What is the Innovation @ the Edge?


- **Combination of** Makerspace/FabLab/Startup Incubator, Classroom, Seminar Room, Laboratory – Applied work space. Knowledge Creation.

- A **culture (or mindset) of creating new knowledge** using the latest hardware and software.

- Constant **training, workshops, clubs, and events** to build a supportive, interdisciplinary culture.
What is the Innovation Hub?

- Located in the Research Park
- 20K sq ft w/high-end equipment (3D, cutters, wood-working, steel fabrication, etc)
- Separate/same… staffing as Innovation @ the Edge
- Open to all
- Peer innovators on staff/faculty
- Experts available
- Collaborative Learning
- New methods of pedagogy, research and creativity
Stories from our Innovation Labs
Story #1 – Transform a child’s life

ENABLING THE FUTURE

THE RAPTOR RELOADED

The team behind the original Raptor has released the Raptor Reloaded, an updated and re-factored version of the Raptor Hand. The entire device was modeled in Fusion 360, a free CAD tool that can import and export most standard solid body modelling formats such as STEP and IGES. By designing the hand in a tool compatible with numerous CAD packages, we hope to lower the barrier to contribution to the e-NABLE project for engineers and designers. Previously, if a designer wanted to make a small adjustment to a part of a hand, they’d have to rebuild the entire part in their CAD software before they could make the change. Now they can download the source files and just spend their time making the specific change they had in mind. With this new set of source files, we hope to improve the pace of research and development within the design community.
Story #1 – Transform a child’s life
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"Finally having some time to watch the videos and reflect... I am deeply moved. I have been trying to teach my students spatial skills for 10 years now. I have gone from chalk and cardboard refrigerator boxes in the Lloyd Noble parking lot in my first trials to now working with you and using the OVAL platform. The impact on the students this week was immeasurable and the impact on me has been profound.

Professor Elizabeth Pober, College of Architecture
Story #2 – Reshaping Pedagogy

ArtEDGE

Over 50 7th and 8th grade Norman Public School students visited the Fred Jones Jr. Museum of Art, Innovation @ the EDGE in the Bizzell Memorial Library, and the School of Visual Arts at the University of Oklahoma this fall.

ArtEDGE is a collaborative program between the OU Libraries, the Fred Jones Jr. Museum of Art and the School of Visual Arts.
The teacher told us: “I literally smiled so many times hearing my students squeal with delight, sigh with wonder, and literally say out loud that this is the best day of school they have ever had.”
It’s important to reproduce the crime scene accurately for the jurors.
Story #3 – OU College of Law
Story #3 – Cancer Research
Story #3 – Cancer Research
“Your session provided (students) an opportunity to visualize the future development in the technical area, and to evaluate the potential clinical applications of the new display methods. Both your introduction and the lab session are very well-received by students. Your medical image data base is wonderful. Students are happy to be able to “touch” the lung tumor displayed in virtual 3D”

Dr. Hong Liu
Story #4 – Some Lessons learned?

✓ Community needs to experience VR to understand its possibilities:
  • Invite in Deans, Assoc Deans, Dept Chairs first
  • Focus on those with track record of adapting to change or that are new to organization
✓ Use gaming only for quick introductions to the technology
✓ Focus on developing pedagogy and research applications
✓ Support many types of VR, i.e. Oculus Rift, Vive, Google Cardboard, etc.
✓ Don’t charge for supplies for as long as possible (it easily becomes a barrier to usage)
✓ Reach out to student groups, especially women and minority groups for advice on how to make the spaces inviting to them.
✓ Remember, we need to preserve virtual reality systems and associated data!
The End