

May 11, 2007

NMPMSE Meeting
Natural History Museum

1:00 – Tour of the Museum’s Startup Computer exhibit by Selena

2:00 Convened Partnership meeting

Celia Einhorn – Supercomputing Challenge
Selena Connealy - Museum
Tish Morris - Museum
Claudia Ahlstrom - PED
Mary Jo Daniel - PED
Linda Andrews – NM MESA
Joyce Kaser – Southwest Comprehensive Center
Lisa Solis - RGEC
Diana Orozco - RGEC
Kelly Pekers -UNM
Terry Dunbar - UNM
Tim Aydelott – museum
Jen Tishy – grad student
Clyde Romero - SFIS
Susan Brown - NMSU
Karen Wiburg - NMSU
Richard Nygren – Sandia and APS MSTP
Ana Dozier Enos – SF Indian School
Tom Gruszka - WNMU
Lisa Matthews - NMSU
Kristin Umland - UNM

Tom Bowles – Governor’s Office
Jack Jekowski (Innovative Technology Partnerships)
Barbara Kimbell – UNM, EPSCoR
Patrick Lopez – Executive Director, Explora
Rick Scott – PED – Math and Science Bureau

Later – Tony Begay (Executive Director, NM MESA), XXXXX, Bruce McClure (Sandia)

Tom Bowles – Governor’s Science Plan – PowerPoint will be made available to the Partnership

Science and Technology Plan – Shouldn’t go on the shelf, needs to be dynamic.

- Goals Determine what investments the State can make in S&T to provide significant return to NM in economic development and workforce development (also how do we establish a process so that they don’t have to come back to ask for support year after to year.

- Develop model for how the investments should be made
- Interested in feedback on supercomputing initiative
- Won't talk about energy – but can off line
- EPSCoR requirement for State Science & Technology Plan
- Elements
 - Assessment of issues (SWOT)
 - Elements of investment plan
 - Process for making investments – State Investment model
 - Projected Return on Investment
 - Oversight and accountability processes – feedback to Legislature
 - Request for FY08

Example – nanotechnology not quite ready for investment (Labs agree)

We should be spending \$30M-\$50M per year – this is about what we do right now, but everything is a “one-off”. We really need a core funding model that is sustainable and expected by the Legislature.

- Five areas set up:
 - Aerospace – Chair Casey de Raad (AFTL) – aerospace and space science
 - Bioscience – Gary Resnick (LANL)
 - Energy, Environment and Water – Tom Bowles – making New Mexico the clean energy state
 - Information Technology – Bill Feiereisen (LANL), James Peery (SNL)
 - Nanotechnology (Scott Bryan - MANCEF)
- Two cross disciplinary groups – Economic Development (Stephan Helgesen) and Education (Kurt Steinhaus)
- Two co-chairs for the S&T plan – Bill Flores (higher education) and Rick Scott (PED)
- S&T Core Team – State (Bowles, Charryl Berger, Bill Hume, Kurt, Alan Varela, Roy Soto, Stephan Helgesen), Universities (Van Romero, Vimal Chaitanya, Terry Yates), Labs (Terry Wallace, Rick Stulen), Rural NM (Margaret McDaniel, Jim Fries...), R&D organizations (Garrey Carruthers, Andrew Neighbor), Discipline leaders (James Peery, Bill Feiereisen)

The plan is to flush this out in July and start the rounds with interim committees in the fall. Tom needs help from folks like us to help convey the message of what “science” investment is really all about – sometimes there are big pay offs, sometimes just lessons learned. There are risks in this, no absolute guarantees. Tom hopes to get the Legislature to set up a statute that requires investment in R&D – tech maturation, not early stage development. EPSCoR would be considered to be early stage development. You have to be able to answer the question “how does this help America?” (New Mexico)

- New Mexico Computing Applications Center – Supercomputing – create a magnet for business growth, elevate our Business Profile nationally and internationally. Tom has asked Kurt to look educational elements of the Center. This will be set up as a 501(c)(3) – similar to IAS in Los Alamos. Tom is looking at having 44 gateways around the state. Tom believes that supercomputing is at a threshold that will dwarf what we have seen previously.

Modeling is becoming so sophisticated that you can even do social modeling. Examples – the Boeing 777 – saved \$2B; Procter and Gamble – saved \$1B – Pringles (aerodynamic modeling to stay on conveyer belt), phase dynamics of shampoo, etc.

- Supercomputing Challenge is one way to connect to this.
- IDEAL
- Gateways map –
- One comment – how do we get “all kids” connected into this environment (Karen Wiberg). Tom – you need to start early and have a graded approach to this.
- They are looking at hiring some folks into the Center to come up with educational materials.

Discussion on the national problem of loss of understanding of science by the general public – this drives a need to focus on the more practical aspects of science investment to show results. Question – how do you explain this to the Legislators? Tom – this has been an issue he is trying to deal with. The best way is constant communications with key stakeholders.

Good discussion on the barriers that exist in education to “helping”. Bottom line – Tom is asking us – how can we best help the schools with a Center...what elements can be put into it that will help education. One effort – Senate Bill 211 – 2007 Session – unlicensed content-area experts. What can be done with the Legislature next year to create this.

- Final note - Santa Fe Alliance for Science (<http://www.sfafs.org/>) – founded by Bob Eisenstein in 2004 – now more than 30 volunteers. They are having trouble finding a “home” – various reasons. Tom is trying to better engage them into the Center.

Discussion Items

- Rick Scott – Legislative Session – Math and Science Bureau – official!!! Thanks to NMPMSE.
 - \$2.5M for Summer reading, math and science.
 - High School redesign. Algebra 2
 - American Diploma Project
 - More Math teachers
 - Curriculum for “under-prepared” students
 - Integrated curriculum and dual credit
 - Algebra 1 – 8th grade offer
 - Entrance and exit criteria
 - Two lab courses – online and virtual, lab safety, lab equipment, Science and AYP (federal legislation not yet enacted, but testing will proceed)?
 - Assessment – new HS readiness in G9
 - College readiness test
 - Workplace readiness in G11
 - Portfolios in the future
 - 1 AP or honors course for graduation
 - HB 911 Curriculum Alignment

Discussion of how all of this happens – we can influence it early on by talking with our Legislators, but also now need to help carry this forward and turn this into a silk purse!

Tom Bowles – if you could get only two things accomplished – what would they be?

- Math and Science Advisory Council and Strategic Plan – [Richard Calabro and Cheryl Coyle did not make meeting] – Rick – the plan will be sent out to this group in Draft form for input soon! They need help prioritizing things – they will then send that to Tom Bowles. Mary Jo – think of plan in terms of what the Partnership can do.
- Advance NM – Barbara Kimbell – Exxon Mobil – New Mexico has passed the first hurdle – we are invited to Texas for next round. NM Business Roundtable spearheaded the effort. Twenty-eight pre-proposals – 22 selected to go on, 10 will be selected. Short turn around – will start up September 1st. \$13M over six years. AP expert in Math, Science and English will be needed – full time staff positions. May 22nd is next conference.
- Climate Change Action Group Education and Outreach – Barbara is on the education and outreach committee. Informal science is a key element to this as well. Barbara needs a mega-fauna idea to select.

Updates

- MSP reports – Claudia Ahlstrom – Three contracts awarded (UNM, WNMU, and NMSU)– making great progress – Feds mention New Mexico as the “star”. We have been particularly successful in getting mathematicians involved. Tom G. – summer academy this year with about 45 teachers. Working with principals and districts to understand the culture of K-12. Kristen – conference in Taos – 50 people signed up. Karin Wiburg – moving forward!
- NASSMC Director’s meeting – Website is the best source of information! Rick – very little federal involvement this year – but lots of talk about the NGA and national math and science institute. U-Teach and AP were the buzz of the conference. NASSMC
<http://www.nassmc.org>
- ISEF – Mary Jo Daniel – ISEF starts tomorrow – 1550 kids. Amazing event – plant sciences and life scientists (and behavioral) needed. Public days – Thursday and Friday. Judges needed Tuesday and Wednesday. <http://www.intelisef2007.org> They also need Portuguese and Spanish (technical) interpreters.
- BP (Beyond Petroleum) – Mary Jo Daniel – A-plus for Energy – 247 proposals submitted. More proposals only from California. Final decisions will be made next week - \$500K in New Mexico.
- U Teach Pre-proposal – STEM Success Center – Karin Wiburg – three people wrote in three days. Also Governor Based STEM Center – three partners. NMPMSE will be one of the managing partners. Office at NMSU.

- Announcements – Linda Andrews – Please let NM MESA know if you put them in their proposals – but Thanks!!!
- Treasurer’s report – Selena – We have money! And we also have engaged a CPA to help with paperwork.
- America Competes Act – we are leveraging all the right things in New Mexico to be properly positioned for this, if and when it is actually funded. Bruce – America Teacher Corps will lead to some interesting discussions in the future with respect to the Union issue.
- Next Meeting

Bosque? Perhaps in July or early August.