# Testimony in Support of LD 1740: An Act to Establish the Maine Science, Technology, Engineering, Arts and Mathematics Matching Grant Program

Honorable Members of the Committee on Education and Cultural Affairs,

I am writing to express my strong support for Legislative Document No. 1740, "An Act to Establish the Maine Science, Technology, Engineering, Arts and Mathematics Matching Grant Program." This bill represents a critical investment in Maine's children and our state's economic future.

### **Economic Return on Investment**

Research consistently demonstrates that investments in STEAM education yield substantial economic returns. The National Bureau of Economic Research has found that each additional dollar spent on research and development results in an average long-term increase in Gross Domestic Product of \$2.21. By investing \$3 million in this matching grant program, Maine stands to see significant economic returns that will benefit our communities for generations.

The economic benefits are particularly compelling when we consider the wage premium associated with STEAM careers. The median annual wage for STEM occupations exceeds \$101,000, more than double the median for non-STEM jobs. This wage differential translates directly into increased tax revenue and economic activity throughout Maine. When we provide our children with STEAM education, we are creating pathways to economic prosperity that benefit both individuals and our state budget.

# Supporting Remote Work and Maine's Quality of Life

One of the most transformative aspects of modern STEAM careers is the flexibility they provide. Today, it is entirely possible to grow up in Maine, remain in Maine, and still flourish in a leading-edge STEAM career with employers anywhere in the world. This bill directly supports this opportunity by ensuring Maine students develop the skills needed to compete globally while enjoying Maine's exceptional quality of life.

The STEAM grant program would enable students across our state—particularly in rural and economically disadvantaged areas—to develop the technical skills and creative problem-solving abilities that remote employers seek. By investing in STEAM education now, we're making it possible for the next generation to build prosperous careers without having to leave the communities they love. This promotes population retention in our rural areas and creates a virtuous cycle of economic growth without sacrificing our state's character and natural beauty.

### Fostering New Industries and Entrepreneurship

Maine has already demonstrated its capacity to compete on the global stage in specialized sectors like animal healthcare. However, our state's economic future depends on diversifying into additional high-growth industries. The STEAM education this bill would support is the foundation for entrepreneurship and innovation across multiple sectors.

When we equip Maine children with STEAM skills, we're providing them with the tools to not just find jobs, but to create them. We're preparing a generation of entrepreneurs who can launch businesses that put Maine on the map in industries where we currently have little presence. Every globally successful company begins with founders who have the technical knowledge, creative problem-solving skills, and confidence to bring their ideas to market—precisely the capacities that STEAM education develops.

# **Economic Resilience Through Diversification**

Maine's economy has historically been vulnerable to downturns in a limited number of sectors. The COVID-19 pandemic demonstrated how quickly traditional industries can be disrupted, while simultaneously accelerating growth in digital and technical fields. By investing in STEAM education now, we're enhancing our state's economic resilience for decades to come.

A workforce with strong STEAM skills can participate in varied sectors of the economy, making our state less vulnerable to disruption in any single industry. When our citizens have the adaptable problem-solving skills that STEAM education cultivates, they can pivot to new opportunities as economic conditions evolve. This adaptability is especially critical for Maine's rural communities, which have often depended on a small number of industries for economic vitality.

# **Equitable Access and Geographic Balance**

One of the most compelling aspects of this bill is its focus on equity. By prioritizing programs in areas of greater economic need, LD 1740 ensures that STEAM educational opportunities reach the students who have historically had the least access to them. The bill's requirement for equal distribution between congressional districts further guarantees that both urban and rural communities will benefit.

This approach not only promotes fairness but maximizes economic impact. Research shows that each dollar invested in providing STEAM education to underserved populations yields particularly high returns. The National Forum on Early Childhood Policy and Programs has found that high-quality early childhood programs can yield a \$4-\$9 return per \$1 invested, with even higher returns in economically disadvantaged communities.

# Fiscal Responsibility and Broad Support

The bill's matching requirement ensures that communities have skin in the game, making the state's investment go further. For every \$3 the state invests, at least \$1 will come from the community, creating a minimum \$4 million total investment in STEAM education. This approach stretches taxpayer dollars while ensuring broad community support for funded programs.

Moreover, the one-time nature of this appropriation means that it will not create ongoing budget obligations. This fiscally responsible approach allows us to make a significant investment in our children's future without impacting the state's long-term financial health.

### Conclusion

Legislative Document No. 1740 represents a strategic investment in Maine's greatest resource—our children—while simultaneously preparing our state for economic success in the coming decades. By providing hands-on STEAM learning experiences to students across Maine, we expand opportunity, promote innovation, and build a more resilient and prosperous future.

I urge you to support this important legislation and help ensure that Maine students have access to the educational opportunities they need to thrive in the 21st century economy while continuing to call Maine home.

Sincerely,

Greg Paul Arundel, ME Mentor of FIRST Team 9732