

# Final Report

## NM STEM Coalition

### Launch and Visioning Convening

#### New Mexico STEM Coalition

August 29-30, 2017  
Albuquerque, NM

#### **NM STEM Coalition Organizing Committee**

Los Alamos National Laboratory: Kathy Keith and Zach Leonard

LANL Foundation: Jenny Parks and Gwen Warniment

NM EPSCoR: Selena Connealy

Convening Facilitator: Mi'Jan Celie Tho-Biaz

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## Executive Summary

### Introduction

In Fall 2017, a broad group of stakeholders from business, education, and nonprofit sectors convened with the interest of launching a statewide STEM Coalition. The goal of the convening was to promote a sense of urgency around STEM education issues and build consensus for a path forward.

In addition to a series of collaborative working sessions, two plenary sessions provided context and information for participants:

- Keynote address about STEM education delivered by Public Education Department Secretary-Designate Christopher Ruskowski
- Collective Impact session to highlight the work of Mission Graduate and Central New Mexico United Way, a conversation between Angelo Gonzales and facilitator Mi'Jan Celie Tho-Biaz

### Purpose of STEM Coalition

The [Background Report](#) presented the idea of a statewide, independent, and nonpartisan STEM Coalition based on the framework of Collective Impact. This idea was affirmed by the convening participants and expanded to include specific actions the STEM Coalition might undertake across the following lines of effort:

- Coordinate STEM stakeholders across New Mexico
- Lead the crafting of a statewide STEM vision
- Guide the planning and implementation of three broad strategies related to policy, advocacy/communication, and activities alignment.

### Shared Vision for New Mexico's STEM Education Future

There was broad consensus about the importance of STEM education for the future prosperity of New Mexico, and about the broad goals of a STEM Coalition that would:

- Sustain and advance STEM education by supporting all students pK-16 in achieving STEM literacy
- Build a local STEM-ready talent pipeline
- Encourage policy and conditions to build a STEM economy in NM

### Prioritized Actions

Participants in every working group insisted that without a **statewide STEM roadmap**, or strategic plan with shared goals, strategies, and a defined set of metrics, there would be little chance in realizing the shared vision.

An additional priority that surfaced was the need to further **understand the New Mexico STEM ecosystem**. Although the group acknowledged that some of this work exists, it was recommended that the STEM Coalition make mapping the existing resources a priority, with an emphasis on documenting current and future workforce gaps and needs.

The third priority was the importance of **communication and public awareness of STEM education**. The group suggested developing a communications plan to ensure that all stakeholders and the public were aware of the importance of STEM education.

### **Organizational Structures**

Participants affirmed that a successful and effective STEM Coalition would require an organizational structure beyond the ad-hoc committees and passionate stakeholders of the current effort. In order to achieve systemic change at a statewide scale, three foundational structures were identified as essential:

**Leadership Team** made up of representatives from different sectors: education, business and industry, government, and community organizations.

**Backbone Organization** to provide a home for the STEM Coalition, mobilize funding, and act as fiscal agent. In the early stages of the STEM Coalition, this could be an existing nonprofit organization; in the future, the STEM Coalition could be stand-alone organization.

**Dedicated Staff Person** to guide the work of the STEM Coalition.

**NM STEM Coalition  
Launch and Visioning Convening  
August 29-30, 2017  
Albuquerque Embassy Suites**

**Agenda**

**Tuesday, August 29**

11:45 Registration

12:00 Lunch

Christopher Ruszkowski, Secretary, New Mexico Public Education Department

1:30 Work Session I: Context (Past, Present, and Future)

Break

3:30 Work Session II: Opportunities for Action

5:45 Networking Dinner and No-host Bar

**Wednesday, August 30**

8:30 Work Session III: Building a Coalition, part 1

Break

10:15 Work Session IV: Building a Coalition, part 2

11:30 Working Lunch: Next Steps and Commitment

1:00 Conclude

## Results of the Convening

### Work Session I: Context (Past, Present, and Future)

Participants responded to the prompt: ***What are the most salient parts of the background report?*** Their responses are grouped into four main themes: STEM Education Impact on Jobs and the Economy, STEM as it Relates to Culture and Community, Vision for STEM in NM, STEM Challenges in NM.

#### STEM Education Impact on Jobs and the Economy

- NM is a great environment for STEM jobs.
- Do we have the STEM jobs?
- Importance of National Security (US and NM as leaders)
- Economic development tied to STEM education.

#### STEM as Relates to Culture and Community

- Cultures in NM don't support students leaving their home communities for school and/or jobs.
- How do we keep our local STEM talent here?
- Hispanics are only 7% of national STEM workforce.

#### Vision for STEM in NM

- There is a lack of cohesion and shared vision for STEM.
- Need to demonstrate the return on investment of STEM education vision.
- What is the "product" of a STEM Coalition?
- Government efforts are vulnerable to political swings. Must be based in community and grassroots.
- Look at the issue from a product-driven approach.

#### STEM Challenges in NM

- Closing the achievement gap.
- Math proficiency levels are foundational.
- Closing achievement gap and the economic impact of that.
- Only 25 schools teach computer science.
- Lack of rural infrastructure.
- Perception that NM doesn't do STEM.

Participants also worked in small groups to chart or map the future of New Mexico: ***If we had these things in place, what does that mean for you, for your organizations, for New Mexicans, for our state, for our economy?***

Many groups took a narrative approach and listed items which are grouped into two broad themes: ***Vision for the Future*** and ***Conditions Needed to Realize that Future***

### **Vision for the Future**

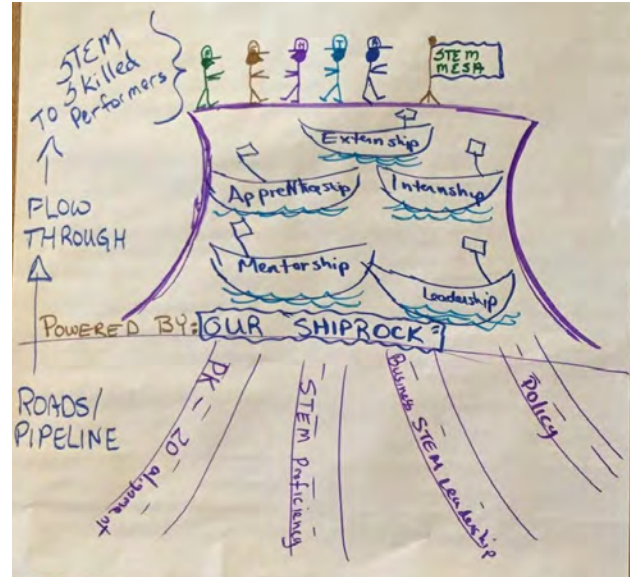
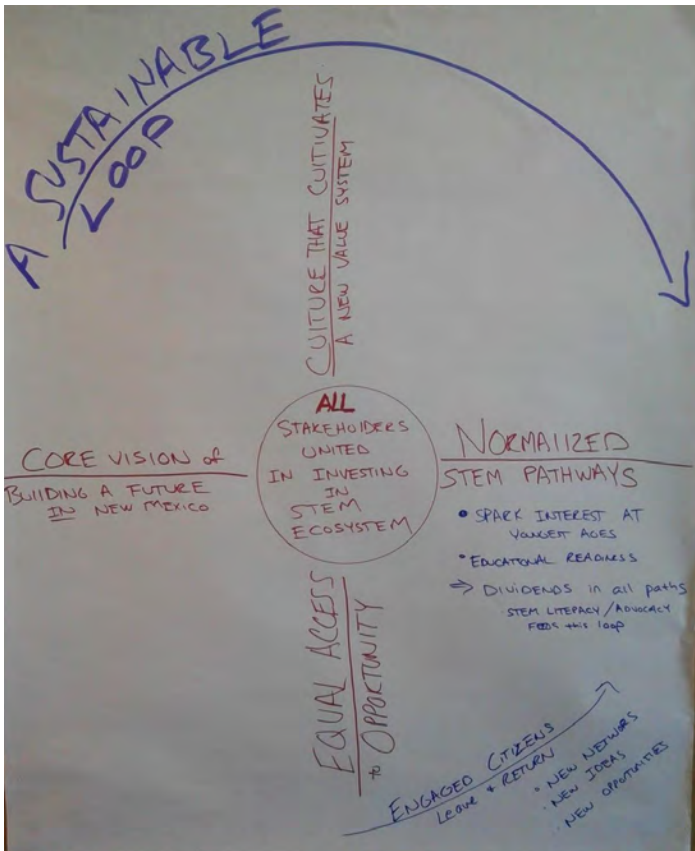
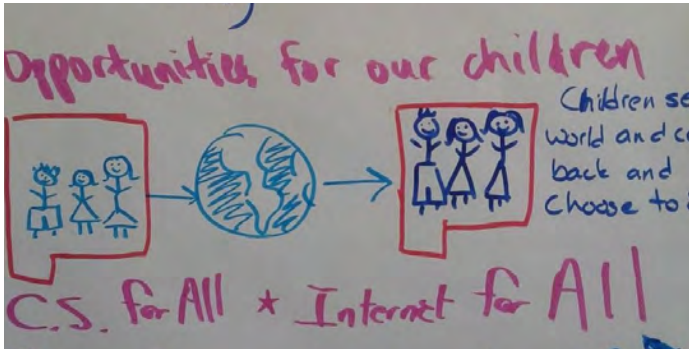
- Robust economy would require
  - entrepreneurial mindset
  - problem solving
  - innovation
- not training but knowledge
- Technologists and Technology companies would want to come
- Diversity in density of technology (high and medium)
- Opportunities for our children (children see world and come back and chose to stay)
- Computer Science for All. Internet for All
- Rural and Tribal prosperity

### **Conditions Needed to Realize that Future**

- Statewide Vision
- Living proof of STEM Programs that power students
- Hold businesses and legislature accountable
- Architectural drawing (vision)
- Alignment
- Proclamation did not provide any accountability
- Effective infrastructure
- Shared employees
- Startups/Entrepreneurs
- Cluster
- Interdisciplinary Education
- Hybrid job and educational opportunities (internships)
- Random focused collisions
- Youth employment and engagement
- Job training and pipeline
- Rename STEM
- Demystify STEM
- Make STEM palatable to our communities and leverage multi cultures
- Start early
- Channel talent
- Change conversation and perception
- Show kids how play is engineering and science
- Different vocabulary
- Balance perceptions--assets based campaign
- STEM TV

**Work Products from Vision Exercise**

Several groups provided graphical representations to describe both a vision of the future and the conditions needed to realize the future.



## Work Session II: Opportunities for Action

Participants worked in small groups to respond to a list of potential actions that were provided in the background report.

### Activities Alignment

- Foster sharing culture across STEM Education
- Map resources and opportunities
- Document needs
- Understand statewide ecosystem
- Build a smarter network
- Aligning the one-off STEM program (“Random acts of STEM”)
- Align STEM education/workforce training with STEM business and industry
- Research other regional efforts

#### *Activities Alignment Actions from the Background Report*

- Enhance student internships programs and implement apprenticeship program
- Ensure access to high quality STEM programs for students across New Mexico
- Align workforce training resources with in-demand STEM jobs

### Advocacy Actions

- Don’t just advocate for more money, have a plan for how it will be used.
- Marketing and Public Awareness: Does STEM need a new name? Why is STEM important?
- Communications plan to reach diversity of statewide population, including rural/urban, Hispanic, Native American
- Consider cultural relevance and STEM identity
- Activate a network with school districts and community partners

#### *Advocacy Actions From the Background Report*

- Advocate for Funding for STEM Education
- Promote STEM Education
- Ensure Systems of Support for Teachers

### Policy Actions

- Monitor legislative and administrative actions related to STEM
- Develop common language for talking about STEM education needs (“math endorsement” doesn’t mean anything to non-educators vs “we need more math teachers”)
- Consider low-hanging fruit in priorities
- Work with Workforce Solutions and Regional Workforce Board
- Consider school boards and districts role in STEM Education
- Can higher ed formula be used to promote STEM Education?

#### *Policy Actions from the Background Report*

- Adopt Computer Science Education Legislation (SB 134)
- Adopt Next Generation Science Standards (NGSS)
- Promote STEM Teacher Mentoring and Induction Programs
- Adopt Math Teacher Competencies aligned to NM Common Core State Standards
- Establish Elementary Mathematics Endorsement



## Work Sessions III and IV: Building a Coalition

Participants worked in table groups to brainstorm about organizational structure (backbone organization, governance, membership), activities of the coalition, and potential funding.

### Characteristics of a Backbone Organization

- Paid Staff
- Champion
- Has a dedicated staff with passion for the vision
- Existing programming of backbone compliments or is a resource for STEM Coalition objectives
- Non-profit with for-profit mentality; Led by core team; Executed by strategic theme teams
- Existing organization
- Leverage existing non-profit (Explora, ACI, etc)
- Look for an established 501c3
- Non-profit with a for-profit strategic plan
- History of working with “change agents”
- Longevity
- Committed and capacity
- Organization should be platform driven, not administrative with ALL stakeholders
- Statewide organization perceived as neutral, not political

### Governing Board

- Representative across broad spectrum of stakeholders
- Separate business board and vision board
- Board should include representatives from varying backgrounds (non-profit, large and small companies)
- grass tops and grass roots
- Relatively small group but representative of stakeholders--executive committee
- Create leadership council to set strategic direction, stand-up backbone, and hire executive director.
- Multi-membership (big and small biz, labs and other gov't, orgs like SBA, community)
- Multi-faceted membership (biz, education, gov't, labs, non-profit, etc)

### Work of Coalition

- Statewide work or coalition that connects regional ecosystems and backbone organizations and coordinates both policy initiatives and sharing of best practices among regional ecosystems
- Push decision-making to lowest level possible, allow senior-most person act/decide with speed
- Public/private type of decision making with equal vote
- Roadmap and SMART Goals for how to get there
- Need to create a vision for NM and promote to Gubernatorial and Legislative Candidates
- Agile structure
- A mechanism should be in place to add, vet and advance ideas

- Start with goal (metrics) and let data drive the backbone, scale and architecture
- Must obtain “big org” support, e.g., STEM proclamation entities (labs, PNM, AFRL, INRI)

**Funding**

- Raise funding from CRA, Social impact investment funds
- State funding for a minimum of 3 years to start and develop vision, shared metrics, and start implementing programs
- Seek support and engagement from small business (ACI, SBA)

## Convening Participants

### **Nyika Allen**

#### ***CEO, NM Technology Council***

Nyika Allen is the President & CEO of the New Mexico Technology Council (NMTC). She is passionate about technology, startups, women's issues and the economic health of New Mexico. Along with her position at the NMTC, she is the 'Tech Expert' on Fox New Mexico, President of Nyika Media ([www.nyika.tv](http://www.nyika.tv)), Co-Organizer of Girl Develop It ABQ, Chair of the New Mexico Association of Commerce and Industry's Entrepreneurship Committee and a 2015 TEDxABQ main event speaker. She holds a BBA in International Management from the Anderson School of Management at the University of New Mexico and the UNM Honors Program. Nyika graduated magna cum laude with both university and scholastic achievement honors and a special international designation. Ms. Allen has both worked, studied and traveled to over 19 different countries. She is currently a UNM Anderson Alumni Council board member, UNM Economic Development Forum member, an Ex-Officio Board Member for Albuquerque Economic Development, a Kirtland Airforce Base Honorary Commander, Chair of the Board for startup company Civnet and was recently recognized as an Albuquerque Business First's 2016 Women of Influence honoree, a 40 Under 40 honoree and the most influential 40 under 40 for the class of 2016.

### **Charles Ashley**

#### ***President and Founder, Cultivating Coders***

Charles Ashley III is President & Founder of Cultivating Coders, a New Mexico based nonprofit that provides technical training in web and mobile application development to rural, tribal, inner-city and underserved urban areas that lack resources in coding education. Prior to his current role, Charles was a Marketing & Strategy Consultant for several clients including Harmonix Technologies, VARA Wines and DeVry University. He previously served as Film Liaison & Marketing Manager for Bernalillo County's Economic Development Department in New Mexico and was Manager of Marketing for CNM's STEMulus Center. Charles currently sits on the US Eagle Federal Credit Union Advisory Board and Albuquerque Youth Basketball League Board and has served on variety of boards such as New Mexico AIDS Services and the Mayor of Albuquerque's Deep Dive Council for Arts & Culture.

Our Mission: The focus of Cultivating Coders is to empower traditionally overlooked and underserved communities by providing technical training in web and mobile application development. Our current emphasis is on the Native American communities in New Mexico but our mission for 2017 and beyond is to provide these same opportunities to areas like Yuma, Arizona, Savannah, Georgia and the Mississippi Delta area, along with the various cities in New Mexico that are suffering from high unemployment rates and lack of diversity in the technology job sector.

### **Heather Balas**

#### ***President, NM First***

A fifth-generation New Mexican, Heather Balas brings over 20 years' experience in public policy, including citizen outreach, voter education, coalition-building, and policy research. She worked in Washington, DC and San Francisco for several years before returning to her home state. Previous employers include the Commission on Presidential Debates, the California Center for Civic Participation, the Henry J. Kaiser Family Foundation, and the National Network for Youth. She holds a Masters in

political communication from the University of Maryland. Heather is married and is mom to two busy children.

**Pamela Blackwell**

***Economic Policy Director, NM First***

Originally from New Mexico, Pamela Blackwell was the project director for dental health access for Health Action New Mexico, a statewide healthcare consumer advocacy organization. Previous employers include the American Association of Nurse Anesthetists, U.S. Representative Steve Schiff and U.S. Representative Ralph Regula. She also served in the legal department of a major hospital system in Washington, DC. She holds a Juris Doctorate degree from the George Mason University School of Law. Pamela and her husband reside in Albuquerque with their three children.

**Lucrece Borrego**

***Perpetua Partners***

**Tracey Bryan**

***President and CEO, The Bridge of Southern NM***

Over 25 years, Tracey has had the privilege of serving in ground-breaking and industry-leading work for non- and for-profit entities. She is a proven leader in building strong relationships among public-private, cross-disciplinary groups to cultivate a shared vision and mobilize action. She currently leads one of New Mexico's most successful collective impact initiatives – The Bridge of Southern New Mexico. This business-led, education-focused partnership ignited the vision that led to New Mexico's first Early College High School and cultivated a community focus on increasing high school graduation rates – which now outpace the state at 80%. The organization has recently convened a set of community partners to create the first-ever comprehensive approach to workforce development for the county and region, with an underlying call to build STEM proficiency countywide, to fuel long-term economic development.

**Camilla Bustamante, Ph.D.**

***Dean, School of Trades, Technology, and Sustainability, Santa Fe Community College***

Dr. Bustamante has over 25 years in education, training and community advancement. She has led and participated in regional and community planning, educational and economic program development and assessment. She has developed and managed budgets for academic, state, and federal agencies to address both normal and off-normal events in the interest of community resilience and sustainability, and served at the operations level for environmental health emergency response during Katrina, the Cerro Grande Fire, and others. She has experience in grant writing, monitoring, management, reporting, and regulatory compliance. Dr. Bustamante is President of the Northern Rio Grande National Heritage Area and is on the board of Amigos de los Luceros, the City of Santa Fe's Quality of Life Board and the national board of the University Economic Development Association.

She previously has served on the Santa Fe County La Bajada Steering Committee, Sustainable Santa Fe Commission, Santa Fe County La Cienega Development Review Board, National Environmental Training Association and Sustainable Communities/ZERI (Zero Emissions Research and Initiatives) New Mexico. She holds multiple degrees from the University of New Mexico: a dual degree Ph.D. in Health Education and a Master of Public Health and an M.A. in Training and Learning Technologies as well as a B.S. in Telecommunication and English from Northern Arizona University.

**Jennifer Case Nevarez**

**Director, Community Learning Network**

A certificated teacher with a Master's degree in Education, Jennifer Nevarez is the Director of the Community Learning Network (CLN), a Santa-Fe based educational nonprofit dedicated to "building stronger communities through real-life learning." In addition to Southwest Experiential Education programs and the "Love Where We Live" Youth Ambassadors and Media Team training programs, CLN is currently stewarding the regional TechHire initiative in Santa Fe and Northern New Mexico and launched New Mexico TechWorks to support and promote expanding Tech access and education and increasing Tech enterprise and employment in our region. To learn more visit [www.nmtechworks.com](http://www.nmtechworks.com).

**Mi'Jan Celie Tho-Biaz****Convening Facilitator**

Mi'Jan Celie Tho-Biaz, Ed.D., is a documentarian, multicultural educator and community scholar. Most recently, her cultural equity practice was featured by [The Rockefeller Foundation](#).

Mi'Jan Celie was a 2015 - 2016 Visiting Scholar at Columbia University's Interdisciplinary Center for Innovative Theory and Empirics; Spring 2017 Documentarian-In-Residence with the Institute of American Indian Art's Essential Studies Department; and inaugural leadership participant with The Banff Centre's New Fundamentals in Creative Ecology, as well as the Aspen Institute's Franklin Project. Mi'Jan Celie was the Steinem Initiative lead designer and facilitator for the 2016 public policy digital storytelling and documentation pilot project with women organizers who labor for reproductive justice, at Smith College; and is currently designer and facilitator with the new Women of Color Leadership Initiative at the Santa Fe Community Foundation.

Mi'Jan Celie's deepest passion resides in stories: writing, gathering, amplifying and [uncovering](#) narratives of personal transformation and community social change.

**Chelsea Chee****Diversity Coordinator, NM EPSCoR**

Chelsea Chee is a Diversity & Inclusion Coordinator at New Mexico Established Program to Stimulate Competitive Research where she works to broaden the participation of female and underrepresented minorities in all NM EPSCoR supported programs. Chelsea holds a Bachelor of Science degree from the University of Arizona and is currently working on a dual Masters program in Community and Regional Planning and Public Administration at the University of New Mexico. Chelsea is Navajo from Teesto/Dilkon, AZ.

**Selena Connealy****Education and Outreach Manager, NM EPSCoR**

Selena Connealy is the Education and Outreach Manager for the New Mexico EPSCoR program. In that role, she is responsible for external engagement activities that include the NM Informal Science Network, a coalition of 12 informal science organizations, K-12 teacher professional development, and STEM faculty development. She is also active in statewide organizations as the treasurer of the NM Partnership for Mathematics and Science Education and as the co-chair of the NM Math and Science Advisory Council (2014-2017).

Selena has experience in both formal and informal learning environments. She holds a BA in English from Rice University, an MAT in Museum Education from The George Washington University, and is a doctoral candidate in Curriculum and Instruction in Science Education at Texas Tech University. She has 20 years' experience with project management in educational and cultural organizations, and expertise in public programming, science education, and education policy.

**Ron Eppes*****Community Relations Manager, Intel***

Ron Eppes is the Intel NM Community Engagement Manager. He has a Bachelor's Degree in Mathematics from Oklahoma Christian University and a Master's Degree in Information Systems from Friends University despite struggling in 2nd grade math class. He was an Automation Engineer at Intel for 12 years before changing to Corporate Affairs. Ron holds leadership roles at several nonprofit organizations. He has been married to his wife Peggy for 25 wonderful years (she would probably only agree to 22 wonderful years and 3, well just years); they have 3 children, a daughter in college and 2 grumpy teenage boys at Rio Rancho High School.

**Jason Espinoza*****President and CEO, NM Association of Commerce and Industry***

Jason Espinoza is the president and CEO of the New Mexico Association of Commerce and Industry (ACI), which prides itself as the voice of New Mexico business. No advocate can speak better on the needs of the private sector than the private sector itself, and, as the state chamber of commerce, ACI represents businesses of all industries, of all sizes and of all regions in the state.

Jason has more than a decade of experience in coalition-building and lobbying the New Mexico state Legislature, and his work at ACI began as its vice president of government affairs. When ACI's board of directors selected Jason as its president and CEO in 2015, ACI made a decisive turn in its policy approach, where now the organization more proactively drafts and champions pro-business legislation that would improve the bottom lines of businesses in every community across New Mexico. The new approach of playing offense has consistently and increasingly paid off, with several significant legislative successes over the last few years.

Jason is an alumnus of Arizona State University, where he graduated summa cum laude with bachelor's degrees in political science and history. Jason also earned a master's in political management from The George Washington University.

Jason has served as a member of the New Mexico Legislative Jobs Council, the New Mexico Business Water Task Force, the Governor's Procurement Reform Task Force Law and Rules Subcommittee, and the New Mexico Health Workforce Task Force.

**Matt Fetrow*****Technology Engagement Lead, Air Force Research Laboratory***

Matt Fetrow is the Director of the Tech Engagement Office at the Air Force Research Laboratory in New Mexico. He leads the laboratory's technology transfer, STEM outreach, commercialization, innovation, and community engagement activities in the state. In addition, Fetrow has led numerous technology programs for the Air Force with a focus on space remote sensing, laser remote sensing, and advanced photonics. Prior to his years of federal service, he worked in optical systems research and development at industry startups and in academia. Matt received his B.S. in Physics from Utah State University and his M.B.A. from the University of Massachusetts.

**Angelo Gonzalez, Ph.D.*****Executive Director, Mission Graduate***

Angelo J. Gonzales is the founding Executive Director of Mission: Graduate, a cradle-to-career education partnership in Central New Mexico, which is committed to producing 60,000 new graduates with college degrees and certificates by 2020. Dr. Gonzales is also a Research Assistant Professor and Associate

Director of the University of New Mexico (UNM) Center for Education Policy Research, and he teaches in the MBA for Education Leaders Program at UNM's Anderson School of Management.

Previously, Dr. Gonzales worked for U.S. Senator Jeff Bingaman for over six years. Most recently, he served as a field representative in the senator's Albuquerque office, where he was responsible for outreach to the New Mexico education policy community. Before graduate school, Dr. Gonzales served in the senator's Washington office as a legislative assistant for homeland security, border policy, and immigration; and he has also worked at Sandia National Laboratories and the White House Office of Science and Technology Policy.

Dr. Gonzales earned his Ph.D. and M.A. in political science from the University of California at Berkeley, and he holds a B.A. in chemistry from Pomona College.

His community activities include serving as a founding member, treasurer, and past president of the Del Norte High School AlumKnights; member and past board chair of the New Mexico Learning Alliance; member of the Albuquerque Hispano Chamber of Commerce Education Committee; member of the City Alive Leadership Team; member of the United Way of Central New Mexico's Hispano Philanthropic Society; and a mentor in the Big Brothers Big Sisters mentor2.0 program at South Valley Academy.

#### **Tim Hand**

##### ***Deputy Director, NM Legislative Education Study Committee***

Tim Hand is the Deputy Director of the Legislative Education Study Committee for the State of New Mexico. Tim's academic background centers on curriculum, instruction and educational leadership. Before participating in legislative work, Tim was the chief of staff and director of assessment, analysis and research for the Las Cruces public schools and director of student support services and senior institutional researcher for New Mexico State University. Tim has also been a tennis coach in New Mexico for 20 years and believes student success happens one meaningful conversation at a time.

#### **Synthia Jaramillo**

##### ***COO, Albuquerque Hispano Chamber of Commerce***

#### **Jack Jekowski**

##### ***Founding Principal Partner, Innovative Technology Partnerships***

Jack is a founding Principal Partner with Innovative Technology Partnerships, LLC. (ITP), a high technology consulting company headquartered in Albuquerque, New Mexico. ITP primarily supports national security programs in the Department of Energy, and the National Laboratories, as well as other federal agencies. Jack specializes in the facilitation of scenario and strategic planning activities in the DOE and national laboratories.

Jack is retired from a 34-year career in the Department of Energy contractor community, having served as a senior manager for EG&G, Inc. and Honeywell, managing large research and technical operations across the country.

Jack has been active in many educational, economic development, and public policy initiatives and organizations in New Mexico for over 30 years. He is currently on the board of several nonprofit organizations including serving as co-Chair of the Statewide EPSCoR Advisory Committee, and also serves on the Board of the State Chamber of Commerce (the Association of Commerce and Industry) as the co-Chair of the Education and Workforce Committee. Jack is past co-president of the New Mexico Partnership for Math and Science Education. Jack, and has been active in several New Mexico STEM initiatives, for example, having served as founding Board Member, Past President and current Board

Member for over 33 years on the New Mexico Mathematics, Engineering, Science, Achievement (NM MESA) program.

Jack has a BSEE, magna cum laude, from Northeastern University.

### **Kathy Keith**

#### ***Community Programs Director, LANL***

Kathy Keith is Los Alamos National Laboratory's director for its Community Programs Office within the Communications and Public Affairs Division.

Keith had served as the executive director of the Regional Development Corporation, a nonprofit organization established to help build a diverse and sustainable economy in northern New Mexico. Previously, as Public Works, LLC's New Mexico Director Keith managed economic development and workforce projects nationwide, specializing in innovative public policy, planning and efficiency projects for state and local governments. Before then, she served as the Economic Development Director for the State of New Mexico.

Keith is a lifelong New Mexican. She earned her bachelor's degree from Texas Tech University.

### **Zachary Leonard, Ed.D.**

#### ***Teacher and Principal Professional Development, Math and Science Academy, LANL***

Zachary Leonard, Ed.D., is a professional development and school improvement specialist with the Los Alamos National Laboratory Math and Science Academy. His work and research interests consist of mathematics and science content and pedagogy, student engagement, professional learning systems, educational leadership, and school professional culture. Zachary works with teachers and school leaders to help implement and sustain job-embedded professional learning designs within the school structure to maximize the transfer of professional development. Zach received his Doctorate in Educational Leadership from the University of New Mexico in 2016; a Master's Degree in Science Teaching from New Mexico Tech in 2007; and a B.S. in Civil Engineering from the University of Maryland in 1994. He is the author of the research study titled ***The Influence of Job-Embedded Professional Learning and Leadership on School Professional Culture***.

### **Steven Lucero**

#### ***Co-founder and General Partner, Perpetua Partners***

Steven Lucero is a serial entrepreneur and business development specialist with the ability to transform a nascent idea into a real business. He has launched or co-founded more than ten start-ups in technology media and telecommunications on three continents and five countries.

Mr. Lucero's companies include an "Inc. 500" & "Hispanic 100" manufacturer (co-founder), and RF engineering company that provisioned all of Mexico's mobile phone networks (co-founder); Latin America's first mobile content development & ad agency (Founder); advisor to media and telecom companies in Latin America, USA and UK (Founder). Additionally, He has advised three Mexican Presidential administrations on telecom and technology, was a member of Vice-President Al Gore's NAFTA committee and has advised Prime Minister David Cameron. Currently he's focused on Perpetua Partners, a Venture Capital fund for Hispanic Tech start-ups as well as a separate mobile platform start-up in stealth mode.



Mr. Lucero resides in Silicon Valley.

**Lillian Montoya**

**Chief Administrative Officer, CHRISTUS St. Vincent**

Lillian Montoya has over 20 years of direct work experience in the public, private, and non-profit sectors. She is a seasoned operations professional with extensive leadership experience, proven expertise in strategic planning and implementation, financial planning/budgeting, and communications. She has a solid reputation for innovative and effective initiatives that are sustainable and for creating consensus around tough issues. She is currently the Chief Operating Officer of Christus St. Vincent Regional Medical Center in Santa Fe.

Among other things, she worked as a Wealth Management Advisor with Citi Smith Barney. Previously, she was the Director of the Community Programs Office at Los Alamos National Laboratory where she led strategic planning efforts, and the corresponding investments in regional education, economic development, and community giving. She was also the Executive Director of the Regional Development Corporation where she was one of the first economic development leaders to espouse a “regional approach” to regional diversification and development. Her experience also includes 12 years of state government employment where she was the Deputy Director at the NM Commission on Higher Education and State Cash Manager at the NM State Treasurer’s Office.

A native New Mexican, Lillian has distinguished herself as an active participant in many community, business and educational organizations and has been repeatedly featured as a New Mexico top business “Power Broker” by the New Mexico Business Weekly.

Lillian received her BA and MBA from the University of New Mexico.

**T.K. O’Geary**

**Senior Consultant, Northrop Grumman Corporation**

TK is a Senior Consultant and Lean Six Sigma Master Black Belt at Northrop Grumman Corporation (NGC), a large systems engineering organization, defense contractor, and state & local consulting firm. Her customers have included DOE, USAF, various State & Local Governments, and – on a very local level – the Bernalillo Public School system, serving a wide range of missions. TK got her start as a reliability engineer at Motorola then, at NGC (and its predecessors TRW, Inc. and BDM International), she has served as a process expert (leading – and training - improvement efforts), program manager overseeing sites that spanned three time zones, and Enterprise Risk Manager for different customers. She is a member of Quality New Mexico, a past District Director at Toastmasters International, and past President of the New Mexico MESA board of Directors.

TK has BS in Mathematics, with minors in computer science and statistics, from Arizona State University, and an MBA from The University of Phoenix.

**Jenny Parks**

**CEO, LANL Foundation**

Since January 2015, Jenny has served as the CEO of the Foundation where she guides its mission and oversees its activities investing in education, learning and human potential through innovative programming, grant making and advocacy.

Prior to leading the LANL Foundation, Jenny served for five years as President and CEO of the New Mexico Community Foundation (NMCF), supporting underserved communities, strengthening nonprofits and growing philanthropy throughout the state, with a special emphasis on rural and tribal communities.

In 2012, under Jenny's leadership, NMCF launched NewMexicoWomen.Org, a fund and initiative with a purpose to provide leadership, education and investment in organizations helping to advance opportunities for women and girls in New Mexico.

Prior to joining NMCF, Jenny served as a Project Manager and then New Mexico State Director for the Trust for Public Land (TPL), a national land conservation nonprofit, leading and completing over 30 community driven conservation projects throughout the southwest.

Jenny led TPL's effort for the completion of the design and construction of the Railyard Park and Plaza in downtown Santa Fe, New Mexico. Opening in September of 2008, the 12.5 acres of public parklands in central Santa Fe, a \$14 million project, is now a hub for community activity.

She has experience as a commercial real estate attorney and developer. She is a graduate of Santa Fe High School, the University of Texas and the University of Texas -School of Law and lives in Santa Fe with her husband and son.

### **Michael Radtke**

#### ***Program Coordinator, Ngage New Mexico***

Michael Radtke is a Program Coordinator for Ngage New Mexico, a 501(c)3 nonprofit organization dedicated to community betterment. Michael's wide variety of interests and social and political philosophies have culminated into a strong reverence for his community. At Ngage NM, Michael primarily coordinates early childhood programs as a part of an education initiative called the SUCCESS Partnership. He also serves on policy council for the Las Cruces Public Schools Head Start Program and is an avid supporter of local art and music. Michael received his bachelors from New Mexico State University, where he studied analytic philosophy, the fundamentals of which have provided Michael with strong critical thinking skills and a proclivity for creative and logical approaches to program management and problem solving.

### **Ellie Rangel**

#### ***Perpetua Partners***

### **Andrea Romero**

#### ***Executive Director, Regional Coalition of LANL Communities***

Andrea Romero is the Executive Director of the Regional Coalition of LANL Communities, MIX Santa Fe, and CEO/Founder of Tall Foods. As a 17th generation New Mexican, she has international experience working in the public, private and philanthropic sectors since graduating from Stanford University in Political Science. Andrea joined the LANL Foundation Board of directors in 2017.

### **Christopher Ruskowski**

#### ***Secretary, NM Public Education Department***

Mr. Ruskowski joined Governor Susana Martinez, Secretary Hanna Skandera and the New Mexico Public Education Department (PED) in April 2016 as Deputy Secretary, Policy & Program. In this role he oversaw the state's academic priorities, policy agenda, and research agenda. In 2017, he co-led the development of the NM State Plan under the Every Student Succeeds Act (ESSA).

Previously, he served for nearly six years at the Delaware Department of Education under Governor Jack Markell, building the Teacher & Leader Effectiveness Unit (TLEU) as Chief Talent Officer/Associate Secretary and co-leading the implementation of the state's Race to the Top (RTTT) plan.

Born in Chicago, "CR" is a first-generation American whose father arrived in the U.S. in 1950. Mr. Ruszkowski is the product of K-12 public schools, and began his education career as a middle school social studies teacher and basketball coach at John F. Kennedy Middle School in Miami, FL. He then worked in a variety of district, non-profit, and charter school contexts, supporting and training novice teachers at multiple TFA Summer Institutes, working within Miami-Dade County Public Schools and the Louisiana Recovery School District with TNTP, and serving within the San Francisco Unified School District as a fellow with Education Pioneers.

Mr. Ruszkowski attended the University of Minnesota on an Evans Scholarship and holds a B.A. in Political Science. He represented the state of Minnesota as a Finalist for the Rhodes Scholarship. He holds an M.A. in Educational Policy, Organizational, and Leadership Studies (POLS) from Stanford University.

**Patricia Sullivan, Ph.D.**

***Associate Dean, College of Engineering, NMSU***

Patricia A. Sullivan serves as Associate Dean for Outreach and Recruitment in the College of Engineering at New Mexico State University. With over 32 years' experience at NMSU, Patricia is responsible for directing statewide engineering outreach services under the College's Engineering New Mexico Resource Network in areas that include technical engineering business assistance, professional development, and STEM educational outreach programs. In addition, she provides direction for the College's recruitment efforts and student career services. Currently, Patricia serves as Chair of the Western Interstate Commission for Higher Education (WICHE). She is also a member of the board of directors for Enchantment Land Certified Development Company (a program that certifies SBA 504 loans in support of economic development), and a serves on the New Mexico Mortgage Finance Authority's Tax Allocation Committee.

**Amy Tapia**

***Manager, Community Engagement, Sandia National Laboratories***

Amy is the Manager of Community Involvement at Sandia National Laboratories. This department is responsible for employee and corporate giving, volunteerism, and K-12 STEM education outreach. Amy has been involved in K-12 STEM education partnerships designed to encourage students to pursue STEM careers for over 15 years. She has been involved in the development of several programs - including CroSSLinks Science Volunteers, Family Science Nights, School to World Career Exploration Event, and the New Mexico Electric Car Challenge. Amy was also responsible for initiating Sandia's Academies Creating Teacher Scientists (ACTS), POWER and Energy on the Go programs to enhance the professional development of science teachers. She has worked at Sandia National Laboratories for 29 years, working in Security, Energy and Environment, and Community Involvement.

Amy is a native of Albuquerque and received her BBA and MBA from the University of New Mexico. She is a 1999 Leadership Albuquerque graduate. Amy is currently involved with the Albuquerque Public Schools Foundation, Mission Graduate, STEM-NM, Mentor 2.0 and NM Kids Matter CASAs.

**Karen Trujillo, Ph.D.**

***Director of K-12 Outreach, The Alliance for the Advancement of Teaching and Learning, NMSU***

Dr. Karen Trujillo is the Director of K-12 Outreach for The Alliance for the Advancement of Teaching and Learning. As an educator for the past 23 years, Dr. Trujillo has served as a teacher, an administrator, a researcher, a professional development specialist, grant writer, and a project director. Her background in mathematics and technology integration, along with her experience with students and teachers in the classroom provides the STEM Outreach Center with expertise in school based outreach and research.

### **Doug Turner**

#### ***Partner, Agenda Global Albuquerque***

For nearly 20 years, Doug has provided political and strategic counsel to executives of Fortune 500 companies, elected officials, governmental and nonprofit organizations.

Turner was the state director and campaign manager for Governor Gary Johnson's (R-NM) successful gubernatorial campaigns and worked as general consultant for both administrations. He also served as a deputy political director for Steve Forbes' 2000 bid for President. He has managed campaigns for the U.S. Senate, the U.S. House of Representatives and consulted on campaigns in Asia and Europe. Turner is a Term Member of the Council on Foreign Relations and a life member of the American Council of Young Political Leaders.

Turner was a Council on Foreign Relations International Affairs Fellow in Japan where he worked on minority parties issues. He provided political campaign and strategic guidance to the now ruling Democratic Party of Japan.

In 2010 Turner provided strategic communications advice to the Office of the Prime Minister immediately following the Fukushima nuclear disaster.

Turner has written widely on Japanese politics and policy. His articles have appeared in Time Magazine, the Financial Times, Foreign Affairs, the Far Eastern Economic Review, the Carnegie Council's Policy Innovations and Japan's Daily Yomiuri.

Turner received his B.A. from the American University School of International Studies in Washington, D.C. and his M.A. in international relations from the Centre Europeen de Recherches Internationales et Strategiques, Universite Libre de Bruxelles/Universite de Paris Sud XI. In 2009-2010 he was a Republican candidate for Governor of New Mexico. He lives in New Mexico with his wife and two children.

### **Yanira Vasquez**

#### ***Director, Math and Science Bureau, NM Public Education Department***

### **Jack Vigil**

#### ***President and CEO, Harmonix Technologies, Inc.***

Harmonix Technologies, Inc. is an Information Technology corporation founded by Jack T. Vigil in 2005. In 2008, Jack was awarded the Young Entrepreneur of the Year and in 2013, Jack was the Overall Winner of the Albuquerque Business First's 40 Under Forty Awards. Harmonix Technologies is located in Albuquerque, NM and specializes in designing, engineering and implementing large networks for various government entities, healthcare facilities and educational IT infrastructures. We have specialized in education and have witnessed firsthand the importance of up-to-date technology in our school districts across the state of New Mexico. We have taken a special interest in STEM initiatives and host a variety of programs partnering with post-secondary schools to mentor and hire interns and graduates at Harmonix Technologies. Jack is originally from a small town in Northern New Mexico named Peñasco. He

was fortunate to have amazing teachers that taught high-level mathematics and science classes which built the foundation for Jack to continue down the path that lead him to leading a successful technology corporation. Our goal at Harmonix Technologies is to be able to contribute to the leaders of tomorrow and we believe that the future success of our students is in the fields of Science, Technology, Engineering and Mathematics!

**Gwen Warniment*****K-12 Program Director, LANL Foundation***

A native New Mexican with multigenerational roots, Gwen is the K-12 Program Director at the LANL Foundation. In this position she oversees the Inquiry Science Education Consortium, as well as potential education partnerships, initiatives, and advocacy.

With over 18 years in education, Gwen's career includes teaching across the elementary to postsecondary landscape, facilitating tailored, productive professional development for educators and communities of practice, and providing instructional coaching for teachers. She has a strong background in designing and running STEM education programming, importantly with an eye toward innovative evaluation and longitudinal impact.

Gwen is a doctoral candidate in Curriculum and Instruction at New Mexico State University. She is a strong advocate for equity and social justice through public education, finding a particular nexus among language, identity, and STEM education.