

Software & Information Industry Association

State Instructional Materials Review and Adoption Reform:
Rules and Processes to Support Electronic Learning Resources

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The Software & Information Industry Association invites state officials, educators and other stakeholders to undertake cooperative efforts aimed at reforming state instructional materials review processes and adoption rules to ensure appropriate consideration of electronic learning resources and thus enhance student access to such resources.

OVERVIEW

Learning technologies present new and exciting opportunities not available, or even imagined, just a short time ago. Today, students and educators are eager to use technology to enhance and transform teaching and learning. Yet, despite the increasing K-12 classroom availability of computers and Internet access, gaps remain as this infrastructure is frequently not matched with the appropriate electronic learning resources necessary to leverage the investment. One significant cause is that systems employed by states to review and approve K-12 instructional materials were originally designed for print-based materials. As a result, the rules and processes in many states do not sufficiently address the opportunities provided by technology-based instructional materials. These various factors have combined to create a classroom environment where instructional technology is utilized primarily as a supplement, even though many electronic resources are poised to meet core state learning standards and education needs. Cooperative efforts are therefore now needed to reform state review processes and adoption rules to ensure appropriate consideration of electronic learning resources and thus enhance student access to such resources.

Some twenty-one states follow an adoption process for review and approval of K-12 textbooks, other core instructional materials and related ancillary resources and tools. The review is intended to ensure core curricular materials align with state academic standards and meet other state regulations as varied as racial diversity and book weight. In most of these states, local school districts may use state instructional materials funds only for those adopted materials.

Quality electronic learning resources aligned to state standards provide a number of added benefits to students and educators. Such software and online curriculum often employs multi-media, incorporates adaptive instruction, integrates testing, allows for real-time tracking of student performance to inform instruction and provide accountability, and links to additional information. As a result, digital resources can be engaging, personalized, flexible, current and efficient and as appropriate as print-based materials for meeting teaching and learning needs.

While many adoption states include such electronic resources in their definition of instructional materials, too many maintain rules and processes originally crafted for print-based textbooks that often result in the exclusion, albeit often unintended, of electronic learning resources. For example, some states require adopted materials to:

- be distributed through a depository, although such a physical warehousing is irrelevant for content distributed over the Internet; or
- remain unchanged in content, appearance and format for up to six years, although such constraints fail to fully leverage technology's capacity for currency and innovation.

The Software & Information Industry Association, representing publishers and developers of education technologies and digital content, looks forward to working with education policy leaders, education officials, and other stakeholders to ensure educators and students can take advantage of the full array of instructional materials – both print-based and electronic – to meet state standards. While recognizing that not all districts are now ready to take advantage of electronic learning resources as their primary curriculum, we view this state reform as critical for those districts now looking to electronic learning resources and who can provide examples for others to follow.

TECHNOLOGY BENEFITS

From Kindergarten to the corporate classroom, technology is encouraging us to rethink teaching and learning traditions and to fundamentally transform many long-standing education models. From diagnosing learner needs to managing accountability data and from distance learning to individualized instruction, technology is helping improve educational opportunities, productivity and outcomes. And with today's students born in a digital age, such technology is necessary to match their lives outside the classroom and engage them in learning.

Quality electronic learning resources – in addition to being learner appropriate, aligned to state standards, and built around effective pedagogy and instructional design – can provide the following educational benefits, a number of which are sometimes provided in a parallel way by print-based resources:

- engage students through multi-media, interactive content;
- adapt to support differentiated or personalized learning for students with alternative learning style, pace or needs;
- keep knowledge current and information accurate;
- enhance accessibility for physical or learning disabled students through assistive technologies and presentation of content in alternative modalities; and
- support accountability needs through integration of assessment, content management and alignment, classroom management and other courseware tools.

Electronic learning resources also provide a number of practical benefits, including:

- expedited delivery and access;
- increased portability (size, weight, etc.); and
- generally enhanced flexibility in meeting evolving and diverse curriculum needs.

In addition to these instructional and practical benefits, education technology is increasingly important in light of the changed learning needs and styles of today's students. Today's students matured in a digital world and are masters of technology. They seamlessly integrate multiple technology tools and digital resources into their daily lives, but are too often forced to leave these skills and aptitudes at the classroom door. As a result, students are increasingly disengaged in school, forced to adapt to a learning process and medium that stands in contrast to that which is most comfortable and successful for them.

As educators increasingly recognize this dynamic and adjust their instruction accordingly, it is critical that state adoption systems embrace innovation and change to ensure the sustainability and viability of the adoption process through the evolution of instructional materials and models.

At the same time, it is important to recognize the impact on technology of the adoption-related practice of ancillary resources provided with the textbook. These resources, including digital versions of textbooks as well as technology-based resources and tools, have been provided in response to educational needs for a more comprehensive instructional system than can be provided alone by the textbook. Yet, as the textbook adoption model has evolved, the expectation has grown that these electronic curricular, assessment, and management resources be included for no additional cost. This has reduced market incentives for development of next-generation digital resources, while at the same time educators are increasingly looking for such software tools to help diagnose and address student needs in this age of increased accountability. Better recognition that such resources are valuable – and worthy of additional or alternative state funding – is critical to enabling publishers to better address educational needs and goals.

ADOPTION BARRIERS & POLICY OPTIONS

While many adoption states define instructional materials to include software, digital learning resources or similar items, many states maintain rules and processes originally crafted for print-based textbooks that often result in the exclusion of electronic learning resources.

Among the issues needing to be addressed and outlined below are the following:

- review criteria and process
- pricing models
- content linking and substitution
- distribution/depositories

Other issues needing to be addressed but not detailed below are:

- reliability/support
- security and intellectual property protection
- technology standards and system requirements

In most cases, there has been no intentional effort to exclude or bias electronic learning resources. Instead, adoption rules and processes were crafted over many years in a period of exclusive reliance on print-based textbook and other core print-based instructional materials. In so doing, guidelines evolved that were often specific to print or failed to consider the relevance to, or other issues unique to, technology.

Addressed below are several of the most critical issues needing reconciliation to support state approval and adoption of electronic learning resources. In each case, the goal should be to address the underlying educational needs, while adding flexibility to any elements unique to the printed book or electronic resource. For each challenge, a number of policy options are proposed. In some cases, these options are complementary to each other and all could be implemented in harmony. In other cases, a menu of options is provided from which it would be appropriate to select only one or two. This menu of policy options is not intended to be comprehensive, and individual states will often need to customize policies to meet their unique statutes and circumstances.

- Review Criteria & Process

The current adoption review process generally focuses on two sets of criteria: content and design. Content includes alignment with state standards, appropriate scope and sequence, appropriate reading level, etc. Design includes both physical layout (e.g., readability, appropriate use of illustrations, etc.) and technical specifications (e.g., textbook weight, font size, etc.). Recognizing that electronic learning resources must meet the same standards for quality content, technology does present unique opportunities and challenges that state adoption review criteria should evolve to address.

- Reviewer Capacity: States generally assemble a team of curriculum specialists to review and recommend submitted instructional materials for adoption approval. Very often, reviewers have limited experience in evaluating electronic learning resources and employing technology in the classroom. In such cases, the review process can not fairly treat submitted electronic learning resources. For example, publishers submitting electronic resources are often asked to supply computer hardware for their reviewers, suggesting reviewers often are not themselves computer users. Therefore, a comprehensive review by technology savvy reviewers is critical for electronic learning resources, just as current reviewers are expected to be textbook savvy.

Policy Options:

- require technology proficiency and experience as a qualification for a reviewer
 - provide training in technology to all state curriculum reviewers
- Design: Most obviously, while textbooks are print-based, bound and linear, digital resources are multi-media, computer-based and often interactive and adaptive. As such, many physical design adoption requirements around paper weight, layout, book binding, etc. are not relevant, while many core elements unique to technology are not currently addressed.

Policy Options:

- Allow for submission forms (e.g., Forms B and M) and review processes which recognize that certain instructional resource design information and review criteria is specific to textbooks and therefore not applicable to electronic learning resources.

- Alignment to State Standards: Instructional materials are generally judged in large part on the degree to which they correlate to state content standards. Most often, states require publishers to submit a printed correlation worksheet demonstrating which book chapter, page, etc. covers each standard. This structure is often not natural for digital materials that are non-linear, adaptive and interactive, and presents navigation challenges that undermine the important goal of demonstrating content alignment.

Policy Options:

- Allow publishers the option of submitting a digital correlation. For example, allow the use of direct electronic links between the standards and the relevant component of the instructional resource to demonstrate correlation.
- Allow correlation worksheets to employ digital navigation reference points rather than just those specific to printed books (i.e., page #).

- Pricing Models

The pricing models for electronic learning resources may vary significantly from that employed for printed textbooks, especially for products delivered over the Internet. Integration of this pricing model into state adoption contract terms presents a further issue to be addressed. In short, current adoption practices assume a fixed fee per unit to acquire possession of a physical book. In contrast, electronic learning resources are generally licensed or provided by yearly subscription fee, which takes into account that the resource is dynamic, highly portable among computer devices, and often hosted remotely (an on-going expense to the publisher).

- Pricing Terms: Adoption rules now provide for a single payment for an instructional material generally intended to last for six years. Prices are set in the state contract and generally remain fixed for the entire adoption period. However, electronic learning resources are instead licensed or offered by subscription, in part in recognition (and expectation) that the product will change and improve over time.

Policy Options:

- Allow the option for a subscription-based pricing model where the cost is divided over multiple years and paid annually.
- Provide, or allow publishers to provide, a staged pricing model whereby a schedule is submitted at the start of the adoption cycle detailing that prices can/will increase one or more times over the course of the adoption cycle to reflect and encourage updated/improved resources.

- Most Favored Nation (MFN): State adoption contracts often require that publishers provide the state with the same, lowest price as other states for identical or similar textbooks. Thus, if state A negotiates a contract for a certain amount, then state B would require the same price if the two textbooks are similar. In making this determination for electronic materials, such MFN policies must recognize several unique factors. First, while a cursory look may suggest two products are the same, software and web-based

materials often evolve in subtle yet significant ways over time. Second, software and web-based materials often integrate various instructional, curricular, assessment and learning management tools that can fundamentally change the product and its value. Third, implementation may require various technical set up and support costs that vary across states (and districts), and which therefore impact the degree to which two seemingly like products are truly similar. Strictly implemented without accounting for these unique technology factors, MFN pricing would therefore provide significant disincentive for electronic publishers to enhance or vary their product to meet unique and evolving needs.

Policy Options:

- Include very limited interpretations of “similar” in determining equivalency of different instructional materials.
- Allow for publisher input, appeal and recourse as part of the process used to determine MFN applicability and similarity between instructional materials.

- Content Linking & Substitution

Electronic learning resources can provide great flexibility by both linking directly to additional resources as well as changing over time to reflect new information as well as new technologies. Adoption policies should embrace the dynamic qualities brought by electronic resources to enhance the student experience. The following policy options may also be appropriate for print-based materials that employ technology to keep information current and accurate subsequent to the date of adoption.

Policy Options:

- Allow for electronic learning resources to link with other web-based resources, provided publishers ensure all such resources are live and appropriate.
- Require publishers to provide a change log at intervals based on their regular periodic product/website update.
- Allow for update of content in electronic learning resources provided the changes are supplemental (i.e., add additional information) or a substitution (i.e., correct for errors or historical/scientific developments), and also remain aligned to state standards.
- Allow for refinement of the electronic learning resource’s technical design and functionality, provided the changes provide enhancement, are necessary in light of new technical standards, and do not impair continued use of the resource.
- Allow school customers to select an alternative web-based electronic learning material in mid-cycle upon demonstration that, due to changes to its content, the resource no longer meets state standards.

- Distribution/Depositories

In many adoption states, textbooks are distributed through a textbook depository, which often places orders, provides delivery, takes payment and otherwise acts as retail distributor for publishers. The role of depositories in the adoption and dissemination of instructional materials needs to be reevaluated in light of efficiencies brought by modern customer service

management, billing and distribution technologies. For electronic learning resources, especially web-based resources, electronic fulfillment and delivery provides the most stark case for reconsideration and new or parallel models.

Policy Options:

- Allow for publishers of any instructional resources (print, digital, web-based, etc.) to use an alternative to a state depository, including acting as their own depository, provided both that: (1) this means is outlined in the adoption submission and approved by the state; and (2) the publisher maintains an acceptable level of customer service.
- Allow for publishers of web-based instructional materials to be exempt from depository requirements in light of the unique nature of the product and delivery method, provided both that: (1) this means is outlined in the adoption submission and approved by the state; and (2) the publisher maintains an acceptable level of customer service.

REQUEST FOR COLLABORATION

SIIA and our member companies view technology and electronic instructional materials as important tools for effective education and student success in the 21st century. In light of the evolution in student needs, educator interests and school technology infrastructure, we invite you to work with us to ensure state instructional materials review and adoption policies and practices treat equally both print-based and computer-based curricular materials.

SIIA encourages state officials, educators and other stakeholders to enhance state and national efforts to better support electronic curricular resources that differ from print-based materials in their design and delivery. SIIA and our member companies hope you agree this reform is needed to ensure educators and students with diverse teaching and learning styles and needs can take advantage of the full array of evolving curricular options to meet state standards.

For more information, please contact Mark Schneiderman, SIIA's Director of Education Policy at 202-789-4444 or marks@siia.net, or visit SIIA's Education Division at <http://www.siia.net/education>.