

September 20, 2016

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RE: RIN # 1894-AA07 - Department of Education Proposed Rule on a Open Licensing Requirement for Direct Grant Programs

Thank you for the opportunity to engage in this listening session in the course of your review of the Department of Education's cost-benefit analysis of this very important proposed rule. CCSSO supports this rule and continues to see an increased demand for open educational resources (OER) from our state members along with an increased interest in the sharing of OER materials. CCSSO supports the use of OER as part of its commitment to equity and making sure all students and teachers have access to high-quality materials. This year, CCSSO hired its first OER fellow to support this increased need from states. CCSSO is also currently a lead technical assistance provider to states as part of the Department of Education's #GoOpen initiative. This submission focuses on the demand for OER materials in K-12 and higher education and highlights current momentum and successes within the OER movement.

The ongoing implementation of college and career ready standards creates new opportunities for states to collaborate and leverage investments of public funds around materials, resources, and professional development related to digital content that can be more freely accessed, used and shared across states. In the Center on Education Policy's 2014 Common Core State Standards [survey](#) of district leaders, over 80% reported that the implementation of CCSS requires a shift to new materials, and 90% cited challenges in finding quality, standards-aligned content and supports. Many states are considering the use of OER to help meet this need.

In 2014, CCSSO conducted a [survey](#) of state education agency leaders to establish a baseline of state awareness, adoption, and implementation of OER. The results indicated that of the 41 state and entity respondents:

- 20 states were currently planning an OER initiative
- 18 states were sharing OER materials within their state
- 26 states are using or promoting OER
- 36 states were interested in what other states/partners are developing
- 23 states were interested in a nationwide repository of OER materials

In 2015, CCSSO launched its [OER Portal](#) to highlight OER case studies from leading states, districts, and schools. CCSSO also conducted a [follow-up survey](#) to note any changes or updates to respondent's data. Totals increased in every category. The results indicated that of the 45 state and entity respondents:

- 23 states were currently planning an OER initiative
- 20 states were sharing OER materials within their state
- 27 states are using or promoting OER
- 37 states were interested in what other states/partners are developing
- 25 states were interested in a nationwide repository of OER materials

In October 2015, the Department of Education launched its #GoOpen campaign to encourage school districts and educators to use openly licensed educational materials to transform teaching and learning. In February 2016, the initiative was expanded to include #GoOpen¹ states, and CCSSO is currently serving as one of the lead technical assistance providers to states as they work to accomplish their state commitments.

¹ #GoOpen States commit to:

- Adopt/Implement a statewide technology strategy that includes the use of openly licensed resources as a central component.
- Develop and maintain a statewide repository solution for openly licensed resources.
- Develop the technical capability to publish OER to the Learning Registry.
- Participate in a community of practice with other #GoOpen states and districts to share learning resources and professional development resources.
- Create a webpage to share the commitment to #GoOpen and document the state's progress.

Progress to-date

States are not only committed to OER, but they are making progress on these commitments. Specifically, today we have commitments from:

- 67 #GoOpen districts
- 17 #GoOpen states
- 4 platform providers

When surveyed, #GoOpen states cite capacity (63%) and resources (financial or otherwise) (58%) as the top two challenges in fulfilling their commitments. Despite these potential roadblocks, the 17 #GoOpen states are [making progress](#) against their commitments:

- 9 states are implementing or have completed their technology strategy
- 12 states are implementing or have developed a statewide repository
- 7 states are implementing or have developed the technical capability to publish to the Learning Registry
- All 17 states are currently participating in a community of practice
- 11 states are implementing or have completed their #GoOpen website

Learning Registry

CCSSO is committed to supporting states with each of the five commitments under #GoOpen, and is assuming a leadership role specifically around the Learning Registry. Today, large collections of learning resources sit online, waiting to be accessed. The burden of locating these resources, assessing their quality, connecting them to related resources, and sharing them with others often falls on individual educators. The Learning Registry makes all of these activities easier by serving as a ‘digital card catalog’ and acting as an aggregator of metadata—data about the learning resources available online. By encouraging all publishers of OER to link content to the Learning Registry, content can be found more easily and duplication of efforts avoided.

Thanks to a grant from the Hewlett Foundation, CCSSO will provide support for the Learning Registry focusing on the governance, maintenance, and future upgrades of the Learning Registry with guidance and technical support from our state members, Learning Registry stakeholders, the U.S. Department of Education, and others interested in OER. The goal of this work is to help ensure that as much OER as possible is discoverable.

State Highlights

Many states across the U.S. are working to support the adoption and implementation of OER. Here are highlights from two #GoOpen states:

Virginia Department of Education (VDOE)

Virginia is one of the #GoOpen states and is in the process of establishing a #GoOpenVA program. To support this work, Virginia established an OER Committee that includes members from the Virginia DOE, local school districts/divisions, institutions of higher education, and other interested parties. The goal of this group is to help review current understanding and usage of OER within the state and districts, identify how to best partner with other states and organizations, and prioritize assistance to move these efforts forward. Initial findings indicate that there are a number of OER efforts already underway across the state that the OER Committee will be able to help coordinate.

In June 2016, Virginia DOE commissioned a study of OER use within Algebra 1 courses ([VDOE Algebra 1 OER Preliminary Study](#)). A number of VA educators with minimal knowledge of OER were chosen to participate with the goal of better understanding how this potentially new concept would be accepted. The results of the study showed that these educators overwhelmingly believed that “these resources help their students understand Algebra,” and that they are “good ways to learn, can enhance instruction and that they wish to continue using OER.” VDOE sees the benefits of OER not only in its ability to enhance existing learning models, but that it can also provide the opportunity to introduce new, more progressive styles of learning to its students.

Since this initial study, the GoOpenVA OER Committee has moved forward in conjunction with other states to develop an OER maturity model and associated roadmap to adopting OER as a primary resource.

As part of these efforts VDOE identified a number of potential constraints. Chief among these is the number of high-quality resources available for use. VDOE is making a concerted effort to not only develop additional curated content, but is adding existing state and district-level resources online in an openly licensed format. GoOpenVA plans to share content not only with districts within Virginia, but with other states and the general public by publishing OER to the Learning Registry.

Washington Office of Superintendent of Public Instruction (OSPI)

The most recent addition to the #GoOpen state cohort, Washington Office of Superintendent of Public Instruction (OSPI), is also one of the leading states and has had significant [impact](#) in OER awareness-building, adoption, and implementation. In 2012 OSPI, per state legislation, hired full-time staff dedicated to OER including the creation of a [library of reviewed open resources](#). In 2016, Washington OSPI adopted a [new open policy](#) that requires all copyrightable intellectual property created by OSPI employees, contractors, and grantees to be openly licensed. OSPI currently issues small grants to school districts interested in creating or adapting OER materials. In 2015-16 alone, OSPI's [six OER grants](#) had a direct impact on 693 educators and 15,720 students. Additionally, Washington's 2015-2016 [Educational Technology Survey](#), show that 113 districts (38.6%) report that they have adopted digital materials (commercial or Open Educational Resources), up from 74 a year earlier.

Independent Research

The research community has also taken note of the increased interest around OER. Here are highlights from studies around EngageNY and the Open Textbook project in Utah:

EngageNY: Demand for standards-aligned K-12 materials continues to exceed supply. EngageNY materials are currently one of the most popular sources for open educational materials. Under Race to the Top, New York State Education Department funded the development of EngageNY, a quality open-source curriculum aligned to Common Core State Standards.

1. "[Uncommonly Engaging? A Review of the EngageNY English Language Arts Common Core Curriculum](#)", a report published by the Thomas B. Fordham Institute in May 2015 provides an independent review of EngageNY's ELA content. Researchers reviewed the materials and found that the EngageNY materials, while imperfect, provide rigorous standards-aligned materials which are a viable alternative to textbooks for teachers across the country.
2. "[Implementation of K-12 State Standards for Mathematics and English Language Arts and Literacy](#)," a 2016 RAND Report investigated how teachers implement and view state standards in states where the Common Core or standards based on the Common Core were adopted. Data for the report comes from surveys of teachers across the country. In examining the curriculum teachers used, materials developed or selected by the teacher or district were the top two sources of curriculum. EngageNY content is the third choice for Math (Figure 2.1) and seventh choice for ELA (Figure 2.2). Additional OER sites are highlighted in this report including LearnZillion.

Open Textbooks in Utah: Utah is another leading state around OER adoption and implementation. Utah created [open science textbooks](#) for grades 3-12.

1. "[A Preliminary Examination of the Cost Savings and Learning Impacts of Using Open Textbooks in Middle and High School Science Classes](#)," a 2012 research article from BYU found that when open textbooks replace traditional textbooks in a classroom they could reduce costs by more than 50%. They also found that students earned similar standardized test scores to the test scores of students their teachers taught in previous years even when they switched to using open textbooks.
2. "[The Impact of Open Textbooks on Secondary Science Learning Outcomes](#)," a 2014 research article from BYU highlight the results of a quantitative study that examined changes in test scores based on the kind of textbooks students used in science classrooms. Researchers found that students using open textbooks scored as high or higher on tests than students using traditional textbooks.

Higher Education Demand for Open Educational Resources

At the higher education level, there is also demonstrated demand for open educational resources, as well as documented cost savings and improved learning outcomes. Given the higher education debt crisis, the savings to students through federal grant and loan programs to the public cannot be ignored.

For community colleges, the urgency of textbook affordability is highlighted, as textbook costs often make up a large percentage of the costs of attendance.

[“A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students,”](#) a 2015 research article finds that classes utilizing OER had measurably higher completion rates and student outcomes, due to reduced cost and increased access to learning materials.

Tidewater Community College (TCC): Tidewater Community College launched a first-in-the-nation zero textbook cost degree in 2013. The results of this initiative show increased student retention and improved student outcomes.

[“The Zero Textbook Cost Degree”](#) TCC found that students in zero textbook cost courses are more likely to complete the course and earn, on average, higher grades than in comparable classes.

[“The Tidewater Z-Degree and the INTRO Model for Sustaining OER Adoption”](#) This article demonstrates that OER adoption lowers the drop rate among students in those OER-adopting courses (improving their academic success while decreasing their cost to attend) and that the decrease in tuition refunds associated with the decrease in drops amounts to a substantial new source of revenue for the institution. In the case of Tidewater Community College, using OER across a single degree program could increase its tuition revenue by over \$100,000 per year – while improving student outcomes and decreasing the cost to attend college.

Business Models - OER in Higher Education

In higher education, traditional business models, both for-profit and nonprofit, have thrived in the implementation and delivery of open educational resources. Openly licensed materials are used to provide innovative learning resources through open-market competitive channels.

OpenStax: OpenStax is a non-profit, open textbook publisher. So far, 1.6 million students have used an OpenStax textbook, for an estimated savings of \$155 million. OpenStax is currently developing an adaptive learning technology, designed to improve learning outcomes through personalized educational paths, that is being piloted in college courses across the country. OpenStax has developed a hybrid funding model where foundation support and partnerships with

educational resources companies combine to provide funding for updating and revising OpenStax textbooks and publishing them under an open license. OpenStax currently has 18 [partners](#) and hundreds of [adopting institutions](#).

Lumen Learning - [Lumen Learning](#) is a for-profit education company focused on expanding the vision of what is now possible with OER, and helps higher education institutions, faculty, and learners take full advantage of its benefits to cut costs and strengthen student learning. They provide supported courseware created using OER, including training and implementation services, to institutions and educators that want to decrease costs and improve student learning. Lumen has a number of [OER Success Stories](#) including one on the Tidewater Community College “Z-Degree”.

Conclusion

The current OER ecosystem in the U.S. spans K-12, institutions of higher education, nonprofits and the business community. Each of these stakeholders uses multiple sources of OER, and it is clear that the demand is outpacing the current supply at all levels. The U.S. Department of Education has an opportunity with this proposed open licensing rule to increase the number of resources available for students, educators, and publishers to discover and adapt for their respective needs. Through this proposed rule, we strongly believe that states, local school districts and institutions of higher education will be better able to serve all students by providing access to quality materials at a reduced cost, while at the same time fostering the development of innovative business models.

Sincerely,

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