quello center

MEDIA & INFORMATION POLICY

2023-2024
ACADEMIC YEAR
ACTIVITY REPORT

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Mission

Named after the late James H. and Mary B. Quello, the Quello Center is one of the leading U.S. academic centers in communication, media, and information policy. Our work examines the interactions between technology, policy, and society at the level of individuals, communities, and society. We collaborate with practitioners to translate rigorous academic research into the design and implementation of better information policy and governance. The Center's interdisciplinary research draws from multiple empirical methods and multi-disciplinary theoretical perspectives. The Center is based in the Department of Media and Information at Michigan State University (MSU). It consists of a core set of researchers, complemented by research associates across MSU as well as other U.S. and international universities and research centers.

Research Areas

	ICTs & society	Interactions of ICTs and society, e.g., social media use and self-esteem; information seeking and COVID-19 beliefs; community impacts of ICTs.
	Digital equity and inclusion	Several projects focus on broadband access and quality, digital skills, and barriers to use, across rural and urban communities, to inform decisions aimed at narrowing digital divides.
	Governance of emerging technologies	Roles of policy in harnessing the benefits of emerging technologies (e.g., 5G, 6G, IoT, AI), public interest innovation, responsible innovation.
	Platform and Internet policy	Our work covers a range of themes related to renewed efforts to design policy frameworks for digital platforms, to revisit Section 230, and to address the market power of big tech.
	Information security	With researchers in computer science and criminal justice we explore the economic, legal, behavioral, technical and policy aspects of cybersecurity.
	Foundations of information policy	Work in this area develops foundational knowledge informing policy responses to challenges such as digital platform power, privacy, surveillance, data ethics, and the governance of AI.

Advisory Board

Leadership Team

Johannes M. Bauer, Director (on leave until December 2024 on a tour of duty as Chief Economist of the Federal Communications Commission)

Keith N. Hampton, Interim Director and Director of Academic Research

Ashley Wilson, Event & Project Coordinator

Quello Center Research Fellows and Associates

Senior Scholar

Sandra Braman, *Scholar and Professor, Department of Media and Information, MSU*

Research Fellows

Young Anna Argyris, *Associate Professor, Department of Media and Information, MSU*

Ava Francesca Battocchio, *Ph.D. Student, Information and Media, MSU*

Grant Blank, *Survey Research Fellow at the Oxford Internet Institute and Senior Research Fellow of Harris Manchester College, UK*

Adam D. Candeub, *Professor, College of Law, MSU*

Shelia R. Cotten, *Associate Vice President for Research Development, Clemson University, Clemson, GA*

Pierrette Renée Dagg, *Director of Technology Impact Research for Merit Network, Inc.*

William H. Dutton *Professor Emeritus at the University of Southern California, Senior Fellow, Oxford Internet Institute (OII) and former Quello Center Director*

Gabriel Hales, *Ph.D. Student, Information and Media, MSU*

Jean Hardy, *Assistant Professor, Department of Media and Information, MSU*

Thomas J. Holt, *Professor, School of Criminal Justice, MSU*

Megan L. Knittel, *Assistant Professor and Research Associate, Department of Media and Information and Quello Center, MSU*

Boram Lee, *Ph.D. Student, Information and Media, MSU*

Elizabeth Mack, *Professor, Department of Geography, MSU*

Lesedi Senamele Matlala, *Doctoral Candidate, University of Johannesburg, South Africa*

Angie Nam, *Doctoral Student, Information and Media Ph.D. program, MSU*

Jonathan A. Obar, *Assistant Professor, Department of Communication Studies, York University, Toronto, Canada*

Tiago S. Prado, *Consultant, Digital Development, Inter-American Development Bank, Washington, DC*

Bianca C. Reisdorf, *Associate Professor, Department of Communication Studies University of North Carolina at Charlotte, NC*

Colin Rhinesmith, *Founder and Director of the Digital Equity Research Center at the Metropolitan New York Library Council*

Craig T. Robertson, *Postdoctoral Research Fellow, Reuters Institute, University of Oxford, UK*

Arun Ross, *Professor; John and Eva Cillag Endowed Chair in Science and Engineering; Site Director, Center for Identification Technology Research, MSU*

Ruth J. Shillair, *Research Fellow, Assistant Professor and Director of MA Studies, Department of Media and Information, MSU*

Inyoung Shin, *Lecturer, Department of Computer Science, Yale University*

Volker Stocker, *Head of Research Group, Weizenbaum Institute for the Networked Society, Berlin*

Steven S. Wildman, *Professor Emeritus, Michigan State University; former Director of the Quello Center; Senior Fellow with the Silicon Flatirons Center and a Visiting Scholar with the Interdisciplinary Telecommunications Program, both at the University of Colorado, Boulder, CO*

Research Associates

Barbary A. Cherry, *Professor, Indiana University, Bloomington, IN; Former Quello Center Associate Director*

Stephanie Jordan, *Assistant Professor, Department of Media and Information, MSU*

Natascha Just, *Professor of Communication, University of Zurich, Switzerland*

Tai-Quan "Winson" Peng, *Associate Professor, Department of Communication, MSU*

Gary Reid, *Distinguished Senior Academic Specialist Emeritus; former WDBM-FM and WKAR Manager*

Whisnu Triwibowo, *Associate Professor, University of Indonesia, Jakarta, Indonesia*

Arnold Weinfeld, *Interim Director of the Institute for Public Policy and Social Research (IPPSR); Director of Urban Policy Initiatives for University Outreach and Engagement, MSU*

Valeta Wensloff, *Director of Undergraduate Studies, Department of Media and Information, MSU*

CONTENTS

EXECUTIVE SUMMARY

Policy issues related to high-speed Internet connectivity and digital equity were a key aspect of our work in the past year. Work from these projects is at various stages of the publication process in peer reviewed journals and books. It was presented at professional conferences, shared online, and in virtual and in-person workshops. Findings from our work have been cited in the media, in federal regulatory proceedings, and are referenced on state government websites.

The 2023-2024 academic year saw the completion of the $10.5 million MOON-Light grant, funded by the National Telecommunications and Information Administration (NTIA). Awarded to MSU and Merit Network, Johannes M. Bauer and Keith Hampton are the Co-Principal Investigators of the award. The grant funded part of a $28.6 million upgrade to Michigan's middle mile infrastructure and will greatly improve the ability of retail Internet Service Providers to supply high-quality connectivity.

The Center obtained two grants from the Pew Charitable Trusts to develop a framework for practitioners and researchers to guide the planning and evaluation of programs funded through the Infrastructure Investment and Jobs Act of 2021. Phase I of the project was completed in September 2024 and work on Phase II started in October 2024. The funding streams also will help expand the Broadband Policy Research Consortium (BPRC) co-founded by the Quello Center in 2022 together with colleagues at UT Austin, Oklahoma State University, and the University of Southern California, beyond the original organizations.

A research grant obtained in the spring of 2022 allowed conducting a follow-up study with the schools that participated in our 2019-2020 study of broadband and educational outcomes. Data is being analyzed, and the first report was released in August 2023. Another grant, awarded to Dr. Jean Bohaczek, explores a user-centric approach to broadband. We continued our work related to digital platform regulation and policies in support of digital innovation.

We participated in national and international webinars for professional audiences and in several events for practitioners related to our work on broadband. Gabriel Hales (a Ph.D. Student affiliated with the Center) attended the 74th Annual ICA Conference in June 2024, where he presented *Social Media Use and Gender Inequalities in Reading, Writing and Math: When Leisure is Learning*. Researchers affiliated with the Center will be involved in the upcoming TPRC52, September 2024, in Washington, DC. Johannes M. Bauer delivered one of the two keynote addresses and Center-affiliated researchers presented three papers that are directly and indirectly related to our work.

Center researchers published several articles, including chapters in field-defining research handbooks. Additional articles are in revision and under review. Technical reports complement the portfolio of academic publications. As in past years, we used the Quello Center *SSRN E-Journal* to disseminate working papers and penultimate versions of publications online.

One of our goals is to translate rigorous research into actionable insights. In pursuit of that goal, we gave presentations at professional conferences, practitioner workshops, and training programs at the local, national, and international levels.

1. SPEAKER SERIES AND POLICY DISCUSSIONS

Part of our mission is to stimulate discussion of important and controversial issues, based on detailed examination of historical experiences and rigorous analyses of forward-looking policy options. Depending on the topic and the speaker, we conduct some discussions following Chatham House rules, record others for time-delayed release in our video archive (https://vimeo.com/quellocenter) or stream them live to a national and global audience (streamed talks are also placed in our video archive). Notable Center and co-sponsored events in the recent past include:

1.1. Speaker Series

Quello Center talks are typically archived at https://vimeo.com/quellocenter. Talks that are not archived upon request of presenters are market with (*).

- **William H. Dutton**, Oxford University and Emeritus Professor at USC, *Reflections on Power Shifts and the Fifth Estate* (October 2023)
- **David Lazer**, Northeastern University, *The Emergent Logic of the Online Information Ecosystem* (October 2023)
- **Marcus Foth**, Queensland University of Technology School of Design, *DataCare for Digital Twins: Participatory Data Analytics and the Social License to Operate Smart Cities* (November 2023)
- **Vikki Katz**, Chapman University, *Placing bets and avoiding debts: Where working-class parents see opportunities in a technologizing future* (January 2024)
- **Maaz Gardezi**, Virginia Tech, *Responsible innovation for climate-smart agriculture: Cases from the U.S. and remote mountain communities of Pakistan* (January 2024)
- **Jessica S. Ancker**, Vanderbilt University, *Evaluations of Telehealth During the COVID-19 Public Health Emergency* (February 2024)
- *Rob McMahon, University of Alberta, DigitalNWT: Codesigning community networking literacies with rural/remote Northern Indigenous communities in Northwest Territories, Canada* (April 2024)

2. ONGOING PROJECTS

2.1. Broadband Policy Assessment and Design

The Quello Center obtained funding for Phases I and II of a grant from the Pew Charitable Trusts to develop a framework for practitioners and researchers to evaluate the programs authorized by the 2021 Infrastructure investment and Jobs Act (IIJA). The outcomes of this research project will assist the federal government, states, and communities in developing timely data collection and measurement steps to design and evaluate short-, medium-, and long-term improvements of digital connectivity and its impacts. The scale and diversity of current federal, state, and local broadband and digital equity policy initiatives also entails a responsibility to the public to assure the responsible use of public funds. Multiple models are currently developed within the federal framework devised by the IIJA and NTIA. Our project will utilize this variation to develop a knowledge base in parallel

with the implementation of programs and initiatives. This approach will allow us to learn from successes and failures and adopt course corrections during the multi-year initiative. It will facilitate learning from experience in various locations, allow improvements of ongoing initiatives, and assist in the development of sustainable, forward-looking programs that can harness the benefits of advanced digital technologies more fully.

Specific research questions pursued in this effort include: (1) What is the impact of the programs authorized by IIJA 2021 on broadband development at a national, state, and community level? (2) How are the programs established by the IIJA affecting digital equity at a national, state, and community level as well as for specific populations and groups? (3) How are the programs adopted at the national, state, and local levels contributing to community social and economic development? (4) What lessons can be drawn from the early experience with IIJA and from prior broadband policy programs to improve the overall effectiveness of current and future initiatives?

Publications, Presentations, Policy Reports

- Knittel, M., Mack, E., Nam, A., & Bauer, J.M., (2024). *Assessing the Effects of the Infrastructure Investment and Jobs Act on High-Speed Internet Access, Digital Equity, and Community Development. Opportunities and Challenges of Measuring the Impact of Broadband Policy*. East Lansing, Michigan: Quello Center at Michigan State University, October 2024.
- Rhinesmith, C., Dagg, P.R., Bauer, J.M., Byrum, G., & Schill, A. (2023). *Digital opportunities compass: Metrics to monitor, evaluate, and guide broadband and digital equity policy*. Working paper, Ann Arbor, MI: Merit Network, Inc. and East Lansing, MI: Quello Center. https://quello.msu.edu/wp-content/uploads/2023/02/Digital-Opportunites-Compass-Paper-20220223.pdf.

2.2. MOON-Light

MOON-Light "Lighting Ceremony", September 10, 2024, at Michigan State University,

From Left to Right: Johannes M. Bauer, MSU Professor; Charlotte Bewersdorff, VP Community Engagement, Merit Network; Roger Blake, CEO, Merit Network; Kevin Guskiewicz, MSU President; Keith Hampton, Director of Academic Research, Quello Center

In 2022, Merit Network and Michigan State University received a $10.5 million National Telecommunications and Information Administration (NTIA) Broadband Infrastructure Program Grant to connect Michigan's many disparate Internet pathways. Despite constraints in the advanced technology supply-chain, the project was completed at the end of May 2024. A ribbon-cutting celbration was held on September 10, 2024 on the campus of Michigan State University in East Lansing, Michigan.

Unlike closed (private) infrastructure networks that offer services from a single service provider to residents, the MOON-Light network will provide regional connectivity through an open-access network approach. Open-access networks (OANs) are high-performance networks that are open to multiple providers that leverage the infrastructure to offer high-capacity broadband services to residents and businesses.

The recording of the event is available [here.](#)

Publications and Conference Papers

- Bewersdorff, C., and K. Hampton (2024, May). Project MOON-Light: Building Next-Gen Broadband Infrastructure for Statewide Access. Merit Networks Member Conference. Plymouth, MI.
- Hampton, K. (2024, April). Addressing the Need for Greater Diversity and Inclusion in Technology and Digital Media Research. Workshop on Impact of Technology and Digital Media on Child and Adolescent Development and Mental Health. Eunice Kennedy Shriver National Institute of Child Health and Human Development and The National Institute of Mental Health. Rockville, MD.
- Hales, G. and K. Hampton (2024, April). Social Media, Video Games, and Adolescent Well-Being and Achievement. Annual Fatherhood Forum: Fathering During Challenging Times. WorkLife Office, Michigan State University, East Lansing, MI.
- Hampon, K. (2024, January). Broadband and Student Achievement: Before & After the COVID-19 Pandemic. Committee Meeting of the National Academies Consensus study on K-12 STEM Education and Workforce Development in Rural Areas. Washington, DC.
- Hampton, K. and G. Hales (2023, November). Broadband and Student Performance Gaps After the COVID-19 Pandemic. Michigan Broadband Summit. East Lansing, MI.

2.3. The COVID-19 Pandemic and Rural Digital Inequities in Educational Attainment, Student Performance, and Psychological Wellbeing

This research effort, led by Keith N. Hampton, studies the role of digital inequality on change in rural student's academic performance, educational aspirations, and psychological wellbeing due to the COVID-19 pandemic. Utilizing existing survey and student record data from a 2019 sample of rural students will be paired with student records from standardized exams (2019-2022), and information on student internet during the pandemic. This work will answer the question of whether students with no or poor Internet access, and those with lower digital skills, experienced declines in academic performance, educational aspirations, or psychological wellbeing? And if initiatives by schools to "fill the gap" in the missing infrastructure for rural Internet access (e.g., deploying cell phone hotspots) was successful at preventing negative consequences to student performance, educational aspirations, and psychological wellbeing due to preexisting digital inequalities?

Publications and Reports

- Hampton, K. N., Hales, G.E., & Bauer, J.M. (2023). *Broadband and Student Performance Gaps After the COVID-19 Pandemic*. James H. and Mary B. Quello Center, Michigan State University. https://doi.org/10.25335/r71b-c922.

2.4. Information Source, Misinformation, and Disinformation

This project, partially funded by a grant from the *John S. and James L. Knight Foundation*, started with an emphasis on information seeking during the COVIE-19 pandemic. It continues as a generalized program of research on how sources of information affect how individuals make sense of complex phenomena. The team continues to mine data collected in three waves of surveys to shed light on information seeking and how different practices influence knowledge about matters of public importance during periods of dynamic change. Such situations, exemplified but not limited to the coronavirus pandemic, necessitate that individuals and organizations make decisions based on incomplete and changing information, often complicated by deliberately misleading information. Using the unfolding coronavirus pandemic as a case to study the broader phenomenon of information seeking and verification under conditions of uncertainty and rapidly changing information, the research project examines the interplay between political and health information seeking. Controlling for socioeconomic and other factors, we are particularly interested in how sources and channels used to obtain, verify, and update information influence individuals' mental models and factual knowledge about the pandemic and appropriate responses.

A team of researchers from Michigan State University, University of North Carolina Charlotte, Oxford University, and Clemson University conducted two nationally representative surveys in the United States and the United Kingdom. We are currently examining four research questions pertaining to theories of information seeking, information verification, and trust in different information sources: (1) What online media, offline media, and other information sources do American and British Internet users rely on and trust during the COVID-19 pandemic, and how do socio-demographic factors influence these choices? (2) (How) Do people update and verify information to deal with incomplete information and uncertain knowledge? (3) How do socio-demographic factors, information sources, and the updating rules used by individuals relate to their perceptions and knowledge about political and health topics related to COVID-19? (4) How do socio-demographic factors, information sources, and the updating rules used by individuals influence behavioral intentions?

Publications, Conference Papers, and Policy Briefs

- Blank, G., Bauer, J.M., Knittel M., Ma, W., & Shillair, R. (2023). Formation and Fragmentation of Mental Models in Heterogeneous Media Ecosystems During Times of Complex Crisis. 73rd Annual Conference of the International Communication Association- Media Sociology Post-Conference, Toronto, May 31.
- Blank, G. & Reisdorf, B. (2023), Digital inequalities and public health during COVID-19: Media dependency and vaccination, *Information Communications and Society*, 26(5): 1045-1065. https://doi.org/10.1080/1369118X.2023.2166356.

- Reisdorf, B.C., Blank, G., Bauer, J. M., Cotten, S., Robertson, C.T., & Knittel, M. (2021). Information Seeking Patterns and COVID-19 in the United States. *Journal of Quantitative Description: Digital Media,* 1. https://doi.org/10.51685/jqd.2021.003.
- Reisdorf, B.C., Blank, G., Cotten, S., Argyris, A., Robertson, C.T., Knittel, M., & Bauer, J.M. (2021). Overcoming COVID-19 Vaccine Hesitancy. Quello Center Policy Brief 02/21, https://quello.msu.edu/wp-content/uploads/2021/03/Quello-Center-COVID-19-Policy-Brief-15-March-2021.pdf.

2.5. Governance of Emerging Technologies

This multi-year research initiative seeks to inform policies toward advanced ICT service and applications in the United States, with a current emphasis on 5G wireless services, platform ecosystems, and systemic types of innovation (e.g., smart mobility). Many of the topics addressed will also apply to emergent technologies, including 6G and sub-THz services as well as the Internet of Intelligence (IoI). 5G, 6G and sub-THz wireless services will constitute an integral part of the future gigabit communication network infrastructure. Platform ecosystems have been the focus of much criticism but the drivers of innovation in these markets, and positive and negative effects of digital platforms, are only poorly understood.

Projects in this area will examine how policy choices affect innovation outcomes. The $100,000 gift from Facebook has helped launch work in this family of projects. Additional proposals are in preparation.

Publications and Working Papers

- Bauer, J.M. & Prado, T.S. (2024). Digital Innovation: An Information-Economic Perspective. In D. R. Raban & J. Włodarczyk (Eds.), *The Elgar companion to information economics*. Edward Elgar.
- Bauer, J.M., Stocker, V., & Pourdamghani, A. (2023). Innovation Dynamics in the Internet Ecosystem and Digital Economy Policy. Prepared for presentation at the European Conference of the International Telecommunications Society, Madrid, Spain, June 18-19, 2023.
- Prado, T.S. (2022). Emerging Policy and Regulatory Regimes for Digital Platforms: Lessons for U.S. Competition Policy. Paper to be presented at the 31st European Regional Conference of the International Telecommunications Society (ITS) and the 50th Research Conference on Communication, Information, and Internet Policy (TPRC50).
- Prado, T.S., & Bauer, J.M. (2022). Big Tech Platform Acquisitions of Start-ups and Venture Capital Funding for Innovation. *Information Economics and Policy*. https://doi.org/10.1016/j.infoecopol.2022.100973.
- Bauer, J.M. (2022). Toward new guardrails for the information society. *Telecommunications Policy*, 102350. Published online April 6, 2022. https://doi.org/10.1016/j.telpol.2022.102350.
- Bauer, J.M. & Bohlin, E. (2021). Regulation and innovation in 5G markets. *Telecommunications Policy*, 102260, https://doi.org/10.1016/j.telpol.2021.102260.
- Knieps, G. & Bauer, J.M. (2021). Internet of things and the economics of 5G-based local industrial networks. *Telecommunications Policy*, 102261, https://doi.org/10.1016/j.telpol.2021.102261.
- Bauer, J.M. and Prado, T.S., Digital Platforms and Innovation: Lessons for Innovation Policy and Regulation (December 15, 2020). Available at: SSRN or DOI.

2.6. [Broadband and Educational Achievements](#)

Initiated in 2019, this study was designed to understand the repercussions of absent or poor home Internet connectivity on student performance and the associated costs to society. The focus was on Internet connectivity outside of school among middle and high school students enrolled in rural and small-town schools. Inequalities related to income and race are often used to explain why some people still do not have Internet or broadband access at home. Often overlooked in this discussion is the role of geography and varying levels of infrastructure access. Our study allowed us to disentangle these factors.

The report published in March 2020 was widely read by policymakers and stakeholders. Building on the experience with the Broadband Gap project, we helped Merit Network to develop a toolkit that facilitates a highly granular assessment of the availability and quality of broadband connectivity. During the past year, the approach has been used by several counties across Michigan, including Washtenaw County, Berrien County, and Ottawa County, to assess the state of connectivity among their residents and to develop appropriate responses to overcome gaps and discrepancies. It was also used by several large organizations, including Wayne State University, to identify and help overcome connectivity gaps among students and faculty. The approach is scalable and applicable to state and national level information collection.

Publications and Working Papers

- Hampton, K.N. & Shin, I. (2023). Disconnection More Problematic for Adolescent Self-Esteem than Heavy Social Media Use: Evidence from Access Inequalities and Restrictive Media Parenting in Rural America, *Social Science Computer Review*, 41(2): 626-647. Download at https://doi.org/10.1177/08944393221117466.
- Hampton, K.N., Robertson, C.T., Fernandez, L., Shin, I., & Bauer, J.M. (2021). How variation in internet access, digital skills, and media use are related to rural student outcomes: GPA, SAT, and educational aspirations. *Telematics and Informatics*, 101666, https://doi.org/10.1016/j.tele.2021.101666.

4. COMMUNITY AND OUTREACH

4.1. Outreach and Public Service

We were involved in numerous outreach activities at the local, state, and national level, including the Ingham County Broadband Task Force, working groups by the U.S. Department of Education, and Opportunity Broadband, an emerging national coalition promoting digital inclusion and innovation. We have intensified our collaboration with the Pew Charitable Trust and several research centers across the country, including the University of Southern California, the University of Texas at Austin, and Carnegie-Mellon University.

4.2. Quello Center Policy Briefs

In March 2020, we launched Quello Center Policy Briefs, a series of brief documents synthesizing longer research contributions intended for decision makers. See https://quello.msu.edu/policy-briefs/.

4.3. In the Media

In response to increasing coverage in news and other online events, we added a new page to our website. See https://quello.msu.edu/in-the-media/.

4.4. Video Library

We have steadily grown our library of archived talks and short interviews with our speakers, archived on Vimeo (see https://vimeo.com/quellocenter) and YouTube (https://www.youtube.com/channel/UCeGcQFBPA0wb-OmoYwgUfEQ).

4.5. Online Presence

If you have not already done so, please:

- Check out the Quello Center website at https://quello.msu.edu/.
- Like our Facebook page at https://www.facebook.com/QuelloCenter/.
- Follow our LinkedIn page at https://www.linkedin.com/company/quellocenter/

5.6. SSRN E-Journal

In addition, we have an online working paper archive on the Social Science Research Network (SSRN), currently featuring more than 100 working papers and reports. See: https://www.ssrn.com/link/Quello-Center-PUB.html

6. SELECTED PUBLICATIONS AND PRESENTATIONS[1]

6.1. Journal Articles and Conference Proceedings

Hardy, J. (2024). Transforming the Rural Asset: Advancing Rural Place through Cultural Assets in the American High-Tech Economy. *Community Development*, 55(6), 823-841, https://doi.org/10.1080/15575330.2023.2301704.

Hardy, J., & Thebault-Spieker, J. (2024). A Turn to Assets in Community-Based Computing Research: Tradeoffs, Deficits, and Neoliberalism in Technological Development. *Proceedings of the ACM on Human-Computer Interaction*, 8(CSCW1), 14:1-14:20. https://doi.org/10.1145/3637291.

Bauer, J.M. (2023). Federal-Local Realignment of Broadband Policy and Digital Equity in the United States. 2023 Urban Affairs Association Conference, Nashville, TN, April 26-29, 2023.

Blank, G., & Reisdorf, B. (2023), Digital inequalities and public health during COVID-19: Media dependency and vaccination, published online on 12 January 2023, Information Communications and Society. https://doi.org/10.1080/1369118X.2023.2166356.

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[1] In reverse chronological order within each subsection.

Bauer, J.M. (2022). Toward new guardrails for the information society. *Telecommunications Policy*, 102350. Published online April 6, 2022. https://doi.org/10.1016/j.telpol.2022.102350.

Hampton, K.N. & **Shin, I.** (2022). Disconnection More Problematic for Adolescent Self-Esteem than Heavy Social Media Use: Evidence from Access Inequalities and Restrictive Media Parenting in Rural America, *Social Science Computer Review*, published online August 5, 2022. Download at https://doi.org/10.1177/08944393221117466.

Prado, T.S. & **Bauer, J.M.** (2022). Big Tech Platform Acquisitions of Start-ups and Venture Capital Funding for Innovation. *Information Economics and Policy*. 59, June, 100973. https://doi.org/10.1016/j.infoecopol.2022.100973.

Shillair, **R.**, Esteve-González, P., Dutton, W.H., Creese, S., Nagyfejeo, E., Von Solms, B. (2022). National Level Evidence-Based Results, Challenges, and Promise, *Computers & Security*, https://doi.org/10.1016/j.cose.2022.102756.

Creese, S., **Dutton, W.H.**, Esteve-Gonzalez, P. & **Shillair, R.** (2021). Cybersecurity Capacity Building: Cross-National Benefits and International Divides. Forthcoming in the *Journal of Cyber Policy*. https://doi-org.proxy1.cl.msu.edu/10.1080/23738871.2021.1979617.

Bauer, J.M. & Bohlin, E. (2021). Regulation and Innovation in 5G Markets. Telecommunications Policy, 102260, https://doi.org/10.1016/j.telpol.2021.102260.

Knieps, G. & **Bauer, J.M.** (2021). Internet of Things and the Economics of 5G-based Local Industrial Networks. *Telecommunications Policy*, 102261, https://doi.org/10.1016/j.telpol.2021.102261.

Shin, I., & **Hampton, K.N.** (2021). New Media Use and the Belief in a Just World: Awareness of Life Events and the Perception of Fairness for Self and Injustice for Others. *Information, Communication & Society*, 1-17. https://doi.org/10.1080/1369118X.2021.1950804.

Hampton, K.N., Robertson, C.T., Fernandez, L., Shin, I. & **Bauer, J.M.** (2021). How variation in Internet access, digital skills, and media use are related to rural student outcomes: GPA, SAT, and educational aspirations. *Telematics and Informatics* 63, 101666, https://doi.org/10.1016/j.tele.2021.101666.

Reisdorf, B.C., Blank, G., Bauer, J. M., Cotten, S., Robertson, C.T., & **Knittel, M.** (2021). Information Seeking Patterns and COVID-19 in the United States. *Journal of Quantitative Description: Digital Media,* 1. https://doi.org/10.51685/jqd.2021.003

Prado, T.S. & **Bauer, J.M.** (2021). Improving broadband policy design using market data: A general framework and application to Brazil, *Telecommunications Policy*, 45(5), 102111, DOI.

Banerjee, S.; Swearingen, T.; **Shillair, R.; Bauer, J.M**.; Holt, T.J.; & Ross, A. (2021). Using machine learning to examine cyberattack motivations on web defacement data. *Social Science Computer Review*. Published online on 23 February 2021, DOI.

Holt, T.J.; Lee, J.R.; Freilich, J.D.; Chermak, S.M.; **Bauer, J.M**.; **Shillair, R.** & Ross, A. (2020) An exploratory analysis of the characteristics of ideologically motivated cyberattacks, *Terrorism and Political Violence*, https://doi.org/10.1080/09546553.2020.1777987.

Feijóo, C.; Kwon, Y.; **Bauer, J.M.**; Bohlin, E; Howell, B.; Jain, R.; Potgieter, P.; Vu, K.; Whalley, J.; & Xia, J. (2020). Harnessing AI to increase wellbeing for all: The case for a new technology

diplomacy, *Telecommunications Policy*, 44(6), 101988, https://doi.org/10.1016/j.telpol.2020.101988.

Hong, S.J.; **Bauer, J.M.**; Lee, K.; Granados, N.F. (2020). Drivers of supplier participation in ride-hailing services, *Journal of Management Information Systems*, 37(3), 602-630. https://doi.org/10.1080/07421222.2020.1790177

Robertson, C.T., & Mourão, R. (2020). Faking alternative journalism? An analysis of self-presentations of "fake news" sites. *Digital Journalism*, published online 25 March 2020, DOI: 10.1080/21670811.2020.1743193.

Reisdorf, B., Fernandez, L., Hampton, K.N., Shin, I., & **Dutton, W.H.** (2020). Mobile Phones will not Eliminate Digital and Social Divides. *Social Science Computer Review,* published online March 2020. https://doi.org/10.1177/0894439320909446.

Robertson, C.T., Mourão, R.R., & Thorson, E. (2020). Who Uses Fact-Checking Sites? The Impact of Demographics, Political Antecedents, and Media Use on Fact-Checking Site Awareness, Attitudes, and Behavior. *The International Journal of Press/Politics*, 194016121989805. DOI.

Aguelakakis, N., & **Yankelevich, A.** (2019). Collaborate or consolidate: Assessing the competitive effects of production joint ventures. *Economic Inquiry, 57*(1), 73-84.

Astorne-Figari, C., López, J.J., & **Yankelevich, A.** (2019). Advertising for consideration. *Journal of Economic Behavior & Organization, 157*, 653-669.

Dutton, W.H., and **Fernandez, L.** (2018/19), 'How Susceptible Are Internet Users?', *InterMEDIA*, December/January 2018/19 46(4): 36-40.

Dutton, W.H., Creese, S., **Shillair, R.**, & Bada, M. (2019). Cybersecurity Capacity: Does It Matter? *Journal of Information Policy*, 9, 280-306.

Fernandez, L.H., Reisdorf, B.C., & **Dutton, W.H.** (2019). Urban Internet myths and Realities: A Detroit case study. *Information, Communication & Society,* 1–22, published online 5 June 2019, DOI: 10.1080/1369118X.2019.1622764.

Hampton, K.N. (2019). Social Media and Change in Psychological Distress over Time: The Role of Social Causation. *Journal of Computer-Mediated Communication.*

Mack, E.A., **Dutton, W.H.,** Rikard, R.V., & **Yankelevich,** A. (2019). Mapping and measuring the information society: A social science perspective on the opportunities, problems, and prospects of broadband Internet data in the United States. *The Information Society, 35*(2), 57–68.

Marin, A., & **Hampton, K.N.** (2019). Network Instability in Times of Stability. *Sociological Forum,* 34(2): 313-336.

Mourão, R. R., & **Robertson, C. T.** (2019). Fake News as Discursive Integration: An Analysis of Sites That Publish False, Misleading, Hyperpartisan and Sensational Information. *Journalism Studies,* 20:14, 2077-2095, DOI: 10.1080/1461670X.2019.1566871

Reisdorf, B.C., Yankelevich, A., Shapiro, M., & **Dutton, W.H.** (2019). Wirelessly bridging the homework gap: Technical options and social challenges in getting broadband to disconnected students. *Education and Information Technology,* 24, 3803–3821. https://doi.org/10.1007/s10639-019-09953-9

Robertson, C.T., Dutton, W.H., Ackland, R., & Peng, T.-Q. (2019). The democratic role of social media in political debates: The use of Twitter in the first televised US presidential debate of 2016. *Journal of Information Technology & Politics*, 1–14.

6.2. Books and Chapters

Bauer, J.M. & Latzer, M. (2024). Co-evolution: Applications and Implications for Governance Research in Media and Communication Studies. In: R. Mansell, M. Puppis, & H. van der Bulck (eds.), *Handbook of Media and Communication Governance*. Cheltenham, UK & Northampton, MA: Edward Elgar.

Bauer, J.M., & Prado, T.S. (2024). Digital innovation: An Information-Economic Perspective. In D. R. Raban & J. Włodarczyk (eds.), *The Elgar Companion to Information Economics*. Edward Elgar

Bauer, J.M. (2022). A framework for 5G and 6G market design. In E. Bohlin & F. Cappelletti (eds.), *Europe's future connected: Policies and challenges for 5G and 6G networks* (pp. 20-30), Brussels, Belgium: European Liberal Forum.

Bauer, J.M. (2022). Agile Regulation: Towards Flexible Governance of the Digital Economy. In: F. Birke, G. Brunekreeft, V. Stocker, & H.-J. Weiß (eds.), *Perspektiven der Netzökonomie*. Baden-Baden: Nomos Verlag.

Bauer, J.M. & **Dutton, W.H.** (2021). "A nova agenda de cibersegurança: desafios econômicos e sociais para uma Internet segura," in: NIC.br (ed.), *Segurança Digital: uma análise de gestão de risco em empresa brasileiras*, Sao Pãulo, Brazil: Cadernos NIC.br Estudos Setoriais.

Hampton, K.N. and Wellman, B. (2021). All the Lonely People? The Continuing Lament about the Loss of Community. In L. Lievrouw and B. Loader (Eds.), *Routledge Handbook of Digital Media and Communication.* Abingdon, UK. Routledge. 281-296.

Fernandez, L. (2020). Digital Advertising in Political Campaigns and Elections. In W. H. Dutton (Ed.), A Research Agenda for Digital Politics. Edward Elgar Publishing.

Creese, S., **Shillair, R.**, Bada, M., **Reisdorf, B.C**., Roberts, T., & **Dutton, W.H.** (2019). The Cybersecurity Capacity of Nations. In M. Graham & W.H. Dutton (Eds.), *Society and the Internet: How Networks of Information and Communication are Changing our Lives* (2nd ed.). Oxford: Oxford University Press.

Dutton, W.H. (2019). Wired City. In A.M. Orum (Ed.), *The Wiley Blackwell Encyclopedia of Urban and Regional Studies* (1st ed.).

Dutton, W.H., Reisdorf, B.C., Blank, G., Dubois, E., & **Fernandez, L.** (2019). The Role of Search and social media in Shaping Public Opinion. In M. Graham & W. H. Dutton (Eds.), *Society and the Internet: How Networks of Information and Communication are Changing our Lives* (2nd ed.). Oxford: Oxford University Press.

Graham, M., and **Dutton, W.H.** with a foreword by Manuel Castells (2019) (eds), *Society and the Internet, 2nd Edition: How Networks of Information and Communication are Changing our Lives*. Oxford: Oxford University Press.

Reisdorf, B.C., Blank, G., & **Dutton, W.H.** (2019). Internet Cultures and Digital Inequalities. In M Graham & W. H. Dutton (Eds.), *Society and the Internet: How Networks of Information and Communication are Changing our Lives* (2nd ed.). Oxford: Oxford University Press.

6.3. Book Reviews

Bauer, J. M. (2022). Review of Christopher Ali, Farm Fresh Broadband: The Politics of Rural Connectivity, MIT Press, 2021. *Journal of Digital Media & Policy*, 13(1), 143-146. https://doi.org/10.1386/jdmp_00099_5.

Dutton, W.H. (2019), Internet Daemons: Digital Communications Possessed. Fenwick McKelvey. Minneapolis, MN: University of Minnesota Press, for *Journal of the Association for Information Science and Technology.*

6.4. Technical Reports

Rhinesmith, C., Dagg, P.R., Bauer, J.M., Byrum, G., & Schill, A. (2023). Digital opportunities compass: Metrics to monitor, evaluate, and guide broadband and digital equity policy. Working paper, Ann Arbor, MI: Merit Network, Inc. and East Lansing, MI.

Bauer, J.M. (2023). US leadership in digital platform policy. AEI Digital Platforms and American Life Project. Washington, DC, American Enterprise Institute. https://platforms.aei.org/author/jbauer/

Reisdorf, B.C., Blank, G., Cotten, S., Argyris, A., Robertson, C.T., Knittel, M., & **Bauer, J.M.** (2021). Overcoming COVID-19 Vaccine Hesitancy. *Quello Center Policy Brief* 02/21.

Bauer, J.M., Hampton, K.N., Fernandez, L.H., & **Robertson, C.T. (2020).** Overcoming Michigan's homework gap: The role of broadband Internet connectivity for student success and career outlooks. Quello Center Working Paper No. 06-20.

Hampton, K. N., Fernandez, L.H., Robertson, C.T., & **Bauer, J. M.** (2020). Broadband and Student Performance Gaps. James H. and Mary B. Quello Center, Michigan State University. 3 March 2020, DOI.

6.5. Recent and Upcoming Presentations

Bauer, J.M., Stocker, V., & Pourdamghani, A. (2023, June). Innovation Dynamics in the Internet Ecosystem and Digital Economy Policy. Prepared for presentation at the European Conference of the International Telecommunications Society, Madrid, Spain.

Prado, T.S. (2023, June). Assessing the Market Power of Digital Platforms: An Experimental Investigation of the Online Video Market. Prepared for presentation at the European Conference of the International Telecommunications Society, Madrid, Spain.

Bauer, J.M.; Knittel, M.; Ma, W.; Shillair, R.J.; & Blank, G. (2023, May). Formation and fragmentation of mental models in heterogeneous media ecosystems during times of complex crisis. 73rd Annual Conference of the International Communication Association-Media Sociology Post-conference.

Braesemann, F.; **Rottenkolber, A.**; Teutloff, O.; & **Bauer, J.M.** (2023, May). The Global Digital Technology Space and Its Relations to Digital Inequalities. Pre-conference on New Frontiers in Global Digital Inequalities Research. 73rd Conference of the International Communications Association, Toronto.

Prado, T.S. (2022, August). Safeguarding Competition in Digital Markets: A Comparative Analysis of Emerging Policy and Regulatory Regimes. Presented at the 50th Research Conference on Communication, Information, and Internet Policy (TPRC 50) Available at SSRN: https://ssrn.com/abstract=4137588 or http://dx.doi.org/10.2139/ssrn.4137588.

Hampton, K.N., & **Shin, I.** (2022, May). Disconnection is More Problematic for Adolescent Self-Esteem Than Heavy Social Media Use: Digital Inequality, Restrictive Parenting, and the Relationship to Time Rural Youth Spend with Friends and Family. Presented at the 72nd Annual Conference of the International Communication Association. Hybrid Conference. Paris.

Prado, T.S. (2022). Safeguarding Competition in Digital Markets: A Comparative Analysis of Emerging Policy and Regulatory Regimes. Presented at the Conference of the International Telecommunications Society 2022. Gothenburg, Sweden.

Knittel, M. (2022, January). How an Online Health Support Community Responded to the COVID-19 Crisis," Paper to be presented at the Hawaii International Conference on System Sciences (HICSS) 2022.

Hampton, K.N., & **Bauer, J.M.** (2021, November). The Social Side of Building Fiber: Implications for Middle and High School Students Academic Performance and Self-Esteem. Michigan Universities Network Research Collaboration Summit. Merit Networks. Ann Arbor, MI.

Grant, B., & Reisdorf, B.C. (2021, September). Digital inequalities and public health during COVID-19: Media dependency and vaccination. Presented at the Digital Inclusion Policy and Research Conference 2021 (DIPRC2021), Liverpool, UK, September 14, 2021.

Hampton, K.N., & **Bauer, J.M.** (2021, November). When Access is Not Enough: Evidence from Rural Michigan. Washington, D.C., The Pew Charitable Trust.

Bauer, J.M. (2021, October). ICT Convergence: Challenges and Opportunities for Regulation and Public Policy. PURC/World Bank International Training Program on Utility Regulation and Strategy, Gainesville, Florida, October 12, 2021.

Prado, T.S., & **Bauer, J.M.** (2021, August). Effects of Big Tech Acquisitions on Start-up Funding and Innovation (August 17, 2021). Quello Center Working Paper No. 04-21, Available at SSRN: https://ssrn.com/abstract=3787127 or http://dx.doi.org/10.2139/ssrn.3787127

Prado, T.S. (2021, June). Kill Zones? Effects of Big Tech Start-up Acquisitions on Innovation. 23rd Biennial Conference of the International Telecommunications Society (ITS), Gothenburg, Sweden, 21st-23rd June. https://www.econstor.eu/handle/10419/238049.

Shillair, R., Dutton, W.H., Esteve-Gonzalaz, P. and Creese, S. (2021, May). *Understanding the Role of Human and the Machine in Cybercrime and Cybersecurity. Cybersecurity Capacity Building: Cross National Benefits and International Divides.* [Online]. SECREV: The Cybersecurity Revolution. https://secrev.org/index.html

Hampton, K.N.; Robertson, C.T.; Fernandez, L.H.; Shin, I.; & **Bauer, J.M.** (2021, May). Digital Media and Human Capital in Rural America: Broadband Access, Digital Skills, and Excessive

Media Use for GPA, SAT, and Educational Aspirations. International Communication Association. Virtual Conference.

Hampton, K.N.; Robertson, C.T.; Fernandez, L.H.; Shin, I.; & **Bauer, J.M.** (2021, May). Beyond Equitable Access: Everyday Use and Digital Skills for Rural Students' Academic Outcomes. IEEE International Workshop on Communications Quality and Reliability. Virtual Conference.

Hampton, K.N. (2021, May). Beyond Equitable Access: Everyday Use and Digital Skills for Rural Students' Academic Outcomes. Bridging the Connectivity Challenge Hackathon. Cybera, Inc. Calgary, Canada.

Creese, S., **Dutton, W. H.**, Esteve-Gonzalez, P., & **Shillair, R.** (2021, February). Cybersecurity Capacity Building: Cross-National Benefits and International Divides. TPRC48, The Research Conference on Communications, Information, and Internet Policy. Washington D.C. Available at SSRN: https://ssrn.com/abstract=3658350 or http://dx.doi.org/10.2139/ssrn.3658350

Knittel, M., & Shillair, R. (2021, February) Information Policy, Privacy Failings, and Steps Towards Empowerment in Cases of Technology-Facilitated Sexual Violence. The Research Conference on Communications, Information, and Internet Policy TPRC48. Washington, D.C. http://dx.doi.org/10.2139/ssrn.3748984.

6.6. Work in Progress

Prado, T.S. & Bauer, J.M. (in progress). Emerging Policy and Regulatory Regimes for Digital Platforms: Lessons for U.S. Competition Policy.