

# The National Laboratory for Education Transformation (NLET)

*"A bold new course for American competitiveness"*



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**Dear Reviewer:**

**America's future rests in the hands of its young people.**

In the last decade, our schools and our concepts of education nearly stood still while a handful of other nations moved aggressively to meet the needs of the information age and the global knowledge economy. If today's young people cannot easily progress in large numbers through school into college and then enter the workforce, become researchers, innovators and professionals, it will be difficult for our country to redefine its economic base and reinvest in global leadership and competitiveness.

Even with the substantial assistance provided by the Federal government to the States and to districts, how we structure, deliver, assess, and progress students is not likely to change fundamentally. If the changing demographics of the United States, the increasingly high levels of technology use by young people and corporations, and the evolving needs of employers are not taken into account in reform efforts, these investments will not produce the returns necessary to help craft our collective future.

In surveying the education improvement landscape over the last quarter century, it is clear that current structures were designed for a different era. Circa 2010, we have the design capacity, expertise and research institutions to thoughtfully redesign education systems and mount new R&D efforts in learning. These resources, however, are often not aligned, rarely work collaboratively, and there is no central effort for consolidating, scaling and searching out efficient new methods for learning and training.

After examining many improvement efforts and their objectives, it is clear that tremendous effort has been expended on programs, many of which produced positive local results but failed to induce overall change in the country. To manage the human capital development of the U.S., a dedicated national public-private research, development and design capability is needed to address the broader education needs across society and industry. This will lead to greater inclusion and greater success in progressing students into and through college, into the workforce and into higher levels of innovation.



The following proposal for a National Laboratory for Education Transformation (NLET) contains the combined work of board members of the non-profit Innovate-Educate ([www.innovate-educate.org](http://www.innovate-educate.org)) that includes representatives from America's top technology, defense, education and education technology corporations. The strategy committee of the board of Innovate-Educate has interacted with educators, major foundations, research institutes, universities and museums and gained their support to work alongside the education establishment and industry in the early stages of this bold initiative.

Attached is the first concept paper defining NLET and its work, as well a list of signatories interested in supporting NLET, a set of FAQs and a bibliography. Please understand that this draft raises the concepts embodied in NLET but does not yet contain the detail that defines the operation, financing, alliances and strategy of the proposed national laboratory. This document is designed to initiate that more comprehensive process.

**Gordon Freedman, Chair, Strategy Committee**  
**March 2010**

## THE VISION

NLET’s vision is a vibrant and respected United States that has redesigned its education systems to meet the challenges of global competitiveness, commercial innovation, social responsibility and security.

## PROBLEM STATEMENT

There is a growing consensus that the public education systems within the United States are not adequate or competent to produce the highest level of college graduates. Innovative and collaborative thinkers and facile learners are necessary to fulfill commercial, governmental and social needs of the United States in the coming decades. This concern translates into attempts to improve U.S. scores on International benchmarks, produce more college graduates in STEM-related fields, develop more highly qualified teachers, and ensure that Federal funds to states and districts are used to solve persistent problems rather than service older reform agendas. As the demographic and technological profile of the U.S. rapidly evolves, new demands for change mount, placing increased pressure on the outdated and, in some cases, already faltering education structures across the nation.

## NEED FOR A HISTORICAL SHIFT

The U.S. has been a world leader in education innovation from its inception. The new nation moved education from a solely religious base to a mostly secular base with the world’s first aspiration for universal education. At the end of the Civil War, the Freedmen’s Bureau (1865-1872) expanded education, with assistance from private groups, to emancipated slaves and their families. The Morrill Acts (1862, 1890) extended colleges into every state for agricultural and technical education. The Smith-Hughes Act (1917) inaugurated vocational education in the U.S. to aid industrial growth. The G.I. Bill, Serviceman’s Readjustment Act (1944), near the end of World War II, eventually put millions of servicemen through college or into training and, thereby, helped create the modern U.S. The Defense Education Act (1958) countered the Cold War. NCLB (2006) measured school success. Yet, in 2010, as new technologies speed up globalization and initiate a new era of international competition and individual empowerment, the education structures have changed little and been challenged even less.

*“Now is the time to focus our efforts on driving change into America’s education system. We must invest in educational R&D. Different models are required, different techniques must be adapted, and different tools must be developed and used. America has demonstrated what it can achieve when it puts its best and brightest minds behind a common cause.”*

Lee Ramsayer, Vice President,  
Public Sector & Education,  
Monster Worldwide, Inc.

## THE CORE OF CHANGE

### Emphasis

The three areas of emphasis that NLET projects and advocacy include are: Literacy, Inquiry, and Access.

- 1. Literacy** – No amount of emphasis on STEM or 21st Century skills will succeed without basic literacy (reading/writing), information literacy (search/authentication), and mathematical literacy (analysis).
- 2. Inquiry** – Learning or absorbing curriculum, as opposed to internalizing concepts and principles, requires projects, work placement, and hands-on learning. This includes computation as a tool of inquiry and investigation across the grades rather than simple technology use.
- 3. Access** – Hundreds of millions of dollars have been spent in the last decade on open materials created by universities, foundations and government departments and agencies. These materials have no central point of access and have not been rated or coordinated with standards and assessment.

## NLET APPROACH TO EDUCATION, IDENTITY, ECONOMY AND SOCIETY

Periodic revitalization of learning and education are essential to a vibrant society. By developing secure and competent learners with a thirst for knowledge, our society and economy can be sustained and grow. In a world with many competing voices for the attention of youth, igniting learning early and having education systems push toward connecting students with real knowledge is critical. While other societies enforce more discipline, the U.S. must evolve a deeper understanding of how we learn, why we need to value learning, and how we can create cultures that promote learning, innovation and research.

At the same time, paying for high-quality education is a problem that will become more pronounced as Federal funds recede. As constituted, our State education systems are too costly and inefficient in relationship to the quality of their output. Core challenges—commensurate with solutions found in the commercial sector—include a system to achieve greater efficiency, individualization and performance.

## NLET VALUES

In terms of human capital, innovation, and knowledge production, four unique competitive advantages present in the culture of the United States are undervalued in American education: Individualism, Collaboration, Ingenuity, and the ever-present ability in the U.S. for Reinvention.

These values are seen continually in the development and use of digital, network, Internet, media, communications, genetic and nano technologies. New forms of interaction and communication have changed society, commerce, government, research and popular culture. However, they are not thoughtfully or comprehensively implemented inside the U.S. education systems that are tasked to produce workers and thinkers to renew the workforce, society and economy. NLET believes that new technologies should be harnessed to create individualized and socialized cultures of learning to imagine, share, test and apply knowledge and skills. The systematic use of technology is necessary to increase contact time with students, standardize collaboration, provide real-time access to quality resources, improve staff training, involve families and communities and augment physical schooling.

## REDESIGN PRINCIPLES

NLET has an initial set of design principles that set the outside boundaries for change, consistent with the times in which we live, the changes in technology and various cultures that must be serviced.

**Boundaries:** Move beyond the structure of schooling and the content-curriculum organization toward 21st Century education models, academic output, knowledge acquisition and production.

**Participation:** Include a much wider community in the process, move from school-based monopolies to sharing resources and directions with key components of society and business.

**Pathways:** Unlock multiple learning, teaching and experience pathways to reach the potential of all populations of learners, their families, communities and new generations of educators.

**Economics:** Examine the financial, economic and labor assumptions underlying compulsory public, charter, for-profit, public-private education and partial self-financing education models.

**Responsibilities:** Require direct responsibility from all players (students, families, educators, government officials and non-profit funders) for creating and maintaining the next system.



Reinventing education for 21st Century learners and our economy is the foremost objective of NLET.

## NLET MISSION, PURPOSE, GOALS AND OBJECTIVES

NLET’s Mission, Purpose, Goals and Objectives center on renewing education, teaching, learning, knowledge acquisition, innovation and social skills for learning over a lifetime and between generations.

**NLET’s Mission** is to assist in making the United States, its fifty states and territories and the citizens of both, as competitive, innovative, secure and socially committed as possible.

**NLET’s Purpose** is to build a virtual and physical “laboratory” for learning and education and for its effect on individuals, society and the economy, parallel to the DOD and DOE laboratories’ work in advancing defense, security and energy and the work of NIH and NIMH in physical and mental health.

**NLET’s Goal** is to define persistent problems in U.S. education and methodically conduct the research, development and tests to find, create, and advance systemic, economic, competitive, accessible, and academically sound solutions that characterize education systems suitable for the times.

**NLET’s Objective** is to establish critical capabilities that work together in change models: efficiencies, employer needs, scaling, individualization, socialization, performance, responsibilities, and knowledge.

## NLET DIVISIONS, METHODOLOGY AND PRINCIPLES

**DIVISIONS:** NLET’s effort is divided into five broad divisions of work, considered key to change:

- 1. Organizational, Institutional & Government Alignment:**  
National Competitiveness, Stakeholder Engagement, Community & Industry Support
- 2. Human Systems Design & Efficiency:**  
Education Economics, Labor, Organizational Efficiency, Learning Science & Scaling
- 3. Academic Systems & Knowledge Access:**  
Content, Curriculum, Knowledge Access, Assessment & Accountability
- 4. Education/Learning Structures & Infrastructures:**  
Education Structures, Infrastructures, Training & Delivery, Industry Involvement
- 5. Neuroscience & Social Engagement:**  
Individualization, Socialization, Cultures of Learning, Teaching and Staff Excellence

**METHODOLOGY:** NLET has a four- step methodology that will be applied to all of the work in each of the five divisions (above) and for any projects, advocacy or efforts under those divisions.

- A. Focus:** Determine high need areas; define theory, policy, practice drivers that require change.
- B. Study:** Bring together disciplines-practice areas necessary to understand and solve problems.
- C. Test:** Operate national, state, district-school, student-family test beds for projects and programs.
- D. Scale:** Socialize “science” of scaling; multiply positive efforts methodically, market expertise.

Without exploring education problems in depth, we will never know what is possible. By ignoring or simply treating education and learning problems with traditional methods, we limit our future.

## SPECIFIC STATE PROJECT-PROGRAM CATEGORIES (EXAMPLES IN NEW MEXICO)

NLET projects are likely to fall in the following categories modeled here with New Mexico examples:

**(a) Individualization & Socialization** – One approach is to use technology and physical settings to test the amount students can learn on their own, collaborating with each other, to produce outcomes-based results utilizing advice from teachers and experts in a 24x7 collaborative environment. NLET is supporting Albuquerque Public Schools’ (APS) school-within-a-school concept “Education 360.”

**(b) Knowledge & Practice** – One of the largest disconnections in current education is between schools of education, universities, K12 systems, students, industry and government. Many teachers simply return to the classroom just four or five years after they graduated high school. The school of education at Highlands University in New Mexico is examining a program for “Digital Native” teachers who will become skilled in technology use for in-depth learning and bridging into communities and corporations.

**(c) Families, Culture & Communities** – Cultural and demographic factors weigh heavily on student performance, community support, and parental involvement. Likewise, impacted urban areas and sparsely populated rural areas have difficulty meeting the standards set by wealthier suburban districts. NLET will concentrate on homeless populations in Albuquerque and in creating STEM interest in southeast New Mexico with New Mexico State University and the Gadsden Independent School District.

**(d) Financial & Labor Modeling** – Public school and community college financing historically proves very difficult in economic downturns, the very time when investment in education and higher skills is necessary. The Federal government can make up differences, but this does not provide stable, long-term solutions. NLET will work with legislative-financial committees and research-based economists to explore alternate models that more efficiently create better incentives and produce better outputs.

**(e) Inter-Disciplinary Based R&D** – Education as a field of study has not sufficiently explored intersections between learning, education and administration with other research-based disciplines that are either taught in schools or would inform education redesign. Fields such as sociology, psychology, neuroscience, computer science, risk analysis, economics, humanities and the physical sciences need to be assembled to target the short-term and long-term needs of education. NLET has begun assembling researchers at leading universities and research organizations to participate in building new approaches.

## ROLE OF UNIVERSITIES AND RESEARCH INSTITUTES

It is important to note that throughout the Cold War, the United States Government provided high levels of investment through grants and projects to the leading universities in the United States. This support to higher education benefitted schools, teacher-training programs and especially the promotion of math, science and engineering in building careers and national capacity. In fact, it was the Cold War and the U.S. space program that gave birth to the technologies (digital, Internet, media, cellular) that now define our global society and are largely responsible for its rapid changes.

As the Cold War ended so did much of the Federal support for higher education that had pushed the boundaries of science, technology and engineering. Universities must play a major role in setting the new education requirements for schools, teachers, research, innovation, and access.

The only truly renewable natural resource on the planet is the human mind.

## GENERAL NATIONAL PROJECT-PROGRAM CATEGORIES

(UNITED STATES, MULTIPLE STATES, STRATEGIC ISSUES)

NLET 's large-scale national efforts work on consolidation, distribution and national innovation:

**(a) Knowledge Capture Capacity** – NLET will work collaboratively with other foundations, corporations and government entities to organize and manage the knowledge capture, analysis and distribution of education, subject, practice and learning activities. As work is being accomplished nationally on STEM issues and on national core curriculum standards, and as reforms will be taken into practice with the state Race to the Top grants and district Innovation Grants, there is no scalable, searchable and practice-based system to aggregate and breakdown the knowledge and resources that are being amassed. It is a necessary and critical national capacity to manage knowledge about learning, practice, professional development, subject matter content, learning design and reform efforts.

It should be noted that such efforts have been tried in the past with limited results. Those efforts were started prior to the large-scale portal activities by private firms and national agencies. With the advent of Amazon, Google, eBay and other web-based “smart” systems, the technology to do this work is well-established now inside and outside the Federal government. The fact that it could be accomplished in a public-private resource partnership is now possible as well.

**(b) Large-Scale Multi-State Project-Program “Umbrella”** – As large-scale multi-state education efforts are launched by major foundations, U.S. government agencies and as multi-state or multi-institutional consortia work on redesign, reform and STEM issues nationally, there is a danger such efforts will be duplicative, fail to share valuable knowledge and insights. There needs to be coordination to create a much broader platform for reform and redesign. NLET would coordinate with Race to the Top results.

NLET will routinely work with major national and multi-state programs to operate a coordination effort, or “umbrella” effort, to track projects and people and to share information pertinent to the entire field of education change. This unique function, much like strategic and tactical security information and coordination, is just as important strategically in preparing our human capital economic base and our knowledge capacity for innovation as it is to manage homeland security and national defense.

**(c ) Job-Formation, Analysis of Human Capital Output and Capacity Building** - NLET will work with Federal agencies, economists, labor experts, research institutes, such as [www.NBER.org](http://www.NBER.org) and [www.OECD.org](http://www.OECD.org) and corporations such as Monster.com to examine education output and look for incentives and indices that forecast job growth and requirements compared to education output. One NLET partner, Monster, operates a highly sophisticated employment index that looks at numerous employment data bases (demand) and compares those to available applicants (supply). This dynamic index which can be segmented in many different ways could eventually be correlated to human capital production from schools, higher education and training. Such analysis will help further provide data and analyses for shaping of long-term education investment policies.

**(d) Public Advocacy, Marketing and Distribution** – Education has often existed as something students “have to do.” It is tolerated, in the best cases enjoyed, and in others it is a burden and students leave the systems without having achieved lasting benefits. With the wealth of learning materials, free courses, and individual successes in schools, community college and higher education, very little is done to remake education in the minds of learners, their parents and their communities. NLET will work with public relations, marketing and distribution companies and organizations on this important national effort to communicate and advocate for getting the most of out of education and for building a collaborative spirit to create the best and most flexible education and learning systems in the world.



## ORGANIZATION, LEADERSHIP & ALLIANCES

There is no other public vehicle that will propel the U.S. back into commercial, social and moral leadership than a sustained national effort to redefine and redesign our public education investment.

NLET is envisioned as a large-scale, public-private partnership that operates with business-like goals, academically strong-and-sound methodologies and measurement and efficient organizational methods. Leadership will come from a partnership of industry, government and academia operating in a lean, physical and distributed, testable and productive manner. NLET is already active in forming alliances with national foundations, government agencies and facilities, research institutes, networks of university departments and school districts.

## LOCATIONS, PUBLIC INTERFACE AND LEADERSHIP ACCESS

NLET will be based in Santa Fe, New Mexico, allowing easy access to assets in New Mexico such as Sandia National Laboratory, Los Alamos National Laboratory, Santa Fe Institute, and New Mexico Super Computer Applications Center (NMCAC). NLET will also initially work closely with various academic institutions and STEM-related organizations in California. New Mexico will provide ease for testing because of its size, and California will provide depth in its higher education and research institutions.

## CONCLUSION

Alarm bells are sounded regularly over the need for the U.S. to be globally competitive, encourage more STEM-related education, widen access, improve teaching, increase accountability and promote the use of data and technology. At the same time, many of the same methods have been applied over and over again with increasing amounts of money, with only incremental changes in those places that were able to marshal attention, initiative and funds.

As we experience cyclical economic highs and lows, education proceeds in a counter-cyclical manner – more education is needed in the downturn when it is difficult to provide or procure it. Such situations clearly indicate the need for comprehensive education and learning redesign that includes in-depth involvement of all U.S. stakeholders. Relying on traditional methods and organizations cannot possibly solve a problem of this scale and complexity in these times.

What is missed and missing in the reform efforts and dire calls are that society is now truly changing; economies are changing and individuals themselves are changing. Much of this is due to new digital, network and cellular technologies. However, it is not technology alone that must be kept up with by education; it is the new ways in which individuals, communities, corporations and societies operate. This is not a simple swapping out of old ways of doing things for new ones; it is a new way of existing that now requires a new way of understanding youth, learning, education, commerce and knowledge.

We hope that many people and organizations will join in this exploration and redesign of education appropriate for the times and the cultures of change that define who we are in this century.

*“Why is a national laboratory needed? First, the formation of a national laboratory signals national commitment to transforming the educational and learning experience, which will help regain America’s international leadership in achievement and maintain its leadership in innovation. Second, it will help us to engage companies, scholars, teachers, educators, and other experts in learning to work together to develop and apply new ways of thinking and new tools for learning. Three, we as country, must invest in innovation accessible to all learners.”*

**William Flores, President,  
Downtown Houston University**

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## NLET FREQUENTLY ASKED QUESTIONS (FAQS)

### 1. Why, with so many laboratories and education projects, is NLET necessary or beneficial?

What makes NLET unique is its intended ability to look at the whole scope of individual, state and national needs and to analyze what is most effective in education and learning on a strategic scale. Most improvement and reform efforts hold the structure of schooling a constant, invariant in the change equation. NLET will not hold the structure of schooling as a constant; it will be one of the many variables to be analyzed.

### 2. How will NLET assist State education systems and schools and districts in those states?

By having 50 states, several territories and many districts, one of the key problems is that best practices and new policy agendas are not shared freely regionally or nationally. NLET will be dedicated to socializing and scaling what works and what is needed.

### 3. How is NLET different from the viewpoint of teachers, administrators, students and families?

Teachers, administrators, parents and students often do not know where to turn for answers to persistent problems, such as early literacy, Algebra failure, or encouraging drop outs to return. NLET is organized to help stakeholders find verified resources they can use in practice.

### 4. Can you explain NLET's different model and its approach to education?

One of the key premises of NLET is that the current systems of education across the states are based on a model designed to assist the older industrial, manufacturing and services sectors of the U.S. economy. Now that many of those industries and jobs have been exported outside the U.S., the states need to concentrate on an education system designed for the information era.

### 5. How do you see NLET benefitting students, engaging them, and providing motivation?

Students have long been allowed to be passive participants in their own educations, electing to be involved, uninvolved or just getting by. Individualization and socialization of learning, with technology and in collaborative physical settings, can greatly improve the creation of incentives and emotional rewards so that students can manage more of their own learning.

### 6. Why do corporations care so much about changing the education system?

Many corporations are worried about their own futures in an economy without a large enough supply of competent and inventive employees. These corporations, the Federal government and other employers feel the skills and knowledge to succeed in this era must begin to be built in the early years of school and deepen over time. They know that a vibrant economy is required for the economy to survive into a new generation, allowing its elderly to retire and collect their pensions.

### 7. Will NLET benefit charter schools and charter management organizations?

Charter schools often have the ability to adapt to new situations and new learning styles. They will be able to consume the NLET's output and will also be able to actively participate in NLET's design and testing agenda. NLET will spread the word about the successes of charters as well as those of traditional schools.

### 8. How do you see NLET fitting in with the Obama Administration's STEM efforts?

The STEM acronym (Science, Technology, Engineering, Math) is used very loosely and efforts focused on “STEM” generally have to do with increasing the amount of content or time in those subjects. They have less to do with the type of thinking and philosophy that they signify. NLET will put a substantial effort into interpreting what is meant by STEM and how it fits into the overall curriculum and will encourage projects that link learning to “doing” in the STEM fields.

**9. Will NLET work with Race to the Top or Innovation grants from the Department of Education?**

One of NLET's values will be to analyze the Race to the Top proposals as artifacts of what states believe will make a difference for their education systems. This evidence base (grants and grant applications) is a baseline from which broader analysis and research can emerge, especially on persistent problems. On a more practical side, NLET can feed back and help coordinate success factors in the implementation of the Race to the Top (states) and Innovation grants (districts).

**10. What will NLET provide that assists Federal efforts in education outreach?**

The Federal government is one of the largest, if not the largest, producer of free knowledge, data and outreach to schools. However, like schools, districts and States, the Federal government has no effective way to distribute or share what it produces in a uniform manner nationally. NLET will look at this issue and propose portal and use case strategies beginning with STEM.

**11. Is there really a crisis for school finance?**

After the Federal stimulus funds run out, especially in the smaller States that do not win substantial Federal grants, it is unlikely that State tax bases will be sufficient to pay for schools as we operate them today. Efficiencies must be sought, an area that is core to NLET's work.

**12. What role does NLET see for colleges and universities in its activities?**

NLET will concentrate on methods, policies, funding and practices for colleges and universities to assume more responsibility for schools and education systems change. It is not enough to operate schools of education, which often are the least innovative departments on campus. The institutions– and the States in which they reside–must understand that schools are populated by higher education and students they receive at colleges are products of the personnel in schools. NLET will form research networks with colleges, universities and their departments.

## BIBLIOGRAPHIC CATEGORIES

This partial list of bibliography categories has been used to inform the NLET concepts and directions. The categories listed are an initial set that will evolve into a persistent and maintained resource center on NLET’s website, [www.NLET.org](http://www.NLET.org). Please send any additions, comments or resources to [TransformationLab@gmail.com](mailto:TransformationLab@gmail.com) for inclusion in the resource center list. The asterisk (\*) indicates categories for which bibliographic information has been collected and analyzed.

### Categories:

1. Associations (education, disciplines)
2. Demographic and Statistical Information\*
3. Department of Education Regional Labs\*
4. Earth Institute, Columbia University (potential model for NLET)\*
5. Economics of Education and Education Labor\*
6. Education and Culture\*
7. Education Improvement\*
8. Education Preparation and Workforce Misalignment (supply and demand)\*
9. Education Technology
10. Education Systems and Philosophies
11. Business, Organizational and Education Transformation\*
12. Federal Departments and Agencies
13. Foundations (major)\*
14. Grants (significant)\*
15. Higher Education
16. Human Capital Development\*
17. Learning and Neurological Sciences\*
18. Literacy, Numeracy, Health, Public Safety\*
19. National Labs (Department of Education)\*
20. National-Homeland Security and Education
21. National Science Foundation
22. OECD (Organisation for Economic and Cooperative Development)\*
23. Research Institutes
24. Schools of Education
25. STEM Resources and Information



## QUOTES

### **Peter Winograd , Education Policy Advisor, Governor Richardson, Office of the Governor**

“H. G. Wells is quoted as saying that “Human history becomes more and more a race between education and catastrophe.” For all of our running, our efforts to reform current education systems seem so slow and we lose too many of our children. The formation of a national laboratory that questions and transforms public education’s basic assumptions about organizational boundaries, student and community participation, learning pathways, school funding, and governance is sorely needed. These are conversations that we must have if we want to run our race smarter in the future than we have in the past.”

### **Lee Ramsayer, Vice President, Public Sector & Education, Monster Worldwide, Inc.**

“Now is the time to focus our efforts on driving change into America’s education system. We must invest in educational R&D. Different models are required, different techniques must be adapted, and different tools must be developed and used. America has demonstrated what it can achieve when it puts its best and brightest minds behind a common cause.”

### **William V. Flores, President, University of Houston-Downtown**

“Why is a national laboratory needed? First, I think the formation of a national laboratory signals national commitment to transforming the educational and learning experience. Second, we must engage companies, scholars, teachers, educators, and other experts in learning to work together to develop and apply new ways of thinking and new tools for learning. Three, we as a country, must invest in innovation accessible to all learners.”

### **Kimberly S. Adams, Vice President, Human Resources, Enterprise Operations, Lockheed Martin**

“Our economic prosperity and national security are linked to the capacity of the American people to produce scientific and technical innovations. The number of jobs that require individuals to think critically and leverage technology will continue to grow, and the demand will continue to outpace the supply. In order to maintain our competitive edge as a nation, we must have an educational system that fosters creativity and innovation, and a national laboratory focused on education will play a key role in creating that system.”

### **Jami Grindatto, Corporate Affairs, Southwestern United States, INTEL**

“Formed in partnership with key Fortune 500 companies, NLET will act as a living laboratory bringing together thought leaders from across industry, education and government. This research arm will invest in practical and comprehensive approaches to transforming P20 education. NLET’s focus includes areas of extreme importance to our economy and workforce: new funding models in education, workforce development, and the integration of technologies into all aspects of learning. NLET and Innovate-Educate will also work diligently to advance the key components of computing and STEM across the grades as they are both vital to the future of the U.S. workforce.”

### **Gordon Freedman, Blackboard Institute**

“As society, an economy and as individuals we have moved beyond what bricks and mortar alone can provide for mass education. Similarly, we have moved beyond what teachers, textbooks and tests alone can provide. We are on the boundary of very new times and we must adjust how we educate, we must consolidate what we already know and we must do what America truly does best... innovate. There is no other public vehicle that will propel the U.S. back into commercial, social and moral leadership than a sustained national effort to redefine and redesign our public education investment.”



