The Illinois Informatics Institute, along with faculty from Engineering, Fine and Applied Arts, Liberal Arts and Sciences, Media, and Library and Information Science propose to collaborate with UI Extension to replicate Tech Hub Creativity Studios throughout Illinois.

Relevance – Collaborative, community-oriented digital design and rapid fabrication workshops are increasingly recognized as crucial and outstanding contributors to innovation in the fields of art, engineering, business and education. Business leaders and researchers increasingly point to creativity as a key 21st century skill to support problem-solving and innovation (see e.g., Partnership for 21st Century Skills, 2004, [http://www.education.com/ reference/article/Ref\_Creativity](http://www.education.com/%20reference/article/Ref_Creativity); Folkstad & Hayne, 2011, [http://www.computer.org/csdl/ proceedings/hicss/2011/4282/00/01-13-08.pdf](http://www.computer.org/csdl/%20proceedings/hicss/2011/4282/00/01-13-08.pdf); Runco, 2004, “Creativity” *Annual Review of Psychology*, **55**:657-687.) Folkstad & Hayne write “innovation and creativity are at the center of corporate strategy and initiatives and as the engine of technological and economic development.”

Design – Tech Hub is a community-campus interdisciplinary engagement effort based on the C-U Community Fab Lab (http://cucfablab.org), a small-scale workshop for computer-based innovation, design and fabrication. Tech Hub Creativity Studios provide access to advanced digital media for design, building and performance, including computer-aided design, audio/video production, data visualization, and prototype fabrication (e.g., 3-D printing, laser cutting/engraving, and other computer-controlled milling/routing/cutting), and to the people and knowledge needed to creatively engage that technology, including engineers, artists, designers, inventors, and entrepreneurs. Tech Hub faculty and staff will work with Extension staff to 1) design and build mobile creativity units focused on one of 4 themes – electronics/robotics, fabrication, textiles, and gaming/AV recording – to be shared among Extension sites, 2) advise on development permanent Creativity Studios, and 3) develop curriculum to teach the application of the tools in a Creativity Studio. For example, the MineCraft game can be used to teach programming skills, or sustainable farming, or urban design. Game design can be used to teach logical thinking, as well as incorporate fabrication, audio-visual media and programming. Fashion design can incorporate computer-aided design, electronics and textile production.

Anticipated Outcomes – Tech Hub Creativity Studios provide an exploratory design space for community, including youth groups, to collaboratively play, discover, create and test information and digital media technologies, allowing patrons to dream up, design, and create almost anything they can imagine using open source software, digital recording equipment, and DIY (Do-It-Yourself, low-cost) production/manufacturing equipment. In many ways they would form a kind of modern-day inventor’s workshop, continually abuzz with cutting-edge technologies, progressive ideas and passionate people. Specifically, outcomes include mini-workshops based on mobile units, pathways to permanent community-based and operated studios, and curriculum units to be used as tutorials for adults and workshops/camps for youth.

Outreach Strategies – A Creativity Studio is a rich environment where mini-workshops, jam sessions and impromptu interactions result in learning, and where creativity is nurtured and celebrated. Participation of numerous and diverse faculty and staff in this project, coupled with the facilitation expertise of Extension staff, enables the possibility of in-service learning for students to work IN and WITH the communities across Illinois, both physically face-to-face and hands-on, and remotely via video conferencing. Thus the University offers the community not only the technology and information we produce, but the guidance and mentoring required to further creativity and learning, while the community offers new challenges, diverse perspectives, and is the base on which we build the future of Illinois. Studios also complement, and feed into, existing community spaces, such as schools, libraries, and community centers.