# LiDA Center 2019-20 Report

(YEAR 2; June 2019-May 2020)

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- a. supporting specific innovative uses of technology for teaching & learning
- b. preparing high-quality online and blended instructors
- c. <u>influencing educational leaders' decision-making about digitally-rich</u> innovations

GOAL #2. Advance LiDA scholarship, with a focus on:

- a. studying transformative uses of technology for teaching and learning
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**Note:** LiDA staff has been identified with an asterisk (\*) and other LiDA Community members with a double asterisk (\*\*)

#### **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**

As the Center for Learning in the Digital Age (LiDA) began its second year of operations, we were finally ready to embark on a strategic planning process to identify priorities for our work ahead. This process developed over the entire Fall 2019 semester, engaging over 50 individuals in a series of productive meetings and reviews of preliminary documents.

While this process was taking place, however, we continued to fulfill commitments made in the previous year as well as explore new possibilities.

Just as we were getting ready to put our new strategic plan into action, though, the COVID-19 pandemic hit. This caused an unexpected and abrupt closure of our university as well as all local K-12 schools. Given the LiDA Center existing expertise in online teaching, we felt called to respond to this emergency while putting aside temporarily almost everything else - including starting to implement our strategic plan.

We are proud of the services we were able to provide to our community during this crisis, despite the delay it caused on our original plans.

#### Highlights of LiDA 2019 Strategic Plan

Our strategic plan (fully articulated in this <u>brochure)</u> identified five strategic goals as priorities moving forward, as listed below:

- 1. Increase the number of successful transformative LiDA initiatives
- 2. Advance LiDA scholarship

- 3. Achieve visibility for LiDA Center's work
- 4. Create a vibrant and collaborative LiDA community
- 5. Assure the resources needed to sustain and expand the Center's work and its impact

Since the completion of our Strategic Plan, these goals have provided a guide for making decisions about what initiatives to take on and how to best use our resources. They have also been used as a way to organize the body of our annual reports.

We also identified a number of metrics we would monitor and report on, as a way to quantitatively measure our progress on these goals overtime.

Five "strategic initiatives" were also identified as worthy of special investments, as we recognized their timeliness and potential to further several of our strategic goals, as listed below:

- A. Creating a robust LiDA website, along with a comprehensive communication plan
- B. Promoting online learning at the University of Rochester
- C. "Incubating" the K-12 Digital Consortium
- D. Developing capacity in applying selected promising technologies
- E. Developing Warner doctoral students' capacity to engage in LiDA initiatives

### Key achievements prior to the pandemic

Among the on-going initiatives we were pursuing prior to the pandemic, below we highlight the most significant ones.

- Conducting research on youth digital literacy practices in Indonesia which provided a unique opportunity to expand our work internationally
- One of our associate directors serving as the 2019 President of the Online Learning Consortium - a position that gave him national visibility and a greater sphere of influence
- Continuing our work on the NSF-funded Noyce projects preparing "digitally-rich" STEM teachers and master teachers which funded our work towards advancing more transformational uses of technology in K-12 education
- Offering professional learning opportunities on digitally-rich teaching to almost 100 K-12 teachers - as a way to develop awareness of the potential of digitally-rich learning for a larger number of teachers in the region
- Expanding the K-12 Digital Consortium footprint and initiatives to continue to leverage the power of connecting many districts interested in technologyrich innovations
- Serving as a consultant for SafeSidePrevention in the redesign of their distance programs - both to learn more about the new way for offering distance education developed by this company, and to get a better sense of what it would take to collaborate with an educational company

Some new opportunities were also pursued in the same time period. Those included most notably:

- Opportunities to fund LiDA-related professional development for K-12 teachers.
  - o In collaboration with the Center for Professional Development and Education Reform, we applied to serve as the professional development provider in two NYSED "Smart Start" grants applications focusing on digitally-rich teaching and the new computer science standards, respectively (NOTE: these grants were put on hold for a while but were eventually awarded in early 2021).
- Funded opportunities to use digital technologies to support the dissemination of worthwhile educational initiatives.
  - The LiDA Center was invited to support the Bullying Education with Literacy project, launched the previous year with funding from the Moskowitz Family Foundation, as this project pivoted from designing and implementing lessons to creating online materials for educators and parents.
  - A few months later, this led to being invited to explore another project the Moskowitz Family Foundation was interested in, which involved supporting young children's literacy development, starting at birth (*Reading2Babies*).
- Opportunities to explore potential applications of cutting-edge technologies to support learning (moving beyond online instruction).
  - Along with many other colleagues from across the UR, we participated in a proposal for an NSF Al-Institute focusing on Al-Augmented Learning; although not awarded, this initiative established valuable connections with faculty across the University interested in application of Al to education.
  - The LiDA Center took a leadership role in putting together proposals around "Future of Work at the Human-Technology Frontier" including a planning grant that was eventually awarded by NSF.
  - The LiDA Center was invited to collaborate in an NSF grant proposal on Cybersecurity Education.
- Opportunities to explore future implications of technology advances on educational systems.
  - Following some conversations initiated by Ricard DeMartino, director of the RIT Simone Center for Student Entrepreneurship and Innovation, we launched a study group on the potential impact of "Disruptive Technologies in Higher education" and submitted grant proposals to various foundations to support a pilot project on this topic.

All these developments also informed our concurrent strategic planning work, as reflected in the strategic goals and initiatives we eventually agreed on.

In Fall 2019 we also conducted our search for a LiDA Assistant Director.

### Helping educators respond to the pandemic

We are especially proud of the amazing efforts put forth by the entire team - but especially \*Fredericksen and \*\*Lisa Brown - in support of all UR instructors, as they needed to switch to "emergency remote teaching" in the matter of days when the University had to close in response to the pandemic in early March 2020. This included introductory workshops offered multiple time to reach hundreds of UR instructors, the swift creation of websites that faculty and students could use as a reference as needed, as well as more indirect (but equally critical) support provided to inform university leaders' decisions through daily meetings of the Education IT Governance Committee and other informal vehicles.

We also quickly redesigned courses and other experiences for K-12 teachers involved in our projects and courses and offered our services in support to districts in the K-12 Digital Consortium as well as the East High School Educational Partnership Organization (EPO). Some of these services were offered pro-bono (as in the case of the East EPO). For a few services, we were also able to repurpose funds available in some existing grants and contracts, as well as pursued supplements and other funding opportunities, to support some of this work.

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 following contributions to growing and improving online learning opportunities at the UR were made this year - both pre-COVID and after the pandemic hit:

#### Pre-COVID:

- Continuing to support the growth of Warner online offerings: Even pre-COVID, we continued to promote the creation of new online offerings (See data showing the 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).
- Educational IT Governance Innovation Grants: This committee, co-chaired by \*Fredericksen, launched a new competition for mini-grants to support technology-rich innovations within the University; 9 "innovation grants" were awarded (see list, along with a brief description of each project).
- University of Rochester Faculty Summit 2019 Teaching and Learning with Technology: This <u>half-day event</u> was co-sponsored by the LiDA Center together with the Education IT Governance Committee and the Office of Academic Administration to bring UR faculty together to share innovative experiences with

- online teaching and showcase valuable tools. It included 9 concurrent presentations, plus over a dozen posters, as well as opportunities for informal conversations.
- The Committee On Online Learning (COOL), chaired by \*Fredericksen (in his role as the UR Associate Vice-President for Online Learning) and consisting of representatives of all UR academic units, continued to be a vehicle for conversations about online learning and teaching across the University.

#### **DURING THE PANDEMIC:**

- Support to the entire University for the emergency move to remote teaching due to COVID-19 was provided in the following complementary ways during March-May 2020:
  - \*Fredericksen, together with \*\*Lisa Brown, immediately designed and offered a 1.5 hour introductory workshop to support UR instructors in moving their courses online; the workshop was offered a total of 12 times reaching hundreds of UR faculty, doctoral students and adjunct instructors.
  - o Within the first two weeks after the UR announced moving all instruction online, \*\*Brown and \*Fredericksen also created a **website for instructors** to support <u>Teaching During Times of Disruption</u> as well as a complementary **website for students** to support <u>Learning During Times of Disruption</u> each including guides, handouts and video tutorials.
  - Additional workshops were provided later in the semester on the topics of Teaching During Times of Disruption Part 2 and Moving from Disruption to Online Teaching. These were offered five times to hundreds of UR faculty members.
  - \*Fredericksen and \*\*Brown also designed an accelerated version of the course sequence we have developed for UR faculty interested in learning to teach online, and offered two sections in April-May, involving a total of 78 UR instructors slated to teach courses in Summer A and Summer B 2020 resulting in the redesign of quality online courses for the University.
  - \*Borasi participated as a **consultant in the weekly debriefing meetings organized by the Institute of Optics**.
  - \*Fredericksen, together with \*\*Peyre, led daily half-hour debriefing meetings of the University Educational IT Governance Committee to provide a forum for IT and instructional technology leaders in each school to share and discuss experiences; \*Borasi and \*Miller also participated in these meetings.
  - \*Fredericksen also took a leadership role in designing, administering and analyzing a **survey for UR students** to gather valuable information of the student experience of the emergency remote teaching.
- Additional support to Warner for the emergency move to remote teaching due to COVID-19 was provided in the following complementary ways during March-May 2020:
  - o \*Fredericksen and \*\*Brown offered **two sessions of the introductory workshops just for Warner instructors** (attended by over 40 individuals) just a few days after the University announced the move to remote instruction.
  - The LiDA Center organized 2 office hours and 4 Zoom debriefing sessions for Warner instructors interested in sharing experiences and discussing specific issues.
  - o LiDA Center staff organized a **professional development series specifically for instructors in the K-12 Leadership program,** as they prepared to offer fully online almost all of their core courses in Summer 2020 to large classes.

- o LiDA Center staff also offered **individual support to Warner instructors** as needed while teaching the remainder of their Spring courses online, as well as to prepare for offering all Summer 2020 courses online.
- Contributed many new courses/professional development offerings for the University (within and outside of Warner), as designed by each of the 18 students that took EDE486 in this time period as well as the 78 instructors who took the accelerated version of the course offered in April-May 2020.

#### 2. **K-12 Digital Consortium** (*Strategic Initiative C*):

PROJECT DESCRIPTION: The LiDA Center is offering some leadership and infrastructure support in the initial stages 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:

- A few new districts officially joined the Consortium during this time period, reaching a total of 28 members as of May 2020 (see <u>complete list of current Consortium</u> <u>members</u> on the k12digital.org website).
- Offered a Kick-off Workshop in January 2020 at Wayne Finger Lakes BOCES as described in more details in Goal #1c.
- Started regular Zoom meetings (once every two months) with district liaisons.
- Made significant additions to the <u>Consortium website</u>, notably involving redesigning the section on District Profiles and the "First Steps" page, as well as beginning to build a "Community Space" where members could share information and interact online.
- Continued to manage the 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 this second year of the grant included:

- We designed and implemented two hybrid-online "STEM digitally-rich teaching" courses an adaptation of our signature course EDE484A: Digitally-Rich Teaching and Learning in K-12 Schools, co-taught by \*Miller and \*\*Daley in Fall 2019, and a brand new course entitled (EDE 468:Integrating Technology in STEM Teaching), co-designed and co-taught by \*Borys and \*\*Daley in Spring 2020 (link to syllabus).
- As K-12 schools closed due to COVID19 in March 2020, we used part of our Leadership Seminar as well as the Spring 2020 course to support our Fellows in coping with the emergency situation and help them apply what they had learned about leveraging technology to this different situation.

# 4. AccelerateU Online Learning Coordinators initiative PROJECT DESCRIPTION:The LiDA Center has been supporting AccelerateU (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 AccelerateU.

In 2019-20 (year 2 of the grant), the LiDA Center helped re-design the initial 2-day training for another group of about a dozen OLCs, and continued to support the development of a Professional Learning Community with several of the participating districts.

#### 5. SafeSidePrevention Distance Program

<u>SafeSidePrevention</u>, a company founded by UR faculty Anthony Pisani designed and is continuing to offer a successful video-based suicide prevention "remote" program to many institutions across the world. IN 2019, they decided to do a major redesign of this program, to better leverage available digital technology.

\*Borasi and \*Miller consulted with *SafeSidePrevention* to inform a major redesign of their distance program, aiming at making better use of online capabilities to support learning. This included several meetings with *SafeSidePrevention* staff in charge of the redesign, to both share relevant pedagogical principles and affordances of digital technologies we thought could inform their design, and to review and respond to preliminary drafts.

#### 6. **Bullying Education with Literacy**

PROJECT DESCRIPTION: This project, funded by the Moskowitz Family Foundation, focuses on providing teachers with online supporting materials and information to fight bullying in school using literacy. Started in 2018 with \*\*Carol St.George as the PI, after a year the project pivoted to pursuing their original goal through a rich website that would make the materials created easily accessible to everyone. \*Borasi and \*Han, as well as other research assistants, are part of the project team.

While the first year of the project focused on preparing an accessible literature review on the topic, as well as developing and piloting a number of different literacy learning experiences for elementary students, in this second year the project shifted its focus to preparing digitally-rich resources for teachers interested in developing anti-bullying literacy activities - and looked at the LiDA Center for support. By the end of the year, a <u>website</u> was created to give access to (a) information about more than 50 bullying-related books teachers could use (in most cases including selected instructional materials), (b) six sets of "bullying cards" each providing a bullying scenario for discussion with students (along with background information teachers could find useful to lead this discussion), as well as (c) links to other resources about bullying as well as (d) the literature review developed in year 1.

#### 7. Reading2Babies

PROJECT DESCRIPTION: This project, also funded by the Moskowitz Family Foundation with additional support from the Rosenwald Foundation, aims at increasing literacy development in young children, starting at birth. Started in early 2020, and involving a collaboration with the UR OBGYN department, this project involves the creation of another website to disseminate materials and information to support reading and other literacy activities with babies, as well as an "All about Babies" app that will also include other information and guided activities involving health.

The project was launched in Spring 2020 with an initial gift by the Rosenwald Foundation. \*Borasi, along with three Warner doctoral students and two representatives from the UR OBGYN, participated as a "team" in an NSF-funded I-

Corps short course in March 2020 (co-taught by \*Miller), as a way to get this project launched in a way that took into consideration the "customer perspective" from the start. The team conducted over 30 "discovery interviews" with new parents and health care providers, which led to reconceive the initial project and led to the current idea of developing an app as well as a website so as to better respond to the needs and immediate interests of new parents..

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

- 1. **New graduates from Warner LiDA 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 803 semester credits of instruction in the 2019-20 academic year:
  - EDE410: Learning in the Digital Age (\*Lammers) (not offered this year)
  - EDE420: Introduction to Video Production for Education Research (\*\*Textor) (F19=4)
  - EDE421: Introduction to Video Editing for Education Research (\*\*Textor) (F19=4)
  - EDU446: Entrepreneurial Skills for Educators (\*Miller) (Su19=35; Sp20=14)
  - EDE470: Topics in Online Teaching (for UR faculty only) (\*\*Brown) (Su19=6; Sp20=12)
  - EDE471: Topics in Online Course Design (for UR faculty only) (\*Fredericksen) (Su19=6; F19=2; Sp20=7)
  - EDU481: Integrating English & Technology (\*\*Boyle+) (Su21=6)
  - ED482: Teachnology & Higher Education (\*Fredericksen) (not offered this year)
  - EDU483: Integrating Mathematics & Technology (\*\*Boyle+\*Borys) (Su19=2)
  - EDE484A: Digitally-Rich Teaching & Learning in K-12 Schools (\*Borys; \*\*Daley; \*Miller) (F19=36; Sp20=15)
  - EDE484: Online Teaching & Learning (Instructor: \*\*Brown) (Su1g=6; F1g=7; Sp20=9)
  - EDE486: Designing Online Courses (\*Fredericksen) (Su19=10: F19=3: Sp20=5)
  - EDU481: Integrating Science & Technology (\*\*Boyle+\*\*Luehmann) (Su19=6)
  - EDF488: Online Teaching Practicum (\*Fredericksen & \*\*Brown) (Su19=8; F19=5; Sp20=3)
  - EDF490: K-12 Digitally-Rich Teaching Practicum (\*\*M.Daley) (6 students for the year)
  - EDE492: Integrating Technology in Teaching Content Areas (\*\*Boyle) (Su19=3)
  - EDU497: Teaching & Learning in Higher Education & Health Care Settings (\*Borasi & \*Miller) (F19=31)
  - EDU499: Integrating Social Studies & Technology (\*\*Boyle+) (Su19=)
  - (New MTF-DR course (\*\*Daley & \*Borys) (Sp20=21)
  - \*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 126 of these credits, plus also took an additional 84 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 (with support from \*Borys and \*\*Boyle) offered 7 sections of a ½ day introductory workshop on blended teaching in Summer and Fall 2019 as part of this grant, serving a total of almost 100 teachers.
- Supported by the same grant, in response to the need for remote teaching and learning caused by COVID19, \*Borasi and \*Miller also designed a 2-day-equivalent online workshop on "Leveraging Technology to Support Remote Teaching", including two Zoom sessions as well as some asynchronous components, to be offered in June-July 2020.

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

- In his role as Associate Vice-President for Online Learning, \*Fredericksen organized three public symposia in Fall 2019 (see Fall Colloquia for more information)
- As mentioned in #1a, as part of their effort to prepare instructors to teach online in the COVID19 emergency situation, \*Fredericksen and \*\*Brown offered a total of 22 workshops, attended by hundreds of UR instructors.

### 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 second year of the project included:

- 4 of the 5 students in cohort 1 (who started their program in Summer 2018) graduated in Summer 2019, and continued to work with \*\*Leuhmann during the pandemic to develop a strong technology-rich unit for remote teaching focused on COVID-19
- The 5 students recruited for cohort 2 started their program in Summer 2019.
- 5 students were recruited for cohort 3 (scheduled to start their program in Summer 2020)

**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): Raffaella Borasi and Dave 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 January 2020 to over 60 participants from multiple districts and BOCES.
- A first <u>LiDA webinar</u> was offered in February 2020 on the topic of "setting up and running student help desks," building on the experience of two district members -

Webster and Brighton. This webinar was recorded and posted on the Consortium website, so as to be accessible to interested educators who were not able to attend the live event. This proved to be a viable and valuable format - although we have not yet repeated this kind of event due to the pandemic.

- 2. Collaboration with Warner K-12 leadership preparation program: Andrea Cutt and Holly Manaseri, directors of Warner K-12 Leadership preparation program, reached out to \*Borasi and \*Miller to help them add a new focus on digitally-rich and remote teaching throughout the K-12 leadership preparation program they direct. During the period covered by this report, the following first concrete initiatives were undertaken:
  - In Fall 2019, \*Borasi gave a guest presentation on digitally-rich instruction and digital conversion in the course EDU407: Curricular and Instructional Leadership.
  - Special arrangements were made to enable students in the K-12 School Leadership program to also pursue an Advanced Certificate in Digitally-Rich Teaching in K-12 Schools.
  - The LiDA Center was invited to host the April 2020 virtual event titled "Leadership During School Closure: Leveraging Technology," as part of the "Leaders for Equity" series organized by the Warner K-12 Leadership program for alumni from their program as well as other interested school administrators.

# **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 vis-a-vis online education.

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

- Fredericksen, E., (2020) Leadership for Online Learning in US Higher Education, a book chapter in *Leading the e-Learning Transformation of Higher Education*, Stylus Publishing
- Will the Coronavirus Forever Alter the College Experience? The New York Times
- Online education is growing, reaching new audiences Rochester Business Journal
- <u>Higher ed learns a new skill</u> The Rochester Beacon

#### 2. CHLOE Report:

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

In addition to the **2020 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://gualitymatters.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: <a href="https://www.qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-4-report-2020">https://www.qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-4-report-2020</a>
- 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 was awarded a Fulbright U.S. Scholar grant for the 2019-20 academic year for a research project designed to address a significant educational need in Indonesia to build local knowledge about students' digital literacy practices and Information and Communication Technology (ICT) use for learning. In partnership with a UNNES teacher educator and English as a Foreign Language scholar (and Warner alumna, Dr. Puji Astuti), this study employed surveys and focus groups to generate data about how, why, when, where, and to what ends secondary students from Central Java utilize technologies in their everyday lives. The study uses abductive analysis to put existing theories, largely derived from studies conducted in Western contexts, in conversation with the data to identify anomalies and unexpected findings that are unique to the Indonesian context. Findings have begun to be shared with teachers, teacher educators, and policy makers with the aim to improve the digital literacy and ICT education for Indonesian youth and with the larger research community to expand the world's definition of digital literacy. Already, this work has been or will soon be disseminated in the following ways:

- Lammers, J. C., & Astuti, P. (forthcoming). Calling for a global turn in digital literacies for greater connectivity. *Journal of Adolescent & Adult Literacy*.
- Lammers, J. C. (2020, May 28). <u>Fulbright Impact in the Field: A Panel on Digital Education</u>, <u>COVID-19</u>, & the Future of <u>Teaching and Learning</u>. Panelist invited by the Fulbright Social Media Team. (via WebEx)
- Lammers, J. C. (2020, April 14). *Journey to Fulbright*. Colloquium for Mary Lou Fulton Teachers College and Doctoral Council, Arizona State University. Tempe, AZ. (via Zoom)
- Lammers, J. C. & Astuti, P. (2020, February). Learning about the digital literacies of Indonesian youth: Sharing with our community of inquiry. Work-in-progress session presented at the *National Council of Teachers of English Assembly for Research*, Nashville, TN.
- Lammers, J. C. & Astuti, P. (2020, February). *Digital literacies of Indonesian secondary students:* What have we learned? Presented at both Universitas Negiri Semarang and Universitas Gadjah Mada, Yogyakarta, Indonesia

In addition, Lammers has continued her research on 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. Efforts in this reporting year were aimed primarily at informing classroom practice more directly. There was just one presentation in this reporting year:

• Lammers, J. C. (2019, October 8). Layering a "passionate writer" identity in online spaces: Learning from an adolescent writer across time and space. Invited talk at the Centre for Research on Learning and Innovation at University of Sydney, Australia.

#### 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 welkl as colleagues across the world.

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

- Marsh, V. L., Lammers, J. C., & Conroy, E. (2020, April). Researchers as thought buddies: Examining a research-practice partnership through design-based research. Roundtable presented at American Educational Research Association annual meeting, San Francisco, CA. (Conference canceled).
- Lammers, J. C. (2020, January 8). Tapping into online fanfiction communities to teach creative writing. Workshop presented as part of the AMINEF/Fulbright English Teaching Assistants Mid-Year Enrichment Conference, Jakarta, Indonesia.
- Lammers, J. C. (2019, November 2). Adopting a "digital literacies as social practice approach" to English language teaching and learning. Full-day workshop for teachers hosted at UNNES, Semarang, Indonesia.
- Lammers, J. C. (2019, November 16). Adopting a "digital literacies as social practice approach" to English language teaching and learning. Plenary talk given at 1<sup>st</sup> National Conference: Promoting 21<sup>st</sup> century skills in English literacy and education, Pontianak, Indonesia.
- Lammers, J. C. (2019, October 11). Bringing fanfiction into the English Language Arts classroom to connect learners with authentic audiences: Challenges and opportunities. Seminar presented for the Research in Educational Impact (REDI) at Deakin University, Melbourne, Australia.
- Lammers, J. C. (2019, October 19). What can educators learn from adolescents' interest-driven digital literacy? Plenary talk given at 2nd International Conference on Education and Social Science Research in Semarang, Indonesia.
- Lammers, J. C. (2019, September 14). Bringing fanfiction writing into the English classroom to connect learners with authentic audiences. Keynote presented at 8th UNNES International Conference on English Language Teaching, Literature, and Translation. Semarang, Indonesia.
- Magnifico, A. M. & Lammers, J. C. (2019, July 22-26). Writing in the wild: Fanfiction as a classroom practice. New Hampshire Literacy Institute. Durham, NH.
- Lammers, J. C. (2019, August). Preparing all teachers for digital literacies: Field notes from a teacher education course. Oral presentation at the 18<sup>th</sup> Nordic Literacy Conference & the 21<sup>st</sup> European Conference on Literacy, Copenhagen, Denmark.
- Lammers, J. C. & Van Alstyne, J. (Summer 2019). <u>Connecting student writers with online</u> audiences: Lessons from the field. Layered Literacies column, *ALAN Review*, *46*(3), 98-103.

### 5. Application for an NSF Al-Institute on Al-Augmented Learning

In late Fall 2019, \*Borasi and \*\*Daley participated in a series of meetings in preparation for submitting a planning grant proposal to NSF for an AI Institute focusing on AI-Augmented Learning. The team included several UR faculty from the Goergen Institute for Data Science, Computer Science, Philosophy, Music Theory, as well as the Medical Center. The proposal was submitted in February 2020. While not funded, this collaborative work was instrumental to opening a number of new opportunities for collaboration - including the ones described in #2a.6 below.

6. **Future of Work at the Human-Technology Frontier projects** (Strategic Initiative D):

### Developing UR Capacity to Competitively Engage in Future of Work Projects

PROJECT DESCRIPTION: Recognizing the importance of Future of Work projects for the future of the UR (and other higher education institutions), we are trying to develop an interdisciplinary team of faculty and staff across the UR that will work together to develop the needed cross-disciplinary expertise and collaboratively pursue external funding opportunities.

Building on connections made within the UR for the AI-Institute application, \*Borasi led a group comprising of 15 faculty and staff across the UR to put together an application for the 2020 University Research Award [URA] (an internal seed-funding competition) focusing on developing capacity within the institution to engage in "Future of Work" projects. While the 2020 URA program was suspended and no awards made this year because of the pandemic, this application was the catalysts for submitting another grant proposal (see below).

# NSF Future of Work Planning Grant on Artist-Technologists

PROJECT DESCRIPTION: This 1-year \$150,000 planning grant from the National Science Foundation INSFI supports the exploratory work of an interdisciplinary team of 27 UR and RIT faculty and staff around artist-technologists' creative design at the human-technology frontier - with an initial focus on music (as the artistic domain) and Artificial Intelligence and Augmented/Virtual Reality (as main technologies) (see <a href="public abstract">public abstract</a>). The project team includes 'Borasi (as PI), 'Borys, Harris, Judge, 'Miller, ''Peyre, and ''Xu from Warner.
A sub-set of the team that applied to the 2020 URA, also decided to apply for a planning grant from NSF Future of Work program - which was awarded!

# • Study of new technology-rich post-secondary options and factors affecting their adoption (Strategic Initiative F)

PROJECT DESCRIPTION: A team of faculty from RIT College of Business led by Richard DeMartino and the UR Warner School of Education ('Borasi, 'Miller, Harris and Rubenstein) have come together to better understand the new post-secondary education options currently available given the advances in online teaching technologies, along with the factors affecting their adoption. This study will also take into consideration how the situation may have been changed due to how high school students experienced online learning during the pandemic.

After having developed some theoretical foundations for this study (see LiDA Colloquium and conference presentation), this interdisciplinary team submitted grant proposals to several foundations to support both full fledged and pilot studies. While not of these proposals has been successful so far, each one helped refine our case - and we are hopeful to eventually find a good match!

#### 7. 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 college. 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.

Although the proposal sent to NSF the previous year was not awarded, the team continued to collaborate in the following ways:

- \*\*Bai, Z, Borasi, R., Daley, M, and Miller, D. (2019). Artificial Intelligence in High School -What, Where and How? Invited presentation given to the Data Science Colloquium Series in Sept. 2019
- \*\*Daley, M., \*\*Bai, Z., \*Borasi, R. & \*Miller, D. collaborated in writing a chapter on "Machine Learning a new lens for integrating computational and scientific thinking in the high school classroom" for an edited book.
- \*\*Bai and her graduate students developed an experience for the Spring 2020 course taken by our NTF-DR fellows using a prototype of *Smiley Clusters*.
- \*\*Bai and \*\*Daley co-authored some publications based on the data collected in this and a few other pilot experiences
- \*\*Bai submitted a 2020 URA to continue working on developing and studying *Smiley Clusters*, with \*Borasi and \*\*Daley as consultant (not awarded as the 2020 URA program was suspended due to the pandemic)

#### 8. 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, a case-study database was created with data from 7 video interviews with key players

# 9. Online Teacher Identity Development in EDE484.

PROJECT DESCRIPTION: The design of our first course in the sequence to develop online teachers (EE484: Online Teaching & Learning) was informed by identity theory. Farzana Hafsa's dissertation conducted an in-depth case-study of most of the students who took one specific offering of this course to better understand to what extent the course supported participants' identity as online teachers, and what elements of the course design were most impactful. After \*\*Hafsa completed her dissertation in May 2019, she worked with \*Borasi and \*Miller (as the original course designer for EDE484) to disseminate key findings of her work in the following complementary ways:

- \*\*Hafsa and \*Borasi created a webpage on the LiDA Center website to introduce educators to the topic of "Online Teacher Identity"
- \*\*Hafsa and \*Borasi presented on this topic at the Online Learning 2019 conference in Toronto ("Impacts of online teacher identity on course design and delivery for novice online teachers")
- \*Borasi, \*\*Hafsa and \*Miller submitted three articles for publication based on Hafsa's dissertation findings (none accepted to date)
- 10. **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 Ichair), 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
- Frederick, Susan. Simulation in an Advanced Practice Nursing (APRN) Program: Can it be Transformational? (committee: \*\*Daley, \*Miller, Kirchgessner) proposal defended Fall 2019.
- \*Han, Yu Jung, Extramural English in an Affinity Ecology: Intersecting Spaces for Interestdriven English Learning (committee: \*Lammers, Curry, Rebecca Black - UC-Irvine) - proposal defended in December 2019
- Migliore, Jennifer, Developing Collaboration in a Structured Online PLC: An Action Research Study (committee: Mock, Lammers, Miller) - dissertation defended October 2019
- Rice, Paula-Marie, Using Coding to Teach Kindergarteners How to Engage in 21st Century Learning Skills: An Action Research Study (*Luehmann, Daley, Miller*) - dissertation defended May 2020

# 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):
  - Created a new section to host a series of "LiDA eModules", starting with "Developing a shared vision for digitally-rich teaching."
- 2. Lesson learned reported on k12digital.org:
  - Enhanced the design of the "<u>First Steps</u>" page, by adding additional materials as possible "next steps" including adding <u>excerpts from an interview with R-Options</u>, a local company serving K-12 schools' IT infrastructure needs.
  - With the support of \*\*Fullerton, started to create a "Community Space companion" to k12digital.org, to enable educators within the K-12 Digital Consortium to directly share information and lessons learned by posted in open forums and other online options. The Community Space was created and piloted in the February 2020 Kick-Off Workshop, but its launch was then put on hold because of the pandemic.
- 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. Work on co-constructing this bibliography continued during this reporting year as doctoral student Judy Van Alstyne took up the management and hosted one introductory session for interested students in the fall 2019.
- 4. **LiDA "Daily Dose" on Twitter:** As the pandemic shut down schools and educators and parents around the globe grappled with remote instruction, \*\*Dang and \*Lammers began sharing "Daily Dose" tweets each weekday to offer virtual resources that might be useful during this crisis.

- 5. Other innovative dissemination products:
  - Created a new 3-minute <u>video for the 2020 NSF "STEM for ALL Video</u>
     <u>Conference</u>" related to the Noyce MTF-Digitally-Rich project, and focused on the design of the sequence of courses leading the Advanced Certificate in Digitally-Rich Teaching (which won a "facilitators' choice award")
- 6. **GOAL #2c.** Advance LiDA scholarship, with a focus on developing research methodologies to effectively and ethically make use of digital data
- 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 by this report:
  - Stornaoiuolo, A., Magnifico, A. M., Lammers, J. C., & Curwood, J. S. (2019, December). Centering ethics in digital literacy practice and research: Toward reciprocity. Paper presented in the *De-Assembling the "Digital": Possible Futures for Digital Literacy Research and Pedagogy* symposium at the Literacy Research Association annual conference, Tampa, FL.
  - Lammers, J.C., Curwood, J.S., Tekobbe, C., Magnifico, A.M., & Stornaiuolo, A. (2019, October). Respectful ethical decision making: Positioning the online researcher as a bearer of moral consequence. Fishbowl presented at Association of Internet Researchers Conference, Brisbane, Australia.
  - Lammers, J. C. (2019, September). Affinity space ethnography: An innovative method for studying online language learning. Paper presented at Qualitative Research on Language Education in Contemporary Asia: New Perspectives, Directions, and Innovations, Solo, Indonesia.

# 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</u> <u>Indonesia</u> on youth digital literacy practices
- \*Fredericksen completed his term as the <u>2019 President of the Board of the Online 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:

- This year, LiDA staff have produced a total of 5 **publications** and 16 **presentations**; these included, in addition to those listed elsewhere in this annual report:
  - Add presentation at Online Learning 2019 by \*Miller & \*\*Dang
  - Add presentation at Online Learning 2019 by \*Borasi & \*Miller
- LiDA Center website: Between June 1, 2019 and May 31, 2021, website traffic included 1574 unique users for 2627 sessions and 7415 page views.
- **K12digital.org**: Between June 1, 2019 and May 31, 2020, website traffic included 967 unique users for 1818 sessions with 6625 page views.

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

- 2019 Light and Sound Interactive (\*Borasi)
- Online Learning 2019 (\*Borasi, \*Miller)
- 2019 NYSCATE conference (\*Borasi; \*Miller; \*Han)
- 2019 Frameless Symposium (\*Borasi)
- 2019 OLC Accelerate (\*Fredericksen)
- 2020 OLC Innovate (\*Fredericksen)
- 2020 STEM for All Video Showcase (\*Borasi; \*Borys; \*Han; \*Miller)

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

- \*Fredericksen'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 2019 fall Online learning Symposium series:
  - October 10 Online Learning Initiatives at St. John's University Dr. Elizabeth Ciabocchi, Vice Provost for Digital Learning and Executive Director of Online Learning & Services, St. John's University
  - November 14 Online Learning Research and the Impact of Social and Teaching Presence – Dr. Karen Swan, the James J. Stukel Distinguished Professor of Educational Leadership and a Research Associate in the Center for Online Learning, Research, & Service (COLRS), University of Illinois
  - December 12 Faculty and student experiences with Online Learning at the University of Rochester: Dr. Edwin Vanwijngaarden, Professor, Public Health Sciences, Laura Jones, Lead Instructor, Writing, Speaker and Argument Program, Dr. Sarah Peyre, Professor, Surgery and Medical Humanities and Bioethics, Dr. Stephen Uebbing, Professor, Educational Leadership, Stephanie Venturino, Doctoral Student, Eastman School of Music

- In Fall 2019, the LiDA Center partnered with the Education IT Governance Committee and the Office of Academic Administration to offer the first <u>Faculty Summit on Online Teaching and Learning</u>
- 5 LiDA Colloquia were organized in the 2019-20 academic year (pre-COVID19) and advertised across the University of Rochester through @rochester (the UR daily enewsletter).
- \*Miller and \*Borasi organized and participated in an <u>Experience Rochester</u> webinar on "Navigating Remote Learning in Times of Disruption" held in May 2020

## 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** .
- Raffaella Borasi and Dave Miller acted as organizers and facilitators for the April 2020 K-12 "Leaders fro Equity Tuesday Talk Series" on "Leadership During School Closure: Leveraging Technology", which were attended by almost 50 local K-12 administrators

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

- \*Fredericksen's completed his term as the 2019 President of the Online Learning Consortium
- \*Lammers completed her Fulbright Fellowship in Indonesia, giving several international presentations (see #2a)

#### 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. This year we moved to a monthly event (instead of bi-weekly), making purposeful efforts to invite as presenters people from across the University and the community. The following events were organized:

- Fall 2019 season:
  - (Sept. 2019) Sharing & Networking about Current LiDA Initiatives
  - (Oct.2019) How Are Disruptive Technologies Affecting Higher Education?

- (Nov. 2019) How Are Digital Technologies Redefining the Goals of K-16 Education?
- Spring 2020 season:
  - (Feb. 2020) Al-Augmented Learning: What May it Look Like?
  - (March 2020) Open Education Resources: Continuing the Dialogue
  - (April 2020 cancelled because of the pandemic)
- 2. **LiDA Communication Plan** (Strategic Initiative B): Following the strategic plan recommendation to develop a comprehensive communication plan for the LiDA Center, in early 2020 we had preliminary conversations with two potential consultants but decided to put this initiative on hold when the pandemic hit.
- 3. **Growth in LiDA community members:** Reached a total of 40 current members (see current list in the <u>LiDA Community page</u> on the LiDA website).
- 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: This year we continued the *Mastermind Group* involving all LiDA Directors and other Warner faculty in the LiDA Community, where everyone committed to meet every other week for 1.5 hours in fall 2019 and monthly in Spring 2020.
  - **Learning with XR:** With the support of a mini-grant, \*\*Luehmann continued to work with a group of doctoral students on analyzing data collected during her Bridging Fellowship in Chemical Engineering.
  - **(NEW) Disruptive Technologies and Higher Education:** Richard DeMartino, Director of RIT Simone Center for Student Entrepreneurship and Innovation, contacted \*Borasi to explore his interest in why technology advances have not yet disrupted higher education as it has been the case in other industries. This led to the creation of a study group including Warner faculty \*Miller and Nathan Harris, as well as \*Borasi and DeMartino. During this first year, the group met regularly to developed some cross-disciplinary expertise which also led to two presentations and to begin to submit grant proposals to foundations to fund some empirical study on this topic.
  - **(NEW) Cybersecurity Education** (\*Borasi; Peizhao Hu RIT; Dana Dachman-Soled University of Maryland): \*Borasi was contacted by RIT computer science faculty Hu to be a co-principal investigator in a special grant proposal to NSF under their Early Concept Grants for Exploratory Research (EAGER) category on the topic of cybersecurity education. While this grant was not awarded, the team was encouraged to pursue a different type of grant.
- 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 for high school courses for the region): \*Miller has continued to serve as a consultant as part of the 2018-21 NYS Learning Technology Grant awarded to AccelerateU.
- Zhen Bai, UR faculty in the Computer Science Department, continued to work with \*\*Daley and some Warner doctoral students to develop the ML-operated software to support students' scientific inquiries. A first version of the software was piloted with teachers participating in our NSF-funded MTF project, as part of one of their courses in Spring 2020.
- Gloria Jacobs, a Warner alumna who is now on the faculty of Portland State
  University (OR), has offered a summer research apprenticeship experience with her
  research group to a Warner doctoral student around developing digital literacy for
  vulnerable populations as a way to increase their access to health care.
- SafeSide Prevention: As described earlier, \*Borasi and \*Miller served as consultant to this company as they worked on making a major redesign of their distance professional development program on suiside prevention.
- 6. **New collaborations:** New collaborations were explored with the following individuals/groups:
  - Al-Augmented Learning: The opportunity to apply for an NSF-funded Al-Institute on Al-Augmented Learning brought together a interdisciplinary group of faculty across the UR, including \*Borasi and \*\*Daley. The group was able to submit a planning grant proposal despite a very short timeline. Although the planning grant was not awarded, this process established some important connections that were leveraged in other projects, leading to two other related interdisciplinary grant applications mentioned in previous sections of this report a 2020 University Research Award on developing interdisciplinary teams around Future of Work (discontinued because of the pandemic) and an NSF Future of Work planning grant on artist-technologists that was awarded.

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

### 1. New LiDA staff positions:

• Assistant Director: A grant from the Schultz Family Foundation in 2019 allowed us to first pilot this position with advanced doctoral students, and then establish this new clinical faculty position - which was advertised in Fall 2019. Zenon Borys was hired for this position starting on January 2020 on a part-time basis while he completed prior commitments, with the intent to move to 50% FTE as of July 1, 2020.

- **LiDA Fellowship "pilot"**: A gift from the Scandling Family Foundation in 2020 allowed us to award a special fellowship to an advanced doctoral student to contribute to special projects within the LiDA Center. Yu Jung Han was selected as the first recipient of this fellowship for the following 2020-21 academic year.
- 2. Partnership with the Center for Professional Development and Education Reform: While the LiDA Center and the Center for Professional Development and Education Reform (CPDED) have collaborated in a number of ways from the start, and most notably around the NSF-funded Noyce Master Teaching Fellowships project, in November 2019 out two centers jointly applied to the PD providers for two NYS Smart Start grants one led by the Greater Southern Tier (GST) BOCES and the other led by the Wayne Finger-Lakes (WFL) BOCES. Awards for these grants were postponed because of the pandemic (but both grants were finally awarded in 2021).

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

- LiDA Director (R. Borasi): 50% FTE (80% FTE till Dec.2019 while on leave + 10% Jan-May 2020)
- LiDA Associate Director for Higher Education (E.Fredericksen): 5% FTE
- LiDA Associate Director for K-12 Education (D. Miller): 5% FTE
- LiDA Associate Director for Informal Education (J. Lammers): 25% summer
- LiDA Assistant Director (Z.Borys): starting January 2020 part-time, at 20% effort
- RAs playing some LiDA Assistant Director's function: Han; Dang
- Additional RA support:
  - Elizabeth Desser: ~6% FTE (5 hours/week)
  - Flla Wan: ~10% FTF (10 hours/week)

#### 4. Personnel working on funded LiDA initiatives:

#### LiDA Staff:

- \*Borasi: 12% FTE on Noyce MTD-DR grant; 5% on Moskowitz Foundation grants; directing HPE program 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% July-Dec.2020 on NSF Noyce MTF2 supplement; 5% on Moskowitz Foundation grants; 5% on LiDa projects; 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)
- \*Z.Borys: 20% FTE on Noyce MTD-DR grant; + Teaching 2 LiDA courses (covered by Warner)
- Other personnel (for a total of 3.45 FTE):
  - \*Y.J. Han: ~5% FTE on Moskowitz projects
  - Erqian Xu (RA): Moskowitz projects
  - Anlun Wang (RA): Moskowitz projects
  - L.Brown: Teaching 3 LiDA courses & online teaching practicum (covered by Warner)
  - Cynthia Callard (Center for Professional Development and Education Reform - CPDER): on Noyce MTD-DR grant (+Sync-ON)
  - Carson (Center for Professional Development and Education Reform -CPDER): 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
  - J. Kruger: on Noyce MTD-DR grant
  - St.George: on Moskowitz projects
  - L.Warner: on Noyce MTD-DR grant

#### Faculty and staff outside of Warner:

- 5. Free lancers: This year we have not yet been in a position to hire any free-lance
- 6. 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 the 2020-21 fiscal year to date, including the following contribution directed to support specific core initiatives and positions:
  - Support for the LiDA Assistant Director position
  - Support for the 2020 "LiDA Fellowship"
  - Support for the LiDA Colloquium Series
  - General support for the LiDA Center's infrastructure and unfunded initiatives

#### 7. Grant proposals submitted and awarded:

• NYS Smart Grant on digitally-rich teaching with Greater Southern Tier BOCES (~\$100,000/year for five years to Warner) - New York State Education

- Department, Nov.2019 (program put on hold because of the pandemic eventually awarded in 2021)
- NYS Smart Grant on engineering and computer science with Wayne Finger Lakes BOCES (~\$200,000/year for five years to Warner) - New York State Education Department, Nov.2019 (program put on hold because of the pandemic - eventually awarded in 2021)
- Planning grant for an Al-Institute for Al-Augmented Learning (\$500,000 over two years) - National Science Foundation, January 2020 (denied)
- 2020 University Research Award: Developing Capacity for Future of Work Research (\$75,000 for one year) University of Rochester, February 2020 (program suspended)
- Future of Work Planning grant (\$150,000 for one year) National Science Foundation, March 2020 (awarded)
- Rethinking PrivateAI preparation through a "math-integrated approach" to improve access and outcomes (\$300,000 over two years) - National Science Foundation, EAGER program, May 2020 (denied)
- Year 3 extension for the *Bullying Education with Literacy* project (\$150,000 for one year) Moskowitz Foundation (awarded)

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

• Several LiDA RAs took a new series of mini-courses on video production and video editing for research, designed and taught by \*\*Kristana Textor.