

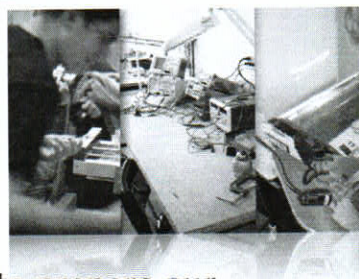
FABLAB* INITIATIVE AT DEMING HIGH



Ron Wolfe
Fred Parker
Dr. Daniel Lere

* - Originated with Center for Bits and Atoms at MIT

Thoughts?



- What is currently done in NM to prepare our students to be career and college ready?
- How are we developing longitudinal school plans that support learners for an ever-changing global and economic landscape?



What is a FabLab?

- Outreach of MIT's Center for Bits & Atoms
 - extension of research into digital fabrication and computation.
- Platform for innovation and invention
 - provides stimulus *for local education* and entrepreneurship.
 - a place to play, create, learn, mentor, invent.
- Who is it for?
 - community of learners, educators, technologists, researchers, makers & innovators - 30 "+" countries, & 24 time zones
 - off-the-shelf, industrial-grade fabrication and electronics tools

FabLab Uses Around the World

- Norway Shepherds created system for tracking sheep using mobile phones
- In Ghana, people made an innovative truck refrigeration system powered by the vehicle's exhaust gases
- In Afghanistan, people fashioned customized prosthetic limbs
- In South Africa a government & business backed project is creating simple internet connected computers to hook up televisions @ cost of just ten dollars each

FabLab, with what ?



Support diverse fabrication activities using compact computer-controlled fabrication tools, to cut, drill, machine, engrave, and slice most non-metallic material:

Laser cutter/engraver, 3D-printer, CNC mill, Vinyl cutter, etc.

Fab Labs also sports Electronics stations: Arduino electronic kits, soldering irons, hand tools for electronics assembly, etc.

Open source software & programs written by MIT



Where to host a FabLab ?

Fab Labs can be installed in any easily accessible room at safety standards, offering enough space to accommodate equipment, users and visitors, in nice comfortable conditions.

Deming Public Schools

- Current use of technology in Deming
- Educational and community use of Fab Lab.
- Expectations for the work force of the future in technology
- Uses of a Fab Lab facility by industries



Deming PS Implementation

- Excellent educational tool:
 - Academic - STEM (Science, Math, ...)
 - Innovation / creativity (Vocational, Art, ...)
 - Scalable and Flexible - Development of "creators"
- Produce "technologically skilled" graduates
 - Meet Economic Development needs
 - Graduates planning Engineering career
 - Vocational - skills highly desired by employers
- Community Usage to Innovate / Invent
- Prestige
 - Relationship with MIT
 - Relationship with other worldwide organizations
 - Early implementer in NM schools and community



Cost?

- Approximate Equipment cost for startup (\$107,000)
- Cost does not include staffing, maintenance, indirect, etc. (\$300,000)
- Where: Grant funding, crowd sources, community/business partnerships, Title 1, etc.
- Availability during non- school hours

