LiDA Center 2018-19 Report

(YEAR 1; April 2018-May 2019)

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HOW THIS REPORT IS ORGANIZED

With the exception of the Executive Summary, this annual report is organized around the five strategic goals (and related sub-goals) articulated in our 2019 LiDA Strategic Plan. You can choose to read about the progress made this year with respect to specific goals in any order you wish, using the linked table of contents provided on the left side bar.

For each goal, we have listed all the projects/ activities that contributed towards that goal during the period covered by this report. To keep the main text to a

minimum, for each project/ activity listed under each goal we provided just a brief description (which readers familiar with that project/ activity can skip), followed by information about specific achievements made this academic year related to that goal. Links to artifacts and other documents providing additional information have been embedded in the text, for readers interested in learning more.

As some of our projects/ activities address multiple goals, they will be listed more than once - so some repetition was unavoidable.

This annual report is intended to complement other "cumulative" reports (i.e., from the start of the LiDA Center in 2018 to date) that are also accessible on the Strategic Planning and Reports page of our website.

EXECUTIVE SUMMARY

Starting a new enterprise is always an adventure - and the launch of the Center for Learning in the Digital Age (LiDA) was no exception. It took considerable time and effort to have this new Center approved by the University leadership, but now we were ready to launch!

We started with a minimal staff of four part-time directors dedicating less than the equivalent of one full-time person when taken together. We were committed to continue supporting Warner's online offerings and programs to prepare online and digitally-rich instructors. Our LiDA Associate Director for Higher Education held the dual role of university-wide Associate Vice-President for Online Learning. This uniquely positioned him to promote and support online teaching across the UR. Just a few months earlier, in collaboration with the Center for Professional Development and Education Reform, we had been able to secure two five-year Noyce grants from the National Science Foundation (NSF) to prepare "digitally-rich" STEM teachers and master teachers, for a total of \$4.2M. Launching these projects was clearly a priority.

Beyond that, though, it was pretty much a clean slate - exciting and daunting at the same time!

Where should we start? Creating a strategic plan? While that might seem a logical starting point, we felt it would be premature to try to set our course for the next three to five years, when we neither knew enough about what we could accomplish with our limited resources nor what opportunities for our services may be available. Instead, we chose to spend our first year exploring as many opportunities for collaboration as possible - guided by "the power of saying YES" - while also working at building the Center's infrastructure.

As we looked back at what we had done at the end of the year, we were surprised at how well this approach worked - and how much was achieved.

Building the LiDA Center's infrastructure

In this first year, we feel we made great strides towards developing some important structures and tools for the LiDA Center.

The most critical undertaking was designing and launching a robust website for the LiDA Center. Our goal was not only to describe our mission, services and programs, but also to provide educators working in the area of Learning in the Digital Age topics with a means for sharing information and lessons learned. We feel we made great progress towards this goal.

We also experimented with a few different initiatives to build the LiDA Community. These most notably included redesigning a *LIDA Colloquium Series* that had predated the start of the Center, launching a "*Mastermind Group*" comprising of the LiDA Directors and a few other interested Warner faculty, and developing special learning opportunities for interested Warner doctoral students.

We were also able to secure funding for a new part-time position as LiDA Assistant Director, to start the following academic year.

Exploring new opportunities for LiDA work

The opportunities we explored were very diverse, as illustrated by the following examples:

- Revitalizing the existing Western New York Digital Conversion Consortium;
- Supporting an application for a Bridging Fellowship with the UR Chemical Engineering department to collaboratively developing AR experiences for their undergraduate courses;
- Securing a partnership with Wuhan University in China to offer "low residency programs" that leveraged Warner online offerings;
- Supporting *AccelerateU* (Wayne-Finger-Lakes BOCES) by offering professional learning opportunities for the emerging position of "online learning coordinators" in K-12 schools;
- Collaborating with a computer science colleague on an NSF grant proposal to develop and study an online platform that would enable high schools students to use machine learning in their scientific inquiries;
- Engaging in preliminary conversations with Dr. Tony Pisani, a UR Medical Center faculty and founder and CEO of SafeSidePrevention, about supporting their redesign of one of their successful distance program;

When taken together, these opportunities:

- Spanned K-12, higher education, and informal settings both locally and internationally;
- Involved new technologies (AR and machine learning) as well as tools to support online and blended teaching;
- Fostered collaborations with colleagues in other UR units as well as local companies and non-profit organizations.

As such, all presented great learning opportunities for the LiDA team to figure out what was needed, what was possible and where our expertise could be of most value - as well as to begin to make some contributions to worthwhile LiDA projects - regardless of whether or not they led to eternal funding (although many of them did!).

Unintuitive as it may have looked at first, in the end our decision to postpone the development of a strategic plan really turned out to be the right thing to do.

All of these activities were instrumental to inform our strategic planning process, which was later launched in Fall 2019. Therefore, we decided to organize the body of our annual report "retrospectively" around the five strategic goals identified in our 2019 strategic plan.

GOAL #1a - Increase the number of successful transformative LiDA initiatives, with a focus on providing support to specific innovative uses of technology for teaching and learning

1. **UR Online Learning** (Strategic Initiative D):

PROJECT DESCRIPTION: In his role as Associate vice-President for Online Learning for the entire University, and with support from LiDA Center staff and others, *Fredericksen leads strategic efforts to promote and strengthen online learning across the UR.

The LiDA Center made the following contributions to growing and improving online learning opportunities at the UR:

- Continuing to support the **growth of Warner online offerings** an initiative that has increased access to Warner courses to students with time and distance constraints, while maintaining their high quality. (See increase in Warner online courses and Number of students taking Warner online courses since the Warner Online Initiative was launched in 2013, and in particular its continuous growth over the period covered by this report).
- Supported the redesign of several K-12 leadership courses from face-to-face to a hybrid-online format, as part of the launch of the new <u>Southern</u> <u>Tier's low residency program preparing K-12 school leaders</u> an initiative that opened up new opportunities for rural teachers in the Southern Tier interested in pursuing an administrative career. To date, 18 students have already enrolled in this program.

- Supported the **UR College of Arts, Sciences and Engineering launch of its first online summer courses** by providing training to all but one of those instructors through the special UR Faculty Course Sequence.
- Supported the creation of new online courses that will lead to a **new online program in Public Health**.
- The **Committee On Online Learning (COOL)**, chaired by *Fredericksen (in his role as the UR Associate Vice-President for Online Learning) and comprising of representatives of all UR academic units, has continued to be a vehicle for conversations about online learning and teaching across the University.
- Contributed **10 new courses/professional development** offerings for the University outside of Warner, as designed by students in EDE486.
- UR undergraduate students benefited from the <u>integration of AR/VR</u>
 <u>experiences in undergraduate engineering courses</u> designed by Warner faculty
 **April Leuhmann in collaboration with the engineering faculty teaching those
 courses, as part of her Bridging Fellowship in Spring 2019.
- 2. **K-12 Digital Consortium** (Strategic Initiative C):

PROJECT DESCRIPTION: *Borasi and *Miller are supporting the **"incubation" of the K-12 Digital Consortium**— a collaboration between the LiDA Center and K-12 school districts in the Rochester region interested in transforming teaching practices by leveraging digital technology. Achievements during the time period covered by this report include:

- Reconstituted the Consortium Steering Committee, and gained its approval for the idea of "incubating" the Consortium within the LiDA Center.
- Developed clear expectations and processes for membership, documented on the new website.
- 17 district/BOCES members officially joined the Consortium, in addition to the original "founders" (see complete list of current Consortium members).
- Offered two key workshops, targeted mainly to members' leadership teams as described in more details in Goal #1c.
- Re-designed the Consortium website (k12digital.org).
- Started a K-12 Digital Consortium Twitter account
- 3. **Noyce Master Teacher Fellows (MTF) Digitally-Rich grant project** (part of Strategic Initiative C):

PROJECT DESCRIPTION: This 5-year \$3M grant from NSF is preparing 20 math and science "master teachers" to provide leadership in 7 high-need districts engaging in technology innovations (which are all part of the K-12 Digital Consortium). Each MTF will complete an Advanced Certificate in Digitally-Rich Teaching in K-12 Schools and an Advanced Certificate in Teacher Leadership at Warner (for a minimum of 42 credits per MTF) (see program description). This project was launched in collaboration with the Center for Professional Development and Education Reform in summer 2018; the leadership team consists of "Callard (as PI), "Borasi, "Borys, "Carson, "Daley, Fluet, Kruger, Martin, "Miller, "Occhino and Staloff.

Major accomplishments in the first year of this grant included:

- Initial investments to develop the leadership team.
- Participants' recruitment, which included an innovative "recruiting workshop" and resulted in securing 21 teacher-leaders-in-training, who have all started the program in Spring 2019.

• Redesigned in a hybrid-online format and offered in Spring 2019 the first STEM education course.

4. AccelerateU Online Learning Coordinators initiative

PROJECT DESCRIPTION: The LiDA Center has been supporting Accelerate U (an organization within Wayne Finger Lakes BOCES that acts as a clearing house and support for online high school courses in the region) in developing a cadre of "Online Learning Coordinators" (OLCs) – an emerging new role within K-12 school districts, intended to support high school students taking online courses -- as part of a 2018-2021 New York State Learning Technology Grant (NYS LTG) awarded to Accelerate U.

In this first year of the grant, an initial 2-day training (purposefully including some online components) was offered to a total of 34 participants from over 20 different districts.

5. Design of Warner "low residency programs":

PROJECT DESCRIPTION: The LiDA Center has been supporting the Warner School Online initiative by strategically adding "low residency programs" that students could attend at least partially online, so as to reduce required time on campus - and consequently increasing accessibility adn reducing students' costs.

*Borasi took a leadership role in identifying 5 Advanced Certificate, 15 Master's and 2 Ed.D. programs at Warner that could be completed by international students with minimum residency in Rochester. She also created <u>materials</u> <u>about each of these programs</u> (link to pdf) to be shared with Wuhan and Nanjing Universities in China as part of a May 2018 trip to China, organized to establish a formal collaboration between these universities and the University of Rochester.

GOAL #1b - *Increase the number of successful transformative LiDA initiatives,* with a focus **on preparing high-quality online and blended instructors**

- 1. **Graduates from Warner online and digitally-rich advanced certificates:** In this time period, xx students completed the Advanced Certificate in Online Teaching and yy students completed the Advanced Certificate in Digitally-rich Teaching in K-12 Schools (see our up to date <u>list of LiDA Advanced Certificate graduates</u>)
- 2. **Courses on digitally-rich teaching:** High-quality training in blended and/or online teaching was provided through the following graduate courses taught at Warner (see <u>brief descriptions</u> for each of these LiDA courses), which were all initiated and/or (co)designed by LiDA staff for a total of 739 semester credits of instruction in the 2019-20 academic year:
 - EDE410: Learning in the Digital Age (*Lammers) (Sp19=10)
 - EDE420: Introduction to Video Production for Education Research (**Textor) (Su18=8; F18=11)
 - EDE421: Introduction to Video Editing for Education Research (**Textor) (F18=8)
 - EDU446: Entrepreneurial Skills for Educators (*Miller) (Su18=32; Sp19=17)
 - EDE470: Topics in Online Teaching (for UR faculty only) (**Brown) (Sp19=4)

- EDE471: Topics in Online Course Design (for UR faculty only) (*Fredericksen) (Su18=2; F18=1; Sp19=5)
- EDU481: Integrating English & Technology (adjunct+) (Su21=4)
- ED482: Teachnology & Higher Education (*Fredericksen) (not offered this year)
- EDU483: Integrating Mathematics & Technology (**Borys) (Su18=2)
- EDE484A: Digitally-Rich Teaching & Learning in K-12 Schools (*Miller&*Borasi) (F18=18)
- EDE484: Online Teaching & Learning (Instructor: **Brown) (Su18=7; F18=10; Sp19=12)
- EDE486: Designing Online Courses (*Fredericksen) (Su18=17; F18=5; Sp19=10)
- EDU481: Integrating Science & Technology (**Luehmann) (Su18=9)
- EDF488: Online Teaching Practicum (*Fredericksen & **Brown) (Su18=3; F18=9; Sp19=4)
- EDF490: K-12 Digitally-Rich Teaching Practicum (*Miller) (8 students for the year)
- EDE492: Integrating Technology in Teaching Content Areas (not offered this year)
- EDU497: Teaching & Learning in Higher Education & Health Care Settings (*Borasi & *Miller) (F18=27)
- EDU499: Integrating Social Studies & Technology (adjunct) (Su18=4)
- *EDE545: Leadership Seminar in Digitally-Rich STEM Teaching (**Callard, **M. Daley &) (21 students for the year)
- ED567: Designing Research in Online Space (*Lammers) (not offered this year)

NOTE: Noyce MTFs, who took EDE545, contributed 63 of these credits, plus also took an additional 63 credits in other non-LiDa courses (see Goal 1a, #3 for more information about this project).

3. Professional development [PD] for K-12 teachers:

 As part of the already mentioned NYS Learning Technology Grant awarded to AccelerateU, *Borasi and *Miller designed a ½ day introductory workshop on blended teaching - to be offered multiple times during Summer and Fall 2019 as part of this grant.

4. Professional development [PD] for higher education [HE] instructors:

• In his role as Associate Vice-President for Online Learning, Eric Fredericksen organized three public symposia in Fall 2018 (see <u>Fall Colloquia</u> for more information).

5. Noyce Digitally-Rich Scholarship grant project:

PROJECT DESCRIPTION: This 5-year \$1.2M grant from the National Science Foundation [NSF] provides full scholarships to a total of 29 pre-service math and science teachers who also complete an Advanced Certificate in Digitally-Rich Teaching in K-12 Schools and commit to teach for at least two years in high-need schools after graduation. This project (see <u>brief description</u>) was launched in Spring 2018; the leadership team includes Choppin (as PI), *Borasi, *Borys, **M.Daley, and *Miller. Progress made during this first year of the grant included:

- 5 students were recruited for cohort 1, and started their program in Summer 2018.
- 6 students were recruited for cohort 2, and are scheduled to start their program in Summer 2019.

GOAL #1c – Increase the number of successful transformative LiDA initiatives, with a focus on **influencing educational leaders' decision-making about digitally-rich innovations**

- 1. **Professional development [PD] for K-12 leaders within the K-12 Digital Consortium** (see also Goal #1a): *Borasi and *Miller designed and offered the following free professional development events, targeting mainly the leadership teams within the consortium member districts:
 - <u>Kick-Off Workshop:</u> Offered in February 2019 to over 70 participants from 20 districts.
 - <u>Leadership Workshop:</u> Designed and offered for the first time in May 2019 to a group of over 50 participants from 12 member districts.

GOAL #2a. Advance LiDA scholarship, with a focus on studying transformative uses of technology for teaching and learning

1. Research on leadership in online education in higher education

Recognizing the key role played by higher education leaders for online teaching and learning in their institution, * Fredericksen has been a pioneer in studying higher education leadership's practices visa-vis online education.

*Fredericksen's work during this academic year resulted in the following presentations and publications:

- <u>Fredericksen</u>, E., (forthcoming) Leadership for Online Learning in US Higher Education, a book chapter in *Leading the e-Learning Transformation of Higher Education*, Stylus Publishing
- Fredericksen Online learning leadership in US Higher Education at: Open SUNY Summit March 2019 Syracuse, NY
- Fredericksen, Garrett, & Legon What we know about online learning leadership at: EDUCAUSE Learning Initiative February 2019 Anaheim, CA
- Legon, Garrett & **Fredericksen** *Achieving Online Learning Success: Contrasting Institutional Models at:* OLC Accelerate Conference on Online Learning November 2018 Orlando, FL
- Legon, **Fredericksen** & Garrett *Chief Online Learning Officers Perspectives on Management, Governance & Quality Assurance*: Quality Matters Conference October 2018 St. Louis, MO
- Fredericksen OLC Leadership Network: A National Collaboration of Senior Leaders at: OLC Innovate Conference on Online Learning April 2018 Nashville, TN

2. CHLOE Report:

PROJECT DESCRIPTION: *Fredericksen has been one of the authors of the annual report on the state of online education in higher education since 2018.

In addition to the **2019 report** (*link to the report*) itself, this work led to the following publications and presentations in the period covered by this report:

Garrett, R., Legon, R., Fredericksen, E. E., & Simunich, B. (2020). CHLOE 5: The Pivot to Remote
Teaching in Spring 2020 and Its Impact, The Changing Landscape of Online Education, 2020.
Retrieved from the Quality Matters website:
http://qualitymatters.org/ga-resources/resource-center/articles-resources/CHLOE-project

- Garrett, R., Legon, R. & Fredericksen, E., (2020). *CHLOE 4 Navigating the Mainstream: The Changing Landscape of Online Education 2020*. Retrieved from Quality Matters website: https://www.qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-4-report-2020
- Conference presentations at OLC Accelerate Conference on Online Learning November
 2019 Orlando, FL and the EDUCAUSE Conference October 2019 Chicago, IL

3. Research on youth digital literacy:

PROJECT DESCRIPTION: Lammers has been studying youth digital literacy in the United States and in Indonesia, as a means of theorizing global meaning making through digital practices and to inform educators about how youth leverage technology for their own interest-driven learning.

*Lammers has continued to study youth digital literacy as it takes place in a variety of informal online spaces, as a way to better understand the learning potential of specific digital literacy practices that youth seem to use spontaneously and with great success on their own. Her research has generated the following publications and presentations in the period covered by this report:

- Lammers, J. C. (2018, April). Examining an adolescent writer's networked audience practices
 across contexts: Insights from a longitudinal case study. Paper presented in symposium: The
 Critical Role of Audience in Digital Writing at the American Educational Research Association
 annual meeting, New York City, NY.
- Lammers, J. C. (2018, April). Learning from the connected writer: Implications for writing studies. Poster presented in session titled: *Taking the Long View: Learning from Longitudinal Studies of Writing* at the American Educational Research Association annual meeting, New York City, NY.
- Lammers, J. C., Magnifico, A. M., & Curwood, J. S. (2019, March). Looking back and thinking ahead: Charting new directions in online fanfiction research. Presentation as part of the invited colloquium "Fandom and Language and Literacy Development" at the American Association for Applied Linguistics annual conference in Atlanta, GA.
- Lammers, J. C. (2019, February 9). Why digital matters: Considering the authentic language learning opportunities in online spaces. Plenary talk given at the Applied Linguistics Winter Conference at Binghamton University.

4. Research on leveraging the potential of digital literacy in schools:

PROJECT DESCRIPTION: For the past decade, *Lammers has been conducting research on students' engagement in fanfiction and other powerful digital literacies, and deriving implications for English Language Arts/Literacy classrooms - in collaboration with Warner doctoral students as well as colleagues across the world.

*Lammers work on this topic generated the following publications and presentations in the period covered by this report:

- Huang, T. & Lammers, J. C. (2018). A qualitative inquiry of video learning by Chinese L2 learners: Learning internalization, understanding social realities, and reflecting on challenges. *CSL: Chinese as a Second Language, 53*(3), 257-294. https://doi.org/10.1075/csl.18004.hua
- Lammers, J. C., & Van Alstyne, J. H. (2019). Building bridges from classrooms to networked publics: Helping students write for the audience they want. *Journal of Adolescent & Adult Literacy 62*(6), 653-662. DOI: 10.1002/jaal.933
- **Lammers**, J. C. (2018, September 14). <u>Navigating tensions when connecting classrooms to</u> online communities. *Literacy Daily*.
- **Lammers**, J. C. (2018, November 8). *It's the ethos, not the tech: Pedagogical principles for the digital age.* Digital Humanities Lunch talk, University of Rochester.

5. Case Study of the East Irondequoit digital conversion.

PROJECT DESCRIPTION: The East Irondequoit Central School District has been a pioneer in the Rochester region, since it started its journey towards digital conversion in 2012 under the leadership of Superintendent Susan Allen and Chief Information Officer Joe Sutorius. The LiDA Center has committed to conduct a case study of this experience, as a way to document key decisions made, challenges encountered, and lessons learned that could benefit other districts embarking in similar 1:1 initiatives.

During the time period covered by this report, 1. the following accomplishments were achieved:

- We secured approval from East Irondequoit's leadership and RSRB for data collection.
- 7 video interviews with key players were completed to date, with the goal of developing multi-media documents to be posted on the k12digital.org website as a way to document and disseminate this district's successful efforts in ways more accessible to and usable for practitioners
- 6. Implications of machine learning for scientific inquiry and science education: PROJECT DESCRIPTION: Since early 2019, 'Borasi, 'Miller, and ''M.Daley have collaborated with Computer Science faculty ''Zhen Bai to explore how machine learning may provide new ways to generate as well as to test hypotheses as part of scientific inquiry and the implications this may have for how we teach about scientific inquiry in schools and colleges. This work is intended to leverage and complement ML-powered learning environments "Bai has been developing to make the use of machine learning more accessible to students with limited math and coding background. This collaboration started during the 2018-19 academic year, an cultivated this year with the submission of a grant to the National Science Foundation (not funded).
- 7. **Study of AR/VR use in undergraduate engineering courses;** As part of her Spring 2019 Bridging Fellowship, April Luehmann has worked with colleagues in engineering, as well as Warner doctoral students, to collect and analyze data about how students engaged in the AR/VR learning experiences in Bridging Fellowship they designed for a number of undergraduate chemical engineering courses.
- 8. **LiDA-related doctoral dissertations**: In this section we are listed all "active" UR Ph.D./Ed.D. dissertations on topics related to LiDA, where either the student is part of the LiDA community, or at least a member of the dissertation committee is a LiDa staff or LiDA community member:
 - **Borys, Zenon, Teachers' Curriculum Practices in the Digital Age (committee: Choppin Ichairl, Hursh, Otten) proposal defended in 2019
 - **Carson, Cynthia, Coaching from a Distance: Exploring Coaching Practices of Video-based Online Coaches (committee: Choppin Ichairl, Luehman, Roth-McDuffie) proposal defended in 2019
 - **Hafsa, Syeda [Farzana], Investigating Teachers' Identity Development in a Hybrid Course to Prepare Online Teachers, dissertation defended in Spring 2019

GOAL #2b. Advance LiDA scholarship, with a focus on leveraging digital technologies to more effectively disseminate new knowledge

- 1. **LiDA Center website** (part of Strategic Initiative B):
 - Designed the LiDA Center website to include a section intended to provide an introduction to practitioners and researchers about specific topics, based on research findings and lessons learned.
 - Created a first example on the topic of "Online Teacher Identity", as an illustration and an invitation to other experts within the LiDA Community to do the same for other topics (see <u>Online Teacher Identity example link to Online Teacher Identity page</u>)
- 2. Lesson learned reported on k12digital.org:
 - The redesign of the K-12 Digital Consortium's website purposefully included sections where lessons learned from the field can be reported using multi-media.
 - A first illustration on "First Steps when launching a 1:1 initiative" was created, building on the insights shared at the May 2019 K-12 Consortium Leadership Workshop (see this example)
- 3. **LiDA Zotero Bibliography Project**: Initiated by LiDA Director Lammers, in collaboration with Eileen Daly-Boas, this project involves any interested LiDA Community member in creating a collaborative bibliography of work related to learning in the digital age, using the platform Zotero, which enables tagging for easy search, as well as commentaries from multiple people. The project was launched this year.
- 4. Other innovative dissemination products:
 - Contributed a <u>video for the NSF "STEM for ALL Video Conference</u>" about the Noyce MTF-Digitally-Rich project (focused on the K12-University partnership we established with the K-12 Digital Consortium)
 - 5. **GOAL #2c.** Advance LiDA scholarship, with a focus on developing research methodologies to effectively and ethically make use of digital data
- 1. Developing research methods to study learning in online spaces
 PROJECT DESCRIPTION: *Lammers, along with other colleagues and Warner students, has been

working on identifying methodological and ethical issues presented by conducting educational research in online spaces, and also offering some solutions and research innovations.

The following publications and presentations have been generated in the period covered.

The following publications and presentations have been generated in the period covered by this report:

- Curwood, J. S., Lammers, J. C., Magnifico, A. M., & Stornaiuolo, A., (2019). Ethical dilemmas within online literacy research. *Literacy Research: Theory, Method and Practice*, 68(1), 293-313. https://doi.org/10.1177/2381336919870264
- Magnifico, A. M., Lammers, J. C., & Curwood, J. S. (2019). Developing methods to trace participation patterns across online writing. *Learning, Culture, and Social Interaction*. [early online] https://doi.org/10.1016/j.lcsi.2019.02.013
- **Lammers**, J. C. (2018, November). Respect as a guidepost in ethical online literacy research. Paper presented in the *Ethical Considerations in Online Literacy Research* symposium at the Literacy Research Association annual conference, Indian Wells, CA.
- Lammers, J. C., Stornaiuolo, A., Verhoeven, Y., & McGuinness, S. (2018, October). Trolls, stalkers, and flamers, oh my! Revisiting ethical decision-making internet research in light of ever-changing online practices. Roundtable presented at Association of Internet Researchers Conference, Montreal, Canada.
- Magnifico, A. M., Curwood, J. S., & Lammers, J. C. (2018, July 4). Addressing methodological challenges: A new approach to tracing participation patterns in online writing. Talk given at the Centre for Research in Digital Education: School of Education at University of Edinburgh, Scotland.

GOAL #3. Achieve visibility for LiDA Center's work

1. Awards and other recognitions:

- *Lammers was awarded a <u>Fulbright Fellowship to conduct research in Indonesia</u> on youth digital literacy practices in 2019-20.
- *Fredericksen was appointed as the <u>2019 President of the Board of the Online</u>
 <u>Learning Consortium (OLC)</u>, the premiere professional organization on online
 education. This recognition and honor draws unique attention to the Warner School
 at the University of Rochester and reflects on the national reputation of a key player
 in the LiDA Center.

2. Publications, presentations and internet presence:

- A total of 6 **publications** and 15 **presentations** to date have recognized affiliation with and/or support from the LiDA Center (see items marked with an asterisk in the list of LiDA products).
- Launched the <u>LiDA Center website</u> (link to https://www.rochester.edu/warner/lida/), including several sections showcasing the Center's work and accomplishments (see in particular the ABOUT, SERVICES and PROGRAMS sections) (Strategic Initiative B)

• Launched the <u>k12digital.org website</u> (*link to k12digital.org*); the collaboration with the LiDA Center is made very explicit in the title itself.

3. LiDA staff's participation in conferences and events:

- UR/RIT AR/VR Initiative Meeting and Discussion (October 1, 2018) (*Borasi)
- 2018 Frameless Symposium (*Borasi)
- 2018 OLC Accelerate (*Fredericksen)
- 2019 OLC Innovate (*Fredericksen)
- 2019 STEM for All Video Showcase (*Borasi; *Miller)

4. Contributions to increasing the LiDA Center's visibility within the University of Rochester:

- *Frericksen's organized several well attended activities and events in his dual role as **Associate Vice-President for Online University** for the entire university. This included the 2018 fall Online learning Symposium series, and the 2019 spring faculty workshops.
- **Luehmann was awarded a prestigious <u>Bridging Fellowship</u> from the University of Rochester to spend Spring 2019 with the Hajim School of Engineering to collaborate on AR/VR initiatives.
- 14 LiDA Colloquia were organized in the 2018-19 academic year and advertised across the University of Rochester through @rochester (the UR daily e-newsletter).

5. Contributions to increasing the LiDA Center's visibility in the region:

• LiDA Directors Borasi and Miller have continued to played a very visible role in the **K-12 Digital Consortium** (involving 17 school districts and three BOCES in the region).

6. Contributions to increasing the LiDA Center's visibility nationally and internationally:

- *Fredericksen serving as the <u>2019 President of the Board of the Online</u> Learning Consortium (OLC).
- *Lammers award of a <u>Fulbright U.S. Scholar grant to conduct research in Indonesia</u> on youth digital literacy practices (*to take place in 2019-20*)

GOAL #4.Create a vibrant and collaborative "LiDA Community"

1. LiDA Colloquium Series

PROJECT DESCRIPTION: Featured LiDA program aiming at creating opportunities for sharing and dialogue about topics related to learning in the digital age for educators across fields. Redesigned the **LiDA Colloquium Series**, and offered a total of 14 sessions.

- Data Visualization (April, 2018)
- How can we study teaching and learning in digital spaces? A focus on ethical issues (October, 2018)
- How can we leverage digital technologies to create "radically new" learning experiences? A focus on K-16 education (October, 2018)
- How can we develop digitally-rich teaching practices? A focus on leveraging OER and other available digital resources (November, 2018)
- How can foster systemic change around digitally-rich education? A focus on getting started (November, 2018)
- What "new" learning experiences are made possible by digital technologies?: A focus on professional education (November, 2018)
- Open Sharing (January, 2019)
- Open Pedagogy: Varied definitions, multiple approaches (February, 2019)
- Fostering systemic change around digitally-rich education: A focus on getting started (February, 2019)
- Exploring Infiniscope: Tapping into NASA data and imagery for adaptive learning (March, 2019)
- Social and tactile augmented reality for STEM learning and teaching: Roles, strategies, and laughter (March, 2019)
- Inclusivity matters: A conversation with digital learning designers (April, 2019)
- How do they do it? K-12 teachers' stories of digitally-rich instruction (April, 2019)
- What Can We Learn About Technology Interventions? (May 2019)
- 2. **Growth in LiDA community members:** Secured 22 new LiDA community members (in addition to 7 current staff members), after finalizing and making public decisions about LiDA Community expectations (<u>as listed in the LiDA Community page on the LiDA Center website</u>).

- 3. **LiDA website and Communication Plan** (Strategic Initiative B):
 - Designed and launched in May 2019 the <u>LiDA Center website</u> including a <u>Shared Resources</u> section created to provide the opportunity to LiDA community members to share information about their projects, work products, and valued resources.
 - Started a K-12 Digital Consortium Twitter account, and linked that to the LiDA website until we have an active Twitter account more specific to the Center.
- 4. **Active LiDA Working Groups this year:** The following working groups (and individuals identified in parenthesis) have been meeting regularly and/or working on unfunded collaborative projects over the current year:
 - Mastermind Groups: We decided to explore the practice, used by a number of successful entrepreneurs, of establishing a small peer group of individuals with a common interest, who commit to regular meetings to share experiences and provide input on each other's ideas). We successfully piloted a first Mastermind Group involving all LiDA Directors and three other Warner faculty in the LiDA Community, where everyone committed to meet every other week for 1.5 hours for the entire academic year.
 - Learning with XR (A.Luehmann; A.White from Chemical Engineering; several Warner RAs): **Luehmann started this working group with Chemical Engineering faculty Andrew White and other UR faculty and students prior to the launch of the LiDA Center, as they worked on an internal grant funded by the UR Provost Office to create a prototype device that would enable chemical engineering students to engage in AR/VR learning experiences. With some financial support from the LiDA Center (covering for some RAs' hours) as well as a Bridging Fellowship awarded to Luehmann for Spring 2019, during the period covered by this report this Working Group has continued to design, implement and study AR/VR learning experiences for UR undergraduate engineering students.
 - Machine Learning & Scientific Inquiry (Z. Bai Computer Science; R.Borasi; M. Daley; D. Miller; RA X.Wan): Preliminary conversations with Zhen Bai, a UR faculty in Computer Science interested in applications of machine learning to education, let to the creation of this Working Group. The Group initially focused on preparing a grant proposal for NSF STEM+C program (due May 2019), but decided to continue to work together even after this proposal was declined.
- 5. **Other on-going active collaborations:** The following existing collaborations were maintained and/or expanded:
 - AccelerateU (an organization within Wayne Finger Lakes BOCES that acts as a clearing house and support: (an organization within Wayne F BOCES): Prior to the official launch of the LiDA Center, AccelerateU included LiDA Director Miller as a key professional development provider in a proposal for a NYS Learning Technology Grant. This grant was awarded in early 2019, and at that point AccelerateU asked the

LiDA Center to provide a few additional services besides the ones originally planned in the proposal (increasing the contract for year 1 to \$67,000).

- 6. **New collaborations:** New collaborations were explored with the following individuals/groups:
 - <u>Dr. Zhen Bai</u>, UR faculty in the Computer Science Department, reached out to the LiDA Center looking for collaborators in projects involving the application of artificial intelligence and machine learning to education. This led to the creation of the "Machine Learning and Scientific Inquiry" Working Group mentioned above.
 - <u>Dr. Gloria Jacobs</u>, a Warner alumna who is <u>now</u> on the faculty of Portland State University (OR), reached out to the LiDA Center to explore possible collaborations around developing digital literacy for vulnerable populations as a way to increase their access to health care.
 - Wordsmyth (-link to their website): Dr. Robert Parks, founder and CEO of Wordsmyth (an Ithaca-based ed-tech company that has produced, among other things, an online interactive dictionary), asked the LiDA Center to partner in a Small Business Innovation and Research (SBIR) grant proposal to the Department of Education. The proposed project involved some enhancements to make their online dictionary more easily accessible and useful to K-5 elementary teachers. Although the grant was not awarded, Wordsmyth decided to proceed anyway with implementing some of these enhancements.
 - <u>Teachers Connect:</u> LiDA Director Miller negotiated with *Teachers Connect* (an ed tech start-up company) to start a "private" online community for our Noyce MTF Digitally-Rich project, as well as an open "K-12 Digital" online community using their online platform
 - <u>Dr. Charles Graham</u> (*Brigham Young University*) and *Jered Borup* (*George Washington University*); co-authors of an e-book to prepare blended teachers): LiDA Director Miller initiated a couple of Zoom conversations with Dr. Graham and Dr. Boruyp to explore possible collaborations.
 - <u>ASSISTments</u> project (*Worcester Polytechnic Institute; exploring ways to leverage digital technology to support assessment in K-12 schools)*: LiDA Director Miller initiated a couple of Zoom conversations with Worcester faculty involved in this project. to explore possible collaborations.
 - SafeSide Prevention: Dr. Tony Pisani, a UR Medical Center faculty and founder and CEO of SafeSidePrevention (a UR spin-off to provide high quality training on suicide prevention), contacted the LiDA Center to seek advice and support in redesigning of their "distance" professional developments programs on suicide prevention for youth services and health care professionals. This led to a first paid consultation in May 2019, followed by a small contract for the next year.

GOAL #5. Assure the resources needed to sustain and expand the Center's work and its impact

1. New LiDA staff positions:

The LiDA Center was launched with the following part-time positions:

- Director (*Borasi) also playing the role of Associate Director for Professional and Life-long Learning
- Associate Director for Higher Education (*Fredericksein)
- Associate Director for K-12 Education (*Miller)
- Associate Director for Informal Education (*Lammers)

2. LiDA Center staff working on unfunded infrastructure and core initiatives:

- LiDA Director (Borasi): 10% in 2018, 50% FTE Jan-May 2019 while on sabbatical)
- LiDA Associate Director for Higher Education (*Fredericksen): 5% FTE
- LiDA Associate Director for K-12 Education (*Miller): 5% FTE
- LiDA Associate Director for Informal Education (*Lammers): 25% summer
- RAs piloting some LiDA Assistant Director's function: Han; Dang
- Additional RA support (Ella Wan; Farsana Hafsa): ~50% FTE total

3. Personnel working on funded LiDA initiatives:

LiDA Staff:

- *Borasi: 12% FTE on Noyce MTD-DR grant (2018); directing HPE program, co-teaching 2 LiDA courses, and supervising LiDA dissertations (covered by Warner)
- *Fredericksen: 5% FTE on supporting online teaching at Warner + teaching LiDA courses & supervising online teaching practicum, directing Online Teaching program and supervising LiDA dissertations (all covered by Warner)
- *Miller: 15% FTE on Noyce MTD-DR grant; 5% on K-12 Consortium (covered by mini-grant); + teaching 5 LiDA courses, directing Digitally-Rich Teaching program & program advisor for Digitally-Rich Teaching and Online Teaching programs, supporting Warner faculty online teaching and supervising LiDA dissertations (covered by Warner)
- *Lammers: teaching a LiDA course + supervising LiDA dissertations (covered by Warner)

• Other personnel (for a total of 2.20 FTE):

- Heather Boyle: on Noyce MTF-DR
- Elizabeth Desser: on Noyce MTF-DR
- L.Brown: Teaching 3 LiDA courses & online teaching practicum

- Callard (Center for Professional Development and Education Reform -CPDER): on Noyce MTD-DR grant (+Sync-ON)
- Carson: on Noyce MTD-DR grant (+Sync-ON)
- Jeff Choppin: on Noyce Scholarship grant (+SYNC-ON)
- Mike Daley (CPDER): on Noyce MTD-DR grant; + HPE Program advisor + teaching 2 LiDA course
- April Luehmann: on Noyce Scholarship grant
- Stephanie Martin: on Noyce MTD-DR grant
- Michael Occhino: on Noyce MTD-DR grant
- Melissa Staloff: on Noyce MTD-DR grant
- L.Warner: on Noyce MTD-DR grant

Faculty and staff outside of Warner:

- Free lancers: This year, we have not been in a position to hire any free-lance
- 4. New gifts secured to support the LiDA Center's infrastructure and unfunded core initiatives: A total of about \$80,000 in gifts has been received to date during this time period, including:
 - Securing a **3-year gift** of \$50K/year from the **George L. Schultz Family Fund** to support a part-time Assistant Director (with the agreement that we would initially "pilot" potential functions associated with this role with a combination of doctoral students for the first year) (starting Jan.2019)
 - Receiving a \$10K **gift from the Scandling Family Foundation** that partially supported the launch of the LiDA Center website
 - Received a total of ~\$20K in George Eastman Circle and other recurring gifts

5. New grants and contracts:

- Finalized an augmented contract for Year 1 of AccelerateU NYS Learning Technology grant for a total of \$67,000.
- Paid \$1,000 by **Wordsmyth** for RSRB submission.
- Secured a **UR Bridging Fellowship** for A.Luehmann AR/VR work (which fully covered her salary and benefits for Spring 2019).

6. New grant proposals submitted:

- *Lammers submitted a proposal for a Fulbright U.S. Scholar grant to take place in Indonesia for the 2019-20 academic year (\$22,750 awarded, plus research leave from the University of Rochester)
- SBIR Phase I proposal submitted to the U.S. Department of Education in collaboration with Wordsmyth (\$200,000; not awarded)
- Grant proposal submitted to the National Science Foundation STEM+C program, in collaboration with Zhen Bai (Computer Science) and Mike Daley (Center for Professional Development and Education Reform) (\$1.5M; not awarded)

7. **Developing Warner doctoral students' capacity** (Strategic Initiative E):

- A few doctoral students took EDE410: Learning in the Digital Age
- Launched mini-courses on video production and video editing for educational research, designed and taught by *Kristana Textor; several doctoral students took those course
- Launched the LiDA Zotero Bibliography project