

FINAL REPORT FOR THE CENTER FOR DIGITAL INCLUSION 2012-2018

Executive Summary

The School of Information Sciences founded the Center for Digital Inclusion (CDI) in 2011 to foster inclusive and sustainable societies through research, teaching, and public engagement about information and communication technologies (ICT) and their impacts on communities, organizations, and governments. CDI was informed by the pathbreaking work of Prairienet and the Community Informatics Initiative, two previous instantiations of engaged scholarship at the School. CDI provided an intellectual home to a broad sector of faculty, staff and students who worked in this area, bringing together interest in information and society, community informatics and human-centered computing. CDI's portfolio of grants focused on building and operating next generation broadband networks, developing new models of digital and information literacy training, and examining the social and economic impact of ICTs. This report summarizes and highlights CDI's activities from 2012 to 2018, with short sections related to the Community Informatics Initiative and Prairienet and an appendix of administrative and CDI staff.

Overview

The Graduate School of Library and Information Science (GSLIS) began the planning and development of the Center for Digital Inclusion (CDI) in late spring of 2011, with Dr. Jon Gant as founding director. CDI was informed by the path-breaking work of Prairienet and the Community Informatics Initiative, two previous instantiations of engaged scholarship at the School. The Illinois Board of Higher Education approved the Center for Digital Inclusion on October 31, 2012, for a six-year term expiring on October 31, 2018. The Center closed at the end of the fiscal year, June 30, 2018, a decision made in consultation with iSchool leadership, after the 2016 departure of Dr. Gant. Martin Wolske served as interim director of CDI (2016-18), with Sharon Irish serving as acting director (2016-17). The Graduate School of Library and Information Science (GSLIS) became the School of Information Sciences (iSchool) in 2017.

The mission of CDI was to foster inclusive and sustainable societies through research, teaching, and public engagement about information and communication technologies (ICT) and their impacts on communities, organizations, and governments. CDI provided an intellectual home to a broad sector of faculty and students who worked in this area, bringing together interest in information and society, community informatics and human-centered computing. The Community Informatics Research Lab, co-directed by Kate Williams and Abdul Alkalimat, also operated within CDI's purview. CDI's portfolio of grants focused on next generation broadband networks, development of new models of digital and information literacy training, and examination of the social and economic impact of ICTs.

CDI also contributed to the iSchool teaching mission by providing instruction for the Community Informatics (CI) certificate and administering the certificate awards for MS students. The CI certificate, which was non-transcriptable, was discontinued in 2017.

CDI supported and expanded many public engagement activities. The arc of CDI's mission and work reached back to 1993 with the launch of Prairienet, and continued through grant-funded efforts like the Community Networking Initiative (CNI) and the Community Informatics Initiative (CII). The staffing of CDI varied over its term, largely depending on grant funds.

GSLIS/iSchool provided significant support to CDI, which in turn helped develop grant proposals.¹

This report summarizes CDI's activities and impact from 2012 to 2018, with brief sections related to CII and PrairieNet and an appendix of administrative and CDI staff.

Key Grants

Information is presented in reverse chronological order.

US Ignite/Smart Gigabit Communities (SGC)

US Ignite/National Science Foundation (US Ignite was awarded a NSF Cooperative Agreement CNS-1531046), 2016-18, \$30,000/year plus \$25,000 gigabit application start-up funding; Jon Gant, then Martin Wolske, then Tracy Smith, PI's Champaign-Urbana was one of the original 15 sites for U.S. Ignite partnerships, with CDI serving as liaison to Urbana-Champaign Big Broadband (UC2B) for US Ignite funding and projects. Until 2017, CDI served as the principal investigator and lead organization for the US Ignite/NSF subaward for the 3-year project called "Sustainable Ecosystem of Smart Applications" (SESA). In 2017, Tracy Smith, Director of Research IT in Technology Services at the University of Illinois, became principal investigator on this grant, although the technical lead, Chieh-Li (Julian) Chin, continued serving as the tech leader on the project and remained a CDI staff member. The goal of the project was to assemble and jump-start a growing and sustainable ecosystem of gigabit testbeds and corresponding applications. The research team participated in a series of local, regional, and national meetings and conferences (including but not limited to US Ignite Annual Application Summit; Midwest Big Data Hub Smart, Local, Resilient Workshop; Regional Neighborhood Network Conference; Illinois Data Science Initiative Community Engagement Working Group; iSchool Research Showcase) as well as reached interested groups in the community, identified existing gigabit apps and apps in the development pipeline, provided collaboration opportunities among researchers and community members, and showcased SGC efforts in our community. A Student Application Development Contest was held to award undergraduate innovators with mentoring and travel funding support. Analee Paik won the award for her proposal, "Jargon," for a medical term translation app.

The team also worked closely with Lisa Bievenue, the lead on Virtual DILP (Digital Innovation Leadership Program). Virtual DILP helped develop a network of living laboratories among community anchor institutions, including schools and libraries throughout the state for training students and practitioners to build capacity for organizations to provide digital literacy training to the public, particularly in underserved communities. The project provided start-up funding to Virtual DILP to build a proof-of-concept communication tool that supports training and education among multiple sites in real-time.

The team connected researchers at the University with U.S. Ignite and introduced them to funding or presentation opportunities from US Ignite. The "TEEVE" and "4CeeD" project led by Dr. Klara Nahrstedt, and the "AirVR: Virtual Intubation Simulator" led by Dr. Thenkurussi Kesavadas, the Director of Health Care Engineering Systems Center, have been featured or demonstrated on the US ignite website or at the US Ignite Application Summit.

The team partnered with Midwest Big Data Hub, City of Champaign, and HackIllinois to organize the Smart Gigabit Application Reverse Pitch event that sought proposals to use

¹In FY 12, GSLIS provided \$122,800 as a bridge fund to CDI. Then these amounts were provided: FY13: \$250,000; FY14: \$200,000; FY15: \$125,000; FY16: \$125,000; FY17: \$125,000; FY18: \$75,000

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open municipal data to solve socio-technical community challenges. The event was co-located with the annual HackIllinois event that attracted more than 800 student developers. 15 teams submitted project ideas to the reverse pitch event and 3 were awarded.

Digital Innovation Leadership Program (DILP)

Office of the Provost and College of ACES (Extension), 2015-2017, \$299,000,
Jon Gant, PI

With a campus wide team, Digital Innovation Leadership Program (DILP) developed a new model for digital literacy training and partnered with the University of Illinois Extension Service to support workforce development in emerging skills to support digital fabrication and additive manufacturing, digital media production and data analytics to scale the model state-wide. This grant provided computer access to over 15,000 visitors and training for approximately 4,526 people.

Gadget Garage

IL Sustainable Technology Center (ISTC), 2015-17, \$12,500, Martin Wolske, PI
CDI was a Co-PI for the Illinois Gadget Garage grant with ISTC

<http://www.sustainelectronics.illinois.edu/research/gadgetgarage.cfm>.

Martin Wolske served as the Project Leader with Joy Scogrum from ISTC.

The Gadget Garage also partnered with the UI School of Art and Design. Funded by the UI Student Sustainability Committee, this project launched a collaborative repair center for student- and staff-owned electronic devices in order to extend the useful life of products; provided experiential learning for students through associated classes, volunteering, and participating in the iFixit Technical Writing Project; and empowered people to see do-it-yourself repair as a viable option for addressing minor damage and performance issues.

Digital Literacy for All (DL4ALL)

IL Department of Commerce and Economic Opportunity, 2014-15 (due to the state budget impasse, the grant was canceled on March 31, 2015), \$108,000, Martin Wolske, PI

This project worked closely with community centers, both Champaign and Urbana libraries, and Unit 4 (Champaign) schools to provide digital literacy training and to train iSchool students to be future digital literacy training leaders. In the first nine months of the project, grant funding supported 14,364 people for general computer access, the majority of whom did not have home computer access. DL4All provided innovative digital literacy training to 909 unique individuals meeting their self-defined literacy needs in flexible sessions ranging from 20 minutes to day-long workshops. Community partners included Champaign Public Library; Kenwood Elementary, Champaign; Tap-In Leadership Academy; The Urbana Free Library; and the Urbana Neighborhood Connections Center.

Evaluation of the American Library Association News Know-how Program

American Library Association, 2012-14, \$89,697, Jon Gant, PI

CDI evaluated the two-year News Know-how news literacy project, an American Library Association (ALA) effort conducted in 2012 and 2013 by the ALA's Office for Intellectual Freedom (OIF) using grant funds provided by the Open Society Foundations. The evaluation team studied the impact of work with librarians, journalists, news ethicists and students nationwide. According to the ALA, "Using libraries as 'newsrooms,' high school students were taught how to engage in a nonpartisan, critical analysis of news and information." Community partners included YouMedia, Chicago; Oak Park (IL) Public Library; Iowa State Library Association; San Antonio (TX) Public Library, main branch; and San Jose (CA) Public Library, Hillview branch.

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MixITUp! Youth Advocacy Librarianship

Institute of Museum and Library Services, 2011-2014, \$904,314, Rae-Anne Montague, PI
MixITUp partnered master's students in the Graduate School of Library and Information Science (GSLIS) with the Champaign County Juvenile Detention Center, Don Moyer Boys and Girls Club, Peer Ambassadors, TAP In Leadership Academy, the UP Center, the Urbana Free Library, and the Urbana Neighborhood Connections Center on this three-year collaboration to advocate with and for youth in the LIS profession and in our communities. This program involved experiential learning, emphasized youth advocacy, and worked closely with underserved local youth on multiple literacies.

Urbana-Champaign Big Broadband

National Telecommunications and Information Administration (NTIA), 2012-13; sub-award for canvassing of targeted neighborhoods in preparation for implementation, \$454,000, 2012-13, Jon Gant, PI

CDI partnered with the University of Illinois Office of Network Management to support an internet service provider startup, UC2B. UC2B is a University of Illinois-led intergovernmental consortium that received a \$30 million Broadband Technology Opportunity Program grant to construct a 187-mile fiber-optic broadband network infrastructure providing gigabit speed Internet access serving households and community anchor institutions in Urbana-Champaign, IL, one of the first in the United States. The above-ground work to establish social infrastructures continued well beyond the grant-funded period. Dr. Gant was director of Urbana-Champaign Big Broadband (UC2B) Operations; CDI assisted the UC2B agency in maintaining and expanding its services. A \$22 million federal infrastructure grant from NTIA awarded in 2012, supplemented by \$8M state funds and support from local partners, enabled the construction of a fiber-optic broadband network. With UC2B, CDI led initiatives to develop a digital inclusion strategy for our communities through access, adoption and application development. Key CDI contributions were canvassing and enrolling low-income residents in 11 census tracts for internet services; negotiating with two different private partners to run the expansion of the fiber to other properties; and conducting research on broadband adoption and use by community anchor institutions and residents.

Strategies for Sustainable Broadband in Illinois: The Case of UC2B

Partnership for a Connected Illinois, 2012-13, \$57,009, Jon Gant, PI

CDI partnered with the Partnership for a Connected Illinois, also known as "Broadband Illinois," to evaluate the impact of the UC2B project. The evaluation helped to inform the broadband community about developing strategies to deploy and adopt high-speed internet services around the United States. The report shows that "Champaign now has Gigabit and 10-Gigabit connections between its facilities, and its annual recurring cost for fiber maintenance is less than the leased T-1 lines that the fiber replaced. Its internal bandwidth between its buildings is now 600 times greater than before. Now that the City has fiber between its buildings, it has further saved money by consolidating backup and disaster recovery services."

Gant, et al. (October 31, 2014) "Strategies for Sustainable Adoption: The Case of UC2B"
Partnership for a Connected Illinois Final Report

Inclusive Gigabit Libraries: Learn, Brainstorm and Discuss

Institute of Museum and Library Services, 2012-13, \$99,168, Jon Gant PI

CDI partnered with the American Library Association and U.S. Ignite on this continuing education project to raise awareness about next generation networks and how libraries

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might participate in U.S. Ignite initiatives. Jon Gant went to California sites in Santa Monica and Silicon Valley to conduct interviews with librarians and officials.

Strategies for Building Digital Communities through Stakeholder Alignment

April 2013-October 2013, UI Research Board, OCLC Department of Digital Inclusion (Dublin, OH; Angela Siefer), \$1,513, Jon Gant, PI

Gant and Siefer modified a stakeholder alignment process and analysis developed and tested by Joel Cutcher-Gershenfeld, Mark Nolan, Michael Haberman, and others of the University of Illinois at Urbana-Champaign through research funded by the National Science Foundation (NSF-VOSS EAGER 0956472, “Stakeholder Alignment in Socio-Technical Systems” and NSF SciSPR-STO-OCI-INSPIRE 1249607, “Enabling Transformation in the Social Sciences, Geosciences, and Cyberinfrastructure”). Building Digital Communities: Pilot is an OCLC project supporting and documenting the work of nine pilot communities to increase the access and use of digital technologies. The work is based upon *Building Digital Communities: A Framework for Action* created by IMLS, the University of Washington and the International City/County Management Association (ICMA). The Framework is designed to engage all sectors—libraries, city/county managers, community-based organizations (CBOs), and other stakeholders—to form coalitions and make strategic decisions to increase access to broadband and adoption of digital technologies. A project also was developed in Dodge City, KS.

Sowing Seeds

IL Department of Commerce and Economic Opportunity, July 2012-June 2013, \$116,457, Jon Gant, PI

The Sowing Seeds project established a new community technology center (CTC) in Danville, Illinois, and expanded basic training to this and four existing CTCs in Champaign-Urbana and East St. Louis, Illinois. The grant allowed for expansion of advanced digital media training focused on the development of skills necessary to meet the NETS standards of the International Society for Technology in Education (ISTE). Community partners included The Urbana Free Library; Shadow Wood, Champaign; Salt and Light, Champaign; Green Meadows Community Library, Danville; and Mary E. Brown Center, East St. Louis.

Key Teaching Activities

Jon Gant visited Universidad del Turabo (Gurabo, Puerto Rico) in December 2012 (with Ann Bishop, Rae-Anne Montague, and Diana Stroud); Martin Wolske visited Universidad del Turabo in March 2012 (with six GSLIS students and Rae-Anne Montague).

Jon Gant served as advisor to the Department of Commerce, NTIA, Virtual Internship Program. He supervised 4 MS students through an independent study who examined broadband adoption and building a data repository prototype. The project team included 2 on-campus and 2 distance-learning students. The virtual internship is a model of how to offer these types of internships for students.

Martin Wolske has regularly taught Introduction to Networked Systems, Community Engagement, Community Informatics Studio, Informal Learning Spaces and Pedagogies, and other CDI-related courses, both online and on-campus.

CDI supported Sharon Irish’s FemTechNet facilitation and coordination (2013-18) as well as video dialogue production about Women, Information Technology and Scholarship (WITS)

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and another on Bodies with Karen Flynn and Dorothy Roberts (2013), and transcription of video dialogues for use in Distributed Open Collaborative Courses (DOCCs).

Through grants and iSchool funding, CDI supported a significant number of students in RA, GA, and hourly appointments. Many of the GA students were PhD students in the Information and Society program at the School of Information Sciences. Seven of the GA's earned their PhDs and are now tenure track faculty at leading schools nationally. Other PhD and graduate students also work at leading companies including Facebook or are tech entrepreneurs.

Selected Engagement Activities

Sharon Irish and Martin Wolske assisted in the development of the UC2B Community Benefit Fund, an idea in development by community leaders since the inception of the UC2B agency. Initial grants were disbursed in 2018.

CDI helped launch the weekly "CU Hack Night" that began in January 2017. For a time, the gatherings averaged 20 people per evening, with the "Ground Zero" innovation space donated for use by Parkland College. cuhacknight.org

Martin Wolske's courses have frequently involved community partners in and outside of classes in Champaign-Urbana, other parts of central Illinois, and East St. Louis in furtherance of digital inclusion and equity. He is also a member and CDI representative of the coordinating committees for the Community Informatics Research Network conference and the Outreach and Engagement Practitioners Network workshop held as a pre-conference for the Engagement Scholarship Consortium conference. Martin Wolske also served on the Champaign Public Library Board of Trustees, 2014-2016 (as president, 2015-2016).

Starting in 2016, Jon Gant was deeply involved in the strategic planning of the Research IT Portal, a key component of the campus research service model to provide researchers and IT professionals information about available IT resources and services. In July 2016, Chieh-Li (Julian) Chin began to help design and develop the portal.

With Partnership for a Connected Illinois (Laura Lane), CDI began co-hosting the Chicagoland Broadband Communities MeetUp in February of 2014. These regular meet-ups served to build ties to various organizations in Chicago in support of future projects and networking.

In 2013, CDI provided partial support for the Rose & Taylor Barbershop mural on North First Street in Champaign, an installation about local history using augmented reality via a downloadable app. <http://www.news-gazette.com/news/local/2013-12-12/past-present-future-together-rose-and-taylor.html>

Miriam Sweeney was hired to collect and frame strategies related to diversity, inclusion and leadership and produced a report in July 2012 (see IDEALS: <http://hdl.handle.net/2142/100860>)

Jon Gant convened three "Engaged GSLIS" meetings (May 17, May 30, and June 20, 2012), which in turn created several subcommittees to address how best to connect with

community partners and students. CDI was also an instigator of the School's Task Force on Inclusion, formed in January 2012, which then became a standing committee on diversity.

In 2011 UC2B hired fifteen Community Ambassadors to canvass targeted neighborhoods for interest in broadband service, supervised by CDI coordinator LaEisha Meaderds.

Through grant- and course-related projects, CDI faculty, staff and students worked with the Champaign County Juvenile Detention Center, Champaign-Urbana Area Project, Don Moyer Boys and Girls Club, Dream Girls Academy, Ghetto Genius, Tap In Leadership Academy, Urbana Neighborhood Connections Center, WILL Radio and TV, local school districts and libraries, and FemTechNet.

...[T]here is certainly a lack of cross-fertilization across campus units...and it would be great to somehow incorporate (or at least track) the activities of other campus units. In the end I think it would help our community partners immensely.... I think one part of community engagement should be enabling community partners to tap into University resources, and not just one department's resources.

~Noah Lenstra, iSchool student leader, December 2009 (used with permission)

Setbacks and Challenges

CDI experienced a significant challenge in 2015, the first year of the State of Illinois' budget impasse (which continued through 2017.) The Department of Commerce and Economic Opportunity suspended CDI's grant, Digital Literacy for All, on March 31, 2015. Suspension of funding disrupted training for many individuals. This grant supported 4.5 FTEs through a team comprised of a project leader, technology specialists, and training staff. CDI had to absorb the GA funding for four students by using money set aside to hire a CDI coordinator.

The changing funding landscape combined with reduced staff and departing faculty, meant that the proportion of effort put into grant writing was not compensated by successful proposals. Further, even successful grants rarely provided sufficient resources to do the tasks necessary to fulfill the grant objectives.

Community Informatics Initiative (CII; 2007-11)

Community informatics (CI) is the field of study and practice devoted to understanding how information processes and technologies help communities achieve their goals.

Understanding that community-based opportunities were not limited to library and information science, GSLIS sought and received funding from the Office of the Provost to run a seed-grant program open to faculty anywhere on campus, encouraging them to build on more than fifteen years of community relationships and pilot research that could be externally funded, or to develop courses that could bring students into contact with communities in Illinois and elsewhere.² With that funding, the Community Informatics

²Approximate amounts of support received from the Provost: 2008: \$160,000; 2009: \$230,000; 2010: \$230,000; 2011: \$195,000. Portions of these funds supported programming at the Puerto Rican Cultural Center in Chicago. Seed funds were awarded to the following people: Paul Adams, Ian Brooks; Ricardo Diaz; Rae-Anne Montague (with Joe Coyle); Cris Mayo, Dale Bauer and Michael Burns; Robert Motl (with Douglas Smith); Madhu Viswanathan (with Barry Pittendrigh, Julia Bello-Bravo); Shevon Harvey; Chris Fennell; May Berenbaum (with David Forsyth, George Reese, and Meadow Jones); Will Patterson; Steven Notaro; Ruth Nicole Brown; Lynne Dearborn; Rebecca

Initiative was created in 2007. Also, apart from this funding but with support from the Provost, two full-time (Jon Gant, Kate Williams) and one half-time (Abdul Alkalimat) faculty were hired by GSLIS in 2007 to build curriculum and research in community informatics (CI). Caroline Haythornthwaite, a professor of social informatics in GSLIS, served as co-director with Ann Bishop Peterson-Kemp from 2007-10; Sharon Irish served as interim director of CII in 2010-11.

The seed funds, combined with two large grants from the Institute of Museum and Library Services (IMLS), enabled CII to be a catalyst for research, curricular and engagement activities on- and off-campus. Graduate students started and nurtured the Community Informatics Club, members of which organized community-based projects locally and across the state; presented and published papers on-campus and at national conferences; and received a TIS Bookstore grant to fund computer equipment and training.

Key Grants

Equipping Citizen Journalists: Establishing Community Newsrooms in North Champaign and East St. Louis

UI Office of Public Engagement, 2011-2012, \$15,000, Martin Wolske, PI
Community partners included Salt and Light, Champaign; Shadow Wood, Champaign; Mary E. Brown Center, East St. Louis; East St. Louis Park District.

Community Informatics Corps (CIC)

Institute of Museum and Library Services, 2007-11, \$996,243, Ann Bishop (now Ann Peterson-Kemp) and Bertram (Chip) Bruce, co-PI's. Final report in IDEALS:
<http://hdl.handle.net/2142/28564>

CII expanded and enhanced its pilot Community Informatics Corps (CIC) master's program. The aim of the CIC was to recruit and mentor a group of Latinx, African-American, and other students interested in the experiences of underserved groups in society who are eager for a career that gives them the opportunity to contribute to their communities. Students in the CIC focused their coursework on social entrepreneurship and community library and information services; they learned to create innovative information services implemented within and across a range of community-based and public interest organizations. A non-transcriptable certificate in community informatics was proposed and approved in 2008, and discontinued in 2017.

Among other projects, this grant supported teaching and research on Paseo Boricua in Chicago, with the Puerto Rican Cultural Center (PRCC). The Community as Intellectual Space symposium, which was begun in 2005, was enlarged and held annually through 2011 in Chicago in partnership with PRCC.

Youth Community Informatics (YCI)

Institute of Museum and Library Services, 2007-11, \$788,895, Ann Bishop (now Ann Peterson-Kemp) and Bertram (Chip) Bruce, co-PI's. Final report is in IDEALS:
<http://hdl.handle.net/2142/28563>

CII and the University of Illinois Extension's statewide 4-H network partnered to reach youth and youth leaders with engaging, educational activities to recruit underserved youth into Library and Information Science (LIS). Five Illinois communities—Champaign-Urbana,

Ginsburg; Sarah McLafferty; Stacy Harwood; Annie Abbott; John Kindt; Christian Sandvig; Deana McDonagh; Lissette Piedra; Abdul Alkalimat (Gerald McWorter); and Kate Williams.

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Chicago, Danville, East St. Louis, and Rockford—with a high concentration of minority, low-income, and English-language-learner populations piloted the program. Junior high and high school youths participated in a variety of activities designed to give them familiarity with a range of information science topics, and a variety of LIS careers. The curriculum was published as *Community as Curriculum*, available in IDEALS:
<http://hdl.handle.net/2142/29967>

Community partners included Peer Ambassadors, Champaign; TAP In Leadership Academy, Champaign; Teen Tech Team, East St. Louis and the Urbana Free Library, in addition to 4-H partners. Bruce, Bishop and Budhathoki edited essays drawn from the YCI project, *Youth Community Inquiry: New Media for Community and Personal Growth* (Peter Lang, 2014).

Developing A New Interdisciplinary Community-engaged CI Studio Course

iCUBED, 2009-2010, \$9,892, Martin Wolske, PI

Community partner was the Mary E. Brown Center, East St. Louis. As a result of this work, studio pedagogy is now emerging in information science curricula around the world.

Developing an International CI Studio Course

UI Office for International Programs and Studies, 2009, \$2,000, Martin Wolske, PI

Community partner was StepUp, São Tomé and Príncipe, Africa

CTC Development and Training

IL Department of Commerce and Economic Opportunity Eliminate the Digital Divide Grant Program, 2008- 2009, \$55,000, Martin Wolske, co-PI with Paul Adams. Community partners included Prairienet, Champaign-Urbana; Teen Tech Team, East St. Louis; Community Concepts, East St. Louis; Mary E. Brown Center, East St. Louis; Eagles Nest, East St. Louis.



Prairienet was an early "freenet," launched in 1994. The first paid director of Prairienet was Martin Wolske (1997-99); Paul Adams became director in 1999, through 2008. In 2000, the Urban League of Champaign County along with Prairienet implemented the Community Networking Initiative (CNI) to address Champaign-Urbana's "digital divide." This effort included conducting over 500 interviews and holding a number of focus groups in low-income communities. The resulting information indicated a strong need for a sustained program providing technology support and assistance. After a robust life of 15 years, dialup and web-hosting services were phased out in 2008, given the availability of other options.

In 2015, the Center for Digital Inclusion worked with Sally van der Graaff, an alum of the iSchool, to produce a white paper on the legacy of Prairienet, "Digital Participation and the University of Illinois: Prairienet, Community Informatics, UC2B & CDI," which is available in IDEALS: <http://hdl.handle.net/2142/100861>

Stakeholders

The Center for Digital Inclusion and its antecedents had an extensive network of people and groups on- and off-campus with which it had generally productive collaborations. These groups included: undergraduate and graduate students in and outside of the iSchool, faculty in and outside of the iSchool, units on campus such as the Academy for Entrepreneurial Leadership, Center for Democracy in a Multiracial Society, Center for Global Studies, Center for Teaching Excellence/CITL, CITES, Cultural Heritage and Museum Practices Collaborative, the East St. Louis Action Research Project (and its variants), the Ethnography of the University Initiative, Extension, Illinois Informatics Institute, Latino Partnership of Champaign County, National Center for Supercomputing Applications, Office of International Programs, Office of the Vice-Chancellor for Public Engagement, UI cultural houses and area studies, WILL Radio and TV, local and statewide non-profits, state, city and county governments and their programs, grassroots organizations, public libraries, public schools, health clinics and hospitals, NGOs and government officials in São Tomé, West Africa. CDI was also involved with national and international organizations such as the American Library Association, Association of Internet Researchers, Association for Library and Information Science Education, the Community Informatics Research Network, CTCNet, the Engaged Scholarship Consortium, Imagining America, National Digital Inclusion Alliance, and Schools Health and Libraries Broadband Coalition.

Final Products

In the final months of CDI, Martin Wolske and Sharon Irish worked together to support several projects:

- On April 17, 2018, Martin Wolske, Barbara Jones, CM! Winters, Emily Knox, and Colin Rhinesmith organized and presented a half-day pre-conference workshop, “New Ways of Thinking about Digital Equity,” at the Net Inclusion conference. Almost 50 people attended.



L to R: Emily Knox, Barbara Jones, CM! Winters, Colin Rhinesmith and Martin Wolske in Cleveland, OH, at the Net Inclusion conference

Discussion questions for the workshop included: What are the implications of your information access policies? What are some ways to break the cycle of information poverty? How might we emphasize the human rather than the technological aspects of digital equity?

- Funds were provided to Madhu Viswanathan (Business) to create video modules on financial literacy with Extension. CII also supported Viswanathan’s work in the past;

- Money was transferred to the Illinois Informatics Institute to work with Will Patterson to upgrade the HipHop Xpress, a mobile sound studio and classroom, which was supported in the past by CII;
- A short video dialogue about campus-community engagement with Sharon Irish and Sally Carter (of Tap In Leadership Academy) was filmed, edited, and produced by Kate LaBore (available by September 2018);
- Martin Wolske and Henry Grob with a small team of other editors revised and installed the book, *The Person-Centered Guide to Demystifying Technology*, on Press Books.

Takeaways

The past 25 years (1993-2018) of Prairienet/CII/CDI offer some takeaways that seem worthwhile to keep in mind as the School develops new and/or altered ways of engaging with local communities. Of course, context and location matter, and there are other good ideas waiting for development as well. A selection of strategies that worked reasonably well include:

- Delivering courses in which students receive credit for work done in communities at the invitation of community partners (i.e., setting up computer labs in beauty shops, churches, libraries)
- Using grant funds to support travel to conferences by community partners to co-present with staff/faculty/students
- Making small-to-medium-sized grants to projects that community partners identify as needing support, often in tandem with student engagement (\$500-\$15,000)
- Establishing a Community Engagement Fund in which donors recognize that their gifts to the School may be used off-campus for community-based projects (like purchasing paint) <http://ischool.illinois.edu/giving/funds>
- Assigning graduate students to a particular organization or group with which they work for at least a semester, preferably a year. A grant pays the student a stipend and the partner receives a 20-hour-a-week worker.
- Arranging for meeting space and/or wifi connectivity for community partners to use on campus, without cost
- Offering a course rubric (Community Informatics Studio) that serves as a quick way to organize a class around a current or urgent need in the community, which students can take according to their skills and interests
- Having one or two permanent staff who can “match” groups and courses as well as coordinate research interests in relation to local needs
- Compensating community partners for their time and wisdom, as well as co-authoring publications with them
- Leveraging contacts and funds from different sectors to fund a project, either internally (on campus) or a combination of grant funds, in-kind contributions, cross-unit collaborations, and off-campus sources.

Those involved in community engagement efforts must accept and learn from mistakes as well as name and confront current entrenched power structures that do not serve us well. Not all students are suited to community work; many organizations do not have the time or structures to accommodate student placements. Frequent check-ins and staff continuity are crucial. Participants must also reflect on: who benefits? Who does not benefit? Why? What can be done?

Some general premises about engagement:

- A multiplicity of approaches is needed and desirable, while recognizing that work in coalitions can amplify smaller efforts and strengthen shared priorities. At times, coalitional work requires sitting with discomfort and certainly learning and practicing conflict management.³
- University engagement with publics needs to evaluate not only the immediate financial costs and benefits, but also the costs and benefits to morale, resource use, and credibility, short- and long-term.
- “Nothing about us without us is for us,” a slogan with a long history among activists, must guide responsible research with community members.

This final report was written by Sharon Irish, with suggestions from Chieh-Li Chin, Jon Gant, Linda Smith, and Martin Wolske. It does not represent the opinions of the School of Information Sciences or of those who provided welcome input.

³Conflict management/resolution **must** include memories of past events; conflicts that have not been resolved and wounds that continue to fester (cf Ahmed, *On Being Included*: <https://www.dukeupress.edu/on-being-included>; Chatterjee and Maira, eds. *The Imperial University: Academic Repression and Scholarly Dissent* [2014]); Viet Nguyen, <https://vietnguyen.info/2013/just-memory-war-and-the-ethics-of-remembrance>

APPENDIX

Organizationally, the Center for Digital Inclusion was one of four research centers at the School of Information Sciences, including the Center for Informatics Research in Science and Scholarship (CIRSS); the Center for Children’s Books, and the Hathi Trust Research Center. These centers report to the Associate Dean for Research, who in turn reports to the Dean of the School.

Center for Digital Inclusion Leadership and Staffing	
Dean’s Leadership Team	
	John Unsworth (Founding Dean for Center for Digital Inclusion, 2003-2012)
	Allen Renear (Dean, 2012-Current)
	Stephen Downie (Associate Dean for Research, 2012-Current)
	Linda C. Smith (Executive Associate Dean/Associate Dean for Academic Programs, 1997-Current)
Center for Digital Inclusion Leadership Team	
	Jon Gant (Director, 2011-2016)
	Chieh-Li Chin (2011-2018)
	Sharon Irish (2011-2018)
	Martin Wolske (2011-2018)
	Executive Assistants LaEisha Meadards Shavion Scott Susan Lafferty
Faculty and Campus Affiliates	
	Paul Adams Abdul Alkalimat Lisa Bievenue Catherine Blake Bertram “Chip” Bruce Nicole Cooke Joel Cutcher-Gershenfeld Leah Davis Dave Dubin Les Gasser Jeff Ginger Elizabeth Hoiem Brant Houston Emily Knox Laura Lane Jerome McDonough Rachel Magee Rae-Anne Montague Ann Bishop Peterson Kemp Dan Schiller Tracy Smith Mike Twidale Kate Williams

Research Affiliates	
	Adrian Brown
	Jarai Carter
	Marisa Elena Duarte
	Christy Glaze
	Chris Hamb
	Corey Jackson
	John Kersh
	Noah Lenstra
	Kinyetta Nance
	Safiya Noble
	Mark Nolan
	Jacqueline Oquendo
	Kirstin Phelps
	Colin Rhinesmith
	Sarah Roberts
	Roxana Ryan
	Angela Siefer
	Sunah Suh
	Miriam Sweeney
	Aiko Takazawa
	LaTasha Velez