

Economic Impact Statement for Content Standards Revision Technology Integration

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Executive Summary

Using a negotiated rulemaking process involving stakeholder groups, Superintendent of Public Instruction Elsie Arntzen has developed recommendations for the revision of the Montana Technology Integration Content Standards. The current Technology Integration standards were adopted in 2008. In order to benefit students, it is important to implement standards that are based on current knowledge and understanding of best practices for Technology Integration instruction to ensure that Montana schools provide students with the up-to-date, rigorous learning expectations across the range of Technology Integration learning opportunities.

When a district incorporates or integrates Technology Integration standards into district curriculum or offers an elective course in technology, the following integration standards include skills for:

- a. empowered learners
- b. digital citizens
- c. knowledge constructors
- d. innovative designers
- e. computational thinkers
- f. creative communicators
- g. global collaborators
- h. reflective users

The Office of Public Instruction (OPI) surveyed school districts in winter and spring of 2020 about the impacts of the proposed standards on district resources for staffing, instructional materials, curriculum development, and professional development. Despite reminders the response rate was low. There were only five respondents to the Technology Integration survey. The OPI advertised this survey multiple times through multiple communication sources. The data may not be representative of the state's perspective on implementation of the new Technology Integration standards. Before acting on the data obtaining broader responses would be ideal. The data will only be displayed by count.

Three of the five respondents indicated that their district could implement the proposed standards using existing resources. For the two respondents who answered no, they indicated a need for instructional materials, personnel, and professional development.

The OPI has identified \$1,305 to support the implementation of the proposed Technology Integration standards. This funding will provide online professional development opportunities. The OPI will also develop a model curriculum guide to assist school districts with curriculum development. For those districts that are having trouble meeting the current standards, the model curriculum guide may provide more support than the districts are presently receiving.

Based on the survey results and the advice of the negotiated rulemaking committee, the OPI has concluded that the school district expenditures required under the proposed standards are insubstantial expenditures that can be readily absorbed into the budgets of existing district programs.

Introduction

Content standards are adopted by the Board of Public Education through the administrative rulemaking process. The content standards for thirteen academic subject areas are promulgated in Title 10, Chapters 53 and 54. The content standards are used by school districts to develop local curriculum and assessments in all the content areas that include the arts, career and technical, English language arts, English language proficiency, health enhancement, library media,

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mathematics, science, social studies, technology, traffic education, workplace competencies, and world languages. The K-12 content standards describe what students shall know, understand, and be able to do in these content areas.

This economic impact statement analyzes the impact of the proposed revisions to the Montana Content Standards as prescribed in [2-4-405, MCA](#).

Affected Classes of Persons

Describe the classes of persons who will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule. Refer to Section 2-4-405 (2)(a).

The individuals who will be affected by the proposed Technology Integration content standards are those persons who have responsibilities for implementing the Technology Integration standards at the local level. These responsibilities include allocating resources for curriculum development and coordination, developing and adopting curriculum, delivering curriculum in the classroom, supporting students in meeting learning goals, and paying for any changes that are required by the standards. The affected classes include school administrators, teachers, school trustees, school business officials, parents, students, and taxpayers.

The beneficiaries of the proposed rule are students and the educators and parents who educate those students. In order to benefit students, it is important to implement standards that are based on current knowledge and understanding of best practices for Technology Integration instruction to ensure that Montana schools provide students with the up-to-date learning expectations across the range of Technology Integration learning opportunities.

Further benefits of the revised rules relate to the structure of the proposed standards. The Montana Technology Integration Content Standards from 2008 included five content standards with three benchmarks at grades 4, 8 and upon graduation. The proposed standards are organized by grade level for grades K-5, and by grade band for grades 6-8 and 9-12. The benefit of having grade level standards from K-5 is to clarify learning expectations for the elementary teacher who is responsible for teaching all standards in all content areas with collaboration with the librarian. The 6-8 and 9-12 grade bands provide clarity of expectations while allowing flexibility of staffing and program delivery at those grade levels.

The Superintendent of Public Instruction is recommending changes to the Technology Integration content standards, and the addition of the Technology Integration program delivery standards in ARM 10.55.

The proposed standards will also benefit higher education institutions who prepare Montana's pre-service teachers with alignment to high-quality, college-and-career ready learning expectations.

The costs of the proposed rules will be borne by local school districts and their taxpayers as well as the Office of Public Instruction (OPI). To support the implementation of the proposed standards, the OPI will provide professional development opportunities and include supplemental materials that districts can use to assist in curriculum development.

The OPI will provide workshops at state conferences for educators, help design a model curriculum guide and instructional resources accessible on the OPI website and offer online professional development for educators through the OPI Teacher Learning Hub (Hub).

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The Hub is an online interactive professional learning network dedicated to providing free high quality professional development and training for all K-12 educators throughout Montana. As part of the OPI's service to Montana schools, the Hub's readily accessible learning opportunities aim to minimize the time teachers spend away from their classrooms to attend trainings as well as save school districts money on professional development costs. The Hub offers facilitated and self-paced modules, as well as a video library with a variety of trainings that support instruction, positive school climate, and student success.

Economic Impact

Describe the probable economic impact of the proposed rule upon affected classes of persons, including but not limited to providers of services under contracts with the state and affected small businesses, and quantifying, to the extent practicable, that impact. Refer to Section 2-4-405 (2)(b).

The Office of Public Instruction (OPI) conducted a survey of schools to assess the impacts of the proposed rule between January and May 2020. A total of five responses were received from five district school administrators and or teachers. Not all questions were required to complete the survey. The respondents represented all school class sizes A, C, Small school, and one independent elementary. All grade levels were represented from elementary to high school, with some respondents representing more than one school type.

Three of the five respondents indicated that their district would be able to meet the proposed standards within existing resources. three of the five of the respondents indicated that the proposed standards would not or may not require their district to substantially revise the district's current curriculum.

Four of the five respondents indicated the proposed standards would impose a cost for personnel beyond what is required to implement the current standards. The proposed rule does not require schools to hire additional Technology Integration teachers. Some of the personnel concerns may be addressed with additional technology professional development.

The OPI does not anticipate that providers of services under contract with the state or small businesses will be affected by the proposed rules. It is possible that school districts will replace existing instructional materials and supplies, which may be a minor benefit to local service providers.

Cost to State Agencies

Describe and estimate the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenue. Refer to Section 2-4-405 (2)(c)

The Office of Public Instruction (OPI), in accordance with 20-7-101, MCA, has incurred costs associated with the negotiated rulemaking process, including contracting with a facilitator and convening the rulemaking committee. The OPI also pays for rule filings and publication of notices with the Secretary of State for standards revision. The OPI does not anticipate any additional costs associated with the accreditation of schools. The new standards will be incorporated into the OPI's accreditation review process within the existing budget of the OPI.

The Board of Public Education is responsible for the adoption of content standards. The costs associated with board member attendance at public hearings will be paid within the existing budget of the Board of Public Education.

In addition to the costs associated with the rulemaking process, the OPI will incur costs associated with providing professional development opportunities. The OPI has estimated \$1,305 budgeted (from sources at OPI) to assist with

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the implementation of the proposed rule. The OPI plans to offer free professional development online through the Teacher Learning Hub in addition to providing a model curriculum guide.

Cost and Benefits of the Proposed Rule

Analyze and compare the costs and benefits of the proposed rule to the costs and benefits of inaction. Refer to Section 2-4-405 (2)(d).

The Board of Public Education has adopted a regular cycle for review of content area standards. The purpose of the regular review of standards is to ensure that content standards reflect current knowledge and best practices for each content area. The proposed Technology Integration content standards provide clear benchmarks for what students should know as they move through the K-12 grades.

The majority of the costs associated with the proposed standards are for ensuring that teachers understand the new Technology Integration standards and have acquired current knowledge and best-practice instructional strategies to integrate technology purposefully into Montana K-12 classrooms. These proposed standards provide teachers and students a wide range of up-to-date Technology Integration teaching and learning opportunities that connect to students' lives and the world around them.

The proposed standards will benefit teaching and learning in the following ways:

- The standards are broken out in K-5 standards to clearly define what students should know and be able to do at the end of each grade and then by grade band for grades 6-8 and 9-12.
- The standards can be incorporated into multiple programs of studies and academic content areas.
- Emphasis on physical and digital library collections and standards for students to engage in both mediums.

The following addresses four areas of potential economic impact on school district operations and budgets.

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Technology Integration

Personnel

The proposed standards were developed with the expectation that the K-5 Technology Integration curriculum will be delivered by all endorsed teachers. At the middle school and high school levels, districts will need all teaching staff endorsed in any area to implement proposed standards just as they do with the current standards.

Four out of the five respondents said that the Technology Integration standards would impose additional costs for personnel beyond what is required to implement current standards. It is important to emphasize that there is no requirement in the proposed standards for additional instructional time be allocated to Technology Integration. There are also no requirements for additional teaching endorsements. However, districts and teachers will need time to integrate the new standards into their curriculum and lesson plans.

The Office of Public Instruction (OPI) does anticipate that more time will be required for educators to increase their knowledge of Technology Integration topics and to align curriculum and instruction to the proposed grade level standards. The OPI has developed a plan for providing professional development to educators and administrators who are responsible for delivering the Technology Integration standards. This plan is outlined under the Professional Development section of this statement.

Curriculum and Instructional Materials

Three out of the five respondents indicated that they would not or may not need to substantially revise their existing curriculum to implement the proposed standards. The OPI will provide a model curriculum guide and instructional resources for the Technology Integration standards once the proposed rule is adopted. The guide will be useful to districts as they begin to review and revise their current curriculum to integrate the Technology Integration standards.

Four out of the five respondents said there would be additional costs for instructional materials beyond that is required to implement the current standards. One of the respondents indicated that they would have difficulty finding instructional materials to implement the proposed standards with one respondent indicating that they may have trouble.

Districts are likely to follow a combination of one or more of four approaches to revise their curriculum and identify supporting instructional materials:

- Identify the gaps in their existing curriculum and make adjustments to integrate the proposed standards;
- Adapt and adopt the model curriculum guide developed by the OPI;
- Adapt and adopt the curriculum materials provided by their local curriculum consortium or the Montana Small Schools Alliance; or
- Adapt and adopt curriculum materials that are aligned to the state standards and available online.

As stated in the previous section, it is likely that all teachers will need time away from their classrooms to work on technology integration into their curriculum both at the school and through professional development opportunities. Districts will incur costs for substitutes and potential travel expenses to curriculum consortia meetings and conferences.

If school districts determine that updated or additional instructional materials are needed to implement their revised curriculum, the cost of these instructional materials will be borne by the school district.

Professional Development

All teachers at every grade level will need access to professional development opportunities that will help integrate the new standards into their curriculum guides.

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The OPI's implementation plan includes presentations at state conferences (when appropriate) and course creation on the Teacher Learning Hub.

The OPI will provide a curriculum guide for the Technology Integration standards once the proposed rule is adopted. The guide will be useful to districts as they begin the review and revision of their current curriculum to integrate the proposed standards.

If school districts determine that additional professional development is needed to implement their revised curriculum, the cost of these professional development will be borne by the school district.

The budget for implementing the OPI's professional development plan consists of the professional time and effort to develop a model curriculum guide and create professional development.

The cost of inaction would compromise the quality of educational opportunity for Montana students. The adoption of statewide Technology Integration standards will hopefully help to reduce the technology and course offerings disparities that may occur across the state.

Less Costly or Less Intrusive Methods

Are there less costly or less intrusive methods for achieving the purpose of the proposed rule? Refer to Section 2-4-405 (2)(e).

No. The process for proposing, reviewing, and adopting academic content standards is prescribed in statute in 20-7-101, MCA and in Montana Administrative Procedure Act. It is not possible to have statewide implementation of standards without formal rule adoption.

The role of the Board of Public Education is to set standards that apply to all accredited schools. The proposed rules reflect a set of best practices identified by educators that establish a minimum level of quality for all schools to meet. While there are school district costs associated with the implementation of these standards by school districts, the Office of Public Instruction will offer and coordinate professional development opportunities in a manner to reduce the burden of costs on school districts.

The proposed rule for revising the Technology Integration content standards includes the following Statement of Reasonable Necessity:

The Board of Public Education has determined it is reasonable and necessary to adopt, amend, and repeal rules relating to Technology Integration content standards pursuant to ARM 10.54.2503 Standards Review Schedule and 10.53.104 Standards Review Schedule. The board has determined that to stay consistent with the legislative intent of [20-1-102](#) and [20-9-309, MCA](#), it must review and make contemporary amendments to its standards. The Legislature recognizes the need to reassess educational needs on a cyclical basis and the board recognizes its standards represent the minimum standards. These standards are the basis upon which a quality system of education is built and maintained. The board strives to conform to a regular review cycle for every chapter of accreditation. The standards review process shall use context information, criteria, processes, and procedures identified by the Office of Public Instruction with input from representatives of accredited schools and in accordance with the requirements of 20-7-101, MCA.

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Selection of Proposed Rule

Analyze any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule. Refer to Section 2-4-405 (2)(f).

In recent years, the Office of Public Instruction (OPI) has promoted educator best practices and updated information on Technology Integration. However, this has not reached all schools or all educators. With the adoption of the proposed Technology Integration standards, all schools and educators will be seeking updated information and best practices in Technology Integration.

Montana's Technology Integration Standards have not been revised for 12 years. School districts are interested in revising their curriculum based on current Technology Integration information and pedagogy. The Board of Public Education agreed to move forward with the Superintendent's request to begin the process for Technology Integration standards revision.

Efficient Allocation of Public and Private Resources

Does the proposed rule represent an efficient allocation of public and private resources? Refer to Section 2-4-405 (2)(g).

Yes, the proposed content standards will apply to all public and any private schools seeking accreditation by the Board of Public Education.

Data Gathering and Analysis

Quantify or describe the data upon which the economic impact statement was based and an explanation of how the data was gathered. Refer to Section 2-4-405 (2)(h).

The Office of Public Instruction disseminated an electronic survey tool to all school districts in the state. The recipient list included superintendents, principals, district clerks, and county superintendents. Many school districts shared the survey tool with teachers and curriculum coordinators. The survey was available for five months. The existing standards and proposed standards were linked to the survey tool, so that respondents could compare the two. Please see the OPI [Content Standards Revision](#) webpage for more information.

Attached to this economic impact statement is a summary of the results from respondents. (Attachment A)

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Applicable Statute

2-4-405. Economic impact statement. (1) Upon written request of the appropriate administrative rule review committee based upon the affirmative request of a majority of the members of the committee at an open meeting, an agency shall prepare a statement of the economic impact of the adoption, amendment, or repeal of a rule as proposed. The agency shall also prepare a statement upon receipt by the agency or the committee of a written request for a statement made by at least 15 legislators. If the request is received by the committee, the committee shall give the agency a copy of the request, and if the request is received by the agency, the agency shall give the committee a copy of the request. As an alternative, the committee may, by contract, prepare the estimate.

(2) Except to the extent that the request expressly waives any one or more of the following, the requested statement must include and the statement prepared by the committee may include:

(a) a description of the classes of persons who will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;

(b) a description of the probable economic impact of the proposed rule upon affected classes of persons, including but not limited to providers of services under contracts with the state and affected small businesses, and quantifying, to the extent practicable, that impact;

(c) the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenue;

(d) an analysis comparing the costs and benefits of the proposed rule to the costs and benefits of inaction;

(e) an analysis that determines whether there are less costly or less intrusive methods for achieving the purpose of the proposed rule;

(f) an analysis of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule;

(g) a determination as to whether the proposed rule represents an efficient allocation of public and private resources; and

(h) a quantification or description of the data upon which subsections (2)(a) through (2)(g) are based and an explanation of how the data was gathered.

(3) A request to an agency for a statement or a decision to contract for the preparation of a statement must be made prior to the final agency action on the rule. The statement must be filed with the appropriate administrative rule review committee within 3 months of the request or decision. A request or decision for an economic impact statement may be withdrawn at any time.

(4) Upon receipt of an impact statement, the committee shall determine the sufficiency of the statement. If the committee determines that the statement is insufficient, the committee may return it to the agency or other person who prepared the statement and request that corrections or amendments be made. If the committee determines that the statement is sufficient, a notice, including a summary of the statement and indicating where a copy of the statement may be obtained, must be filed with the secretary of state for publication in the register by the agency preparing the statement or by the committee, if the statement is prepared under contract by the committee, and must be mailed to persons who have registered advance notice of the agency's rulemaking proceedings.

(5) This section does not apply to rulemaking pursuant to 2-4-303.

(6) The final adoption, amendment, or repeal of a rule is not subject to challenge in any court as a result of the inaccuracy or inadequacy of a statement required under this section.

(7) An environmental impact statement prepared pursuant to 75-1-201 that includes an analysis of the factors listed in this section satisfies the provisions of this section.

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Attachment A

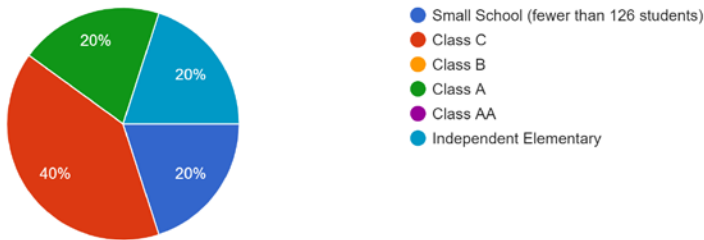
Technology Integration Impact Survey

Survey Demographics (n=5)

*many of the questions were optional

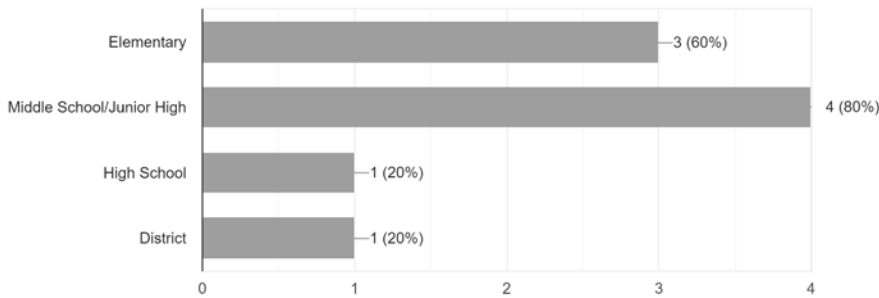
What school size do you represent?

5 responses



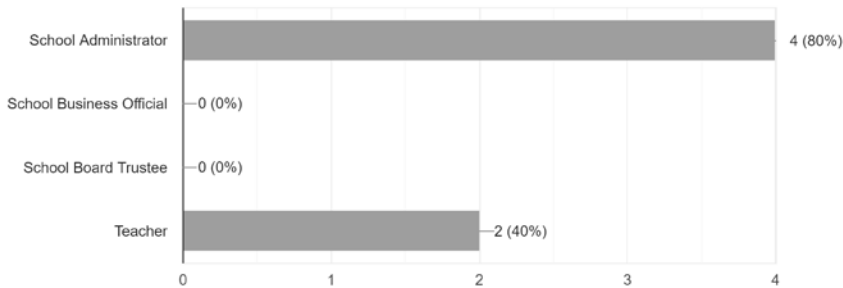
What school type do you represent?

5 responses



What is your role?

5 responses



Content Standards Implementation

Question	Yes	No
Do you anticipate that your district will be able to meet the proposed standards with existing resources?	3	2

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Will your district be able to implement the proposed program delivery standards for social studies?	3	2
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If no, what are the two most significant challenges: all rated equally: Instructional Materials, Personnel, and Professional Development.

Instructional Materials

Question	Yes	No	Maybe
Would the proposed standards impose a cost for instructional materials beyond that required to implement the current standards?	4	1	
Will your district have difficulty finding instructional materials to implement the proposed standards?	1	3	1

If you answered "yes" additional feedback:

"Far more devices (computers) would be needed, as well as safety programs subscriptions and installed for each computer."

"We have resources at the middle/high school level but would need to find resources for the elementary levels."

Personnel

Question	Yes	No
Would the proposed standards impose a cost for personnel beyond what is required to implement the current standards?	4	1

If you answered "yes" additional feedback:

"We would need to have someone with experience in the tech field."

Professional Learning

Question	Yes	No
Would the proposed standards impose a cost for professional learning beyond those expenses already required to implement the current standards?	2	3
Will your district have difficulty finding professional development opportunities for Technology Integration educators?	3	2

Summary if answered "yes"

"None of my staff are currently trained in this area."

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“There is always a need for PD for technology.”

“.. no current technologist fully dedicated to working with staff and all the additional technology requirements, we would be hard pressed to supply PD. Our part of the state suffers with hiring of certified and classified staff as it is. The last two years we haven't had complete teaching staff hired. This would be a VERY tough sell to our taxpayers who would like to see the basic requirements met before adding a new set of high standards.”

Curriculum Development

Question	Yes	No	Maybe (if option)
Would the proposed standards, if adopted, require your district to substantially revise its current curriculum?	2	2	1
Would the proposed standards impose a cost for curriculum development beyond what is required to implement the current standards?	2	3	

Summary if answered “yes”

“Our curriculum cooperative is currently reviewing the tech curriculum so it will be 6 years from now.”

General Feedback

“These changes are significant and would take time, energy and resources away from the basic skills instruction that MUST occur at the K-8 level.”

“We revised our Technology Curriculum two years and ago and this aligns well.”