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Next Generation Learning – Introduction

Carnegie Corporation of New York

THE OPPORTUNITY EQUATION

Excellence and Equity in Mathematics and Science to Transform Education

The Parthenon Group

Stupski Foundation

Next generation learning (NGL) describes teaching and learning practices and structures that will prepare today's students to master this high level of cognitive and social learning. NGL is personalized and deeply engaging, focused on deeper learning of higher-order content, complex skills and the integration of the two. It can take place any time and any place, is enabled by new tools – technology, performance-based assessments, and flexible learning environments, and offers students socio-emotional supports in their learning. NGL will enable our education system to prepare far greater numbers of learners for productive adult lives in the 21st century.

The challenge is daunting. Scaling excellent next generation learning at the K-12 and post-secondary level enables all American students to gain the knowledge and skills for the 21st century. It will be possible only if we "do school differently," and in fact, re-imagine notions of school altogether. Educators are caught at the intersection of changing global demands and stagnant, inflexible educational policies and school structures that create barriers to new ways of learning. Personalized learning will require changes on every level and in every role. Our current system fails to provide the essential structure and enabling systems to allow for truly innovative uses of time, instructional practices and diverse resources to develop deeply engaging personalized schooling. These are needed to enable far more learners to master the academic and cognitive knowledge and skills required to meet the challenges of the future.

Education reformers know that change is necessary if our schools and communities are to prepare today's young people for full civic participation and rewarding employment in the new knowledge-based and technology-based global labor market. A new generation of education entrepreneurs – in the public sector, nonprofits, and private-sector ventures – are working on this challenge, striving to increase both the effectiveness of American education and the reach of new approaches.

Fortunately, the environment for change has improved greatly, with a major step forward seen in the progress of the Common Core State Standards Initiative, and the accompanying efforts by two consortia of states to develop higher quality assessments. More than 40 states have already adopted the new standards in mathematics and English language arts and are beginning to grapple with implementation. With this movement, the nation has the first large-scale meaningful common expectations for the performance of students, teachers, and schools, as well as the vendors and innovators who seek to bring new and improved practices and tools to the education marketplace. The Common Core is a foundation for building a shared understanding of what needs to be accomplished in American education and for prioritizing immediate and long-term needs. Equally important is the movement to develop assessments to replace state tests that have too often narrowed content and reduced the complexity of skills taught. Ultimately, common standards and assessments, along with advances in information technology, will promote and support new ways to deliver differentiated instruction, and expert systems that guide teachers' professional decisions.

In short, the Common Core makes next generation learning technically possible and financially viable. It also provides a platform to move even further towards more robust definitions of deeper learning and to clearer articulations of the non-cognitive and affective skills required for postsecondary and professional success. We can reasonably expect that, over the next few years, the Common Core will stimulate the marketplace to deliver a "toolbox" of techniques and technologies available to American teachers that will grow significantly in both size and sophistication. More fundamentally, next generation learning has the potential to shift many deeply embedded notions about when, where, and how learning ought to take place. NGL platforms will increase our capacity to connect students with learning experiences that are motivating, relevant, and richly informed by what we know about the intellectual and social development of children and adolescents. It will multiply the productivity of teachers, expand the reach of scarce pedagogical and content-area expertise, and give all educators access to timely support throughout their careers. Moreover, NGL may even build new bridges between schools and other sectors of society, including post-secondary institutions, non-profit organizations, and employers, and allow us to credential learning that happens outside of traditional schools and classrooms by defining competency-based, not time-based, learning progressions.

The potential of NGL goes beyond the provision of learning platforms for students and educators. NGL also offers tantalizing new capacity to solve entrenched systemic problems and enable higher levels of performance by states, districts, schools, and teachers. The critical school reform innovations of the past decade have become the essential building blocks to help integrate and develop next generation learning. The same ecosystem that is enabling NGL can also speed the cycle of innovation by allowing solutions to be developed collaboratively, vetted rapidly and reliably, and shared more efficiently and equitably.

School reform initiatives over the past two decades have ushered in specific changes and altered the way we think about school reform. Charter schools and district initiatives to replace low-performing schools, for example, have brought new school models to the field while also demonstrating that reinvention is possible and even necessary to break patterns of failure. New pathways into teaching have provided alternatives to traditional teacher preparation and encouraged thoughtful consideration of why young people choose to become teachers today, what might keep the best of them in the profession, and how their skills and knowledge can be expanded and maximized over

time. New accountability mechanisms have raised the bar on school performance and prompted fresh thinking about what the United States can reasonably expect of its schools and what its students can accomplish.

Public education now has a small but vibrant sector of education entrepreneurs and a growing market for the innovations they produce. Yet capacity to implement and capitalize on new practices is still tremendously uneven around the country, and our ability to scale up successful models is limited. The tools and practices that fall under the rubric "next generation learning" can help address that situation, partly by providing new resources to teachers and students in a scalable way.

If implemented with care, next generation learning will enhance, not diminish, the fundamental values upon which American public education is built, including equitable opportunity for all students, public accountability, and a commitment to excellence. By increasing the capability of our education system to meet students' individual learning needs through the wise and savvy use of time, human capital and technology, NGL gives our nation a chance to do what it has never done before: educate *all* American young people for the challenges of higher learning, work, and citizenship.

To learn more about the state of the field of next generation learning, the Stupski Foundation, Carnegie Corporation of New York, and the Opportunity Equation commissioned a study by The Parthenon Group. Parthenon analysts compiled a comprehensive market fact base and interviewed over 100 district and state-level practitioners, entrepreneurs, policy experts, vendors, and funders to determine the potential for NGL and identify how to go to scale from its current nascent stage. The first of the two papers that follow, *Next Generation Learning – Defining the Opportunity*, describes the vision and building blocks for next generation learning — as well as myths and misconceptions about NGL that need to be dispelled if its promise is to be realized. The second paper, *Next Generation Learning – Scaling the Opportunity*, highlights barriers to scaling NGL models and offers recommendations for addressing those challenges.

Carnegie Corporation of New York
Carnegie Corporation of New York is a philanthropic foundation created by Andrew Carnegie in 1911 to do "real and permanent good in this world." The Corporation makes grants to promote international peace and to advance education and knowledge—primary concerns to which Mr. Carnegie devoted the foundation. Through its urban and higher education programming, the foundation strives to enable all students, including historically underserved populations and immigrants, to achieve academic success and perform with high levels of creative, scientific, and technological knowledge and skill. Current priorities include upgrading the standards and assessments that guide student learning, improving teaching and ensuring that effective teachers are well deployed in our nation's schools, and promoting innovative new school and system designs.

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THE OPPORTUNITY EQUATION
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The Opportunity Equation
The Opportunity Equation promotes equity and excellence in mathematics and science education for all students. A partnership between the Institute for Advanced Study and Carnegie Corporation of New York, Opportunity Equation engages national and local decision makers and thought leaders to establish common mathematics and science standards that are fewer, clearer, and higher, coupled with high-quality assessments; improve math and science teaching, along with methods to recruit, prepare, support, and manage the nation's teaching talent; and redesign schools and systems to deliver math and science learning more effectively. The initiative was created to carry out the recommendations of the Carnegie-IAS Commission on Mathematics and Science Education in its 2009 report, *The Opportunity Equation: Transforming Mathematics and Science Education for Citizenship and the Global Economy.*

The Parthenon Group
The Parthenon Group is a leading advisory firm focused on strategy consulting, with offices in Boston, London, Mumbai, and San Francisco. Since its inception in 1991, the firm has embraced a unique approach to strategic advisory services built on long-term client relationships, a willingness to share risk, an entrepreneurial spirit, and customized insights. Parthenon's education practice—the Education Center of Excellence (ECE)—is the first of its kind across management consulting firms, and operates under the explicit mission and vision to be the leading strategy advisor to the global education industry. Parthenon invests significantly in dedicated ECE management and team resources to ensure that its global expertise extends across public sector and non-profit education providers, foundations, for-profit companies and service providers, and investors.

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Stupski Foundation

Stupski Foundation
The Stupski Foundation works to improve life options for children of color and poverty by contributing to the transformation of the K-12 public education system. We seek to catalyze a new student-centered system for public education rooted in personalization and to develop a new learning paradigm that take advantage of recent research and technology advances. The foundation works with students, parents, teachers, and education and community leaders. We are partnering with the Council of Chief State School Officers (CCSSO) to form the Partnership for Next Generation Learning Innovation Lab Network. This Network will incubate new models both inside and outside of the public education system and support innovation in practice, policy, and structure at the state, district, school, and student levels.

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