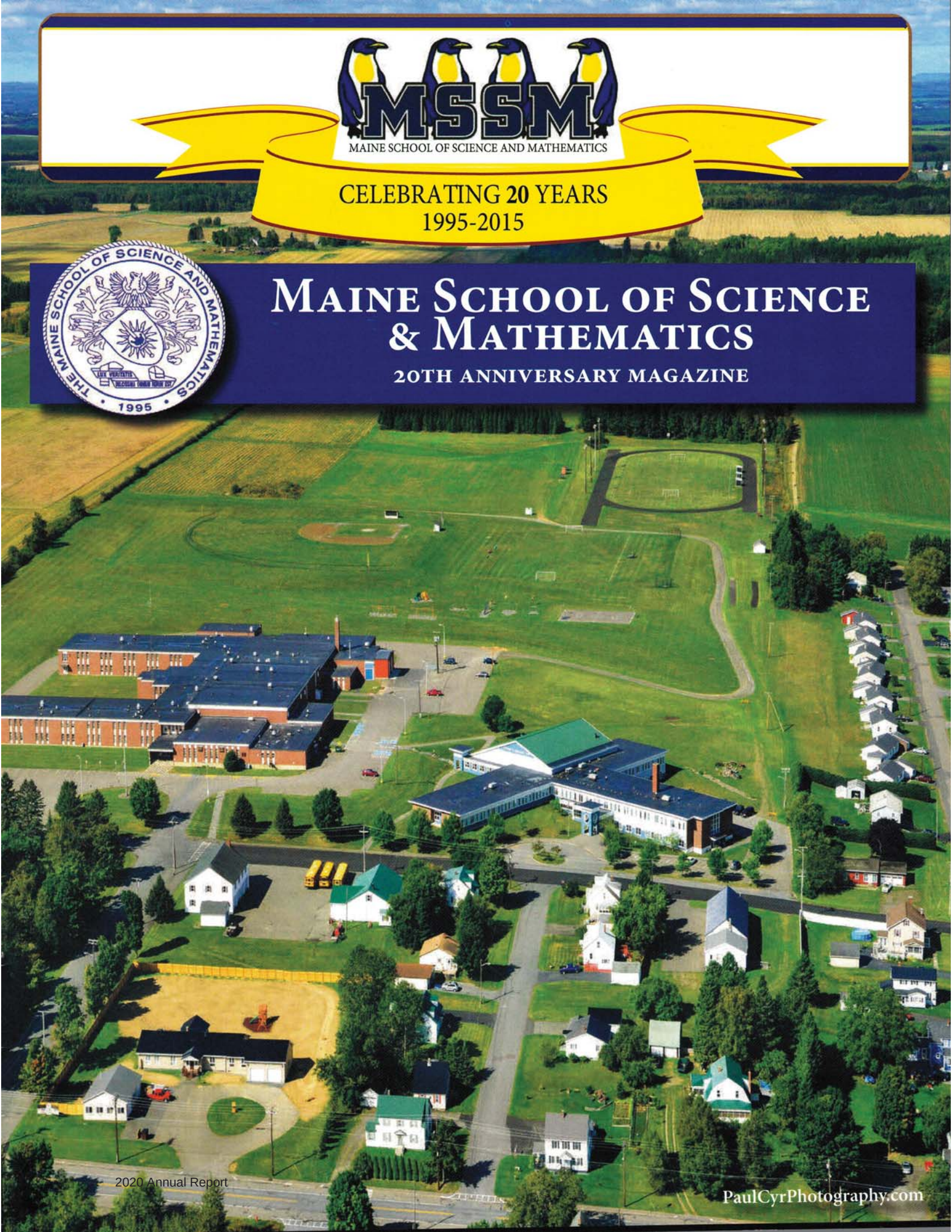
MSSM

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

CELEBRATING **20** YEARS
1995-2015

Maine School of Science & Mathematics

20th Anniversary Magazine



2020 Annual Report

PaulCyrPhotography.com

From the desk of

Luke Shorty

1998 MSSM graduate and current Executive Director of the Maine School of Science and Mathematics

Luke getting ready for MSSM's prom in 1998.

There is an old adage that time flies when you are having fun. I couldn't agree more. It seems like yesterday that the Loring Air Force Base closed and that the Maine School of Science and Mathematics was established by the 117th Maine Legislature in 1995. Can you imagine the excitement and energy of the 135 pioneering students who led the way towards attending Maine's only public residential magnet school? It was electric, compelling and inspiring.

I remember driving up with my parents past Bangor, past Houlton, farther north than I had ever been before. I remember the anxiety of the new and unknown. What would classes be like? Where would we live? What was the town of Limestone like? I remember moving into the, then new, dormitory that was once Limestone's K-6 school. It was here that I met students from all over the state who were equally excited and passionate about science, mathematics, and had a passion for learning. I quickly realized that I had arrived in a community that resonated with me. The town was welcoming, the classes were challenging, and I formed some of the strongest relationships that I've ever had with peers from all over the state of Maine. Little did I know then that I would end up where I am now.

In August 2009, I first returned to the Maine School of Science and Mathematics as a Mathematics Instructor and two years later, I accepted the role as MSSM's 6th Executive Director. You might wonder what drew me back. It was a belief in the school's mission and a strong desire to give back. The founders of MSSM worked hard to instill it in myself and all of my classmates that the state had invested in us and that someday, we will be called to give back. I decided I would give back with my time.

Since I have been back, I have been inspired by the dedication of the MSSM faculty to provide a challenging, rigorous, authentic learning experience not just mathematics and

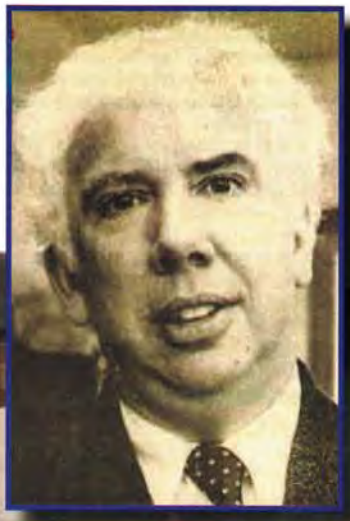
science, but in the humanities as well. I have been amazed by the safety, care, and guidance of MSSM's dedicated residential life staff give to our students. I am humbled and impressed that the close knit community I experienced is still strong and healthy, fostered and nurtured by MSSM's devoted staff and the Limestone community. I am proud to see that the magnet school is strong and is still attractive to many students and their families throughout the great state of Maine and beyond.

We are currently experiencing a large growth in our student population to the point where we have acquired a second building to house the growing demand for MSSM's programs. We are launching new initiatives to give back to educators and students thru distance learning opportunities, professional development weeks, and middle school Science Technology Engineering and Mathematics (STEM) camps. MSSM serves over 700 students a year through its programs and has impacted hundreds, if not thousands more through our professional development and outreach. All of this could not be done without the strong partnerships with organizations in higher education, non-profits and industry. Through these partnerships, we have been able to offer college credit for courses beyond the AP Curriculum, developed distance education and rich research opportunities for our students and shown MSSM students the innovating and exciting happenings right here in our state. They are now aware of great opportunities for them throughout Maine to continue their education, and find exciting, fulfilling employment.

I am excited for the future, realizing how much more MSSM can give back to the people of the state of Maine. MSSM has started to offer courses through distance education technology for students throughout the state. We are looking to develop programming that will help educators collaborate to discover and share the best practices they are using in their day to day classroom to strengthen the STEM education Maine students are receiving in their primary through secondary schools. We continue to look for ways to partner and share with the world the exciting scientific, technological, and engineering innovations and accomplishments happening right here in the state of Maine. Since the early days when the Maine School of Science and Mathematics opened its doors, it has graduated over 800 alumni and we must share the success stories of the alumni who have started their own businesses, have become leading scientists and engineers in their fields, and have become lawyers, doctors, and educators.

The first twenty years of MSSM's existence have been very exciting and fruitful. The first leg of our journey is complete, but the launch pad is ready for the next adventure. I am confident and excited about what MSSM can give to the state's highly motivated, high achieving youth; its educators; and the public in the next twenty years!

Luke Shorty



Dr. James C. Patterson

FOUNDER & VISIONARY

By Alan Whittemore, Dean of Enrollment

For the past twenty years the hallways of the Maine School of Science and Mathematics have been filled with the sounds of students hustling to and from class as the teachers review their lesson plans. It behooves the members of this institution to reflect on the activities and events which permitted its doors to open in the fall of 1995. That reflection will take you directly to Dr. James C. Patterson.

Long before the publication U.S.News and World Report announced the amazing achievements consistently earned by the Maine School of Science and Mathematics' students, Jim Patterson vigorously pursued a vision for a thriving school located in the middle of a potato field. He worked tirelessly with community leaders and state government officials until his dream was realized in the late hours of June 30th, 1995 in the chambers of the 116th Maine State Legislature.

Perhaps Jim Patterson's tenacity developed while 'crashing the boards' on the University of Maine at Machias' basketball team; more likely, his resolve to accomplish tasks greater than himself matured a few years later while serving in the United States Army. Patterson was drafted during the Vietnam war whereupon he was assigned to Fort Benning Officer Candidate School in Georgia. Patterson responded rapidly to the demands necessary in becoming a military officer and thrived while training; however, during maneuvers one evening, he severely tore his ACL. The initial diagnosis was grim; he would never walk again without assistance.

Prom 1997

Following months of painful rehabilitation, combined with his unwavering belief in himself, Patterson walked out of the hospital and returned home to Maine. His devotion to duty never left him, for he felt he had more to accomplish in this world; he just needed to push forward. In spite of the obstacles life presented him, he used his G.I. benefits to complete his Master of Education in 1971 from the University of Maine at Portland-Gorham, now known as the University of Southern Maine.

Jim and his wife Pauline arrived in Aroostook County in 1973 where Jim served as a principal in the Van Buren School District. Two years later, he joined the University of Maine at Presque Isle staff and assisted in the development of their counseling and student services program. In 1975, Patterson left UMPI to assume the responsibilities of the Academic Dean at the Northern Maine Technical College, now known as Northern Maine Community College, and would eventually become its President in 1984.

Little did the South Portland native realize what adventures still awaited. In 1992, not long after opening his own development consulting firm, aptly named Patterson Associates, Loring Air Force Base was placed on the closure list. This meant an unprecedented exodus of people from the greater Limestone area and a devastating impact on the entire central Aroostook region. Patterson answered the call from his clients Bob Clark and James Morse to help facilitate and advise on the future use of the vacant school facilities. Jim was invited to sit on the "Challenge of Change Committee". This group of local, concerned citizens faced some daunting facts, not the least of which was that 1,700 to 2,100 students would be departing within the next 12 months. The entire K-12 population would now fit into one of the two wings of the high school building. The Limestone elementary and middle schools would be closed. Fred Edgecomb, the chair and local businessman and farmer; Cathy Bowker who would later teach and then lead MSSM; James Morse, Limestone School Superintendent; Frank McElwain, a Limestone Community School teacher; Mike Edgecomb, selectman and current Board Of Trustee member; and Art Thompson, community leader and current Foundation Chair along with several others wrestled with the grim task of finding a viable use for the vacant classrooms. It was the end of an era for Aroostook County, which did not bode well for the citizens of Limestone.

Preliminary ideas, such as developing an international school of agriculture, were deemed infeasible and dismissed. The committee sought insight from Governor John McKernan and the Commissioner of Education Leo Martin. It was during these talks that the committee learned of the strong desire to increase the state's math scores and increase aspirations in the sciences. Attention was given to a relatively new organization, the National Consortium of Specialized Secondary Schools in Mathematics, Science and Technology (NCSSSMST), now known as the National Consortium of Secondary STEM Schools. NCSSSMST had previously discovered a significant discrepancy in mathematics and science testing scores when considering geographic and other socioeconomic factors in their states. Most of the consortium schools were residential and had utilized a rigorous and challenging curriculum. The student test scores showed demonstrable improvement regardless of their individual background. In the spring of 1994, Governor McKernan proposed the concept of a statewide, residential school focusing on the fields of mathematics and science.

State Senator Judy Paradis and Representative Susan Pines co-sponsored a bill to establish the Maine School of Science and Mathematics. With successful passage of the bipartisan bill to establish the school, Patterson needed to build a team to share his vision of the school. MSSM's first employee, Alan Whittemore, was hired as head of admission in September 1994 and was quickly joined by Sandra Cyr, the first bookkeeper and sole administrative staff person. Pat Farrell, from the Indiana Academy for Science, Mathematics and Humanities, was the first faculty member hired, and was tasked to develop the mathematics program. Patterson and his team embraced

the quest to spread the word to prospective students throughout the hills and valleys of Maine. Informational sessions were held in town libraries, meetings with high school guidance counselors were conducted, interviews with newspaper editorial boards were given and MSSM's message was heard at local civic organizations in cities and towns across the region. A coalition of interested students and their parents often accompanied the MSSM presentations and were instrumental in keeping the vision very much in the forefront of discussion throughout Maine.

Pioneer Class of 1996

With the unwavering support of several key legislative leaders of such as Senators Leo Kieffer and Judy Paradis, Representatives Richard Kneeland, Gary O'Neal, James Donnelly, and the Speaker of the House, John Martin, funding was secured late in the evening of Friday June 30th. The time for celebrating Maine's first and only residential magnet school was short; Patterson, as the head of the school, now had less than 66 days to hire teachers, develop curricula, and identify and train residential staff.

Susan Gould-Leighton's math class

One hundred and thirty-five students, known as the 'pioneer class', assembled Labor Day weekend of 1995 on the former Loring Air Force Base's vacant officer quarters, which was now their new home.

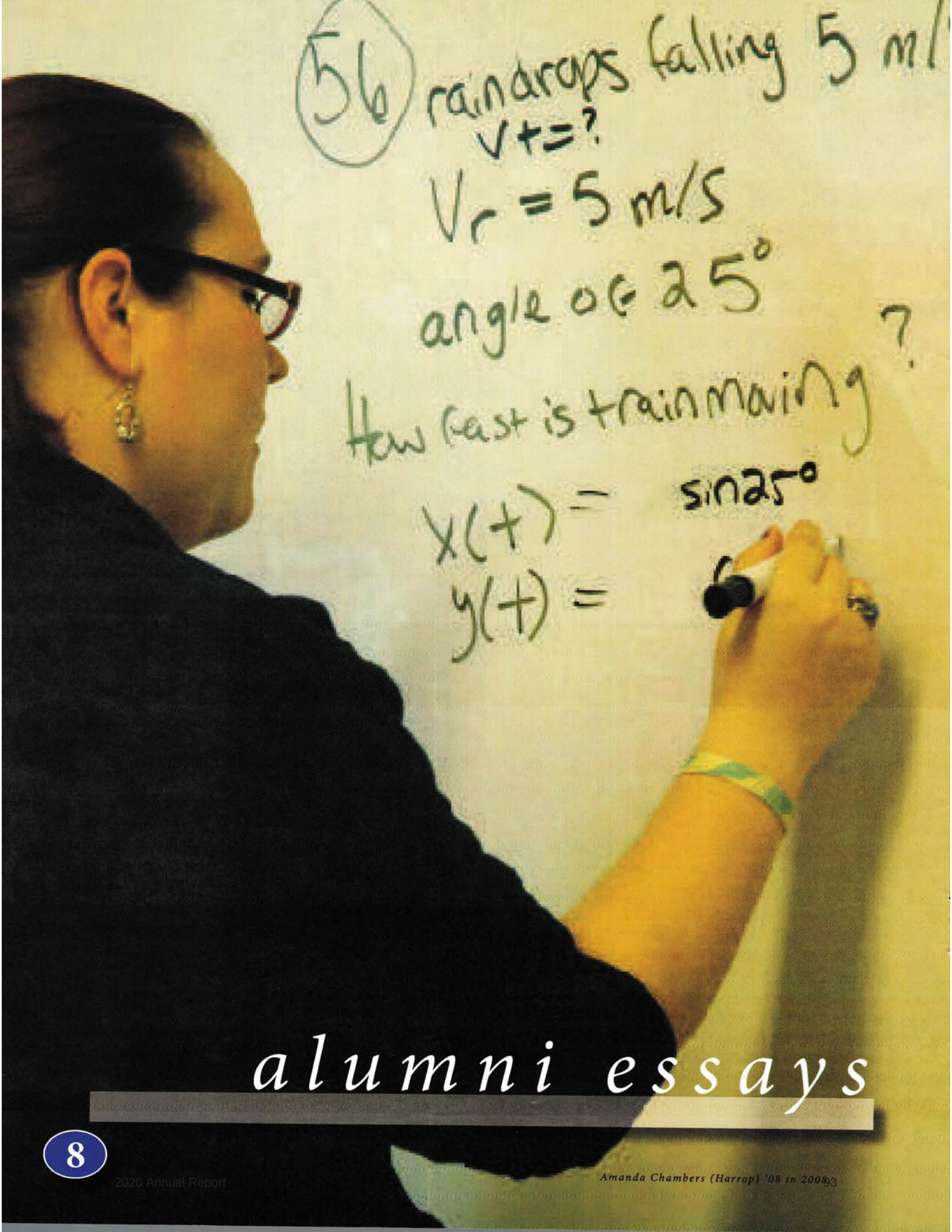
Meanwhile, some five miles away, MSSM's faculty members were making final preparations in their classrooms. Patterson was able to attract professional staff and faculty that had the same common denominator: they were all risk-takers with a passion to share their respective talents. Patterson recently reminisced on how blessed he was to have assembled such a great group of people. They were all fully dedicated to education and willing to meet the needs of some of Maine's most motivated and capable students.

Patterson served as the school's Executive Director for its first six years. He departed in 2000 to seek yet another adventure, opening a University of Maine branch office in Belfast, Maine. Now retired, Jim and Pauline have found a warmer clime in Venice, Florida, but he still remains a member of MSSM's Board of Trustees as its first, and only, Lifetime Honorary Trustee. Pauline reminisced about the start-up years, "I admit that the 24/7 commitment it took was wearing at the beginning. I was concerned Jim would burn out, but it had the opposite effect. He thrived at the thought of establishing this wonderful school for young motivated students with creative minds hungry for learning". Jim confirmed this assessment, "Nothing in my life to date compares to the existence of the Maine School of Science and

Mathematics. In addition to bringing hundreds of families to 'the County' over the years, it remains a tremendous gift to every citizen of the great state of Maine." He added, "I am grateful to have played a role and may the school continue to flourish and prosper."

In closing, and on behalf of everyone at the Maine School of Science and Mathematics, whether you are a 'pioneer', alumna, or current student; a family member, staff member, or faculty member; a neighbor, taxpayer, legislator, or, simply, a friend of the school, we all want to take this moment to loudly and proudly proclaim to James Patterson, a most sincere: 'Thank you!"

Jim & his wife Pauline



alumni essays

Amanda Chambers (Harrop) '08 in 2008

'96 Prasanth Prasanna

My decision to attend MSSM is one of the few that has resonated throughout every aspect of my life. It has echoed distinctly over the last 20 years and will continue to do so forever. After arriving at school, I realized two things. The first was that I had arrived in a place where I could feel comfortable to be myself amongst my peers, without fear of becoming a social pariah. The second was that I felt like the idiot in the school. I could no longer do little work and skate by. I needed to learn how to put my nose to the grindstone.

After I graduated from MSSM, I was also fortunate to work with one of my best friends, Erich Hunter, to start the first alumni driven alumni association. The school at the time was looking to start an alumni association and Erich and I thought it would be better if we started it ourselves since we were both graduates. We attended various Board of Trustee meetings with fellow classmate Kate Reilly deLutio and received information and guidance from MSSM administration. All of us knew each other and our personalities, so we knew right away what we wanted to accomplish. We ran the MSSM Alumni Association over the course of four years before handing the reins onto the next crew. We hope that our creation will continue to serve alumni for generations to come (and eventually get our Loyal Order of the Water Buffalo hats!)

After MSSM, I enrolled in Washington University in St. Louis, MO where I graduated with a degree in engineering. I then decided to attend medical school at Northeast Ohio Medical University in Rootstown, OH and eventually came back to Maine to finish my residency and intern at the Maine Medical Center in Portland. I also attained my fellowship in Musculoskeletal Imaging and Imaging Informatics at the University of Maryland Medical Center in Baltimore, MD. My travels have led me to work as a radiologist at the Diagnostic Imaging Center of Salem in Salem, OR.

I hope the MSSM experience is as important for others as it is for me. Although I would never say my time at MSSM was the "best year of my life," as that would imply I peaked and my life has lessened since. Life should be about improving every day. As a result, you will also improve everyone else's lives around you. I can think of no better way to repay those who worked hard to create MSSM and to improve Maine's education system and, of course, future "penguins," then doing so. I would not be where I am now without the constant support of my friends from MSSM. Most of my best friends are from that single year of my life, while others I have made are from classes that followed. People that I wasn't very close with in school have now become good friends whom I look forward to seeing on my return trips home.

Angie Harbert (Dinsmore) '96

I am proud to be an MSSM alumna and part of the pioneer class! I was born in a tiny town in northern Aroostook County called St. Agatha, but I later moved to Caribou. I was a sophomore at Caribou High School going into my junior year when I heard about a new residential math and science school in Limestone called the Maine School of Science and Mathematics. At that time, I had exhausted all the offerings that Caribou High School had provided. I was looking for more advanced, college-prep classes, and at that time, there weren't any AP or advanced courses at CHS. I wanted to go to a place where smart meant that you were *cool*. So I took a drive out to Limestone and MSSM and immediately liked what I saw. I interviewed, took a number of placement tests, and found myself attending MSSM in the fall of 1995. At first, I thought to myself "am I really going to do this?" But in the end, it turned out to be one of the best decisions of my life.

During my two years at MSSM, I learned something so much more than academics. I finally found myself in a place where it was OK to be smart. Not only was it OK, but it was encouraged by the dedicated faculty, staff, and my classmates. During my time at MSSM, I was taught many things, but most importantly, I learned time management and self-confidence. After I graduated from MSSM in 1997, I enrolled at Mount Holyoke College in South Hadley, MA, which is an all-women's college. I soon realized that attending an all-women's college wasn't the best fit for me. In 1998, I took a year off from school and came back to MSSM to work as a residential instructor in the dorms, as well as substitute teach at Caribou High School. I thought about becoming a teacher at the time, but I decided to pursue my true passion: engineering. A year later, I attended the University of Maine in Orono and graduated in 2002 with a degree in chemical engineering. Later on in my college career, I worked at Fraser Papers through the University of Maine Cooperative Extension. After I graduated from UMaine, I wanted to continue to work at Fraser Papers, but couldn't find a job there. It was through a mutual friend that I found myself interviewing at Alliant Techsystems Inc. in Ogden, UT in 2003 and I soon got the job and have been there for the past 12 years.

Out of all of the degrees that I've held in my hands, the one that I'm the most proud of is my diploma from MSSM. MSSM was the hardest two years of schooling that I had ever gone through. MSSM gave me the confidence that no matter what was thrown my way, I could be successful. As an engineer, I work in a male-dominated field. My experience at MSSM gave me the knowledge and courage to seek an education and career in an engineering field. It also encouraged me to "pay it forward" and I continue to participate in STEM workshops for girls in the hopes that they may have the same career options that I do.

Angie Dinsmore with Governor McKernan and Senator Olympia Snow at MSSM's graduation in 1997.

'97 Elizabeth Martin (Neal)

It started with a newspaper article. An air force base in the frozen North had closed and the town was looking for ways to add more life. They wanted to open a school for gifted kids. They would teach math, science, languages and literature, all bigger and better than I could get in my public school. The spell was cast. I hunted for a phone number and I was the first to request an application, but apparently they weren't ready yet. We campaigned at the State House and wrote letters. I wished and hoped so hard that this school would open. It bordered on obsession. Could there be a place where acing a math test didn't mean our mailbox would get set on fire? Was there a place where I could get a quality education that would actually prepare me for college and life? My sights were set on becoming a physician and I needed better options. Then, before I knew it, I found out the good news: MSSM will be opening in the fall. That fall, I moved into the dorm with my best friend Bethany Butler (Gallagher). We all lived together and navigated this new territory together, even staff and teachers. I took classes for ten to twelve hours a day and usually spent my nights doing hours of homework. I wanted to absorb all of it. I learned chaos theory, leadership skills, chemistry, physics and the laws of the universe. I took astronomy under the stars, biology on the trail, and French from a native speaker. I learned to swim properly, manage my time, and survive a week of non-stop final exams. Still, there was time for plenty of fun and mischief. My only regrets are that I couldn't spend more time there.

It wasn't all magic and wonder. The food started off pretty bad, but we learned how to advocate and help things improve. I was sleep deprived because I overloaded myself but I learned my limits. We had one phone for thirty girls on our dorm floor, so communication wasn't the best with friends and family back home. I got a little homesick, but I was never lonely.

After I graduated from MSSM, I attended the Rensselaer Polytech Institute in Troy, NY, majored in Biology and I graduated in 2001. Five years later in 2006, I graduated with honors from Rush Medical College in Chicago. I moved back east to Springfield, MA for my Pediatric Residence from 2006-2009, did my chief residence year in 2010, and then landed a job as a clinic pediatrician for 2 years in western Massachusetts. I took the advice that you should get a "real" job when you turned 30. After two years in Massachusetts, I became a partner at Vernon Pediatrics & Adolescent Medicine in Vernon, Connecticut, where I have been there ever since. I've also married and I have two wonderful boys.

MSSM provided the rigorous education I needed so that college actually felt easy. Since I've left MSSM, I've graduated with honors, got married, fought cancer, became a doctor, enjoyed my residency, did a chief year and survived an unhappy first job. I now happily serve as a partner in a thriving

pediatrics practice. I couldn't love my career more. I wouldn't be the same person today without my days at MSSM. It was exactly what I needed. Thanks to all my classmates and teachers who made it the amazing time that it was. Here's to you!

Ruth Lyons '98

I decided to attend MSSM because I remember wanting an environment where I felt more visible. I was a good student and athlete, but I didn't feel a connection to my sending school. I lived in a very affluent town in southern Maine and did not have the means that other families had. Therefore, I felt like everything that surrounded me was a constant reminder that we had less than everyone else. I remember visiting MSSM and feeling relieved that everyone ate the same school lunch and how it wasn't about what you were wearing but actually who you were. I was able to become my true self at MSSM, albeit not an easy task. I have to say, though, that I feel like I got the best of all worlds; I attended MSSM with my twin sister, so I never actually had to experience homesickness as I had my best friend and part of my family with me. Since we had one of the last bus stops on extended weekends, it wasn't exactly a pleasant journey, but those weekends became so special to our family. It was true quality time with our mother creating many family memories.

One of my favorite experiences about MSSM was taking part in athletics. My sister and I enjoyed athletics prior to coming to MSSM and we were able to continue to participate in sports.

Participating on the Limestone team was a change in pace as I was coming from a Class A background. Playing with LCS taught us more about sportsmanship and the art of the game. Our athletic experiences at MSSM were more based on passion rather than competition. MSSM was very accommodating to ensure that we were able to continue any athletic drive we had.

L-R: Janneke Voight-Strickland, Ruth Lyons and her sister Meghann at MSSM's prom in 1997.

When I graduated in 1998, I attended the Rochester Institute of Technology in Rochester, NY and studied Photographic Illustration. I felt the time spent at MSSM gave me the self-discipline to balance college life better. I learned how to advocate

for myself at MSSM in a sheltered environment which made the college scene more manageable. This allowed me to soar socially and academically my freshman year. After graduation, I discovered the New York Teaching Fellows program and was able to transition into a career of teaching. I earned my master's in Education at Fordham University while teaching 5th grade in the Bronx. I then moved to Connecticut and during my time in Connecticut, I was able to be a key member of starting a school dedicated to the needs of gifted and talented students, the Renzulli Academy. As rewarding and challenging as this experience had been, I wanted to teach in Maine and give back to the State that had given me such a great start. In 2013, I earned my Ph.D. at the University of Connecticut , specializing in gifted education and talent development and relocated to Maine this year as the Gifted and Talented Coordinator for RSU 22 in Hampden. I am thrilled that I have come full circle and have found a home back in Maine. I want to invest in Maine, as Maine invested in me so many years ago. I realize MSSM has been the core reason for so much of my success, and I want to help create such opportunities for other students. My MSSM experience has had more of an impact on my life than I ever anticipated.

'99 Lisa Cash

Hi, my name is Lisa Cash and I graduated in 1999. Like many alumni, I won a number of scholarships to stay in-state and I went to UMaine. After some indecision on choosing a major, I settled on Political Science and received my Bachelor's. I worked for a few years as a restaurant manager but never really thought that was the right fit. I always wanted more education, and I finally decided to pursue a Master's degree in Social Work. I finished in two years, and rejoined the professional world as a clinical therapist, first working with children, but finally selecting the world of aging. I became the Director of Social Services at a nursing home which was the job of my dreams. However, that's not even close to where my story starts.

In February 2014, tragedy stuck my family. I left my dream job when my then 6 year old daughter Wynter was life flighted to Portland and diagnosed with leukemia. She was in critical condition and remained in the PICU for 6 days. On day 2, her legs began to hurt and finally went numb. She collapsed on the floor. An MRI found a tumor on her spine. Wynter has remained paralyzed ever since. I watched her hopes and dreams of being a dancer and a gymnast fly out the window, and replaced them with hours of physical therapy, dangerous medications, surgeries, and nursing care. Each time she asks when she will be able to walk again, it tears my heart open. The community came out to support us in leaps and bounds. I am forever grateful for that. I think what I found the most comforting was the response from MSSM alumni. I graduated 15 years ago, and hadn't heard from many of them in years. The first donation to Wynter's care came from an alum. Then, care packages, cards, checks, words of inspiration and hope from people I hadn't seen in years. Soon, the website exploded with donations. Alumni from years before and years after mine contributed. We raised $1000 in the first 48 hours and $5000 in the first month. Help came from everywhere, but a large percentage of it came from those I went to MSSM with. This great group of former teenagers reached out to my daughter and I cannot express my gratitude enough.

Recently, I went out to dinner with Wynter and celebrated her 7th birthday. Dinner was paid for by an alum two years before me. Wynter wore a hat knitted by a friend in my class. The waiter's sister who had attended two years after me served her dessert. She received more than 700 cards for her birthday, thanks to a Facebook campaign that spread far and wide. Alumni sent cards from every corner of the world and made her day something to remember. There's a chance she may not see another birthday, and they really helped make this one something to remember. I always knew that MSSM was something special, and the people I met would change my life forever. It forms a bond between people: something that I can't explain. It's something that brings out the best in everyone. I'm glad 18 years ago, I made the choice to apply, and that they accepted me into their tribe. My daughter is grateful, too!

Lisa Cash with her daughter Wynter and pop star Katy Perry.

'01 Amy Bigelow

My MSSM journey started way back in 1999. I'm one of the few students who weren't from the state of Maine, but New Hampshire. It's a funny story of how I became interested in MSSM. I knew a guy by the name of Joe Mathis who attended MSSM around the same time. I talked to him one day because I had grown frustrated at my current school in Wolfeboro, NH. and I knew he went away to a school in Maine that specialized in math & science. After talking to him, I checked out MSSM online (yes, they did have a website back then). I was immediately hooked.

Back at my sending school, I was a good, but bored, student. Before I went to MSSM, I was a kid who got all A's, did all of my homework, but I wasn't a passionate learner... yet. The shift to become the passionate learner I am came about by being surrounded by an interesting group of learners. Two teachers that really made a difference in my life and helped me become the learner that I am were Mr. Siddiqui and Mr. Farrell. Learning what mathematics was at MSSM made me into a better math student by far.

When I wasn't in the classroom, I learned how to become a juggler, started a recycling program, practiced writing epic poems, learned how to cook steak (but also became a vegetarian), memorized all the words to "Baby Got Back" and "Ice Ice Baby," (which remain crowd favorites to this day), celebrated major Jewish holidays and honed the skill of becoming someone else's biggest fan.

Post-MSSM, I started studying Economics at the University of Chicago, but transferred to Middlebury College, earning a Mathematics degree with a minor in Education. I taught 7th grade math for 2 years through the Teach Kentucky program in Louisville, tried 1 year of public high school teaching in upstate NY, and for the past 7 years have chaired the Math Department at Franklin Academy, a college-prep high school for students with Asperger's syndrome and Nonverbal Learning Differences, in East Haddam, CT. Today I work with students who are "twice exceptional," students who have a learning disability and Asperger's syndrome but who are great at computer programming. Recently, I started my thesis work by looking at group actions on the Rubik's Cube. For my second Masters at Wesleyan University, I presented at the National Council of Teachers of Mathematics annual conference. You can find my entire presentation here: http://tinyurl.com/nczvq6a.

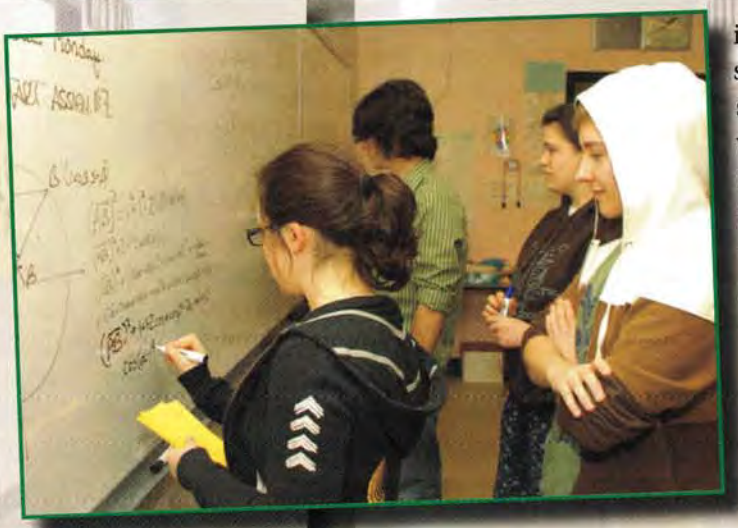
Vintage Pete Pederson, circa 2008.

MSSM has made me a curious learner, and helped and showed me ways to learn beyond the traditional textbook curriculum. My lifelong goal has evolved to become some other school's Mr. Siddiqui. I've also served as the Odyssey of the Mind coach, developed the AP program, served as chair on a Math Department, organized π Day celebrations and had a classroom that essentially serves as the student lounge, I think I'm pretty well on my way.

When not teaching math, I enjoy training for triathlons and adventure races and exploring patterns on the Rubik's Cube. I still keep in touch with a lot of my MSSM classmates, including my longtime friends Nicole Grohoski and Pam Perkins.

Katie Higgins (Benson)'06

Early in my high school career, I realized I was bored with school and I needed a fresh start. I knew there had to be a place for me to succeed and meet people who shared the same interests. I found a school in northern Maine that was more focused on education called the Maine School of Science and Mathematics. I was skeptical at first, but MSSM definitely prepared me for the outside world. I gained confidence enabling me to succeed in life. I learned a great deal about stress and time management while I was there. I appreciated realizing I could simply retreat to the swing sets to reflect on the issues of the day with my friends. It was a tremendous stress reliever and it brought me closer to them, and to this day, I remain in contact with Emily, Hannah, & Jen.



In 2005, during my junior year midterms, some of my friends and I decided to host a beach party in the dorm since the weather outside was brutally cold. We filled a kid's pool with water, found a small potted palm tree and placed a tarp of sand around the pool with beach toys. Teachers, students, and staff came down to play in the water and the sand in Hawaiian shirts, shorts and sandals. It was fun just to relax and chat with each other in the "sun." I remember we had an amazing turnout. It was an awesome experience!

After MSSM, I enlisted in the U.S. Navy as a Nuclear Electronics Technician and Reactor Operator. MSSM taught me to be myself and develop the self-confidence needed to be successful in the U.S. Navy. I was stationed in Yokosuka, Japan for four years aboard the USS George Washington (CVN 73). When I completed my tour, I backpacked across Europe with my husband of six years, Josh, who is in the Air Force. We have just

received orders to transfer to Nebraska where I plan to complete my Veterinary Medicine degree at the University of Nebraska-Lincoln. I'm so excited to be taking on this challenge.

MSSM helped me gain the skills in mathematics that I wouldn't have attained otherwise. I have always dreamed of becoming a veterinarian and without MSSM, I definitely wouldn't have gone to college or enjoyed success in the US Navy's nuclear program. I am very thankful for MSSM and its life changing impact.

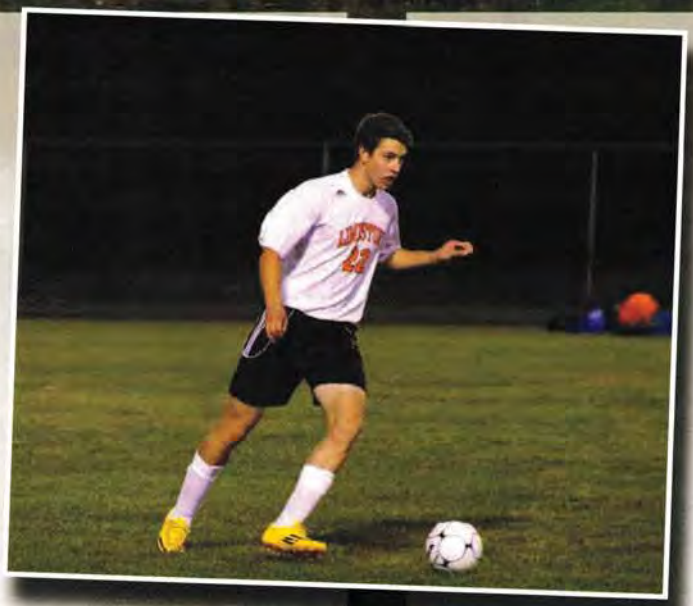
'15 Grier Ostermann

While at MSSM, I have laughed, cried, cloud gazed, and completed homework assignments all within an hour's time. I have been able to experience so much over the past four years and I wouldn't exchange it for anything. While here, I have met hundreds of extremely smart students and devoted faculty. While looking back at MSSM's history, it seems not much has changed in the day to day flow; we still go to class, we still share the building with LCS, and we still somehow find a way to occupy our time even though we find ourselves in the little town of Limestone for 9 months of the year. Most of the teachers, administrators, and all the students have changed over the years, but the intense sense of community is still alive and well.

When I came to MSSM, I knew I would be among some of the best students around. At first, I didn't quite understand how good the best would actually be. I knew the classes were going to be hard and that my peers would be smart, but I had no way of knowing what I was getting myself into. I learned quickly that adults at MSSM care. A lot. They don't just care about how we are doing academically or physically but they check our mental stability too. They truly want us to succeed both in the classroom and in life. There is a real sense of community that's instilled here from the moment you walk through the doors. For example, I showed up to dinner one evening and

L-R: Drew Emond, Gabby Collins, Oliver Adams, Emma Vannorsdall, and Grier Ostermann holding up the 2015 VEX Robotics Design Award at the state competition in Hampden.

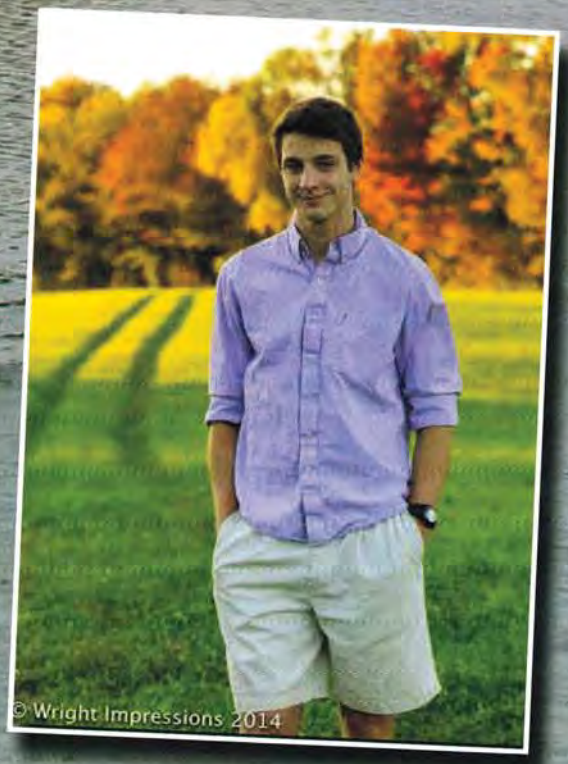
only Mr. Lambert, the Chief Operating Officer and engineering teacher and I were in line. He offered to let me cut in front of him. Being the stubborn person that I am, I told him that I wasn't going to unless he had a good reason. He simply stated that the students come first. They really do.

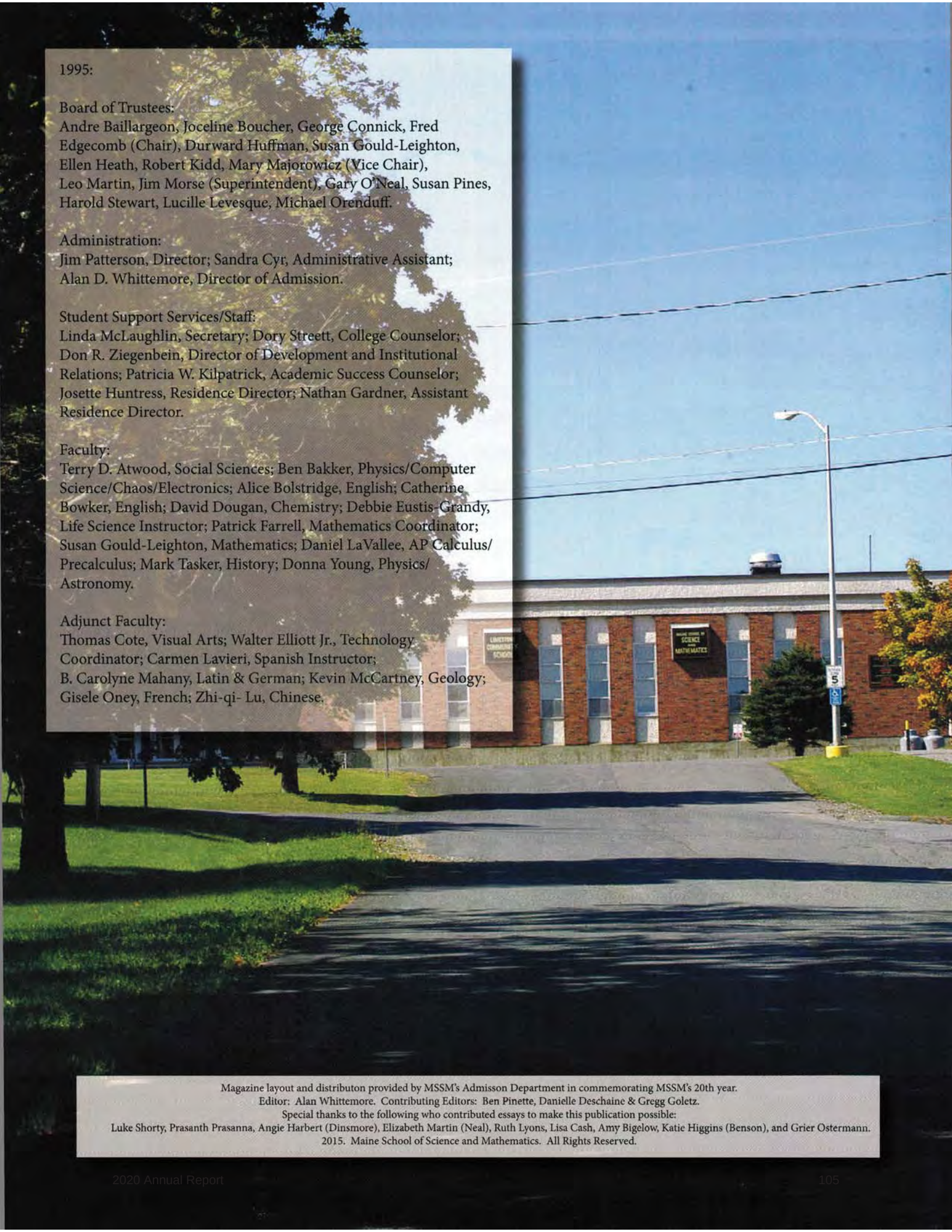


An important stereotype that goes along with attending boarding school is the issue of competitiveness. Students at MSSM are not very competitive with each other, instead, we support one another, bringing the whole community up together. It's rare to walk through the lower lounge and not see students collaborating on a homework assignment, group project, or something that may not be necessarily school related. We strive for the best in each other. We know what it's like to struggle and strive to make it better for the classes who follow us, much like those before us have done.

While at MSSM, I have enjoyed participating in multiple activities such as internships, dog sledding, quilt-making, and making friends from all over the state and world. Its experiences such as sneaking into your friend's room at midnight and having them help you talk out a problem is the beauty of dormitory living. I've also noticed since my freshman year in 2011 that the number of MSSM kids participating in sports has increased. MSSM students now account for half or more of the participants on many LCS/MSSM teams. This past fall, for example, ten of the eleven soccer players were MSSM students. This year, I had the opportunity to start a cross country ski team by practicing with Caribou while representing MSSM.

This school has not only taught me to stick up for what I believe in, but it has given me the tools and knowledge to do so. Even though it's not always been sunshine and roses, it has been one of the most positive life changing experiences for me. I love MSSM, I love Limestone and I'm thankful for everyone who has affected my life here. Next year I will be attending McGill University in Montreal, Canada to study engineering. Eventually, I would love to work on robots for production, the military, or assisting humans. I cannot wait to continue to spread the good MSSM "vibes" elsewhere.





1995:

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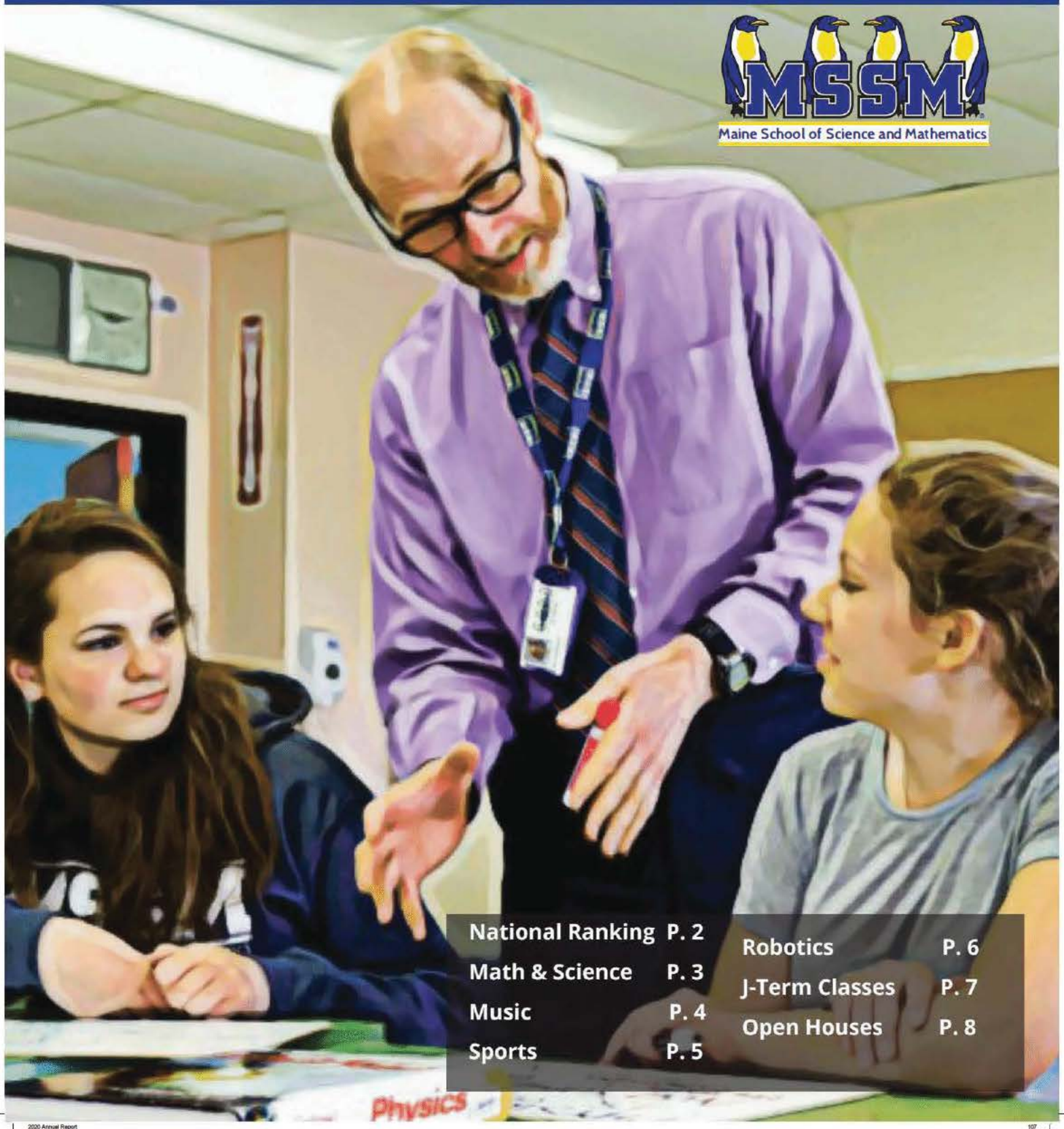
Magazine layout and distributon provided by MSSM's Admisson Department in commemorating MSSM's 20th year.
Editor: Alan Whittemore. Contributing Editors: Ben Pinette, Danielle Deschaine & Gregg Goletz.
Special thanks to the following who contributed essays to make this publication possible:
Luke Shorty, Prasanth Prasanna, Angie Harbert (Dinsmore), Elizabeth Martin (Neal), Ruth Lyons, Lisa Cash, Amy Bigelow, Katie Higgins (Benson), and Grier Ostermann.

APPENDIX H

2019 Year of Success Publication

MSSM

25 Years of Success



Ranked #2 Best High School in the U.S., #1 in Maine

Maine School of Science and Mathematics (MSSM), the state's first tuition-free, public, residential high school, has been ranked #2 Best High School in the nation by U.S. News and World Report. MSSM received a 99.99% overall score out of a possible 100 points. Ranking factors included #1 in College Readiness Index Rank, #1 in Math and Reading Proficiency Rank, #1 in Math and Reading Performance Rank. MSSM was also ranked #1 in Maine and #2 Magnet School in the nation. This is the highest rank MSSM has received from U.S. News and World Report. MSSM has been ranked 8 times in recent years, receiving rankings in the top 20.

Executive Director, David Pearson, said, "The MSSM family is rightly thrilled about the marvelous U.S. News and World Report educational rankings that places the school top in Maine, second in the United States, and nationally second as a magnet high school. But as in all things, there is no singular responsibility for such impressive results. These rankings are consequent upon what is, and always will be, a team effort at the school. As such, we are deeply grateful for the tireless efforts of our staff who teach, coach, advise, and nurture our extraordinary students; but also to the continuous support of their parents, and the many school districts throughout the State who educated them through their formative elementary and middle school years. We also owe very special gratitude to the Maine Legislature for providing the financial support for our academic and extracurricular programming. Quite simply, this is not just an MSSM success story, but one for our entire great State of Maine."

Dean of Enrollment Management, Alan Whittemore said, "Although we have received such prestigious recognition from the likes of U.S. News & World Report in the past, it is truly rewarding to reach #2 in the nation. We are happy for all involved here at Limestone, the students, staff, and faculty all of whom are working together to provide an education second only to one!"

MSSM's College Counselor, Erica Jortberg, enjoys the privilege of working with some of the most motivated students in the state. She noted, "They are what makes MSSM what it is. When they choose to come to MSSM, it is because they are seeking a challenge and the opportunity to push themselves academically. It is exciting to work with them through the college process and see them off on their post-secondary endeavors."

Maine School of Science and Mathematics (MSSM) is a tuition-free, public, residential high school that enrolls students from across the state and serves over 600 students each year through its academic and summer offerings. Opened in 1995, the school provides high school students a rigorous, student-centered curriculum that emphasizes the connections between math, science, and humanities, and culminates in opportunities for authentic research. MSSM's summer camps inspire Maine middle school students to explore their passions for science, math, engineering, and technology. MSSM also provides professional development opportunities for teachers throughout the state. For more information about MSSM.

#MathLeague

The enjoyment and passion for all things mathematical is the unifying attribute of the 2019 team of eleven students, chosen on the basis of their performances in the regular season MAML meets, who represented MSSM at the State Math Meet in Augusta. Walking into the Augusta Civic Center on that morning to join 98 other Maine teams, they were already guaranteed to go home with a plaque for being the top scoring team during the regular season. In addition, MSSM junior (now senior) James Hawkes was recognized as top scorer in the State during the regular season. This honor came with a massive trophy and a check for $300.

The Team total from the morning and afternoon rounds resulted in an astonishing 846 points out of 920. It is unfortunate for MSSM that each school can only send one team. While some schools brought as few as two mathletes, MSSM had another four full teams in waiting. Kudos to the dedicated staff and students who participate in Math Team at MSSM.

#ScienceBowl

It was an exciting Saturday, March 2nd, 2019, at the University of Southern Maine, Gorham, as 20 teams from 12 Maine high schools battled it out answering questions related to Biology, Chemistry, Physics, Earth Science, Astronomy, Energy, and Mathematics. After 10 rounds of play, including two tie-breaker sets to determine placements for the semi-finals, MSSM Team A emerged victorious with a win over the Scarborough A Team.

MSSM Team B placed 4th in their division, but did not advance to the semi-finals. This is MSSM's fourth win, with previous victories in 2007, 2013, and 2014. The winning team now receives an all-expense-paid trip to the National Science Bowl competition, which is held just outside Washington, DC, at the National 4-H Conference Center in Chevy Chase, MD, on April 25-29, 2019. While at Nationals, MSSM will compete against schools from around the US, as well as listen to lectures from leading scientists and visit many of the spectacular museums found in our nation's capital.

#JazzBand

On March 15th, 2019, MSSM's jazz combo, led by instructor Mark Tasker, capped off a wonderful day for our school when it was awarded its first-ever medal at a state competition! They scored a bronze medal, missing silver by only one point, and did a fantastic job representing MSSM in the midst of an extremely long day.

Congratulations to the 2019 MSSM Jazz Combo members - Humam Al-Fdeilat, Ian Ammerman, Annie Giroux, Greyson Orne, Milica Samardzic, Wesley Chalmers, Noah Olsen, Michael Delorge, Ryan Berry, Connor St. Peter, Rothery Sullivan and Morgan Tasker.

#AllAroostook

THE ALL-AROOSTOOK MUSIC FESTIVAL was produced by the Northern Maine Music Educators Association on Friday, November 30 and Saturday, December 1 at Skyway Middle School in Presque Isle. Mr. Andrew Sullivan attended the event with 6 students. Great job Anna, Michael, Jay, Taylor, Hannah, and Marcello.

MSSM Freshman Performs in All Aroostook Music Festival

On Thursday, January 24 Justin Pelletier, a freshman from Fort Fairfield, was selected to perform an alto saxophone part at the All-Aroostook Music Festival held on Saturday, January 19th at 2:00 PM. The event was sponsored by the Northern Maine Music Educators Association (NMMEA) and was one of two yearly music festivals put on by the association, the other a Choral event. The NMMEA's objective is the promotion, improvement, and advancement of music education.

#Volleyball

MSSM'S EXCITING VOLLEYBALL season came to a close at the girls and boys Aroostook County Volleyball Championships on March 15 & 16, 2019. While many teams from around the area had already scrimmaged each other and thought they knew what to expect, MSSM teams knew each game would be a surprise. Both teams did excellent and left it all on the court at the end of the tournament; however, the girls were the real volleyball standouts in 2019, earning the title **Aroostook County Volleyball Champions.**

#Nordic

THE MSSM PENGUINS NORDIC SKI TEAM ENJOYED A SUCCESSFUL SEASON thanks to an abundance of snow and determination! Along with several new athletes, the team welcomed Marie Beckum as coach. While no stranger to MSSM athletics, this was Coach Beckum's first year at the helm of the nordic program. Thanks to local resident Ron Gallagher, the team had freshly groomed trails on campus whenever conditions allowed which was a huge benefit to the team's training schedule. The soccer field lights were illuminated to allow for night practices!

Veteran team members Dolcie Tanguay and Harrison Walters had particularly strong seasons with consistent top 5 finishes at the local meets. Both earned the title of All-Aroostook athletes based on their performance at the Aroostook League Championship races.

During February break 2019, the team travelled to Titcomb Mountain in Farmington for the Class C State Championship races. Dolcie Tanguay, Victoria Eichorn, Lydian Frost, Brice Carson, and Rothery Sullivan represented the girls' team with Harrison Walters, Will Whitman, Justin Pelletier, Connor St. Peter, and Greyson Orne representing the boys. The trip was a great opportunity for team bonding and experiencing the spirit of competition while racing with the top athletes from around the state. Both teams finished in 5th place overall in Class C! In individual awards, Dolcie Tanguay took 2nd in Classic, Skate, and Pursuit while Harrison Walters finished 2nd in Classic, 6th in Skate, and 4th in Pursuit.

Dolcie Tanguay, Coach Marie Beckum, Harry Walters

#SeaPerch

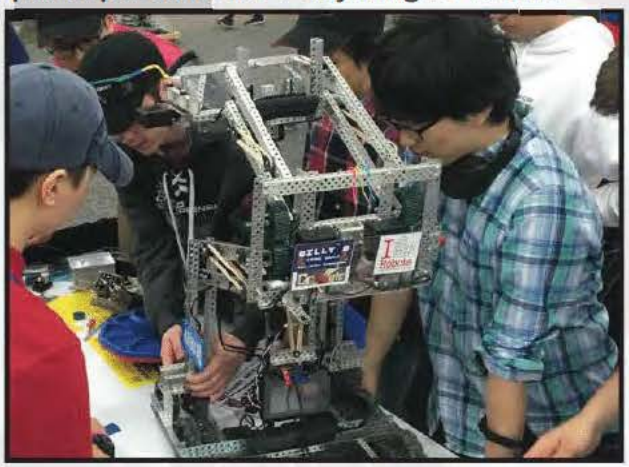
Two teams traveled to Brunswick, Maine to compete in the Northern New England Regional SeaPerch competition on April 6th, 2019.

The MSSM Emperor Penguins team represented by Justin Davis, Rudy Ye, and Kura Yamada finished in 1st place and had the best score in every category including the mission course which was a simulated rescue and recovery mission conducted with their submersible ROV.

By finishing first, the team qualified for the International SeaPerch Challenge at the University of Maryland on June 1 & 2, 2019. At the International Championships, **MSSM took first place** in the Engineering Notebook category.

#VEX-Robotics

April 24-27, 2019, two MSSM VEX Robotics teams, Penguins 4393 S (Madison McCarthy, Wesley Chalmers, and Chandler Pike) and 4393 Z (Ethan Kelley, Federico Galbiati, James Lau, Harrison Ma, Alex Nikanov, and Ryan Oh) participated in the 4 day long 2019 VEX Robotics World Championship, in Louisville, KY. Accompanying the teams were their coach Dr. Anders Gårdestig and Ms. Amber Jeskey and two sets of parents.



The MSSM teams competed with almost 600 other high school teams in the world's largest robotic competition. This was truly a multicultural experience, spurring new friendships and collaborations across language and cultural differences! The pit area was teeming with life and a variety of cultural expressions, ranging from New Zealand, Bahrain, and China, to Great Britain, Finland, and Tunisia, to Mexico, Paraguay, and Canada, just to mention a few.

Our two teams, after competing well over several days, finished at position 63 (S) and 79 (Z) in their respective divisions. This is a very good first showing for teams that consist primarily of underclassmen (only one senior) and several students for whom this is their first year of robotics. What a wonderful testimony to the skills, talents, and dedication of the students at MSSM! After watching the finals, and the long awaited reveal of next year's game, called Tower Takeover, the tired, but excited, teams returned to Limestone, eagerly anticipating and planning for next year's competitions.

#J-Term

During J-Term, 2019, ten MSSM students participated in research projects at the Jackson Lab (JAX) in Bar Harbor and at the Bigelow Lab in East Boothbay. While at JAX students worked on a project related to personalized medicine. They collected and extracted their own DNA, used PCR to selectively amplify three different genes that can differ from person-to-person, and then used restriction digestion, electrophoresis, and sequence analysis to determine whether they had the 'wild type' version of the gene or one of several variations. Students also learned how to use bioinformatics analysis tools, learned about (and saw) some of the mouse strains developed by and used by JAX researchers, toured the Sequencing and Necropsy/Histology facilities, listened to a presentation on the genetics of kidney disease given by Dr. Ron Korstanje, and discussed some of the ethical considerations behind personalized genetic testing for human diseases.

After a week at JAX, students traveled to East Boothbay to spend a week at the Bigelow Lab for Ocean Sciences. students worked with Drs. Nick Record and Peter Countway on a project involving environmental DNA (eDNA). In particular, they wanted to gather information on the winter-time abundance of the marine diatom Pseudo-nitzchia in Maine coastal waters. Blooms of Pseudo-nitzchia are becoming common in the summer in the Gulf of Maine, but little is known about their winter population size. This diatom is of interest to scientists because it produces a toxin which accumulates in shellfish, and becomes harmful to humans who then eat the shellfish. Students collected water samples, filtered those samples for chlorophyll and DNA analysis, and incubated subsamples at two different temperatures to see how warmer temperatures may influence growth of winter plankton. Pseudo-nitzchia abundance was analyzed using quantitative PCR (qPCR), and while its biomass was much lower than it is in the summer there was still some present. On the final day of J-Term, students learned about 'science communication' and put together three short science information videos.

MSSM Announces 2019 Scholar Athletes

The MSSM Athletic Department is pleased to announce that Rothery Sullivan and Trevor Gava were named the 2019 Scholar Athletes! Rothery and Trevor were recognized at a banquet with other area scholar athletes on Monday, March 11th at Caribou High School. At the banquet, the Aroostook League representatives held a drawing for ten $400 scholarships and Rothery's name was drawn! Congratulations!


Trevor Gava


Rothery Sullivan

MSSM Open Houses

Sunday & Monday **Oct 13 & 14, 2019**
Sunday: 4 - 6:30 PM Monday: 8:45 AM - 2 PM

Sunday & Monday **Nov 10 & 11, 2019**
Sunday: 4 - 6:30 PM Monday: 8:45 AM - 2 PM

Sunday & Monday **Jan 19 & 20, 2020**
Sunday: 4 - 6:30 PM Monday: 8:45 AM - 2 PM

Registration is Required
Contact Janet (207) 325 3619 *admissions@mssm.org* *www.mssm.org*

Why is attendance of an MSSM Open House so strongly encouraged?

Open Houses for prospective students and their families are an excellent way to learn about MSSM firsthand. During the event you will be able to visit Aroostook County, attend MSSM classes, meet MSSM students and staff, as well as schedule your personal interview.

The two-day open house allows more time for campus tours, Residential Community Panel, attending classes, Faculty-Student Parent Community panel, admission process, and ends with a student-led variety show.

The Admission's Process

Campus Tour

Student-Led Variety Show

Attend Classes

Community Panel

Visit the Dorm

#MSSM Online

MSSM Conversations
College Counseling Podcast

Google play

facebook.com/MSSM.org/

instagram.com/mssmpenguins/

twitter.com/mssmpenguins

www.mssm.org/news

APPENDIX I

Strategic Plan adopted May 2019

MSSM – A PARTNER FOR MAINE STEM SUCCESS

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

Maine School of Science and Mathematics

Strategic Plan

May 2019

MSSM – A PARTNER FOR MAINE STEM SUCCESS

The Maine School of Science and Mathematics is an academic leader in Maine secondary STEM education by providing a superlative education for motivated students by an exceptional faculty and staff. MSSM will impact more Maine students by also developing teacher and student resources and becoming a valued, accessible resource for students and educators across Maine.

Setting the Stage

In 2018, the Maine School of Science and Mathematics undertook a dual-prong strategic planning process. Faculty and staff used the operational design model to examine MSSM from the inside out, while the Board of Trustees formed a Strategic Plan Steering Committee to examine STEM education nationally, and MSSM's role within the State of Maine educational landscape. This plan is the combination of those efforts.

MSSM's History

MSSM was established in 1993 as a public residential magnet school for the purpose of providing certain high-achieving high school students with a challenging educational experience. Since the first entering class in 1995, MSSM's students have been achieving remarkable academic results. MSSM has developed and grown a very popular middle school focused summer camp which excites and engages students in STEM subjects. MSSM has been at the forefront of efforts to break down gender barriers in STEM education. MSSM summer camp has an equal number of weeks for girls and boys. MSSM's student enrollment has been roughly gender equal for a number of years with current residential enrollment capped due to the capacity of its one dorm.

MSSM's Mission

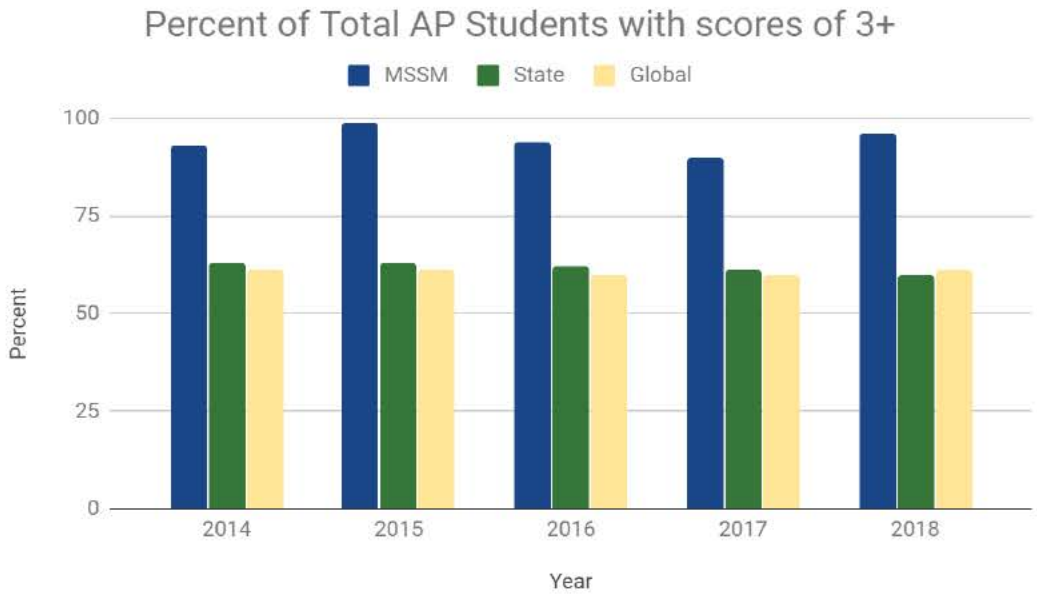
MSSM brings together and helps a group of Maine's most academically motivated high school students to become innovative, well-rounded scholars with the ability to develop, investigate, and communicate critical ideas that improve the human condition and benefit the people of Maine. We understand that highly motivated and prepared students are found in a diverse selection of communities across the state, and they benefit from programs delivered in a variety of ways. MSSM is a trusted partner to those communities and a vital part of the educational landscape for the delivery of secondary STEM education in Maine.

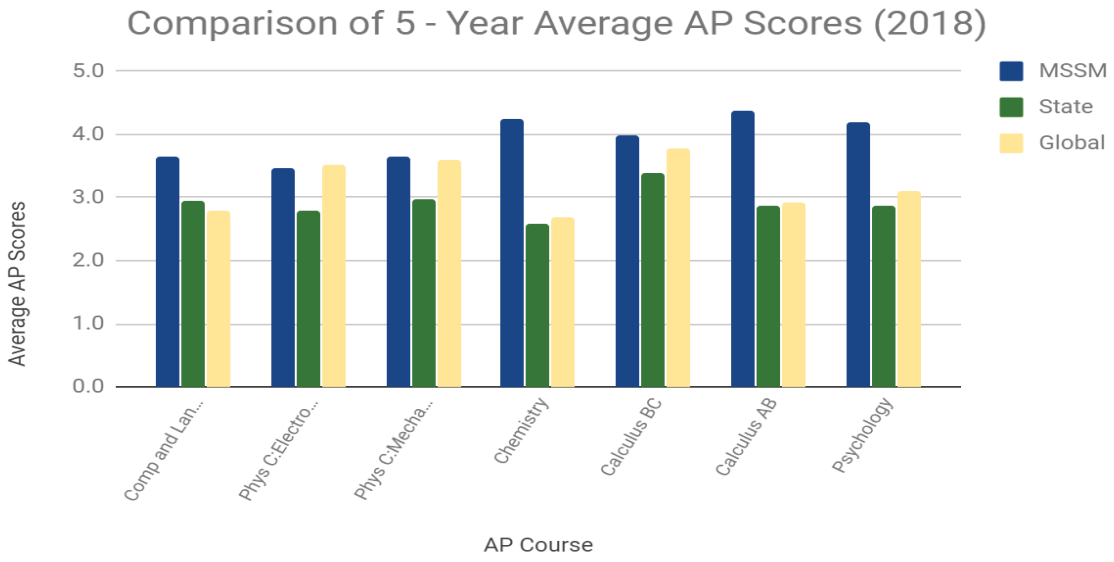
MSSM's Future

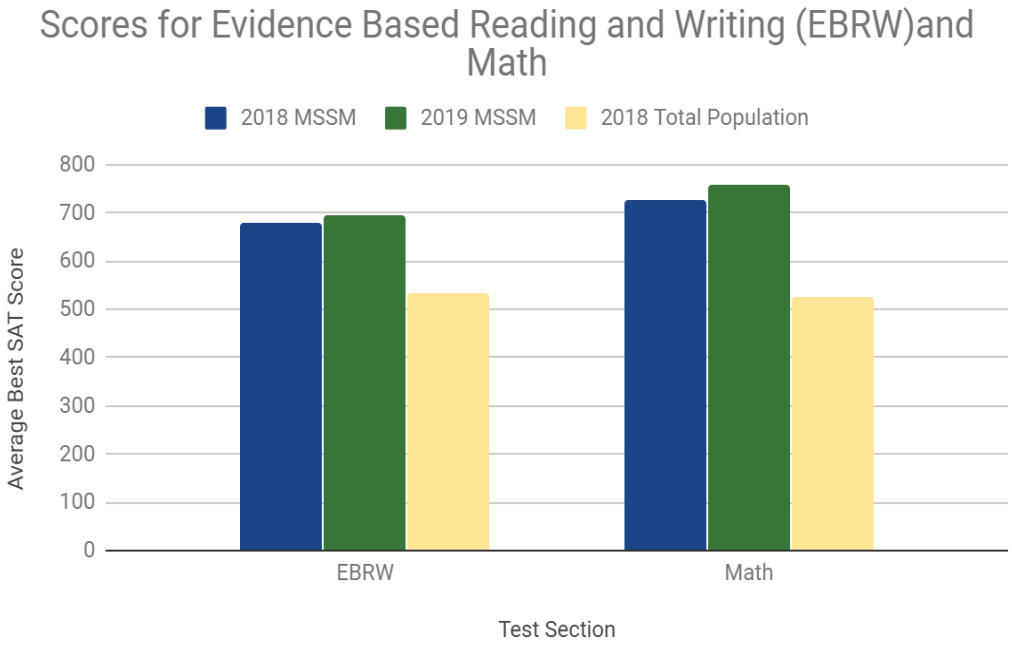
As MSSM celebrates its 25th anniversary, it will build on its core competency of outstanding student outcomes to become a partner for STEM education across the State. MSSM will expand its impact by training teachers, providing STEM teaching resources and filling gaps in local education offerings by providing high-level STEM classes to students who otherwise would not have access to such classes.

MSSM students are motivated, talented, and hard-working and most courses at MSSM are taught at the college level using college textbooks and curricular materials. We have led the state in many initiatives from the inclusion of AP courses, internships, computer programming and most recently, dual college enrollment. Our graduates, many of whom pursue advanced degrees, are making an impact locally, nationally, and internationally.

Advanced Placement courses are offered at MSSM in English Language & Composition, European History, Psychology, Calculus AB and BC, Statistics, Chemistry, and Physics C: Mechanics and Electricity & Magnetism. In the past five years, MSSM students have taken a total of 748 Advanced Placement tests and demonstrated their mastery of college level material by achieving a mean score of 3.9 on the tests. Statistics provided by College Board show a striking disparity between MSSM students and their peers throughout Maine and overall. In the past five years, 95% of MSSM AP students have scored a 3 or better on at least one AP test taken. This is in stark contrast to an average 60% for Maine and test takers overall. Differences are also notable in SAT scores. MSSM students consistently outperform their peers around the state and the total SAT test taking population by at least 100 points in both Critical Reading and Math. MSSM has an agreement with the University of Maine at Presque Isle allowing students to receive college credit for many MSSM courses, some of which are beyond the AP level.







These and other metrics which account for MSSM's high rankings in *U.S. News and World Reports* only tell part of the story. Equally impressive are MSSM's performances at various competitions. Nearly every year since its inception, the MSSM Ivory Math Team has been second to none in the state in both regular and state meets. This year two different types of robotics teams, VEX and SeaPerch, have advanced to international competitions. The Science Bowl team represented Maine for the fourth time at the nationals in Washington, DC. The accolades are not restricted to math and science. For the second time in three years, an MSSM student has been one of two students selected to represent Maine in the

United States Youth Senate Program. For the third year in a row, an MSSM Key Club member has been elected to serve as lieutenant governor for the New England District of Key Clubs. The Jazz Band received a second place award at the State Jazz Festival and our athletes have advanced to play-offs and even brought home an Aroostook League Championship.

As the college admissions process grows ever more competitive, MSSM students continue to gain admission to prestigious liberal arts colleges, technical colleges, and state and private universities. Even more important than the matriculation summary is the news that we receive about the opportunities they find at college as freshmen who walk through the doors prepared to work both independently and collaboratively in a new environment. While we lack data on the extent to which MSSM students ultimately enrich the lives of others in Maine, some stand out due to the extent to which they have dedicated their time and expertise to the great State of Maine.

Matriculation Summary, Classes of 2017 and 2018		
Allegheny College	Maine Maritime Academy	U of Maryland, College Park
Boston College	Massachusetts Institute of Technology	U of Massachusetts, Amherst
Boston University	McGill University	U of New England
Bowdoin College	Mercer University	U of New Hampshire, Manchester
Carnegie Mellon University	Mount Holyoke College	U of Maine
Champlain College	New College of Florida	U of Maine, Farmington
Clark University	Northpoint Bible College	U of Maine, Presque Isle
Clarkson University	Rensselaer Polytechnic Institute	U of Pittsburgh
Colby College	Rochester Institute of Technology	U of Southern Maine
Cornell University	Smith College	U of Utah
Eckerd College	Stevens Institute of Technology	U of Wisconsin, Madison
Embry-Riddle Aeronautical University	Suffolk University	Virginia Tech
Emory University	SUNY Korea	Williams College
Harvey Mudd College	Swarthmore College	Wittenberg University
Kenyon College	Syracuse University	Worcester Polytechnic Institute
Lehigh University	Tufts University	

MSSM – Successes

Nicole Grohoski, Maine House Representative District #132, GIS Specialist and Cartographer

In 1999, her junior year of high school, Nicole's adventurous spirit took her from her hometown of Ellsworth to Limestone where her academic success continued. Her MSSM math and science classes included Chemistry, Physics, Geology, Calculus, Differential Equations, and Multivariable Calculus. She went on to Middlebury College to study mathematics, however, this would eventually take a back seat to her major of Environmental Studies and Chemistry. She holds the distinction of being the first woman to thru-paddle the Northern Forest Canoe Trail which stretches 740 miles from New York to Fort Kent. Having now returned to Ellsworth, she earns a living as a Geographic Information Systems (GIS) Specialist and Cartographer.

Although politics was not on Nicole's radar until just recently, she has long been a force for change. At MSSM, she started students on the path of recycling; transporting cardboard boxes in her backpack to the municipal bins. This student initiative persists today in the MSSM dormitory. Nicole's foray into public service began with an interest in the mathematics of rank choice voting. She soon found others in Maine who were working on this election reform and was empowered to find that regular citizens could make a difference. She is now serving her first term in the Maine House of Representatives where she sits on the Energy, Utilities and Technology Committee, representing District #132, Ellsworth and Trenton.

John T. Giblin, Jr, Ph.D (Tom), Associate Professor of Physics, Kenyon College

Tom enrolled in MSSM in the fall of 1997 as a junior from Brunswick, Maine. At MSSM, he took science classes in Chemistry and AP Physics and he studied Before Calculus, Calculus, and Abstract and Linear Algebra. He left MSSM to study chemistry at the College of the Holy Cross; but, instead earned an AB in Physics and Mathematics. At Holy Cross, he was selected for its highest academic honor, the Fenwick Scholar Program which allowed him to design his own senior research project. Tom's interest in Cosmology took him from Holy Cross to Brown and then to Yale where despite research and teaching commitments, he found time to convince his advisors to donate physics equipment and time to MSSM. He returned to teach and later coordinate the academic program at MSSM Summer Camps.

Tom has worked as a visiting assistant professor at Bates College and as a postdoctoral fellow at Perimeter Institute for Theoretical Physics in Ontario. He is currently the Chair of the Physics Department at Kenyon College and an Adjunct Assistant Professor of Physics at Case Western Reserve University. As a researcher, he has secured nearly a dozen competitive research and innovation grants; three from the National Science Foundation totaling $315,000. He has over forty peer-reviewed publications and give numerous Cosmology talks each year to scientist at top tier research institutions. Still he chooses to devote time to MSSM. Two years ago, when we had been unable to recruit a second physics instructor,

Tom graciously agreed to take on a small group of students who had already completed AP Physics C. Enabled by technology, Tom met with students virtually, delivering a sophomore level college class he was simultaneously teaching separately at Kenyon. Students were highly appreciative of his passion and expertise in particle physics. Tom's commitment to inspiring the scientists of tomorrow is unwavering.

The success of Nicole and Tom certainly isn't wholly dependent on their time at MSSM, but both credit MSSM as providing them with a foundational education they would not have otherwise received.

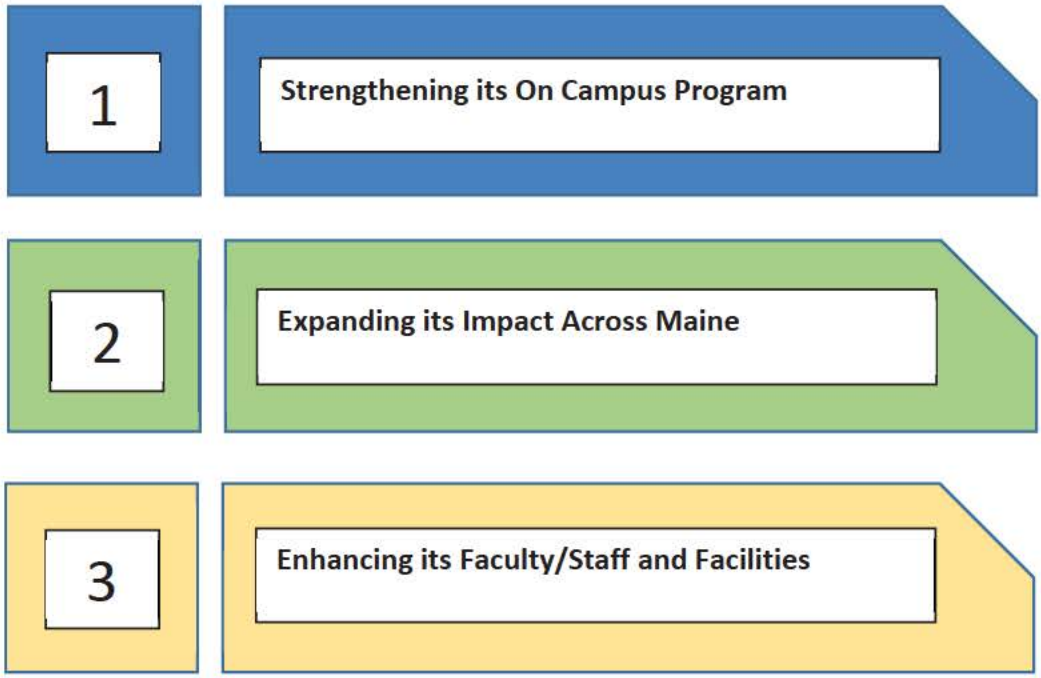
MSSM – WHAT IS NEXT?

With MSSM's 25th anniversary rapidly approaching, MSSM desires to build upon its successes. To do this, it must address critical infrastructure needs and ensure its place as Maine's premier secondary STEM institution.

The Plan

MSSM shall be a recognized leader in the delivery of secondary STEM education, a vital partner to Maine public schools, and a valued, accessible resource for students and instructors across the state.

To ensure MSSM is a foundational partner in secondary STEM education in Maine, MSSM commits itself to achieving its plan by:



1

Strengthening its On Campus Program

STRONG ON CAMPUS PROGRAM

MSSM's on-campus program has been a foundational piece of its exceptional student outcomes since its inception. Every qualified, exceptionally motivated Maine student, no matter their socio-economic circumstances or geographic location, should have the opportunity to experience the MSSM on-campus program.

To maintain exceptional outcomes, the MSSM facilities need to be expanded and fully maintained. MSSM students, faculty and staff need first-rate facilities.

KEY INITIATIVES

- **Increased access** – Qualified students from all parts of Maine, in grades 9-12, regardless of their socio-economic status or geographic location, will have full access to MSSM's on-campus program by reducing the room and board fee.
- **MSSM control all of its critical facilities** – To adapt quickly and meet student, faculty and staff safety and educational needs, MSSM must control the day-to-day operation of all of its critical facilities.
- **Modern lab spaces** – Flexible, adaptable spaces that encourage collaboration and hands-on learning must be created.
- **High quality residential life program** – To support strong social and emotional growth parallel with academic growth MSSM needs a residential life program on par with its academic program.
- **Updated graduation requirements** – Students who demonstrate solid foundations in math, science, and the humanities will have increased opportunities to move more quickly into advanced courses, research opportunities and transferable university credits earned through the University of Maine system.
- **Engineering spaces** – MSSM needs accessible spaces that encourage hands-on learning and long-term projects that support both faculty led programming and student projects.
- **Flexible classroom, meeting and office spaces** – Learning environments must be safe and support discussion and discovery.
- **Technology** – MSSM must provide the tools needed to support computer science programming and expanded virtual/online programming.

- **Strategic marketing plan** – MSSM needs to implement a comprehensive marketing plan for all facets of the school.
- **Research and inquiry opportunities** – Students must be supported in conducting long-term research and solving real-world challenges, including competitions.
- **Safe, clean, and comfortable residential dorms** – To grow and support the residential program, student housing must be at a comparable standard to other residential magnet schools.
- **Proper residential staff housing** – Residential staff is a key component to a great student experience and must have proper accommodations.
- **Sufficient faculty housing** – Availability and quality of faculty housing is critical to faculty hiring and retention.
- **Optimized school size** – Students should have a vibrant, diverse educational community. To support this goal, the school needs to grow demand and enrollment to 200-230 students. The entire educational program needs to expand to meet the needs of those students.

2

Expanding its Impact Across Maine

VITAL PARTNER

MSSM must expand its outreach to become a vital partner to Maine public schools, and a valued, accessible resource for students and educators across the state.

MSSM remains a well-kept secret across the state. Through active partnerships and broader recognition of MSSM's ability to meet the needs of Maine's high-achieving students, MSSM will be seen as a key partner in the Maine STEM landscape.

KEY INITIATIVES

- **Advancement Team** – MSSM will strengthen its working relationship with the MSSM Foundation and others, ensuring a productive partnership for fundraising, support, growth and outreach.
- **Train-the-Teacher** – MSSM will leverage its core STEM competencies to provide training for middle school and high school STEM teachers.
- **Summer camp** – MSSM will maintain and strengthen its middle school focused summer camp.
- **External accreditation and assessment** – Accreditation will support the expanding ability of MSSM students to participate in dual enrollment classes and will provide external recognition of its excellence.
- **Resource for teachers** – MSSM will leverage its core STEM competencies to develop, organize and distribute online STEM lesson plans and enrichment materials.
- **Accelerated college pathways** – Students will have the advantage to begin college already having earned an Associate's Degree or transferable university credits while at MSSM.
- **Expanded partnerships** – Students will have expanded J-Term options, internships and access to other industry partnerships and research opportunities.
- **Outreach and distance learning** – MSSM will develop online content, learning modules and other student learning modalities to support students whose school could benefit from MSSM partnership.

3

Enhancing its Faculty/Staff and Facilities

EXCEPTIONAL FACULTY AND FACILITIES

Exceptional faculty, staff and facilities will enable MSSM to provide world class student outcomes.

KEY INITIATIVES

- **Hiring and retention** – MSSM will develop hiring, retention and human resource policies that ensure the demonstrated quality of faculty and staff
- **Partner opportunities** – Opportunities for MSSM faculty and staff partners and families have an impact on hiring and retention and should receive special focus, including access to daycare and early childhood learning.
- **Involvement in residential life** – Students benefit from a strong connection between faculty/staff and their residential life experiences.
- **Facilities** – MSSM recognizes that faculty and staff need facilities that will help them achieve exceptional student outcomes. Section 1 of this plan addresses some of these facilities upgrades.

IMPLEMENTATION FRAMEWORK

The following goals and strategies form the framework for the school's growth and improvement work for the next five years.

1 Strengthening its On Campus Program

MSSM's on-campus program has been a foundational piece of its exceptional student outcomes since inception. All qualified, exceptionally motivated Maine students, no matter their socio-economic circumstances, or geographic location, should have the opportunity to benefit from the MSSM experience.

To maintain exceptional outcomes, MSSM facilities need to be expanded and improved. MSSM students, faculty and staff need first-rate facilities.

GOAL: Provide an exceptional on-campus education experience to more Maine students.

OBJECTIVES:

1. MSSM should reduce the room and board fee, to a nominal amount, to remove finances as a hurdle for enrollment of MSSM appropriate students.
2. To adapt quickly and provide for student, faculty and staff needs, MSSM must control and manage the day-to-day operation of all of its critical facilities.
3. Modern lab spaces, which are safe, flexible, adaptable spaces that encourage collaboration and hands-on learning, must be created.
4. A high-quality residential life program is required to support strong social, and emotional growth parallel with academic growth of MSSM students.
5. Updated, more flexible graduation requirements will help students pursue their areas of greatest interest and earn transferable university credits through the University of Maine System.
6. Revising the daily schedule and graduation pathways will support student-driven long-term research and solving of real-world challenges.
7. MSSM must provide the tools needed to support the delivery of computer science, engineering and expanded virtual/online programming
8. Flexible classroom, meeting and office spaces are needed to create learning environments that support discussion and discovery.
9. MSSM must implement a comprehensive marketing plan for all facets of the school.
10. MSSM must have a campus plan that supports an inclusive community.
11. To grow and support the residential program, student housing must be at a comparable standard to other residential magnet schools.

12. Residential staff is a key component to a great student experience and must have proper accommodations.
13. Sufficient faculty housing is needed as availability and quality of faculty and staff housing are critical to faculty and staff hiring and retention.
14. In order to have a vibrant, diverse educational community, and to serve more students, the onsite educational programming should grow to between 200-230 students.

STRATEGY I

Work with Maine Government to change MSSM's statute and annual appropriation to reduce the room and board fee charged to families making it affordable to all Maine students.

Required Resources:

- Support from the Department of Education, Governor, and Legislature.
- Additional funding from the State to reduce room and board costs for Maine students.

Earliest Timing:

Rationale:

- As the full cost of room and board has climbed, a number of potential applicants are not applying to MSSM due to the perceived cost.
- Financial aid is available, but many current families struggle to fund their portion of the cost, even after financial aid.
- As a public residential magnet school, MSSM should welcome every qualified Maine student.
- MSSM should be a top option for qualified students from all areas of Maine.

Additional Expected Benefits:

- Diversity makes a school community more vibrant
- Reduced room/board fees will help the State provide an appropriate education for all students.

STRATEGY II

Control critical facilities.

Required Resources:

- The existing lease agreement with Limestone will need to be reviewed.

- A long-term decision regarding the feasibility and location of new facilities will be needed.

Earliest Timing:

Rationale:

- The last 10 years of leasing the academic space from the local RSU has resulted in a backlog of deferred maintenance and safety issues, with little to show for the rent that was paid.
- Faculty and staff are frustrated at the inability to control their day-to-day work spaces.

STRATEGY III

Build or renovate educational spaces, including lab spaces, classrooms and meeting spaces to accommodate flexible, collaborative student experiences.

Required Resources:

Earliest Timing:

Rationale:

- STEM education is moving to collaborative, active and integrated learning.
- Flexible classroom and lab spaces let the spaces adapt as the learning changes.
- Existing facilities need major investment, which must bring maximum return on student outcomes.

Additional Expected Benefits:

- Better facilities will help with faculty, staff and student recruitment.
- Better facilities will support exceptional student outcomes.

STRATEGY IV

Develop and maintain a high-quality residential life program that supports students' social and emotional growth parallel with their academic growth.

Required Resources:

- The Residential Life Team needs to develop a comprehensive residential life program.

Earliest Timing:

- Revised policies and procedures should be presented to the Governance Committee by January, 2020.

Rationale:

- As a public residential boarding school, MSSM should have a comprehensive program for developing the whole student.
- A comprehensive residential life program allows MSSM to instill consistent community expectations and values.

Additional Expected Benefits:

- A comprehensive residential life program is a tool to address issues of student retention.

STRATEGY V

Increase the flexibility of MSSM graduation requirements so students can create programs of study that meet their interests and aspirations.

Required Resources:

- Program Team to review and propose revised requirements.

Earliest Timing:

- Graduation requirements phased in for Class of 2021 students.

Rationale:

- Flexible graduation requirements will support students in the pursuit of their areas of interests and aspirations.
- Flexible graduation requirements will allow students and faculty time for long-term projects or real-world problem solving

Additional Expected Benefits:

- Student projects, science fair participation, and real-world experiences help MSSM achieve higher visibility around Maine and the country.
- Students who are pursuing their areas of interests and aspirations are more likely to remain enrolled at MSSM and stay in Maine after college.

STRATEGY VI

Guide 70% of MSSM graduates to completing a long-term research project or having participated in a real-world problem-solving team.

Required Resources:

- Flexible graduation requirements
- Faculty and staff time for mentoring projects
- Access to lab space and makerspace outside of regular class hours

Earliest Timing:

Rationale:

- Students who want to pursue additional schooling will be more successful coming from a background of research and real-world problem solving.

Additional Expected Benefits:

- Programs customized to student interests will increase interest among prospective families and reduce attrition.

STRATEGY VII Ensure stable, affordable internet service, which is vital to expand MSSM's role in Maine STEM education.

Required Resources:

- Fiber optic internet connection
- Internal network capable of supporting all faculty, staff and student needs

Earliest Timing:

Rationale:

- Delivery of distance education is reliant on a high-speed, stable, internet connection.

Additional Expected Benefits:

- Increased internet bandwidth and stability will enhance the student experience.

STRATEGY VIII

Develop and implement a strategic marketing plan that supports all facets of the school

Required Resources:

- Additional staffing dedicated to marketing.
- Marketing budget for appropriate advertising and outreach.

Earliest Timing:

- School year 2019-2020 budget should support increased efforts in this area.

Rationale:

- MSSM is a hidden gem that needs increased visibility.
- MSSM is not reaching all Maine students who could benefit from the MSSM experience.

Additional Expected Benefits:

- Broadcasting MSSM's success to the broader world will showcase the quality of Maine's education system.

STRATEGY IX

Undertake campus planning in support of an inclusive community. Before any new construction is undertaken by MSSM, a master plan should be developed with input from all stakeholders.

Required Resources:

- Funding for a master planner to work with MSSM to develop a master campus plan.

Earliest Timing:

Rationale:

- MSSM grew organically from the assets made available with the closing of Loring Air Force Base. Now, almost 25 years later, it is time for a comprehensive plan for a campus to support MSSM's mission of delivering exceptional student outcomes.

STRATEGY X

Bring student residential housing up to a standard comparable to similar residential magnet schools.

- Students should be housed in rooms no larger than doubles.
- Gender and age appropriate housing should be ensured by investing in flexible clustered dorm spaces.
- The residential life staff housing in the dorm spaces should be appropriate as to number of units and their layout.

Required Resources:

- Renovated dorm space and/or additional dorm space needs to be pursued.
- For example, Thornton Academy built a new dorm, which accommodates 52 students (26 double rooms, arranged as suites with a shared bathroom, shared living room and two separate bedrooms) and 4 residential life apartments, at a cost of $4.2 million. The dorm is 22,700 square feet (per square foot cost $185

Earliest Timing:

Rationale:

- Other residential magnet STEM schools all have multiple dorms and a strong preference to rooms no larger than doubles.
- Competition for Maine and international students is increasing. Dorm space is an integral part of a residential program.
- Appropriate apartments are essential to recruit and retain qualified staff.

STRATEGY XI
Add additional faculty/staff housing

Required Resources:

- Purchase additional faculty/staff housing or incorporate faculty/staff apartments in new dorm construction projects.

Earliest Timing:

Rationale:

- Faculty/staff recruitment is enhanced by the availability of faculty/staff housing.
- Faculty/staff housing should be safe and comfortable to enhance faculty/staff retention.
- Faculty/staff housing should be similar in quality to support team cohesion.

STRATEGY XII
Grow the on-site education program to between 200 – 230 students.

Required Resources:

- Additional dorm space
- Admittance of day students
- Retention of enrolled students
- Grade 9 as entry point for qualified students

Earliest Timing:

- Day students can be enrolled by Fall 2019.

Rationale:

- Small schools, with enrollment below 300-400 students have been shown to deliver better results in academics, safety and connectedness compared to larger schools.
- A high-performance organizational environment is not likely to be bigger than 230, and a connected learning community not much bigger than 350.
- All highly-motivated Maine students should have access to MSSM.

Additional Expected Benefits:

- As enrollment and demand grows, enrollment focus may want to shift back to upper classmen, in order to serve more Maine students during any two year period.

2

Expanding its Impact Across Maine

MSSM must expand its outreach to become a vital partner to Maine schools and a valued, accessible resource for students and educators across the State.

MSSM remains a well-kept secret across the state. Through active partnerships and broader recognition of MSSM's ability to meet the needs of Maine's high-achieving students, MSSM will be seen as a key partner in the Maine STEM landscape.

GOALS: Increase MSSM's visibility around the state by increasing its partnerships and highlighting MSSM student achievements and college readiness. Become a powerful STEM resource for students and instructors across the state.

OBJECTIVES:

1. MSSM will create, staff and fund an Advancement Team. The Advancement Team will strengthen MSSM's working relationship with the MSSM Foundation and others, ensuring productive partnerships for fundraising, support, growth, and outreach.
2. MSSM will work collaboratively to develop and deliver free or very inexpensive teacher training to over 50 middle school and high school STEM teachers each year.
3. MSSM will maintain and strengthen its middle school focused summer camp, especially its emphasis in supporting gender equity in STEM education.
4. External accreditation will expand the ability of MSSM students to participate in dual-enrollment classes and will underscore MSSM's continuing capacity to achieve its outcome objectives.
5. MSSM will develop, organize and distribute online STEM lesson plans and enrichment materials for educators around the state to use.
6. Expanded Accelerated College pathways will give students the opportunity to begin college already having earned an Associate's Degree while at MSSM, to earn transferable university credits and/or to have an expedited pathway to an advanced degree, particularly in STEM fields.
7. Students should have expanded J-Term options, internships and access to other industry, university and research partnerships.
8. MSSM-developed online content, learning modules and other student learning modalities will enrich the educational experiences of students in a variety of schools across the state.

STRATEGY I

Develop and support a high-functioning Advancement Team to support the MSSM Foundation and others. Strengthen MSSM's partnerships with all stakeholders to enable and support the school's state-wide impact.

Required Resources:

- Full-time advancement office – This position will require an increase in MSSM's annual budget of $_____.

Earliest Timing:

- Fiscal year 2019-2020 budget may support a part time position. Increased funding will be required to fully support this initiative.

Rationale:

- Stable, consistent funding from the State of Maine and a wide variety of stakeholders is necessary for MSSM to impact STEM education across the state.
- Alumni, alumni parents, and parents of current students will be the strongest supporters of MSSM and a key focus in how MSSM tells its success stories, but they all need consistent contact and outreach.

STRATEGY II

Develop and deliver STEM teacher training to middle and high school teachers.

Required Resources:

Earliest Timing:

- Train the Teacher program, Summer 2019

Rationale:

- The Plimpton research showed a strong need for STEM-focused teacher training.
- MSSM is statutorily required to support STEM education around the state.

Additional Expected Benefits:

- The more MSSM faculty and staff interact with other Maine teachers, the stronger MSSM's partnerships with local schools can become.

STRATEGY III

Maintain and strengthen MSSM's middle school focused summer camp, especially its emphasis in supporting gender equity in STEM education.

Required Resources:

- Increased funding for advertising of the MSSM summer camp opportunities
- Increased funding for scholarships so no interested camper is turned away due to a lack of financial resources

Earliest Timing:

- Ongoing

Rationale:

- MSSM's summer camp alumni make up a majority of our enrolled students.
- Emphasizing gender equality in STEM education supports equal access to STEM fields for all Maine students.
- Emphasizing geographic diversity in STEM education supports equal access to STEM fields for all Maine students.

Additional Expected Benefits:

- MSSM summer camp exposes MSSM and the Limestone community to a broad cross-section of the State.

STRATEGY IV

Obtain external validation of outcome objectives through the accreditation process.

Required Resources:

- Administrative team proposal of which accreditation agency, time frame and cost estimate to be provided to the Board for approval.
- Faculty and staff time necessary to complete the accreditation process.

Earliest Timing:

- Accreditation proposal to the Board for a vote at the December 2019 meeting.
- Inclusion in the 2020 budget.

Rationale:

- Dual enrollment and accelerated graduation agreements are easier to achieve with partner institutions if MSSM is accredited.
- External validation of MSSM's programs will highlight the distinction of MSSM's programs.
- Increased STEM opportunities for students necessitate MSSM to distinguish its programming.

STRATEGY V

Develop, organize, and distribute online STEM lesson plans and enrichment materials for educators around the State to use. Initial steps should be focused on computer science and math content areas.

Required Resources:

- Dedicated faculty or staff to organize and coordinate the creation and dissemination of materials.

Earliest Timing:

- Ongoing with the Jack Kent Cooke Foundation Grant Program MSSM is administering

Rationale:

- The Plimpton research highlighted the need for STEM resources for many Maine teachers.
- MSSM has a statutory obligation to support STEM education across the state.
- MSSM can become a partner with local schools to provide STEM education to students.

Additional Expected Benefits:

- Increasing MSSM's partnerships with local schools will remove some of the competition between local schools and MSSM. The focus will be on the delivery of appropriate education to students.

STRATEGY VI

Enhance and deepen student achievement by expanding accelerated college pathways.

Required Resources:

- Maintain existing dual-enrollment agreement with the University of Maine System
- Develop accelerated graduation pathway with University of Maine Orono Engineering program
- Develop accelerated graduation pathway with Maine Maritime Academy and/or University of New England or other medical/dental schools.

Earliest Timing:

Rationale:

- MSSM students do university level work, not just in STEM classes, but in the humanities as well.
- Accelerated pathways demonstrate the quality of the MSSM education and provide value to the students and the State of Maine.

Additional Expected Benefits:

- Third-party validation of the quality of MSSM's education helps recruitment of additional students for MSSM's residential programming.

STRATEGY VII

Cultivate partnerships across the State with institutions of higher education, research, and industry.

Required Resources:

- Executive Director, faculty and dedicated staff time to cultivate partnerships

Earliest Timing:

- Immediate

Rationale:

- Our students and faculty are best served by strong partnerships in STEM fields.
- Students who have opportunities for experiences in research or industry are more likely to pursue higher education or employment in STEM fields.

STRATEGY VIII

Develop online content, learning modules and other student learning modalities to support students who do not attend our on-campus residential school.

Required Resources:

Earliest Timing:

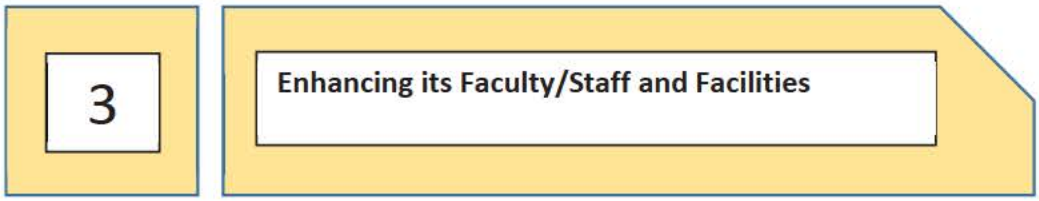
- Immediate – Jack Kent Cooke Foundation Grant work, allowing MSSM to develop Algebra 1 and biology online programming.

Rationale:

- Not every student who can benefit from MSSM STEM classes can be an on-campus student at MSSM.
- MSSM should provide content that local schools cannot provide on their own.

Additional Expected Benefits:

- Additional cooperation between MSSM and local schools will provide opportunities for students who can most benefit from MSSM's on-campus programming to become familiar with MSSM.



Exceptional faculty, staff and facilities will enable MSSM to provide world-class student outcomes.

GOAL: Increase MSSM's ability to hire and retain exceptional faculty and staff.

OBJECTIVES:

1. MSSM will ensure it remains competitive in hiring and retaining faculty and staff by focusing on all relevant factors, including compensation, work environment, professional development opportunities, and other key factors.
2. Opportunities for MSSM faculty and staff partners and families, including access to daycare and early childhood education, will have an impact on hiring and retention and should receive special focus.
3. Students and faculty benefit greatly by enhancing the connection between faculty/staff and the residential life experiences of students.
4. MSSM recognizes facilities are a major area of focus, so all facility needs, including those focused on faculty and staff are covered in Section 1 of this plan.

STRATEGY I

Required Resources:

Earliest Timing:

Rationale:

Additional Expected Benefits:

APPENDIX J

Adopted Budget for 2020-2021 School Year

Maine School of Science and Mathematics

2019/2020 Adopted Budget compared to 2020/2021 Draft/Recommended Budget

(using Version 9 of the Payroll Budget for 120 Maine Students, 1 Non-Resident Student)

Account: ALL FUNDS		*2019/2020 Adopted Payroll Budget*	*2019/2020 Adopted Non-Payroll Budget*	*2019/2020 Adopted Budget*	2020/2021 Recommended Payroll Budget	2020/2021 Recommended Non-Payroll Budget	2020/2021 Recommended Budget	Yr to Yr Variance by Amount	Yr to Yr Variance by %	Notes
FUND	**REVENUE**									
1000	Interest Income (General Fund)			$ 2,400.00			$ 2,400.00	$ -	0.00%	
1000	Misc. Revenue (General Fund)			$ 7,600.00			$ 5,000.00	$ (2,600.00)	-34.21%	conservative budget estimate
1000	State Appropriations			$ 3,290,347.00			$ 3,290,347.00	$ -	0.00%	as of budget proposal date, no change in state appropriations
1000	State Appropriations-Financial Aid			$ 325,000.00			$ 325,000.00	$ -	0.00%	as of budget proposal date, no change in state appropriations for financial aid
1000	Tuition - Day Students			$ -			$ -	$ -		
1000	Tuition - Out of State			$ 419,774.15			$ 34,300.00			adjusted to reflect certainty of enrolling 1 out of state student
1000	Tuition - International									adjusted to reflect no certainty of enrolling international students
1000	Unallocated Carry Forward			$ -			$ -	$ -		
1000	**Subtotal:**			**$ 4,045,121.15**			**$ 3,657,047.00**	**$ (2,600.00)**	**-0.06%**	
2030	Foundation Revenue			$ 47,500.00			$ 30,000.00	$ (17,500.00)	-36.84%	adjusted to match expected support
2030	**Subtotal:**			**$ 47,500.00**			**$ 30,000.00**	**$ (17,500.00)**	**-36.84%**	
2050	Jack Kent Cooke FOU Grant Revenue			$ 40,000.00			$ 33,500.00	$ (6,500.00)	-16.25%	adjusted to match approved grant request
2050	**Subtotal:**			**$ 40,000.00**			**$ 33,500.00**	**$ (6,500.00)**	**-16.25%**	
2670	REAP (Title VI Grant) Revenue			$ 16,691.00			$ 3,000.00	$ (13,691.00)	-82.03%	adjusted to reflect anticipated level of funding
2670	**Subtotal:**			**$ 16,691.00**			**$ 3,000.00**	**$ (13,691.00)**	**-82.03%**	
2700	Title IIA Grant Revenue			$ 16,000.00			$ 3,000.00	$ (13,000.00)	-81.25%	adjusted to reflect anticipated level of funding
2700	**Subtotal:**			**$ 16,000.00**			**$ 3,000.00**	**$ (13,000.00)**	**-81.25%**	
6000	Summer Camp			$ 377,402.24			$ 366,400.00	$ (11,002.24)	-2.92%	adjusted to reflect projected revenues for 4 weeks vs. 5 weeks of camp
6000	**Subtotal:**			**$ 377,402.24**			**$ 366,400.00**	**$ (11,002.24)**	**-2.92%**	
6050	IBT Fees			$ 169,725.76				$ (169,725.76)	-100.00%	adjusted to reflect no certainty of enrolling international students
6050	IBT Carry Forward			$ 22,800.00				$ (22,800.00)	-100.00%	
6050	**Subtotal:**			**$ 192,525.76**			**$ -**	**$ (192,525.76)**	**-100.00%**	
6100	FSC-FLIK Rev (Invest-Imprv FS Program)			$ 14,285.71			$ 14,285.71	$ -	0.00%	no change
6100	Food Service Contract with LCS			$ -			$ 58,000.00	$ -	100.00%	no formal agreement at time of budget proposal, estimate from 19-20
6100	Food Service - Reimbursement			$ 2,900.00			$ 2,500.00	$ (400.00)	-13.79%	
6100	Misc. Revenue (RSL)			$ 8,200.20			$ 2,500.00	$ (5,700.20)	-69.51%	
6100	Room & Board (Out of State)			$ 139,500.00			$ 9,300.00			adjusted to reflect certainty of enrolling 1 out of state student
6100	Room & Board (International)									adjusted to reflect reasonable chance of enrolling 2 international students
6100	Room & Board Fees (Maine Residents)			$ 1,209,000.00			$ 1,116,000.00	$ (93,000.00)	-7.69%	adjusted to reflect anticipation of enrolling 10 less Maine residents
6100	Summer Camp Lease of Dorm			$ 16,791.00				$ (16,791.00)	-100.00%	adjusted to reflect no payment to RSL for use of dormitory in the summer
6100	Vending Machine Revenue			$ 2,200.00			$ 2,000.00	$ (200.00)	-9.09%	
6100	**Subtotal:**			**$ 1,392,876.91**			**$ 1,204,585.71**	**$ 188,291.20**	**13.52%**	
	TOTAL REVENUE:			**$ 6,128,117.06**			**$ 5,297,532.71**	**$ 830,584.35**	**13.55%**	

FUND	EXPENSES									
1000	Academic Support	$ 181,697.91	$ 8,560.00	$ 190,257.91	$ 178,354.86	$ 7,514.00	$ 185,868.86	$ (4,389.05)	-2.31%	decrease in payroll due to Dean of Faculty to 1/2 time
1000	Academic Support (Professional Dev)	$ -	$ 24,000.00	$ 24,000.00	$ -		$ -	$ (24,000.00)	-100.00%	decreased due to lack of funds
1000	Admissions	$ 143,124.58	$ 65,076.00	$ 208,200.58	$ 151,868.37	$ 64,906.00	$ 216,774.37	$ 8,573.79	4.12%	increase in payroll due to transfer for costs back into ADM from IBT
1000	Board of Trustees		$ 13,280.00	$ 13,280.00		$ 13,280.00	$ 13,280.00	$ -	0.00%	
1000	College Counseling	$ 59,500.43	$ 4,655.00	$ 64,155.43	$ 59,257.83	$ 4,530.00	$ 63,787.83	$ (367.60)	-0.57%	
1000	Contingency	$ -	$ -	$ -	$ 13,546.36		$ 13,546.36	$ -	0.00%	Contingency earmarked for anticipated increase to Workers' Compensation
1000	Executive Director	$ 182,517.99	$ 20,223.12	$ 202,741.11	$ 179,983.49	$ 14,707.12	$ 194,690.61	$ (8,050.50)	-3.97%	decrease in non-payroll due primarily to reduction in staff searches expense line
1000	Health Services	$ 70,143.63	$ 34,749.40	$ 104,893.03	$ 63,252.19	$ 58,520.00	$ 121,772.19	$ 16,879.16	16.09%	decrease in payroll due to reconfiguration, increase in non-payroll due to counseling
1000	ICT (Computer Technology)	$ 141,401.71	$ 48,128.34	$ 189,530.05	$ 140,559.51	$ 41,128.34	$ 181,687.85	$ (7,842.20)	-4.14%	decrease in non-payroll due primarily to reduction in tech hardware expense line
1000	Operation of School	$ -	$ 475,766.00	$ 475,766.00	$ -	$ 343,120.00	$ 343,120.00	$ (132,646.00)	-27.88%	decrease in non-payroll due primarily to expected reduction in lease payments to LCS
1000	Operations (Net of FA shown below)	$ 249,686.66	$ 69,358.00	$ 319,044.66	$ 232,066.47	$ 68,643.00	$ 300,709.47	$ (18,335.19)	-5.75%	decrease in payroll due to reduction in force of Receptionist Position
1000	Public Relations	$ 35,806.60	$ 5,650.00	$ 41,456.60	$ 35,540.44	$ 1,650.00	$ 37,190.44	$ (4,266.16)	-10.29%	decrease in non-payroll due to reduction in purchased services expense line
1000	RSL (Financial Aid Expense)	$ -	$ 325,000.00	$ 325,000.00	$ -	$ 325,000.00	$ 325,000.00	$ -	0.00%	
1000	Special Ed	$ 28,247.36	$ 11,489.40	$ 39,736.76	$ 27,970.01	$ 37,505.99	$ 65,476.00	$ 25,739.24	64.77%	increase in non-payroll due to rise in contracted services expense line
1000	Athletics	$ 36,184.35	$ 48,637.40	$ 84,741.75	$ 24,204.77	$ 29,813.40	$ 54,018.17	$ (30,723.58)	-36.26%	decrease in payroll and non-payroll due to move towards intramural soccer
1000	Student Activities	$ 20,366.97	$ 39,080.00	$ 59,446.97	$ 14,098.86	$ 40,707.50	$ 54,806.36	$ (4,640.61)	-7.81%	
1000	Teachers	$ 1,463,390.82	$ 76,837.64	$ 1,540,228.46	$ 1,287,505.19	$ 58,371.22	$ 1,345,876.41	$ (194,352.05)	-12.62%	elimination of 2/3 Chemistry position, elimination of Math position, reduction of Adjunct Instructors, Dean of Faculty to 1/2 time position & adjustment to Dept Head structure
1000	Trafton Expenses	$ 62,112.83	$ 75,495.64	$ 137,608.47	$ 54,306.81	$ 39,595.64	$ 93,902.45	$ (43,706.02)	-31.76%	decrease in payroll due to overbudgeted figures for 19-20, decrease in non-payroll due to reduction in improvement projects & elimination of funds to purchase an additional trafton house
1000	Transportation	$ 16,063.01	$ 8,970.36	$ 25,033.37	$ 14,098.86	$ 8,970.36	$ 23,069.22	$ (1,964.15)	-7.85%	
1000	**Subtotal**	**$ 2,690,164.85**	**$ 1,354,956.30**	**$ 4,045,121.15**	**$ 2,476,614.03**	**$ 1,157,962.57**	**$ 3,634,576.60**	**$ (424,090.91)**	**-10.48%**	
2030	Foundation Grant Expense	$ -	$ 47,500.00	$ 47,500.00	$ -	$ 30,000.00	$ 30,000.00	$ (17,500.00)	-36.84%	adjusted to match expected support
2030	**Subtotal**	**$ -**	**$ 47,500.00**	**$ 47,500.00**	**$ -**	**$ 30,000.00**	**$ 30,000.00**	**$ (17,500.00)**	**-36.84%**	
2050	Jack Kent Cooke FOU Grant Expense	$ -	$ 40,000.00	$ 40,000.00	$ -	$ 33,500.00	$ 33,500.00	$ (6,500.00)	-16.25%	adjusted to match approved grant request
2050	**Subtotal**	**$ -**	**$ 40,000.00**	**$ 40,000.00**	**$ -**	**$ 33,500.00**	**$ 33,500.00**	**$ (6,500.00)**	**-16.25%**	
2670	REAP (Title VI Grant) Expense		$ 16,691.00	$ 16,691.00		$ 3,000.00	$ 3,000.00	$ (13,691.00)	-82.03%	adjusted to reflect anticipated level of funding
2670	**Subtotal**	**$ -**	**$ 16,691.00**	**$ 16,691.00**	**$ -**	**$ 3,000.00**	**$ 3,000.00**	**$ (13,691.00)**	**-82.03%**	
2700	Title I A Grant Expense	$ -	$ 16,000.00	$ 16,000.00	$ -	$ 3,000.00	$ 3,000.00	$ (13,000.00)	-81.25%	adjusted to reflect anticipated level of funding
2700	**Subtotal**	**$ -**	**$ 16,000.00**	**$ 16,000.00**	**$ -**	**$ 3,000.00**	**$ 3,000.00**	**$ (13,000.00)**	**-81.25%**	
6000	Summer Camp	$ 165,583.24	$ 211,819.00	$ 377,402.24	$ 121,687.47	$ 191,820.00	$ 313,507.47	$ (63,894.77)	-16.93%	adjusted to reflect projected expenses for 4 weeks vs. 5 weeks of camp & 1/2 assistant
6000	**Subtotal**	**$ 165,583.24**	**$ 211,819.00**	**$ 377,402.24**	**$ 121,687.47**	**$ 191,820.00**	**$ 313,507.47**	**$ (63,894.77)**	**-16.93%**	
6050	IBT- Non-Resident Student fee	$ 82,291.15	$ 110,234.61	$ 192,525.76	$ -	$ -	$ -	$ (192,525.76)	-100.00%	adjusted to reflect no certainty of enrolling international students
6050	**Subtotal**	**$ 82,291.15**	**$ 110,234.61**	**$ 192,525.76**	**$ -**	**$ -**	**$ -**	**$ (192,525.76)**	**-100.00%**	
6100	Contingency	$ -	$ -	$ -	$ 2,351.08		$ 2,351.08	$ -		Contingency earmarked for anticipated increase to Workers' Compensation
6100	Food Services Contract	$ -	$ 543,700.00	$ 543,700.00	$ -	$ 528,500.00	$ 528,500.00	$ (15,200.00)	-2.80%	decrease to reflect lower expense in food service due to fewer students
6100	Loan & Lease (Dorm #1)	$ -	$ 68,969.28	$ 68,969.28	$ -	$ -	$ -	$ (68,969.28)	-100.00%	decrease to reflect that the loan & lease payments are no longer necessary, paid off in 19-20 fiscal year
6100	Operation of Dorm	$ 123,228.13	$ 213,205.00	$ 336,433.13	$ 110,392.43	$ 204,850.00	$ 315,242.43	$ (21,190.70)	-6.30%	decrease in payroll due to overbudgeted figures for 19-20, decrease in non-payroll due primarily to reduction in improvement projects & decrease in expense for clothing
6100	Residential Life	$ 304,055.20	$ 25,364.00	$ 329,419.20	$ 302,994.27	$ 14,773.00	$ 317,767.27	$ (11,651.93)	-3.54%	decrease in non-payroll to reduction in expenses, decrease in non-payroll due to reduction in
6100	Transportation	$ 13,142.46	$ 99,512.84	$ 112,655.30	$ 14,098.86	$ 99,989.00	$ 114,087.86	$ 1,432.56	1.27%	
6100	Vending Machine Expense	$ -	$ 1,700.00	$ 1,700.00	$ -	$ 2,000.00	$ 2,000.00	$ 300.00	17.65%	
6100	**Subtotal:**	**$ 440,425.79**	**$ 952,451.12**	**$ 1,392,876.91**	**$ 429,836.64**	**$ 850,112.00**	**$ 1,279,948.64**	**$ (115,279.35)**	**-8.28%**	
	TOTAL EXPENDITURES:	**$ 3,378,465.03**	$ 2,749,652.03	$ 6,128,117.06	$ 3,028,138.14	**$ 2,269,394.57**	$ 5,297,532.71	**$ 830,584.35**	13.55%	

APPENDIX K

Charter for Business Planning Committee

MAINE SCHOOL OF SCIENCE AND MATHEMATICS

Business Planning Committee Charter

(a public document)

Preamble

At the end of the 2019 academic year, the Maine School of Science and Mathematics ("MSSM") was ranked #2 among over 17,000 public high schools in the country by U.S. News & World Report magazine. While unranked this year due to size limitations on reporting, MSSM has historically been ranked among the top 20 schools when included.

This year, the school's Board of Trustees (the "Board") approved two foundational documents confirming the school's commitment to its mission of providing the best possible educational experience for some of Maine's most deserving and gifted high school students. These two documents (attached) describe the bookends of a life-altering experience available to a residential student at the Maine School of Science and Mathematics ("MSSM"). The first document describes a Mission Appropriate Student, and the second is the Portrait of a Graduate. The creation of these statements engaged the whole MSSM community (students, teachers, alumni, parents, administrators and board members), and they are representative of the community's love of and commitment to the school.

Now, after 25 years of success, the school's future is at risk because available resources are inadequate to sustain a safe and superior academic experience for MSSM students. The school has operated in recent years on flat funding from the state, and the likelihood of any additional financial support is small in the face of the state's current budgetary challenges. International students, whose tuition payments have supplemented the school's budget in recent years, are becoming an unreliable financial resource. At the same time, there are growing needs to fund new priorities in the areas of student wellness (emotional, physical and social) and curriculum redesign and to replace or upgrade aging and inadequate academic and residential facilities.

Preliminary research by an ad-hoc committee of the Board has found that creative and successful new models have emerged at similar residential STEM schools in other states around the country. These new models have been developed in response to changes in STEM education generally and to the availability of public funding, which varies significantly between states. From this early research, it is clear that similar schools in other states are thriving today, providing the highest level of education for qualifying students in their states. One important contributor to the success of these schools has been their ability to build strategic institutional partnerships to strengthen their business models both programmatically and financially.

In light of these preliminary findings, the Board of Trustees has determined that a thorough reassessment of the school's business model is necessary and that options be identified and considered for a more sustainable path forward. As the school embarks on this process, two fundamental resolutions were unanimously adopted by the Board of Trustees at its workshop retreat on Friday, May 22.

- The school is committed to maintaining a superior academic program in a safe residential environment for the students in its care.

- The business model for the school needs to be reconsidered in the broadest sense, and additional resources identified for investment in the school's future.

To explore viable new business model options, the Board has authorized the formation of the Business Planning Committee (the "Committee"). This Charter explains the organization, objectives, process and timeline for the Committee's work to identify optional business models for the Maine School of Science and Mathematics.

Committee Membership and Organization

The Committee consists members appointed to serve until their resignation or until the Committee is disbanded by the Board of Trustees and the Committee has the authority to fill empty seats.

Designation	Proposed Nominees
Chair of the Board of Trustees	David Ferguson
Executive Director of MSSM	David Pearson
Treasurer of the Board of Trustees	Peter Orne
Chair of the Governance Committee	Josh Chalmers, co-chair
At large member of the Board of Trustees	David Coit, co-chair
Representative of the Maine Dept. of Education	Dan Chuhta
Representative of Maine Legislature	TBD
Faculty Representative to the Board of Trustees	Anthony Scott
Student Representative to the Board of Trustees	William Tun
Parent representative	Cris Alvarado
Alumni representative	Kate Reilly deLutio
MSSM Foundation representative	Jeremy Shute
At large	Ruth Kermish-Allen

It is essential that there be active representation on the Committee from the Executive branch of state government and from the Maine Legislature throughout Phase 1 (described below) to provide alignment with the needs and interests of Maine residents. The Committee will establish its own leadership structure and sub-committees to accomplish its purpose in an effective and timely manner.

Phased Objectives and Timelines

The overarching objective of the Committee will be to provide the Board of Trustees with a forward-looking business model for MSSM that enhances the value of the school to the State of Maine, its citizens and especially for the students it enrolls. The plan hopes to identify new sources of financial support for the school through partnerships with other institutions as well as enumerating and justifying additional financial support from the State of Maine.

The Committee's work will be carried out and delivered in four phases, with the objectives of each new phase dependent on the outcome of the prior phase and ongoing direction from the Board of Trustees.

Phase 1 – Discovery & Concept

The Committee will explore a broad range of options to create a financially sustainable business model for MSSM consistent with its programmatic objectives. The principal activities of the Committee during this first phase will be to:

- Research the business models of the 15 other state-sponsored residential STEM high schools to evaluate the elements of their success and applicability to Maine.

- Interview institutions in Maine (and possibly elsewhere) that would have the resources and interest in partnering with MSSM to meet its long-term objectives.

The Board recognizes that both the needs of the State of Maine and the practice of education have a changed over the 25 years since the school's authorizing legislation was established. Therefore, the Committee is encouraged to exercise a wide degree of latitude as it explores potential resources and examples of business models that could position MSSM for success in the next quarter century.

No less than once a month, the Committee's leadership will report on its progress to the Executive Committee of the Board of Trustees. The Executive Committee will represent the Board of Trustees in providing oversight and guidance to the Committee within this first phase.

Once the Committee has completed its research and is prepared to recommend a business model or options for business models, it will seek approval by the Executive Committee before presenting its findings and recommendations to the full Board. It would be the Committee's objective to deliver its findings to the Board of Trustees for approval in the Fall of 2020.

Phase 2 - Authorization

Once approved by the Board of Trustees, the proposed business model or models will be offered to the Maine Department of Education and appropriate Legislative committees for review and feedback. The objective of this review would be for the Board to gather feedback from constituencies to move the process to Phase 3, in which the Board would authorize a more detailed Business Plan or Plans to be developed. Presumably Phase 2 would occur in time for vested parties in state government to consider proposed legislative changes during the next biennium legislative cycle.

Phase 3 – Business Plan

Assuming support from the State of Maine, the Committee would proceed to write a detailed Business Plan for all relevant parties to use as a blueprint for substantive agreements and commitments necessary to establish the new business model for the Maine School of Science and Mathematics. Parties to these agreements would include institutions involved in providing the funding, facilities, governance and regulations (among others) embodied in the Business Plan.

Phase 4 - Implementation

The final phase of this project would be to implement the Business Plan.

Board of Trustees' Approval

This Charter has been approved by the Maine School of Science and Mathematics Board of Trustees by unanimous vote at its duly authorized meeting on June 22, 2020.

Maine School of Science and Mathematics

Mission Appropriate Student

You may be an MSSMer if you are...

An Enthusiastic Learner
You love to learn. Whether in the classroom, on your own or with a group of friends, you possess a passion for the pursuit of knowledge, a deeper understanding of the world around you, and, by virtue of this, a more intimate understanding and knowledge of yourself.

Honest and Respectful
You fervently believe in the value of honesty in everything you say and do, while recognizing and appreciating the existence of other perspectives. You respect the ideas of others, and you actively support a safe environment that fosters the open exchange of competing beliefs.

Independent yet Community-Minded
You are confident in your own thoughts, but you accept your peers as they are and see them as individual contributors, each in their own way, to your shared community. You eagerly engage in team activities that strengthen inter-personal relationships and that contribute to a culture of mutual support and respect among your peers.

Attribution
This definition was established in a community-wide process in the Spring of 2020, involving the active engagement of the students, parents, alumni, faculty, staff and the Board of Trustees of the Maine School of Science and Mathematics.

Maine School of Science and Mathematics

Portrait of a Graduate

MSSM's mission is to create educated citizen-leaders who will benefit their communities in the state of Maine and beyond. At MSSM, you will share many experiences with your classmates, building strong personal bonds that will last long after your graduation. This Portrait describes the values that the school holds dear and that we as a community hope that you will learn to appreciate and respect as you engage in the MSSM experience. By your graduation, you will:

Mastery
Gain a depth of knowledge in many subjects, and you will gain skills in discovery, analysis, and critical thinking, enabling you to be an effective problem solver. You will learn how to articulate your conclusions in spoken and written communications, enabling you to effectively convey your thoughts for the benefit of others.

Resilience
Appreciate the immense power and sense of accomplishment that come from persistence, and from the development of a curious and creative mind. You will seek challenges every day from which you will gain self-confidence and the ability to face adversity.

Self-awareness
Understand your strengths and your weaknesses, and you will assume full responsibility for your words and your deeds. This self-awareness will enable you to be an effective citizen and to be considerate as you encounter differences in others.

Engagement
Learn the value of active participation in community building. You will come to appreciate that each individual can contribute to shared objectives in different ways through innovation, collaboration, and leadership, and that the coming together of these different skills makes for a more effective and robust community.

Purpose
Graduate from MSSM with a sense of purpose that shapes your goals and guides your life decisions. Your MSSM experience will give you unique advantages and opportunities. You understand the importance of giving back to the people and communities who have enabled your success.

Attribution
This definition was established in a community-wide process in the Spring of 2020, involving the active engagement of the students, parents, alumni, faculty, staff, and the Board of Trustees of the Maine School of Science and Mathematics.