

NGLC Background Information

On October 11, EDUCAUSE, the Gates Foundation, and their Next Generation Learning Challenges (NGLC) partner organizations will publicly launch the program and release the RFP for its first wave of grants. The following documents provide a general overview of NGLC as it stands just prior to the launch of the “Wave 1” grant competitions:

- *Next Generation Learning Challenges* (overview brief)
- NGLC Wave 1 Timeline
- Key Messages—Next Generation Learning Challenges
- NGLC Community Engagement
- *Next Generation Learning Challenges, Wave 1: Building Blocks for College Completion—Request for Proposals*

Please treat these documents as embargoed until the public announcement of the program on October 11.

NEXT GENERATION

LEARNING
CHALLENGES

Transforming education through technology

College Readiness and Completion Gap

A college credential—whether a certificate or degree—helps individuals fulfill their potential in life. Yet by age 30, fewer than half of all Americans have earned a college degree. For low-income and minority students, the situation is even bleaker. Getting more students ready for—and through—college is an economic imperative for our nation.

The need for a college-educated workforce in the United States is rising. Since the early 1970s, the number of jobs requiring postsecondary education or training has more than doubled and is expected to reach 64 percent by 2018. Today's careers require skills in critical thinking, problem solving, communication, and self-direction.

High school graduation rates are only 70 percent, and for minority and low-income students, the rate drops to near 50 percent. Even with a diploma, only half of graduates leave high school prepared to succeed in college. For those not college-ready, remediation is costly, keeping many from entering or remaining in college. Just over half of those who enroll in college will actually earn a degree, with as few as one-quarter of low-income students graduating.

Next Generation Learning Challenges

Technology has the potential to increase student achievement through more personalized models of teaching and learning that lead to deeper learning and engagement and lower costs.

Next Generation Learning Challenges will harness this potential by identifying and expanding effective technology-enabled learning solutions to reach more students with the goal of improving college readiness and completion.

Educators and entrepreneurs are designing promising technology-based approaches to improve student success, but the pace and adoption of successful innovations must accelerate. Individuals and institutions that create innovative and effective programs often lack the resources and support to expand them to an entire campus, district, or educational system.

To accelerate the adoption of effective technology-enabled learning solutions, Next Generation Learning Challenges will:

- **Provide investment capital** to help bring promising solutions to many more students;
- **Create an active community** of innovators and educators who are committed to driving next generation learning forward; and
- **Build a body of evidence** that others can learn from and use to adopt the best technologies to increase college readiness and completion.

Next Generation Learning Challenges is focused on technology that can support student achievement in secondary and postsecondary education (grades 9–16), with an emphasis on assisting low-income students who often face the most significant college readiness and completion challenges.

Next Generation Learning Challenges is a partnership between the Bill & Melinda Gates Foundation, the William and Flora Hewlett Foundation, EDUCAUSE, the League for Innovation in the Community College, the International Association for K-12 Online Learning, and the Council of Chief State School Officers.

Challenge Funding Will Speed Progress

Next Generation Learning Challenges will release a series of funding opportunities approximately every 6–12 months, starting in October 2010. Each will address a specific set of challenges. Initial funding will focus on postsecondary education and will:

- **Increase the use of blended learning models**, which combine face-to-face instruction with online learning activities.
- **Deepen student learning and engagement** through the use of interactive applications, such as digital games, interactive video, immersive simulations, and social media.
- **Support the availability of high-quality open courseware**, particularly for high-enrollment introductory classes like math, science, and English, which often have low rates of student success.

- **Help institutions, instructors, and students benefit from learner analytics**, which can monitor student progress in real time and customize proven supports and interventions.

The second wave of funding will focus on secondary education, with future waves to be developed.

The Role of Technology

Technology has untapped potential to address many of today's barriers to educational achievement. It has played a role in improving access to education. Now, Next Generation Learning Challenges seeks to identify and support the many ways technology can deepen, accelerate, and support learning, resulting in dramatic improvements in college readiness and completion.

Technology can enable strategies and processes that increase student retention and academic success. For example, decades of research indicates that students who are more engaged with the subject matter perform better academically. Interactive applications—such as digital games, interactive video, immersive simulations, and social media—have been shown to increase student learning and engagement.

Today's students must master specific content but also develop career-spanning skills such as critical thinking, problem solving, collaboration, communication, and self-direction. Supporting high-quality, openly licensed,

modular courseware can improve student learning and allow teachers and instructors more time to focus on coaching and mentoring.

Technology can also facilitate blended learning, which combines face-to-face instruction with online learning. Students in blended learning programs perform as well as or better than students in either face-to-face or fully online environments, and blended learning can often be delivered more flexibly for the learner and at lower per-student costs. Low-income young adults, many of whom must balance their education with family and work commitments, stand to benefit from blended learning.

Finally, technology powers learner analytics, allowing students, parents, faculty, and advisors to monitor student progress and intervene as needed to ensure learner success. Statistical models and algorithms identify students who face the biggest learning challenges, then target interventions and additional support for those individuals.

Next Generation Learning Challenges recognizes that technology is not a panacea; no single initiative can address the needs of all students. This initiative complements other efforts, such as those in policy, measurement and analysis, and financial aid, aimed at improving college readiness and completion.

For more information, please visit

<http://nextgenlearning.com>



BILL & MELINDA
GATES foundation



NEXT GENERATION LEARNING CHALLENGES

Wave 1 Timeline

2010

June 23	–	NGLC Project Announced; Preview website launched
June–August	–	Community Comment Period
August 23	–	Ira Fuchs joins EDUCAUSE as Executive Director, NGLC
September 10	–	Webinar: Benefitting From Scale in Education Innovation Bror Saxberg, Chief Learning Officer, Kaplan, Inc.
September 14	–	Webinar: Scaling Blended Learning Joel Hartman, Vice Provost and CIO, University of Central Florida; and Charles Dzuiban, Director, Research Initiative for Teaching Effectiveness, University of Central Florida
September 21	–	Webinar: Deeper Learning and Engagement Bryan Alexander, Director of Research, National Institution for Technology in Liberal Education (NITLE)
October 1	–	Webinar: The Future of Assessment and Learning Valerie Shute, Associate Professor, Educational Psychology and Learning Systems, Florida State University
October 11	–	Grant program publicly announced; Request for Proposal posted; volunteer reviewer application goes live; proposal submission form goes live if possible
October 12–15	–	EDUCAUSE Annual Conference; two NGLC Sessions; one Gates Foundation Session; Meet the NGLC Staff
October 25	–	Proposal submission form goes live if it has not already done so
November 5	–	Volunteer reviewer application process closes
November 12	–	Volunteer reviewer pool established
November 19	–	Pre-proposals due
December 20	–	Pre-proposal reviews completed

2011

January 24	–	Finalists notified of selection for full-proposal submission
February 21	–	Full proposals due
March 31	–	Wave 1 awards publicly announced

NEXT GENERATION LEARNING CHALLENGES

Message Frame

- A college credential—whether it is a certificate or degree—helps individuals achieve their potential in life. Getting more students ready for and through college is vital to maintaining the global competitiveness of our nation and the well-being of our citizens.
- Too few students graduate from high school ready for college, and even fewer complete an education beyond high school. We must work in a coordinated way to improve education across secondary and postsecondary education to improve college readiness and completion.

Key Messages

- Technology has the potential to increase student achievement through flexible models of teaching and learning that lead to deeper student learning and engagement.
- Next Generation Learning Challenges will provide investment capital to bring effective technology-enabled learning solutions to more students. Next Generation Learning Challenges will evaluate the projects we fund to build a body of evidence regarding their impact, and will also help create an active community of innovators and educators committed to driving next generation learning forward.
- Next Generation Learning Challenges recognizes that improving college readiness and completion also requires focusing on areas such as policy, measurement and analysis, and financial aid.

NGLC Community Engagement

Among the elements of member value for Next Generation Learning Challenges are the content the initiative generates and the increased opportunities for community engagement. Below are examples of the activities under way or planned that will bring visibility and value to EDUCAUSE.

Prelaunch Activities

Back to Campus Webcast Series

This weekly webinar series is dedicated to exploring key themes and premises surrounding NGLC. Topics include:

- Innovation and scale
- Blended learning
- Deeper learning and engagement
- Assessment
- Open educational resources

Call for Volunteer Reviewers

An application will be created inside WizeHive to solicit application reviewers. EDUCAUSE will generate an e-mail to the community encouraging members to get involved and apply.

Online Interaction

During the prelaunch period, community members can respond to questions via discussion forums, submit ideas through an "Idea Box" and contribute resources to wikis on the NGLC site.

EDUCAUSE 2010 Conference: Launch Activities

NGLC-Specific Sessions

Two track sessions will be dedicated to NGLC: the first is designed to be a project overview with Q&A; the second is designed to provide both a project overview and an opportunity for discussion.

- Wednesday, 2:30 p.m. (Meeting Room 204B)
- Thursday, 2:00 p.m. (Meeting Room 204B)

Meet the Staff

Members will have a chance meet NGLC community members at EDUCAUSE Central, ask questions, pick up information, and learn more about ways to get involved.

- Wednesday, 4:30 p.m. (EDUCAUSE Central)
- Thursday, 3:00 p.m. (EDUCAUSE Central)

NGLC-Related Sessions

Hilary Pennington's featured session will highlight key themes explored by NGLC. As such, we will be offering a free stream of her talk to the NGLC community (included on Upcoming Events page):

- Wednesday, 3:30 p.m. (Ballroom A)

Communications Efforts

Timed with the Gates Foundation, EDUCAUSE will release a press release and send an e-mail to the community with ways to get engaged. At the EDUCAUSE Annual Conference, print collateral will include a program insert about NGLC-specific sessions, a two-page program overview, and Diana's article from *EDUCAUSE Review*.

EDUCAUSE Website Changes

The EDUCAUSE NGLC site will change to focus on ways to engage: submit a grant, host a local discussion, spotlight your campus, read background resources (white papers).

Postlaunch Activities

Community Engagement E-Mails

E-mails will be sent to specific subsets of EDUCAUSE (ELI, etc.) with ways to get involved.

RFP Webinars

A series of webinars—one for each challenge—will focus on the specifics of the RFPs and tips for applying.

Content Webinars

A series of webinars will continue to explore key themes surrounding IT solutions to college readiness and completion.

Regional Workshops

Preconference workshops at each of the EDUCAUSE regional conferences will focus on “deeper learning and engagement.” Sessions are designed to introduce key principles and generate ideas surrounding classroom implementation.

Next Generation Learning Challenges Wave 1: Building Blocks for College Completion

Request for Proposals — Rules and Guidelines

Pre-Proposals due November 19, 2010

EDUCAUSE, through the Next Generation Learning Challenges (NGLC), is requesting the submission of grant applications in accordance with the following terms:

Summary

NGLC seeks to dramatically improve college readiness and completion in the United States through the applied use of technology, particularly among low-income young adults. The program provides investment capital, builds evidence, and fosters an active community of innovators and adopters in pursuit of this goal. The program emphasizes identifying proven and emerging technology-enabled solutions, and moving them from “islands of innovation” to greater scale.

NGLC believes that real progress on measures such as student readiness and completion requires substantial reshaping of the currently fragmented, sub-scale markets for solutions as well as the imperfectly aligned incentives facing administrators, faculty, students, teachers, and learning solution providers. The NGLC challenges focus on supporting disruptive change in both the supply and demand for effective solutions to problems of student persistence and completion. The technology-enabled solutions that NGLC will fund will be chosen for their potential to provide the flexible resources that innovators need in order to create change. NGLC grantees will also break down technical and institutional barriers to adoption and scaling, so that new incentives and practices have the opportunity to take hold. If successful, these dual transformations will begin to form a healthier marketplace of innovators and adopters working together to develop and sustain effective learning solutions and to improve student performance, persistence, and completion by creating deeper learning and engagement.

RFP objective: Improve course completion, persistence, and college completion through sustainable, broad-scale technology-enabled product, project, or service-based solutions in one or more of the following challenge areas (listed in alphabetical order):

- Scaling the adoption of *blended learning models*, in order to improve learning outcomes, cost-effectiveness, and course/program completion across a range of institutions and academic programs.

- Scaling the collection and real-time use of *learner analytics* by students, instructors, and advisors, in order to improve student success.
- Scaling *deeper learning and engagement* through the use of richly interactive technologies, in order to improve student learning outcomes.
- Scaling the development and adoption of *high-quality, modular, openly licensed core courseware*, in order to drive broad-scale improvement in student achievement.

Preference will be given in this wave of funding to proposals focused on scaling solutions in the context of high-enrollment, low-success developmental and/or general education courses—core or so-called “gatekeeper” courses—or in high-demand occupational programs such as nursing and allied health, business, criminal justice, and education.

Award structure: Awards may be made at one of two levels:

- For the open, core courseware challenge, awards will be made at up to \$750,000, for periods not to exceed 15 months (with the option of a six-month no-cost extension, subject to approval by EDUCAUSE). Follow-on awards, totaling up to an additional \$5,000,000, may be made to one or more grantees from this wave demonstrating particular effectiveness in scaling the development and adoption of open core courseware.
- For the other three challenge areas, awards will be made up to \$250,000 for periods not to exceed 15 months (with the option of a six-month no-cost extension). There is a possibility that projects demonstrating particular effectiveness and scaling will receive additional funds in a future wave of funding.

Eligible applications will meet the following requirements:

Target learners: Postsecondary education students located in the United States. Preference will be given to proposals demonstrating particular efficacy with low-income young adults under the age of 26.

Eligible applicants: Postsecondary institutions, taxable or tax-exempt organizations, and U.S. federal, state, tribal, and local government agencies. Participating organizations need not be U.S.-based, but the proposal effort must be focused in the United States, or on U.S. citizens living abroad (e.g., U.S. military personnel stationed elsewhere). Proposals focusing on the open core courseware challenge must include participation by one or more groups or consortia of postsecondary institutions.

Target areas: Strong preference will be given for improving student success in high-enrollment, low-completion courses in developmental education, general education, or high-demand occupational programs (i.e., core, “gatekeeper” courses). Examples of gatekeeper courses would include mathematics (e.g., math fundamentals; pre-algebra; algebra; intermediate algebra; statistics); accounting; biology; chemistry; economics; English (composition I & II); history (U.S. history I & II); physics; political science (American government); psychology; and sociology. Examples of high-demand occupational courses would include key introductory courses in the following areas: nursing and allied health; business; criminal justice; education; information technology, etc. This list is not exhaustive, but proposals for courses not listed must make a credible case that efforts to scale solutions for the selected course(s) will

have at least comparable impact on student persistence and completion as will efforts directed at the courses listed.

Intended student outcomes: Proposals must track and address four outcomes:

- **Course completion.**
- **Semester-to-semester persistence.**
- **Mastery of subject-matter learning outcomes.**
- **Mastery of deeper learning outcomes** (deeper learning and engagement, including but not necessarily limited to critical thinking, complex problem solving, working collaboratively, communicating effectively, and fostering self-directed learning/metacognition)

Proposals need not improve every outcome, but they must not *reduce* performance in one outcome in order to improve performance in others.

Evidence prerequisites: Some meaningful evidence of the effectiveness or promise of the solution, either in the activity area(s) to be funded, or in some conceptually adjacent area accompanied by a credible theory of transferability/applicability. (See Appendix 2 for more information about the evidence that you should provide.)

Cost effectiveness: The same or better than before scaling.

Core Values and Criteria

This section discusses criteria and evaluative principles that will apply to proposals submitted in all NGLC challenge areas. It is supplemented by the challenge-specific criteria and evaluative principles provided in the following sub-sections.

NGLC supports technology-enabled efforts to improve college readiness and completion, particularly among low-income young adults. The four NGLC challenges—blended learning, learner analytics, deeper learning and engagement, and open core courseware—represent four areas that, in the judgment of NGLC’s staff and advisers, are likely to hold promising technology-enabled solutions that are potentially amenable to adoption/implementation at scale. It is the primary objective of this RFP to identify and attract such projects into the proposal process; to select those deemed most likely to have the most significant impacts on the problems of completion, persistence, and learning engagement; and to provide the selected projects with funding sufficient to help them reach—rapidly—at least the next level of adoption.

NGLC exists to support *disruptive change* in higher education. Innovations, no matter how promising, only become disruptive when they begin to affect daily practices at a significant fraction of higher education institutions—in other words, when they achieve adoption at scale. Consequently, adoption is both the primary objective of the first wave of NGLC funding, and the primary metric which success will be measured. Proposals must make credible cases for their ability to achieve meaningful levels of real-world adoption.

Because of its focus on adoption, NGLC seeks proposals *only* for solutions that have already been investigated in at least some meaningful way and shown to generate some relevant benefit. Demonstrated efficacy of your product, project, or service in some relevant context—though not necessarily the same context in which you propose to apply it—is a prerequisite for consideration of your proposal. Proposals should provide evidence to document their proposed solution efficacy. Appendix 2 provides an example of the documentation of demonstrated efficacy that you might provide.

Proposals may come from the organizations that originally developed the concepts and that now wish to engage others in adoption, from organizations wishing to adopt concepts that have found success elsewhere, or from teams of organizations of both types. In each case, applicants will be expected to discuss how they intend to preserve the features of the solution that drive its demonstrated efficacy, to discuss their capacity to transfer the solution to the new context(s) successfully, and to detail their strategy for *transferring/adopting*, as opposed to *reinventing*, the solution.

Preference will be given to transfer strategies that improve the scalability of solutions by making it easier for additional organizations to adopt them more readily going forward. Proposals should focus on how to move existing solution(s) to greater scale, serving greater numbers of students and/or larger numbers of institutions while preserving equal or better efficacy and cost-effectiveness. As part of the scaling plan, proposals should describe your organization's capacity for implementing the project at the proposed scale, and beyond (your "scaling capacity").

Solution providers (whether technology providers or education-related product and services firms) play an important role in determining how quickly and cost-effectively a solution can scale. The right match between solutions and providers can accelerate scaling; the wrong match can hinder or block it. Consequently, solution providers—for-profit or nonprofit, proprietary or open-licensed—are welcome as team-members in NGLC proposals. Irrespective of whether providers are team-members, proposals must discuss any plans for engaging with providers, including the intellectual property arrangements under which such engagements will occur.

It is also a primary purpose of this RFP to evaluate the efficacy of the selected projects in improving outcomes. Proposals must address applicants' organizational capacities to collect data and conduct analysis that provides evidence of the program's effectiveness. There is an inescapable tension between the time-scale of this round of funding and the time-scale of the problems that the projects are expected to address. It will most likely be impossible for projects to demonstrate measurable success in improving persistence and credential completion rates during the interval of funding. However, proposals will be expected to incorporate strategies for supporting a longitudinal measurement project (to be created and funded separately from these present awards) to assess long-term impact. Projects will also be expected to articulate a clear, evidence-based, and compelling "theory of change" by means of which they expect to accomplish the completion, persistence, and/or engagement outcomes envisioned by NGLC. Although it is not required that open-source licenses be used for technology developed under an NGLC grant, preference will be given to projects that utilize and adopt open-licensed platforms and make technology available under an open-source license. If a proposal promises

open-source licensing of technology created or adapted, such a requirement will be incorporated into the grant agreement. Additionally, so that the knowledge gained during NGLC-funded projects is promptly and broadly disseminated, the data and research results generated must be made available under a Creative Commons Attribution license for academic research and other purposes.

Many potentially fundable projects will address more than one of these areas. This is all to the good; however, conceptual rigor and a strong evidentiary basis for planning and implementation will be more important to the competitiveness of a proposal than will simple breadth of aspiration. Applicants are expected to discuss the relationships of their projects to *all* of the four areas, indicating those which are primary foci, those which are (or may be) secondary foci, and those where benefits are expected to be incidental or nil, and setting evidence-based expectations for performance in each challenge area judged to be relevant to the project.

Realistically, in order to scale to a level commensurate with the magnitude of the problems of student completion and persistence, projects must be able to sustain themselves for significant periods of time and at comparatively large scales after this phase of NGLC funding is exhausted. Experience teaches that the strongest predictor of long-term project sustainability is a stakeholder-inclusive, evidence-based, and analytically rigorous sustainability planning process that is integrated into the project's design from its inception and embedded pervasively into its ongoing management. Proposals will be evaluated according to the quality, scope, and rigor of their sustainability planning. Preference will be given to projects offering a highly credible sustainability plan.

In addition to achieving greater scale, proposals must describe their conceptual models as well as the model for scaling. Required work products include materials that allow others to implement the conceptual model (e.g., implementation manuals, professional development curricula, etc.). These types of documents and written materials must be made freely available as described in the Intellectual Property Policy, as open educational resources (OER) content, for others to adopt and share. Preference will be given to projects that also provide "scaffolding" materials as OER; for instance, "how-to" materials that can facilitate others in adopting their conceptual models, design approaches, and practices, as well as their deliverables.

Finally, if there is one word that can sum up the primary *evaluative* focus of this present RFP, it is *adoption*. Long-term, the funded projects must lay the foundation for a longitudinal evaluation of impact on student completion and persistence; in the short term, however, the focus of measurement will be almost exclusively on adoption. A credible plan for the achievement of the relevant minimal-scale objectives is a prerequisite for funding, and the accomplishment of those objectives will be the principal criterion for project success. A project's achievement of its adoption targets during the funding interval, while preserving or improving on the demonstrated efficacy of its proposed solution, will be considered *prima facie* evidence of its success.

Projects in each of the challenge areas will face a set of obstacles likely to hinder or block adoption. Those obstacles range from the general to the highly contextual and may cover a wide range of dimensions including economic obstacles, policy/political/bureaucratic obstacles, cultural/emotional/

social-psychological obstacles, and others. Proposals must describe the specific obstacles likely to be most constraining to their adoption plans and incorporate credible plans for neutralizing or overcoming them—and for dealing with or managing other obstacles as they may arise. Preference will be given to proposals that discipline optimism with realism and careful attention to what can go wrong.

For purposes of evaluating project success, the measurement of adoption will involve more than a head-count of institutions or students served. The purpose of this RFP is to identify projects likely to be able to scale to meet the huge challenges of student persistence and completion. To that end, adoption outside of the lead institution or its network of usual collaborators will be taken as stronger evidence for the project's potential scalability than will evidence of adoption within the same institution or among a circle of already established, close collaborators. NGLC welcomes proposals from pre-existing collaborators, but preference will be given to projects having credible plans to promote adoption among wider circles.

Within this overarching set of purposes are embedded different sets of sub-objectives for each particular challenge. The following section reviews those sub-objectives.

Challenge Areas

NGLC has identified four challenge areas in which to solicit proposals: blended learning; learner analytics; deeper learning and engagement; and consortial development of open, interactive core courseware. The following sections provide additional detail on criteria that will be used to evaluate proposals in each of those challenge areas.

Blended Learning

NGLC's primary intent in the blended learning challenge area is to identify, improve, and scale sustainable, collaborative solutions that improve student success. NGLC believes that blended learning approaches have the potential to deliver improved student learning and engagement, as well as improved student persistence and completion, in a more flexible and cost-effective fashion than traditional instruction and with greater efficacy than "pure" online solutions. NGLC is particularly interested in identifying and scaling blended learning models having already demonstrated capacity to improve student outcomes, particularly among NGLC's target population of low-income young adults under the age of 26.

Blended learning provides students with both the flexibility of online learning (time and place) and the structure and engagement of the in-person classroom experience. Given the need to raise the levels of academic achievement, particularly among low-income young adults who often need to combine work with learning, expanding the use of blended learning models may increase learner success. NGLC is interested in exploring the scaling of a variety of blended learning models, including various time-share models (e.g., 50:50, 60:40, or 30:70 face-to-face versus online) and models in which some aspects or functions of a course administration are face-to-face (e.g., orientation and/or testing), while others are provided primarily or wholly online (e.g., class discussion and/or instruction). It is anticipated that most proposals will choose to employ and scale only one blended learning model; however, proposals are

welcome to employ multiple models if they can adequately demonstrate the capacity to do so within the time and resource constraints in effect.

Applicants should realize that NGLC's interest in blended learning models is based in large part on their potential ability to reach more students, more flexibly and cost-effectively, with equal or better outcomes. Proposals must therefore discuss the implications of the blended model employed, with respect to its potential to deliver cost-effective learning outcomes at large scales. Preference will be given to projects implementing blended learning models in more courses at more institutions.

In addition to these values and priorities, applicants should note the following criteria:

- In support of maximal scalability, preference will be given to proposals that take significant advantage of open educational resources, of the types being solicited in the parallel "open core courseware" NGLC challenge.
- Preference will be given to proposals that integrate meaningful and effective learner analytics, of the types being solicited in the parallel "learner analytics" NGLC challenge.
- Preference will be given to proposals that integrate credible plans for using blended learning to foster deeper learning and engagement, of the types being solicited in the parallel "deeper learning and engagement" NGLC challenge.

Learner Analytics

NGLC's primary intent in the learner analytics challenge is to identify, improve, and scale existing solutions that improve student success by increasing the quantity, quality, and timeliness of data that are available to students, instructors, and/or their advisers, as well as the quality of the analysis based on those data that is used to assess student risk, predict student success/failure, and/or improve tailoring of instruction to student needs, with the intent of improving the precision, efficiency, and effectiveness of interventions for at-risk or under-performing students. This challenge seeks solutions that "mine" data from campus IT systems (course management systems, e-portfolios, library systems, student information systems, clicker systems, and others) and feed those mined data to analytical tools and models that can help students, faculty, and advisers recognize problems and risks earlier and respond sooner and more effectively.

NGLC's interest is based on the premise that improved quality of information and analysis will improve the early detection and remediation of risk factors for student failure or attrition, improving student persistence as well as course and program completion, and potentially deepening student learning and engagement. NGLC believes that it is important that comprehensive, sophisticated learner analytics focused on improving student outcomes become pervasive in American postsecondary education.

In addition to these values and priorities, applicants should note the following criteria:

- Preference will be given to proposals providing a clear, compelling, evidence-based theory of how particular analytics can improve one or more of the outcomes of interest to NGLC.
- Proposals must specify the technology application(s) or platform(s) to be used to aggregate and analyze the data. In the interest of maximal scalability, preference will be given to open-licensed

data collection and analysis platforms, and to platforms that support arbitrarily sophisticated analysis (versus those supporting only a single type of analysis).

- Proposed solutions may be voluntary (e.g., a student logs into an application or portal which then mines her data and presents her with a risk-profile) or institutionalized (e.g., a campus runs analytics on data for all of its students and, based on the results, routes alerts and reminders to students, instructors, and advisers as needed).
- Preference will be given to solutions that can perform analysis of a variety of learning models, such as those being solicited in the parallel “blended learning” NGLC challenge.
- Preference will be given to solutions that can aggregate and analyze data from OER and across institutional boundaries, such as the resources and operations being solicited in the parallel “open core courseware” NGLC challenge.
- Preference will be given to solutions that provide rich analytics around issues of student competencies and student engagement, of the type being solicited in the parallel “deeper learning and engagement” NGLC challenge.

Deeper Learning and Engagement

NGLC’s primary intent in the deeper learning and engagement challenge is to identify, improve, and scale sustainable solutions that improve student success in the relatively small group of developmental and “gatekeeper” courses found in the early stages of postsecondary education. NGLC believes that deeper student engagement predicts improved learning outcomes, including a stronger understanding of concepts, better retention of learned material, and the ability to apply that learning to different contexts. Engagement also has a positive effect on student persistence, particularly in the first two years of higher education, leading to greater rates of college completion.

NGLC is interested in identifying and scaling a wide variety of potential technology-enabled deeper learning and engagement solutions having demonstrated efficacy. Among the types of solution-technologies potentially suitable for proposal are interactive video (e.g., students creating, editing, and repurposing video as a pedagogical tool); immersive environments (e.g., “virtual worlds”); augmented reality; remote instrumentation; haptic devices; adaptive learning platforms; social-media-based learning environments; simulations; and serious games. This list is not exhaustive; any technology-enabled solution that meets all NGLC criteria and demonstrates the ability to increase deeper learning and engagement and the potential to scale will receive full consideration.

In addition to these values and priorities, applicants should note the following criteria:

- Technology-enabled deeper learning and engagement solutions often pose distinctive, even insurmountable, challenges to persons with disabilities; moreover, non-accessible solutions may generate obstacles or risks hindering adoption. Consequently, preference will be given to proposals demonstrating the ability to meet major accessibility standards (e.g., “Section 508,” or WCAG “Priority 2”). Proposals must, at a minimum, have a clear and credible roadmap for meeting accessibility requirements in a timely manner.
- Preference will be given to solutions compatible with blended learning environments of the types being solicited in the parallel “blended learning” NGLC challenge.

- Preference will be given to solutions that can be integrated into OER, of the types being solicited in the parallel “open core courseware” NGLC challenge.
- Preference will be given to solutions that generate rich data and support analytics of the types being solicited in the parallel “learner analytics” NGLC challenge.

Consortial Development of Open, Interactive Core Courseware

NGLC’s primary intent in the open, interactive core courseware challenge is to support a series of initiatives that, taken together, create a new model of open core courseware development and delivery. NGLC is seeking *disruptive* change in the open courseware field by means of identifying, improving, and scaling projects that take substantially new approaches to overcoming old obstacles to widespread adoption of open educational resources.

Today, hundreds of colleges and universities worldwide participate in the “open courseware” movement, making some or all of their curricular materials available on the web using open licenses. However, almost all of those institutions continue to develop their courseware in-house, using traditional design and development models and methods; as a result, there are dozens, possibly hundreds, of largely redundant, highly traditional (i.e., static, text-based) versions of the same math or English composition OER available, few or none of which may be ready or easy to integrate into the same course at another institution or to another student’s study plans.

In order to realize the full, disruptive potential of open courseware to improve student persistence and completion while also deepening student learning and engagement, NGLC believes that the next generation of open courseware implementation must exhibit substantially different characteristics:

- The employment of OER must be freed from current patterns of “not invented here,” so that institutions routinely employ best-of-breed OER no matter where it was created. Especially in the gatekeeper courses that pose the greatest impediments to at-risk student persistence and completion, institutions must become less concerned with the uniqueness of their curricular content than with its efficacy. This implies that the OER involved:
 - Must be of the highest pedagogical *and* technical quality, making use, for example, of cutting-edge research in cognitive science, interactive/active learning, multiple learning paths, embedded assessment/frequent feedback, and scaffolded learning, as well as cutting-edge innovation in richly interactive media. The objective is to make the OER in question demonstrably superior to the instructional materials presently employed. These innovations must be disciplined by careful focus on *learning outcomes*; technical and pedagogical virtuosity must be put to the service of deeper student learning and engagement.
 - Must be highly modularized, using standards-based interoperability protocols and other approaches to ensure that modules can be mixed and matched easily and readily by instructors and/or learners.
 - Must be localizable (i.e., customizable and open to tailoring) to the needs and contexts of different courses and institutions.
 - Must be accessible to all wishing to learn, including persons with disabilities.
- Furthermore, it implies that postsecondary institutions:

- Must eliminate the policies, practices, and other obstacles to adoption of “not invented here” OER systematically and pervasively throughout (at least) their gatekeeper courses.
- Must come together collaboratively to achieve economies of scale in the implementation of OER in gatekeeper courses—and perhaps in the delivery of the gatekeeper courses themselves.
- Must come together collaboratively to implement strategies for creating and sustaining the development, evaluation, and continuous improvement of OER of a quality that their individual resources alone might not permit.

This requires two broad areas of effort: creating (or adopting) world-class OER in a format suitably “productized” for incorporation into the open core courses, and smoothing the path for adoption of that OER into the many gatekeeper courses offered each semester in U.S. postsecondary institutions.

Concurrent progress on both fronts is necessary in order for disruptive change to occur. Consequently, NGLC seeks proposals only from *teams* of institutions having the capacity to create, adopt, and deliver solutions at-scale to all of their participating institutions. Minimal success for this challenge will be defined as the delivery of one or more courses constructed out of such modularized, next-generation OER, and delivered concurrently at a minimum of four participating institutions (i.e., the same one or more courses, localized to each institution) in the spring semester of 2012. Preference will be given to proposals delivering more OER, to more courses, at more institutions, and to approaches investigating, for example, shared hosting strategies across team members in order to improve the cost-effectiveness and scalability of the solution. Immediate sustainability is not a prerequisite; however, proposals must discuss sustaining strategies and incorporate plans for developing a sustaining strategy during the grant interval.

Applicants should note that this award structure has been created to reinforce the importance of institutions breaking free from “not invented here” mindsets in order to adopt more-scalable models of both OER creation and gateway course delivery. Strong preference will be given to proposals exhibiting pervasive commitment to this objective.

A second wave of funding is planned to provide additional support for grantees demonstrating exceptional success in this present wave. It is anticipated that an additional funding pool of \$5,000,000 will be made available to support projects that have over-achieved their performance measures in terms of institutional and course adoptions and quality, in order to achieve additional degrees of scale and sustainability. These supplemental awards will be competitive among the recipients of funding in this present wave and will only be awarded for demonstrated success; beyond that, specific requirements and funding details (e.g., number and size of awards) have not yet been finalized.

Awards in this challenge area will be governed by the following additional criteria:

- The OER created and all related work products (manuals, integration formats, hosting environments, faculty development guides or curricula, etc.) *must* be made publicly available and licensed using the Creative Commons Attribution (CC BY) license. This requirement implies a commitment to using only materials that can successfully complete copyright clearance procedures (e.g., originally created

materials owned by the institution(s) receiving the award, or those already available under the CC BY license). Preference will be given to projects that provide the most comprehensive "scaffolding" materials; for instance, those that also provide as OER "how to" materials allowing their concept model and design practices, as well as their work products, to be adopted by others.

- All proposals must agree to articulate clear, measurable, student-centered learning objectives for the selected course(s), use those to drive courseware development, and make them publicly available as a separate work product.
- All proposals must discuss the instructional and technical design models/approaches they will use. Preference will be given to proposals whose design approaches are well-fitted to the challenge objectives and amenable to adoption at scale by others.
- Proposals must describe their proposed technology platform and plans for interoperability with other courseware. In order to maximize adoption/scalability, preference will be given to proposals using open-licensed platforms and supporting one or more standards-based interoperability protocols (e.g., SCORM or Common Cartridge). Grantees are welcome to suggest other appropriate interoperability standards. Preference will be given to *de facto* standards (i.e., those already in relatively wide use) versus "paper" standards having little or no meaningful adoption.
- Preference will be given to proposals that support a broad range of instructional models, including models eligible for the parallel "blended learning" NGLC challenge.
- Preference will be given to proposals that integrate and support powerful, effective learner analytics, of the sort eligible for the parallel "learner analytics" NGLC challenge.
- Preference will be given to proposals that support deeper learning and engagement solutions of the sort eligible for the parallel "deeper learning and engagement" NGLC challenge.
- Preference will be given to proposals that have the potential to also be delivered as part of secondary education curricula (e.g., dual-enrollment scenarios).
- Preference will be given to proposals having the strongest plans for improving the following deeper learning competencies: critical thinking, complex problem solving, working collaboratively, communicating effectively, and fostering self-directed learning/metacognition.

Finally, this challenge is unique among the four in its *requirement* that the work be pursued as a team or consortium among postsecondary institutions. The team need not be pre-existing; in fact, new teams are welcome. Teams need not be legal entities but must make binding commitments among the members. Members may be postsecondary institutions, taxable or tax-exempt organizations, or U.S. federal, state, tribal, or local government agencies. For example, it is acceptable (but not required) for a team of higher education institutions to include one or more for-profit or nonprofit technology platform/hosting solution providers for the course(s) to be constructed and shared.

What counts as an "institution?" By "teams of at least four postsecondary institutions," NGLC means, as a first approximation, teams of at least four *autonomous campuses*:

- Multiple sub-units on the same campus will count only as one institution.
- Autonomous campuses in a multi-campus system (public or private, for-profit or nonprofit) will generally be counted as separate institutions if their chief executives report directly to a central,

system office; campuses reporting to other campuses will not be counted as separate institutions.

Applicants should note that NGLC's objective in setting this minimum is to increase the number and diversity of administrative barriers to adoption that have been overcome. Consequently, preference will be given to teams composed of campuses from two or more separate postsecondary jurisdictions, versus teams composed entirely of campuses from a single, multi-campus system. For the same reason, and because disciplinary as well as institutional, barriers pose obstacles to adoption, preference will also be given to teams engaging the support of one or more relevant disciplinary/learned societies in formulating and disseminating the new policies and practices across institutions.

As evidence for a sufficiently capable team, proposals responding to this challenge must include a draft agreement describing the participants' mutual commitments to design and develop the courseware and/or to integrate, localize, and implement it on their respective campuses (as applicable to their role(s) in the team), and to abide by all terms of the funding agreement. As a precondition of funding, such agreement must be provided to NGLC and it must be signed by each team-member institution.

About this RFP

Key features are:

A short application—approximately five-page pre-proposals are accepted online at [URL]. Full, 20-page proposals will be solicited from institutions whose pre-proposals are selected to advance to the next stage of review.

- *Rapid turnaround time*—we will select grant recipients approximately three months from the pre-proposal submission deadline.
- *Clear focus for proposal review*—Proposal reviews will emphasize solutions that hold the promise of scaling to address America's college readiness and completion needs.
- *Clear, yet flexible, target for awards*—Preference will be given to solutions that improve college readiness and completion for low-income young adults; however, it is not expected that projects will focus solely on this population, given that relevant innovations are likely to facilitate greater learning success in general.

Application Instructions

Key Dates

Monday, October 11, 2010	RFPs announced
Friday, November 19, 2010	Pre-proposals due
Monday, January 24, 2011	Invitations for full proposals issued
Monday, February 21, 2011	Full proposals due

Thursday, March 31, 2011

Awards announced

Any changes to the dates will be posted on the FAQ web page [URL].

In addition, between October 11 and November 19, EDUCAUSE will host two, two-hour interactive Webinars offering prospective applicants the opportunity to ask questions and learn more about the NGLC and the proposal process. Date, time, and registration information are available at: <http://nextgenlearning.com/news/upcoming-events>.

Please also check <http://nextgenlearning.com> for additional information.

Any changes to the Rules and Guidelines will be posted on the Frequently Asked Questions page of the Next Generation Learning Challenges website [URL], including changes to the dates listed above. Please read the current FAQs before submitting questions.

Before You Apply

Applicants are encouraged to attend one of two webinars to receive information about the RFP and how to prepare a proposal.

How to Apply

Proposals must be submitted prior to the submission deadline of 11:59 p.m. EST (GMT-4:59) on November 19, 2010.

Instructions about where to log in to submit.

Application Format

All respondents must use the electronic pre-proposal and proposal forms; submissions must adhere to the length restrictions imposed by the form. Additional supplemental materials, or applications transmitted by any other form, will not be accepted.

Eligibility

NGLC is open to postsecondary institutions, taxable and tax-exempt organizations, and U.S. federal, state, tribal, and local government agencies. Non-U.S. organizations may apply, but the primary focus of the grant-supported work must be in the United States.

Because this RFP focuses on postsecondary education, institutions and organizations serving postsecondary learners are encouraged to apply. Because of the focus on scaling solutions, submissions from teams are encouraged. Teams can include any combination of eligible institutions; ineligible institutions may also participate in teams but may not lead them nor receive NGLC funding for their efforts.

NGLC will invite proposals in a series of waves, spaced approximately every six-12 months. Within this first wave, applicants may submit proposals for one or more of the challenges; during the online submission process, applicants will be asked to indicate the challenge(s) to which they wish to apply. An individual principal investigator (PI) may lead the submission of only one proposal per wave; however,

Individuals serving as PI on one proposal may serve as co-investigators on other proposals. Participants must be prepared to carry forward all of the proposals in which they agree to participate; consequently, in no case should an individual's budgeted time, summed across all proposals in which he or she participates, exceed 100%. Submitting a proposal for one or more of the current challenges does not preclude institutions or individuals from participating in subsequent grant competitions, whether one's current proposal is accepted or not.

Application Requirements

Upon registration, applicants must provide information about the tax status of their organizations, as different grant terms and conditions may apply. The online proposal template will not allow you to submit your proposal until such information has been included in it.

In addition, during the application process you will be required to:

- Confirm that you have read and understand the website Terms and Conditions, Intellectual Property Policy, and Rules and Guidelines Document, and acknowledge that any information submitted on your behalf for NGLC (including your proposal, reports, and any related documentation and communications) will be subject to and handled in accordance with such provisions.
- Confirm your commitment to complying with the intellectual property requirements of the Next Generation Learning Challenges, as stated in the NGLC Intellectual Property Policy.

Expected Outcomes

Applicants should specify the expected outcomes of their program. Examples of outcomes include, but are not limited to:

- Scaling outcomes. Scaling and adoption of the proposed technology-enabled solution. Scaling can be defined as reaching a number of institutions, courses, and learners that is a significant multiple of those being reached presently. Adoption can be defined as pervasive integration of the solution into a production environment. Pervasive integration implies integration into, for example, all administrative sections of a course and all relevant curricular segments of its syllabus; a production environment implies that the course in question is, for example, the mainstream offering of a course at a particular institution, rather than (or in addition to) an experimental, pilot, honors, or otherwise specially selective, transient, or compartmentalized offering.
- Student outcomes. Efficacy is the same or better, with learning outcomes equal or better; content mastery achieved in the same or less time, course completion is as good or better, etc. Students successfully complete the course and make progress toward program completion.
- Cost outcomes. Cost effectiveness is the same or better at scale than prior to NGLC funding.

Note that each proposal must set expectations for scaling, student outcomes, and cost outcomes in *specific, measurable terms*. The actual numbers of students, courses, and institutions expected to participate/adopt must be spelled out.

Selection Process

Review and Handling of Proposals

The goal of the NGLC proposal review process is to identify, improve, and scale solutions at the proof-of-concept or early-scale stage that will improve college readiness and completion.

In keeping with the spirit of the NGLC, we require applicants—whether or not their applications are successful—to make most of their proposal materials available to others for community benefit. As part of this effort, we will publish the pre-proposals and full proposals on the NGLC website. In order to protect individual privacy, before publishing the materials, we will redact salary line-item information from the proposal budgets, preserving only higher-level budget categories.

All content contributed to NGLC (e.g., web site postings, pre-proposals, proposals, findings, and information generated by grant winners) must be made available to the community under a Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/us/>). NGLC also encourages applicants to make technology available under an approved open-source license (for a list of approved licenses, see <http://www.opensource.org/licenses>), and gives preference to proposals promising to do so. If a proposal promises open-source licensing of the technology it creates or adopts, it will be held responsible for keeping that promise under the terms of the grant agreement with NGLC.

Due to the large number of pre-proposals and proposals anticipated, applicants not invited to submit a full proposal or awarded a grant will receive a notice of non-acceptance without specific feedback.

The review process will involve four steps.

1. NGLC staff will screen submissions to ensure proposals address the key criteria described in the RFP. We will screen for unrelated proposals as well as submissions that are ineligible. Applications excluded during the screening process will be notified that their proposals were declined.
2. Review panels, drawn from community experts, will review pre-proposals. Pre-proposals will be considered on their individual merits. The authors of pre-proposals selected for the next stage of review will be invited to submit full proposals.
3. Full proposals will be evaluated by a set of expert reviewers. Those recommended for funding will be advanced to a final review by the NGLC Executive Committee.
4. The final step will be a due diligence review to ensure that the potential grantee is an appropriate recipient of funding.

This process may change—for instance, due to unexpectedly large response to this RFP. Any updates to it will be published in the FAQ page on the NGLC Web site [URL]. Please refer to that page regularly for changes.

Criteria

The substantive proposal criteria have been provided in the “Challenge Areas” section, above. Proposal review will utilize the following general criteria:

- Alignment of proposal with RFP
- Clarity of focus, outcomes, and measures
- Evidence of efficacy of proposed solution
- Estimated likelihood that the stated outcomes will result from the proposed activities
- Scale and scope of potential impact (e.g., number of students, programs, institutions, etc.)
- Estimated likelihood that the proposal will provide a model others can readily adopt
- Expertise and leadership of the respondent; capacity of the team to scale the solution as proposed
- Demonstrated commitment to college readiness and completion, particularly for low-income young adults
- Strengths of relationships and willingness to collaborate with other institutions (secondary and postsecondary, as applicable)
- Capacity to collect, analyze, and share data for project evaluation

Conflicts of Interest

To identify and avert conflicts of interest, reviewers will not be permitted to review proposals from organizations for which they have self-identified the presence or potential for such conflicts. See the NGLC Conflict of Interest Policy [URL] for details.

Notifications

Applicants will receive an electronic notification when a pre-proposal has been submitted. Those invited to submit a full proposal will be notified via e-mail by January 24, 2011, and must return a full proposal by February 21, 2011. Award winners will be notified of their selection by March 31, 2011. Completed and signed grant agreements must be returned by 11:59 p.m. EST on Monday, April 11, 2011.

Please keep in mind that submission of a NGLC proposal may require compliance with internal processes within an applicant's own governance structure. Meeting all NGLC deadlines is the sole responsibility of the applicants, not NGLC.

Therefore, applicants are strongly advised to begin institutional review and approval processes as early as necessary to ensure that all NGLC deadlines can be met.

Conditions of Funding

The detailed Sample Next Generation Learning Challenges Grant Terms and Conditions can be found in Appendix 1 at the end of this document. These terms and conditions have been developed specifically for NGLC and are not negotiable. You are advised to be sure that your organization can accept these Terms and Conditions at the time you submit a proposal. If your proposal is selected for funding, you will be provided 10 days after the notification of award to accept the grant and return the award letter with an appropriate institutional signature.

Amount and Duration of Grants

EDUCAUSE expects to award multiple grants in 2011 in response to this RFP.

Awards may be made at one of two levels:

- For the open, core courseware challenge, awards will be made up to \$750,000, for periods not to exceed 15 months (with the option of a six-month no-cost extension).
- For the other three challenge areas, awards will be made up to \$250,000, for periods not to exceed 15 months (with the option of a six-month no-cost extension).

There is a possibility that projects demonstrating particular effectiveness and scaling will receive additional funds in a future wave of funding.

Reporting

At least two reports will be prepared by the grantee for each NGLC grant: an Annual Financial and Project report, due 12 months from the date of award (March 31, 2012); and a final Financial and Project Report, due September 30, 2012. These reports are due as described in the Reporting section of the Sample Next Generation Learning Challenges Grant Terms and Conditions. The reports are to be submitted electronically and should be cumulative, stand-alone documents that describe the work proposed in the grant award. The project section of each report must include any technical data gathered, models developed, and summary conclusions. The financial section of each report should include an account of the funds expended. Detailed instructions for the reporting format will be provided at the time of award.

Intellectual Property Policy and Terms of Use

So that the knowledge gained during the challenges is promptly and broadly disseminated, all documents, written materials, and other content submitted to EDUCAUSE during the period of an applicant's NGLC grant application (e.g., website postings, pre-proposals and proposals, findings, and information that may be generated by applicants) will be made available to the community under a Creative Commons Attribution license. We recommend that applicants review the terms of this license, which is described at <http://creativecommons.org/licenses/by/3.0/us/>. EDUCAUSE will redact individually identifying salary information from pre-proposal and proposal budget spreadsheets before publishing.

By providing any submission materials, the sender represents to EDUCAUSE that they have the right to provide the information submitted.

Applicants with questions concerning the contents of their submission materials may contact EDUCAUSE using the question form on the NGLC website [URL].

Frequently Asked Questions

The FAQ document will be the primary channel by means of which NGLC updates prospective applicants on any changes to the proposal process, deadlines, and/or terms and conditions. The FAQ will be displayed at [URL]. Applicants should refer to this location regularly.

Inquiries

Please direct all inquiries about NGLC, selection criteria, or application instructions to [Web form URL]. NGLC staff will respond via e-mail. Responses of potentially general interest will be posted in the FAQ (see the previous section).

Appendix 1: Sample Next Generation Learning Challenges Grant Agreement Terms and Conditions

This Grant Agreement dated _____, is entered into by and between EDUCAUSE ("EDUCAUSE") as Grantor and _____ as Grantee.

In consideration of the mutual promises contained in this Grant Agreement, EDUCAUSE and Grantee agree as follows:

I. Organizational Eligibility and Use of Funds

Tax Status. The specific terms and conditions of Next Generation Learning Challenges grants from EDUCAUSE may depend on the tax status of your organization. You must indicate which of the following descriptions applies to your organization when submitting a proposal. (Note that the online proposal template will not allow you to submit your proposal for consideration until the requested tax status information has been provided.) You must also submit copies of the governing documents for your organization with your application (e.g., Articles and Bylaws).

The organization is:

- Exempt from United States Federal income tax under section 501(c)(3) of the United States Internal Revenue Code of 1986 (the "Code") and not a private foundation;
- Exempt from United States federal income tax under Section 501(c)(3) of the Code and a private foundation;
- Exempt from United States federal income tax under a section of the Code other than 501(c)(3) (e.g., Section 501(c)(4) or 501(c)(6)). If applicable, please indicate which section applies to your organization _____;
- Not a tax-exempt organization under the Code. If applicable, please indicate the type of organization and place of incorporation;
- A United States government unit described in section 170(c)(1) of the Code;
- A state, tribal, or local government unit. If so, please describe _____;
- An organization formed under the laws of a country other than the United States. If applicable, please indicate the country of formation and type of organization _____.

Use of Grant Funds. The use of the grant funds must be restricted solely to the purposes of the Project described in the Proposal attached as Exhibit A hereto (the "Project"). Grant funds may not be used: (a) for any purpose other than the Project; (b) to carry on propaganda or otherwise attempt to influence

legislation; (c) to influence the outcome of any public election or to carry on, directly or indirectly, any voter registration drive; (d) to make a subgrant to any individual or to any other organization. Any portion of the grant funds unexpended or uncommitted at the end of the grant period must be promptly returned to EDUCAUSE.

FOR NON-U.S. GRANTEES: All payments will be made in U.S. dollars and will not be adjusted to reflect currency fluctuations.

Limitations on Capital Assets. You may use the grant funds to purchase capital assets such as equipment so long as (1) the assets are used exclusively for the Project during the term of the grant and used in accordance with the NGLC Intellectual Property Policy after the term of the grant, and (2) the aggregate amount of grant funds used to purchase capital assets does not exceed one-quarter (1/4) of the total grant funds.

Subcontracts. Although you may not subgrant any funds received under the Grant Agreement, you may subcontract with third parties to conduct Project activities, so long as the aggregate amount of grant funds paid to subcontractors does not exceed one-third (1/3) of the total grant funds. As the grantee for the Project, your organization has sole responsibility for selection and oversight of any and all subcontractors. EDUCAUSE does not approve the selection of any of your subcontractors and will not oversee their respective activities. Therefore, no implication should be made to investors, media, or the general public that EDUCAUSE supports the activities of any subcontractor. EDUCAUSE requires that you include this stipulation in any agreements with subcontractors you engage to assist with the Project.

Indirect Costs. Grant funds may be used to pay indirect costs of up to 10% of the total grant amount. Indirect costs are defined as (1) overhead expenses incurred as a result of the Project, but that are not easily identifiable with the Project, and (2) administrative expenses that are related to overall general operations and are shared among projects and/or functions. Examples of indirect costs include, but are not limited to, executive oversight, accounting, grants management, legal expenses, utilities, and facility maintenance.

Anti-Terrorism. You acknowledge that you are familiar with the U.S. Executive Orders and laws that prohibit the provision of resources and support to individuals and organizations associated with terrorism and the terrorist-related lists promulgated by the U.S. Government. You will use reasonable efforts to ensure that you do not support or promote violence, terrorist activity or related training, or money laundering. Such efforts to comply with this provision should not be interpreted to interfere with your commitment to academic freedom and open debate on controversial issues.

II. Compliance and Indemnification

Compliance by All Parties. As the grantee for the Project, you agree that (1) all agreements with subcontractors to which you pay grant funds will be consistent with the terms and conditions of the Grant Agreement; and (2) all subcontractors to which you pay grant funds shall be in compliance with the terms of the Grant Agreement (including but not limited to all limitations on the use of grant funds). You also agree that any activities in association with the Project or the Proposal will not modify the

provisions of the Grant Agreement or constitute the basis for any claim by you against EDUCAUSE. You have obtained all necessary regulatory and governmental licenses and approvals required to pursue the Project.

III. Research Practice Assurances

Limitations on Human Subjects Research. Grant funds may be used for human subjects research, but you must have all appropriate approvals, assurances, and certifications (including, but not limited to, institutional review board (IRB) approvals) as of the date the Grant Agreement is fully executed.

Compliance for All Sites. You agree for each venue in which any part of the Project is conducted, you and your subcontractors shall comply with all laws and regulations applicable to the conduct of the Project (including, but not limited to, any research or other activities that are governed by human subjects guidelines, laws, or regulations), as well as to comply with and assure and gain timely, appropriate prior approval for all activities subject to regulation and/or other types of required assurances, certifications, or legal requirements. All appropriate approvals, assurances, and certifications must be obtained no later than the date the Grant Agreement is fully executed. You acknowledge and agree that, as between you and EDUCAUSE, you take and will have full responsibility for all such compliance, both for yourself and all other sites included in the Project, including without limitation those activities conducted through subcontracts.

IV. Payment and Reporting Schedules

Payment. EDUCAUSE will disburse grant funds to grantees via check within 10 business days of receipt of the countersigned Grant Agreement. Grant amounts will vary based on the wave and specific challenges.

All grant payments to be made from EDUCAUSE to Grantee hereunder are contingent upon EDUCAUSE's receipt of funding from the Bill and Melinda Gates Foundation, the William and Flora Hewlett Foundation, and/or any other current or prospective NGLC funders, for use by NGLC in making such grant payments.

Reporting. You agree to provide EDUCAUSE with an annual Financial and Program Report via e-mail to the Program Manager no later than March 31, 2012, and a final Financial and Program Report via e-mail to the Program Manager no later than September 30, 2012 (i.e., no later than 90 days after the end of the grant period). You may apply for one no-cost extension for this deadline, provided that you submit a formal Request to the appropriate NGLC Program Manager no later than March 31, 2012; if approved, the grant would end on December 31, 2012, and the final Financial and Program Report would be due no later than March 31, 2013.

Grant recipients will receive the reporting guidelines and template electronically. Reports should be submitted electronically to the assigned Next Generation Learning Challenges Program Manager.

Please note that these formal reporting requirements are in addition to, not a substitute for, the knowledge-sharing and community engagement requirements that apply to all Next Generation

Learning Challenges grantees. Projects supported under the program are expected to actively and publicly share information, knowledge resources, findings and lessons learned, and so forth, via the Next Generation Learning Challenges website (<http://nextgenlearning.com>) and other appropriate forums throughout the life of the grant.

Record Maintenance and Inspection. You agree to maintain (and require your subcontractors to maintain) adequate program and financial records to enable EDUCAUSE to easily determine how the grant funds were expended. Such records shall be maintained for at least three years following termination of the Grant Agreement, and will be available for review by EDUCAUSE personnel or our designee upon reasonable notice.

V. Next Generation Learning Challenges Priorities

You understand and acknowledge that EDUCAUSE is making the Next Generation Learning Challenges grant in furtherance of its nonprofit purposes, which include the priorities of ensuring that (a) the knowledge gained during funded projects will be promptly and broadly disseminated to the education community, and (b) the intended product(s) or outcomes be made accessible (with respect to cost, quantity, and applicability) to organizations dedicated to improving college readiness and completion. You agree to conduct and manage support of the research, product development, and innovations funded by this grant in a manner that facilitates the achievement of the Next Generation Learning Challenges priorities and in accordance with the NGLC Intellectual Property Policy.

VI. Mandatory Participation in Designated Next Generation Learning Challenges Activities

NGLC Meetings. You agree to participate in the annual Next Generation Learning Challenges meeting, should such be held, by sending two representatives including the Principal Investigator. In that event, reasonable travel expenses associated with your participation will be reimbursed. All travel arrangements must be made in accordance with the travel policy which will be provided with any meeting materials.

Collaboration. In addition to meeting attendance, EDUCAUSE expects that grantees pursuing similar challenges and overarching goals will communicate and collaborate on a periodic basis in achieving progress towards these solutions. EDUCAUSE will identify the other entities with which you should consider collaborating.

VII. Publication

Publication. You agree to prepare and publish data sets, models/frameworks, text, and/or multimedia resources—including but not limited to courses or courseware—and findings resulting from the Project for public use on the Next Generation Learning Challenges website (<http://nextgenlearning.com>) and/or other online forums as directed by Next Generation Learning Challenges staff. You further agree to do so as soon as practical during the course of the Project and immediately following conclusion of the Project. All investigators supported in whole or in part by funds from this grant must be made aware of this obligation and should be encouraged to publish or otherwise disseminate the Project findings as

broadly and promptly as reasonably possible. All publications must include the acknowledgement, "Funded by a grant from EDUCAUSE through the Next Generation Learning Challenges."

Grant Announcements, Public Reports, and Use of Next Generation Learning Challenges Name and Logo. Next Generation Learning Challenges, EDUCAUSE, the Gates Foundation, and other Next Generation Learning Challenges collaborative organizations identified on the Next Generation Learning Challenges website may include information on this grant in periodic public reports and may make information about this grant public at any time on their web pages and as part of press releases, public reports, speeches, newsletters, and other public documents. If you wish to issue a press release or report announcing this grant, or otherwise use Next Generation Learning Challenges, EDUCAUSE, or a collaborative organization's name or logo, please contact EDUCAUSE as outlined in the Grant Agreement at least two weeks before the desired announcement or publication date. You agree to obtain advance approval from EDUCAUSE of the press release and the date of release, or of any other use of the names or logos of Next Generation Learning Challenges, EDUCAUSE, or any Next Generation Learning Challenges collaborative organization. EDUCAUSE requests an opportunity to review and comment on subsequent press releases or reports that are directly related to the grant.

Entire Agreement; Amendment. The Grant Agreement will constitute the entire agreement and supersedes any prior oral or written agreements or communications between the parties regarding its subject matter. The provisions of the Grant Agreement are severable so that if any term or provision is found for any reason to be invalid, illegal, or unenforceable, such finding shall not affect the validity, construction, or enforceability of any remaining term or provision. The Grant Agreement may be amended or modified only by a mutual written agreement of the parties.

VIII. Term of Offer

Grant award offers (published on March 31, 2011) are only valid for 10 days. Upon receipt of award notification, you must return a fully executed Agreement to EDUCAUSE postmarked no later than April 11, 2011, in order to receive an NGLC Wave I grant award.

IX. Right of EDUCAUSE to Terminate Grant

EDUCAUSE reserves the right, at its sole discretion, to terminate the grant at any time if Grantee fails to abide by the terms and conditions of the Grant Agreement, fails to make satisfactory progress with respect to the grant objectives, misappropriates NGLC funds, or behaves in any other fashion detrimental to the success or effectiveness of the Next Generation Learning Challenges. Should EDUCAUSE exercise this right, Grantee will be responsible for returning all unspent or misspent funds. In such case, any materials or work-products produced with grant funds will still be subject to the NGLC Intellectual Property Agreement.

Appendix 2: Sample Summary of Evidence

NGLC is interested in scaling prospective solutions to the four learning challenges that have accumulated some meaningful evidence of efficacy, either in the specific challenge area or in some area adjacent to the challenge and for which the applicant has a plausible theory of applicability. Your proposal must document the fact that the solution you propose to scale has generated meaningful and promising results in a context sufficiently similar to the context of your proposal that your plan to transfer and scale it is *prima facie* credible.

The example information provided below is intended to illustrate the types of evidence that might contribute to making a credible case. It is not intended to be either prescriptive or exhaustive; you may omit from your own evidence any of the categories below that do not apply to your situation, and you may include other types of evidence that you believe help to make the case that your solution is both applicable and scalable. NGLC recognizes that few prospective solutions will have, for example, published, peer-reviewed studies based on clinical trials; evidence from internal studies and other non-peer-reviewed investigations will be accepted. NGLC will evaluate carefully the credibility of your evidence, so please be thorough.

NGLC is strongly committed to assessing the results of its scaling activities; as a consequence, we have a serious interest in funding grantees who have demonstrated themselves capable of rigorous evaluation practices. For solutions at early stages in their life cycles, such as those sought in these challenges, supporting evidence of efficacy is usually far from perfect, and “studies” may be opportunistic rather than carefully designed. Preference will be given to proposals that demonstrate integrity and rigor in documenting both the strengths and the present shortcomings of their evidence and factor those strengths and gaps into their project planning for the NGLC challenges.

Compelling evidence of efficacy might include the following:

- **Date** (please attach dates where appropriate; e.g., if multiple studies were conducted and/or published at different times, each should be dated separately)
- **Authors/Affiliations.** Please indicate the nature of the relationship between the authors/investigators/institutions and the solution/study.
- **Study Purpose.** Please state the research objective(s) clearly.
- **Study Design/Methodology.** What research design did the study employ? Please provide the information necessary for us to evaluate the study’s ability to make reliable causal inferences.
- **Controls.** For what factors, if any, did the study’s analyses control?
- **Sample.** Please describe the size and demographic composition (age, education level, ethnicity/race, gender, income, locale, etc.) of the study sample, as well as the sampling method. What population was the sample intended to represent? How well did it do so?
- **Institution/ Academic Program.** For what academic program(s) and at what type(s) of institution(s) was the study conducted?
- **Duration.** What was the approximate duration of the study? Did the study’s timing encompass any significant changes in the underlying factors of relevance to assessing the solution’s efficacy?

- **Outcomes.** Please do not provide an exhaustive list of outcomes; we are interested only in the (good and bad) outcomes of direct relevance to the foci of this RFP.
- **Results.** Again, please summarize results rather than providing an exhaustive discussion. Provide details only when they illuminate something of importance to your proposal's plans.
- **Limitations.** Please consider this heading an opportunity to demonstrate (concisely) that your team and project would make a high-quality contribution to future evaluative efforts.
- **Cost-Effectiveness.** Please discuss the cost/student or equivalent measure of the solution-as-studied, and provide some comparison to the cost/student or equivalent of the status quo or most-realistic alternative.

Appendix 3: Intellectual Property Policy

Next Generation Learning Challenges Intellectual Property Policy

Effective Date: _____

This Policy describes the commitments that Grantee is required to make with respect to intellectual property rights in grant applications, content, materials, developments, and products submitted to EDUCAUSE at any time during the period of Grantee's Next Generation Learning Challenges (NGLC) grant or developed using any NGLC grant funds. This Policy is supplemented by terms and conditions included in the Grant Agreement between Grantee and EDUCAUSE or as may be agreed otherwise in writing by Grantee and EDUCAUSE.

Grantee understands and acknowledges that EDUCAUSE is making the NGLC grant in furtherance of its nonprofit purposes, which include the priorities of ensuring that (a) the knowledge gained during funded projects will be promptly and broadly disseminated to the education community, and (b) the developed product(s) or outcomes be made accessible (with respect to cost, quantity, restrictions, and applicability) to support education for low-income students in state, tribal, and local education agencies, school districts, other public and private school systems, postsecondary institutions or public libraries, as applicable ((a) and (b) collectively, the "NGLC Priorities"). To best achieve the NGLC Priorities, we require that Grantee agree to the following:

- First, so that the knowledge gained during NGLC-funded projects is promptly and broadly disseminated, all documents, written materials, and other content submitted to EDUCAUSE during the period of Grantee's NGLC grant application and grant (e.g., website postings, pre-proposals, proposals, findings, and information generated by Grantee) will be made available to the community under a Creative Commons Attribution license. We recommend that Grantee review the terms of this license, which is described at <http://creativecommons.org/licenses/by/3.0/us/>.
- Second, so that products, software, and other technology developed using any NGLC grant funds are made accessible to the public in furtherance of the NGLC Priorities, we require that Grantee only use and otherwise exploit the research, products, and innovations (and intellectual property rights relating thereto) developed using any NGLC grant funds (the "Materials") directly in furtherance of making the Materials widely available to the public without unreasonable burden (e.g., costs, restrictions on use). This means that Grantee agrees to conduct and manage support of the Materials in a manner that supports the sustainable adoption-at-scale of demonstrably successful technology-enabled products, projects, or service-based solutions and that facilitates the achievement of the NGLC Priorities. Although Grantee is not required to use open-source licenses for the Materials, we encourage Grantee to do so, and preference will be given to projects that utilize and adopt open-licensed platforms and make technology available under an open-source license (for a list of approved licenses, see <http://www.opensource.org/licenses>). If a proposal promises open-source licensing of

technology created or adapted, the Grantee will be required to keep that promise, and failure to do so will give EDUCAUSE the right to terminate your grant.

- To aid EDUCAUSE in furthering the NGLC Priorities, EDUCAUSE also requires that certain rights in the Materials be granted to EDUCAUSE. As long as Grantee is using and exploiting the Materials as described above in the preceding section, these rights are limited to research and educational purposes. However, if Grantee fails to do so, EDUCAUSE reserves the right to (itself or with the assistance of third parties) make the Materials available in furtherance of the NGLC Priorities. So that EDUCAUSE can exercise these rights, Grantee will be required to grant certain licenses to EDUCAUSE under the Grant Agreement.
- Grantee is entitled to retain all rights (including all intellectual property rights) in any research, products, or innovations developed prior to Grantee's receipt of NGLC grant funds or independently of any project funded by NGLC grant funds which are incorporated in the Materials. However, Grantee should be aware that if Grantee makes any Materials incorporating such prior research, products, or innovations available under an open-source license, these prior developments may also be subject to the terms of such license. Further, in order for EDUCAUSE to exercise the rights it requires under the preceding section, EDUCAUSE also requires the same rights in any prior developments that are incorporated in the Materials. Appropriate licenses to provide EDUCAUSE with these rights will be included in the Grant Agreement.
- Any data-sets, models/frameworks, text, and/or multimedia resources—including but not limited to courses or courseware—and findings resulting from the NGLC-funded project prepared by Grantee may be made available for public presentation on the NGLC website (<http://nextgenlearning.com>) and/or other online forums as directed by NGLC staff. All such materials will be subject to the Creative Commons license described above.
- All investigators supported in whole or in part by funds from the NGLC grant must be made aware of this Policy, must have a written obligation to assign or license all intellectual property created under a NGLC grant to Grantee so that Grantee can deliver to EDUCAUSE the licenses described above and should be encouraged to publish or otherwise disseminate the project findings as broadly and promptly as reasonably possible.
- All publications relating to the NGLC-funded project must include the acknowledgement, "Funded by a grant from EDUCAUSE through the Next Generation Learning Challenges."