LiDA Center 2023-24 Report

(June 2023-May 2024)

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Note: LiDA staff and affiliated faculty have 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) about the progress made in each of our strategic initiatives to date, as well as other metrics and products, that are also accessible on the Strategic Planning and Reports page of our website.

EXECUTIVE SUMMARY

During the 2023-24 academic year, we continued to make progress towards all our strategic goals and initiatives, although we also made it a priority to work towards becoming a thought-leader on the implications for education of Artificial Intelligence (AI) – and generative AI (GenAI) in particular. Therefore, this Executive Summary will focus on articulating what this meant, followed by a list of key achievements across all the other areas.

GenAl and Education

Recognizing that GenAI has the potential to disrupt and/or transform education more than any other technology before it, we decided this year to focus much of our attention and efforts to both exploring what GenAI can do to education (both good and bad!) and sharing what we learned (however incomplete) with other educators, so as to inform their use and decision-making about GenAI.

This translated in the following key initiatives and actions:

- **NSF RAPID grant:** We applied for and were awarded a 1-year grant from the National Science Foundation (NSF) to study K-12 school and district leaders' perceptions and concerns about AI, with the ultimate goal of informing decisions about how to use AI in K-12 education. More than 40 K-12 leaders were interviewed and 150 responded to a survey. We have already secured three publications based on these data (with more in the making) and are working on creating open-access online resources that could further extend the impact of what we are learning.
- *IT mini-grant:* To continue to learn about the potential of GenAI to enhance teaching and learning in higher education, in collaboration with the UR School of Nursing and Simon School of Business we secured an UR mini-grant to explore a few specific GenAI tools and then report back to the UR community.
- Al Horizons Institute planning grant: As the UR Provost Office called for proposals for planning grants for future "transdisciplinary research institutes" a key element of the current university-wide strategic plan LiDA faculty collaborated with representatives of all academic units to put together a proposal, which was one of ten eventually awarded. We see great potential in the unique opportunities that this campus-wide initiative could open.
- **ChatGPT Study Group:** As part of our continuing efforts to better understand the potential implications of GenAI, we continued the initiative launched in the previous year of having a study group of interested Warner faculty and doctoral students sharing and discussing insights related to GenAI and its uses in education.
- *LiDA Colloquium Series:* As in the previous year, we chose to devote our LiDA Colloquium Series to topics related to GenAI and Education, so as to provide a forum for sharing and discussion on this topic open to both K-12 and higher ed educators, and anyone else interested.
- *K-12 Digital Consortium Spring 2024 retreat on AI & K-12 Education*: LiDA also organized a half-day retreat for the K-12 Digital Consortium a collaboration between LiDA and over 25 school districts and BOCES in the region on the topic of AI and K-12 Education, where preliminary data from the interviews and survey conducted as part of the RAPID project were shared and discussed. Over 80 educators participated in this event.
- *Warner/LiDA AI Initiative*: With the support of the Warner dean, LiDA has been leading a school-wide initiative to ensure that the Warner School can position itself as the place to go to learn about uses of AI for education. This on-going initiative, launched in Spring 2024, has so far involved several professional learning opportunities for faculty and staff as well as a survey of Warner students about their perceptions about using AI in their schoolwork and beyond.

Other key achievements:

- The *CHLOE 8 report* on the state of online teaching and learning in higher education was issued, and a new report is underway.
- Our exploration of the hy-flex modality for teaching has continued through a *new IT Governance mini-grant*.
- Supported the *launch of Warner first fully online Ed.D. programs* in Health Profession Education Leadership and K-12 Leadership, respectively.
- The *Noyce Digitally-Rich STEM Master Teaching Fellowship grant was successfully concluded*, with all 21 fellows completing this intense five-year program; publications are underway to disseminate lessons learned from this successful project preparing teacher leaders to promote uses of technology that can enhance the learning of mathematics and science in high-need K-12 schools.
- The one-year *grant from the Madre Cabrini Foundation* to support TESOL online tutoring for refugees and immigrants was successfully completed and renewed for the next year.
- We participated in New York State Virtual Implementation of Teaching and Learning (*VITAL) program*, a statewide initiative that may lead to valuable new opportunities to extend LiDA's impact beyond the region.
- The first Open Education Resources (*OER) project* supported by the UR Libraries, creating a rich set of open-access online materials for the course "Entrepreneurial Skills for Educators", was completed.
- A **\$500K NSF-funded grant in cybersecurity education**, in collaboration with RIT, was awarded and successfully launched.
- We wrote *four grant proposals for a total of \$3.4M*, and secured two of those grants, for a total of \$1.4M.
- We launched our *first LiDA post-doc position*.

Please look at our full annual report for more information on the initiatives just described, as well as other work that has taken place at LiDA over the past academic year.

PROGRESS MADE TOWARDS EACH STRATEGIC GOAL

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 B + F):

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 supported efforts to continue to in the following ways, leveraging *Eric Fredericksen's work as the University Associate Vice-President for Online Learning as well as LiDA Associate Director for Higher Education:

- *Fredericksen continued to open his semester-long course on Designing Online Courses to interested UR faculty, as well as graduate students; 14 individuals took this course this year, resulting in the design of almost an equal number of new high-quality online courses for the University.
- *Fredericksen and **Lisa Brown offered more than 40 workshops on various aspects of online teaching (<u>https://www.rochester.edu/online-learning/</u>). Of special interest this year was the next phase of a major project at the University to start the migration to Blackboard Ultra, the new and modern course format and experience that will impact every faculty member and every student at the institution.
- A symposium was organized in fall 2023 by *Fredericksen to showcase UR faculty experiences with online learning (recording of the presentations can be found at:

https://www.rochester.edu/online-learning/symposium/index.html)

- The Educational IT Governance Committee, co-chaired by *Fredericksen (in his role as the UR Associate Vice-President for Online Learning) and comprising of representatives of all UR academic units (including *Dave Miller, *Raffaella Borasi and **Lisa Brown) has continued to meet regularly to share information and inform decisions across the University.
- Two new awards were made this year as part of the "Educational IT Innovation Grants program" to support digitally-rich instructional innovations at the UR see

https://www.rochester.edu/online-learning/edtechgov/announcement2022in novationgrants.html for a list and brief description of each funded project).

• *New online Ed.D. in Health Professions Education*: This new program - the first Warner doctoral program that can be completed fully online if desired - has been approved by NYSED in summer 2023, and launched in January 2024. 12 students have already matriculated in this new program.

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

PROJECT DESCRIPTION: The LiDA Center is offering some leadership and infrastructure support to 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.

For the 2023-2024 academic year, the NSF-funded RAPID AI grant award was a driving influence for examining the impact of AI in K-12 school districts. The RAPID award funded a round of nearly 50 interviews with K-12 administrators (many from K-12 Consortium districts) and also a survey that has targeted approximately 1100 K-12 administrators across Western NY to gather further insights on the use and impact of AI in K-12. Work done in the 2022-2023 academic year with the Consortium, in addition to this recent work surrounding AI has culminated in a May 30 2024 retreat, hosted at Monroe#1 BOCES to gather administrators in our region for engagement with and dissemination of our RAPID AI study results.

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 21 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, and it will be completed after a 1-year no-cost extension in 2024; the leadership team consists of "Callard (as PI), 'Borasi, 'Borys, 'Carson, "Daley, Fluet, Kruger, Martin, 'Miller, "Occhino and Staloff. We requested and obtained a no-cost extension for 2023-24, which enabled us to mostly work on research and dissemination activities, including conducting exit interviews with all 21 participants, analyzing this data for publications (in progress) and conducting in-depth case-studies with six of the fellows.

4. Noyce Master Teacher Fellows (MTF) BeAJEDI grant project (part of Strategic

Initiative C):

PROJECT DESCRIPTION: This 5-year \$3M Noyce MTF grant was awarded in October 2022 from NSF to prepare a cadre of 19 secondary math and science "master teachers" to support instructional innovations that are consistent with the most recent math and science standards, leverage technology to enhance student learning, and also address issues related to Belonging, Access, Justice, Equity, Diversity and Inclusion (BeAJEDI). This grant focus specifically on teachers working in urban school districts of different sizes (Rochester, Elmira, Jamestown, Salamanca, and Hornell). Each Fellow will complete a Master's degree in Inclusion and Special Education, along with Advanced Certificates in Teacher Leadership, Digitally-Rich Teaching in K-12 Schools, and Urban Teaching and Leadership. This project is another collaboration between the Center for Professional Development and Education Reform and the Center for Learning in the Digital Age; the leadership team includes several Warner faculty

(**Callard - as PI; *Borasi, Cutt, *M.Daley – as co-PI; *Borys, Fluet, Kruger, **Occhino, Pearson and Staloff as part of the leadership team).

In the period covered by this report fellows completed three semesters of coursework (9 credits) towards their Master's Degree in Inclusion and Special Education and completed their digitally-rich portfolios. In addition to coursework, fellows participated in an immersive summer experience led by Professor John Kessler, a university-based oceanographer, where they learned to program sensors using Arduino's (a small, open-sourced electronics platform that includes hardware and software). Fellows also engaged in their first teacher-inquiry experience where they posed questions, collected data, and presented results. This experience was notable because it served as a preparatory scaffold for their upcoming Master's Thesis.

5. Bullying Education through 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 LiDA research assistants, are part of this project team. In the period covered by this report, the team has continued to produce and post new materials for the <u>website</u>. The team is continuing to collaborate closely with the website owner, Laura Griffone, to make advancements on the website and enhance it with engaging content.

6. 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. In the period covered by this report, the team has continued to produce and post new materials for the <u>website</u>, while also developing plans for complementary products associated to this project.

7. Exploring "Hy-flex":

PROJECT DESCRIPTION: The pandemic forced many schools and colleges to use "hy-flex" – that is, offering courses where some of the students attend classes in person while others join those classes virtually. Recognizing the importance of better understanding how to make the most of this new modality even after the pandemic, "Kristen Love is leading a series of initiatives to explore the potential as well as challenges of "hy-flex" for teaching. To date, this has included two UR IT mini-grants (awarded in 2022 and 2023, respectively.

As part of the second IT mini=grant, the following has been taking place over the 2023-24 academic year:

- An eModule on <u>Hy-flex Teaching & Learning</u> has been created and posted on the LiDA website.
- Love, Frederickson, and Carson have been working on a manuscript of our findings related to the social presence that is present in a HyFlex Classroom.
- Love, King, and Carson presented at two conferences (NYACTE/NYSCATE and AERA) on this work
- Love, Carson, Rashid, and Sarchet have submitted proposals to two new conferences (AATLAS and OLC Accelerate) to present on HyFlex findings

8. TESOL online tutoring for refugees and immigrants:

PROJECT DESCRIPTION: Funded by Mother Cabrini Health Foundation, this grant aims meet the basic needs of low-income immigrants and refugees, promote health, employment and education equity in Western NY through incorporating health, education and career contents into a Hy-Flex English language classes offered at workplaces. Multilingual education graduate students at Warner provided students in-person class (2-3 hours/week for 20 weeks). It also aim to provide a training site for Warner language education programs to implement Community-based pedagogies.

This project was launched this year, with workplace English courses offered at two sites. The curriculum covered a wide range of topics, from essential everyday phrases needed in their daily lives to more comprehensive sessions like mock interviews and resume writing. Students greatly enjoyed our lessons, resulting in the formation of a positive learning community. Offering both onsite and online English teaching formats has given students the chance for flexible learning. this dual approach has greatly assisted students in improving their English for work and daily conversation. The project has also presented a valuable teaching practice platform for preservice multilingual education teachers. An extension of the project was secured from Madre Cabrini Health Foundation, securing funding for a second year.

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

- 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 642 semester credits of instruction in the 2023-24 academic year (# in parenthesis indicates the number of students enrolled in each course):
 - EDE410: Learning in the Digital Age (**Lammers*) (not offered)
 - EDE420: Introduction to Video Production for Education Research (***Textor*) (not offered this year)

- EDE421: Introduction to Video Editing for Education Research (**Textor) (not offered this year)
- EDU446: Entrepreneurial Skills for Educators (**Miller*) (Su23=25; Sp24=8)
- EDE470: Topics in Online Teaching (for UR faculty only) (**Brown) (not offered this year)
- EDE472: UR Faculty Online Course Development (for UR faculty only) (*Fredericksen) and **Brown)
- ED482: Technology & Higher Education (*Fredericksen) (not offered this year)
- EDE484A: Digitally-Rich Teaching & Learning in K-12 Schools (*Daley* + *Borys) (Su23=19)
- EDU483: Integrating Mathematics & Technology (*Stell+*Borys*) (Su23=2)
- EDE484A: Digitally-Rich Teaching & Learning in K-12 Schools (*Borys) (F23=10)
- EDE484: Online Teaching & Learning (Instructor: **Brown) (F23=4; Sp24=5)
- EDE486: Designing Online Courses (*Fredericksen) (Su23=9; F23=5)
- EDU481: Integrating Science & Technology (*Stell+**Luehmann*) (Su23=2)
- EDF488: Online Teaching Practicum (**Fredericksen & **Brown*) (Su23=2; F23=8; Sp24=3)
- EDF490: K-12 Digitally-Rich Teaching Practicum (***M.Daley, *Miller, *Borys*) (~23 students for the year)
- EDE492: Integrating Technology in Teaching Content Areas (Stell) (Su23=11)
- EDU497: Teaching & Learning in Higher Education & Health Care Settings (*Borasi & *Miller) (Su23=9; F23=17)
- EDU499: Integrating Social Studies & Technology (*Rosen*) (Su23=11)
- *EDE545x: Leadership Seminar in Digitally-Rich STEM Teaching (***Callard, **M. Daley & Kruger*) (19 students for the year)
- EDU581: Clinical Teaching in Health Care Professions Education: Teaching and Instructional Methods (*Fredericksen, Tara S., Lang) (Sp24=15)
- Doctoral Seminar in GenAl for Educators (King) (Sp24=10)

NOTE: Noyce MTFs, who took the leadership seminar, contributed xx of these credits (see Goal 1a, #3 for more information about these projects).

- 2. **Professional development [PD] for K-12 teachers:** This year, all the PD we offered was part of previously awarded NYSED grants, and included both programs to improve digitally-rich teaching and to begin the implementation of the NYS Computer Science and Digital Fluency standards released in December 2020:
 - (Strategic Initiative D) Computer Science strand of the WFL BOCES Smart Start grant (CS):

PROJECT DESCRIPTION: This 5-year NYSED Smart Start grant was awarded in 2021 to the Wayne-Finger-Lakes (WFL) BOCES to better prepare K-8 teachers in their region to implement the new NYS Computer Science and Digital Fluency Standards for K-12 schools. Several rural and small city districts from this region are participating in this project. Each year up to 60 K-8 teachers from these districts are eligible to participate in the year-long fully online professional learning offered by this grant, and includes a 3-day-equivalent Summer Institute followed by two 2.5 Zoom sessions over the school year for all participants (for a total of about 24 PD hours), and additional work within a mentored Professional Learning Community (PLC) for Tier 2 teachers; all participants are also expected to create online materials based on their classroom implementations, to be publicly shared with other teachers on the project website. WFL BOCES awarded a subcontract to the LiDA Center and

the Center for Professional Development and Education Reform to design and deliver this professional learning. The Computer Science strand of this project is led by *Borasi and *Borys, and has involved *Miller, *Carson and other Warner doctoral students, graduates and Noyce Fellows.

In this third year of the grant, we have been able to essentially repeat the successful plan (see the <u>public description</u>) developed in year 1, and benefit from the cadre of mentors that have served since year 1 (*Cynthia Carson, Michaela Marino, Seth O'Bryan, and Marie Rice), with *Borys in charge of the program. The biggest challenge has continued to be recruiting participants – a phenomenon experienced by all professional learning programs in the region since the pandemic. To address this challenge, we offered two "Kick-off Institutes" – one in May-June and one in July. We were able to recruit a total of 24 participants. In the attempt to increase participation, we also developed two self-paced asynchronous modules for teachers - one on "Introduction to Coding" and the other on "Data Visualization"; eight teachers took the opportunity to engage in the asynchronous modules (five for Data Visualizations and three for Introduction to Coding). Online materials created by the participants can be found in the <u>project website</u> (created by Gordon Baxter, the program coordinator, with support from *Borys).

• (Strategic Initiative F) Transforming Teaching with Technology (T3) - GST BOCES Smart Start grant:

PROJECT DESCRIPTION: This 5-year NYSED Smart Start grant was awarded in 2021 to the Greater Southern Tier (GST) BOCES to better prepare K-8 teachers in their region to leverage technology in their teaching. Several rural and small city districts from this historically under-served region are participating in this project. Each year up to 60 K-8 teachers from these districts are eligible to participate in the year-long fully online professional learning offered by this grant, which is equivalent to 30 hours of PD and includes a 3-day-equivalent Summer Institute, followed by monthly Zoom meetings and support from a mentor, and culminating in the creation of online materials to be publicly shared with other teachers. GST BOCES awarded a subcontract to the LiDA Center and the Center for Professional learning. This project is led by 'Borasi, 'Borys, 'Miller and 'Carson.

In this third year of the grant, we have continued to experience major challenges recruiting participants – as only 12 teachers attended the Summer institute. *Carson continued to lead this PD program, supported by **Tiffany LaPrade, **Kim Saccardi, and **Heather Boyle as PLC mentors (benefitting from the experience they developed in year 1 and 2 in this role). Except for eliminating project-wide follow-up meetings, the program remained essentially the same as what we implemented in the first year (see <u>public description</u>). In the attempt to increase participation, however, we also developed two self-paced asynchronous modules for teachers - one on "Eliciting Prior Knowledge" and the other on "Sharing Student Work";two

teachers took advantage of these modules using them to think about their own instruction using technology and explore new technology with feedback from Carson... The online materials prepared by participants can be found in the <u>GST Smart Start website</u>.

• (Strategic Initiative F) **Re-Imagined and Systemic Educational Transformation** through Technology (RESET) - GST BOCES Learning Technology grant PROJECT DESCRIPTION: This 3-year NYSED Learning Technology grant was awarded in late 2021 to the Greater Southern Tier (GST) BOCES to better prepare high-school teachers (grades 9-12) in their region to leverage technology in their teaching. Several rural and small city districts from this historically under-served region are participating in this project. Unlike the Smart Start grants, this grant supports a "system-change" project, so a key component is the development of teacher leaders to lead and sustain efforts to leverage technology to improve teaching, in addition to offering a year-long fully online professional learning program (equivalent to about 30 PF hours) to other teachers. Therefore, each year of the project has a different design (see a description of the original plan submitted as part of our original application). GST BOCES awarded a subcontract to the LiDA Center and the Center for Professional Development and Education Reform to design and deliver all the professional learning offered by this grant. This project is led by *Borasi, with other members of the project team including LiDA staff *Borys and *Miller, Center staff **Michael Occhino, Kelly Pearson, Marla Iverson, and **Cindy Callard, and Warner faculty Valerie Marsh and Kevin Meuwissen. Due to the challenges experienced in recruiting participants and the decision of districts other than Elmira to withdraw, Year 3 was significantly redesigned to develop PLCs that included both continuing and new teachers. Only one 3-day equivalent "Kickoff Institute" was offered to the new teachers, followed by monthly Zoom meetings in PLCs and one-on-one coaching for all classroom teachers in the group, as well as a final "Showcase" virtual event. The online materials prepared by participants can be found in the **RESET** website. We had 6 continuing teachers and 8 new teachers (although one of the new teachers dropped out after the summer institute). As in previous years, this project was led by *Borasi, with *Miller, *Borys, Kelly Pearson, Kevin Meuwissen and Valerie Marsh serving as mentors for the PLCs in Business, Math, Science, Social Studies and ELA, respectively.

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

 (Strategic Initiative F) More than 40 free 1-hour workshops were offered by *Fredericksen and **Brown (each attended by 15-30 UR faculty and staff) throughout the year - see complete lists for: <u>Summer and Fall 2023</u>, <u>Spring</u> <u>2024</u>

- (*Strategic Initiative D*) The following PD sessions have been offered to increase awareness of GenAI tools and their potential applications and implications for higher education:
 - A 2-hour in-person session for Genesee Community College instructors (August 2023)
 - A 90-minute Zoom session for Genesee Community College instructors (September 2023)
 - A 90-minute in-person session for Warner School faculty (October 2023)
 - A 90-minute Zoom session for potential Warner students (December 2023)

4. 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 26 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 brief description*) was launched in Spring 2018; the leadership team includes Choppin (as PI), "Borasi, "Borys, "M.Daley, and "Miller. As of now, a total 22 scholarships have been awarded, 19 students have graduated and 21 are currently teaching in high need schools.

5. VITAL program

PROJECT DESCRIPTION: The NYS VITAL (Virtual Implementation of Teaching and Learning) Educator Program is a 1-year-long professional learning experience that started in the Summer of 2023, and is designed to "develop a cadre of expert, or VITAL, educators who are able to turnkey professional learning content to colleagues throughout the state" (NYSED website,

https://www.nysed.gov/edtech/vital-educator-program). The program included K-12 teachers from across New York State as well as a few higher education faculty who work with K-12 teachers in teacher development programs. Additional information is available at

https://www.nysed.gov/edtech/vital-educator-program. The program was developed by NYSED, and it was administered through Measurement Incorporated (https://www.measurementinc.com/). Dave Miller participated in this first cohort along with approximately 140 educators from around NYS. The year-long experience engaged all participants in a mostly asynchronous learning experience that focused on the value of teaching and learning at the intersection of online learning and in-person learning, so that participants going through the experience would be reflective on and develop additional insights and skills to be able to teach across a continuum of learning environments. In fact, the website that we used for the program was called the TALE Academy, where TALE is the acronym for Teaching Across Learning Environments. The first cohort of this program wraps up in June 2024. Each participant completed 3 learning modules, each with 7-10 lessons, and a culminating project that will serve to extend key takeaways, principles, and content of the program among higher ed, K-12, and families throughout New York State.

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

1. PD for K-12 school leaders:

• A half-day in-person retreat for leaders within the K-12 Digital Consortium was also organized and will be held on May 30- (see <u>Planning document</u> for an agenda and links to selected artifacts).

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

- 1. Scholarship around the consequences and implications of the pandemic for K-12 schools (*Strategic Initiative F*):
 - *Borasi and *Han are continuing to analyze data collected from interviews with 78 high school students about their experiences during the pandemic, towards a publications for K-12 school leaders about the need to prepare future high school graduates to be effective online learners
 - *Borasi, *Borys and others have been working on a Pressbook on Developing Teacher Leaders, to report on key experiences, case-studies and lessons learned from the Noyce MTF-DR project.
 - We also expect to generate one or more manuscripts from this project as well on the topics of preparing teacher leaders for coaching/mentoring; teacher leader roles and conditions for their success; effective learning experiences to prepare teacher leaders; role/contributions of a focus on digitally-rich teaching to support STEM school reform; and potentials and challenges of engaging teacher leaders in "problems of practice".
- 2. Scholarship around the consequences and implications of the pandemic for higher education (*Strategic Initiative F*):

 *Fredericksen has continued to conduct studies of the online learning experiences of graduate and undergraduate students at the University. The specific studies in Summer 2023, Fall 2023, and spring 2024 were focused on collecting and analyzing data about the student experience in the new Blackboard Ultra course experience. In addition, two other studies were conducted in the Spring 2024 semester with UR faculty about their experience with teaching with the new Blackboard Ultra experience and with Teaching Assistants regarding their experience with Blackboard Ultra.

3. 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, and builds on his national studies of online learning leadership in US Higher Education in 2016 and 2017.

The Changing Landscape of Online Education (CHLOE) 8 report (*Student Demand Moves Higher Education Toward a Multi-Modal Future*) was published in Summer 2023 and covered widely in the higher education press and media and was followed by several national presentations that bring unique visibility to our institution. The CHLOE 8 report was downloaded more than 3000 times since it was released to the public. The CHLOE9 study started collecting data in January 2024 and is currently in the data analysis phase. It will be released to the public in August 2024.

4. 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), this project , launched in 2021, aims to develop interdisciplinary teams of faculty and staff across the UR that will work together to develop the needed cross-disciplinary expertise to collaboratively pursue external funding opportunities around implications of artificial intelligence (AI) and other new technologies for the preparation of future workforces. The project has been supported to date by a \$40,000 mini-grant from the Warner School as well as additional funding from the Goergen Institute for Data Science and the Ain Center for Entrepreneurship.

As this capacity building project is coming to an end, this year we had two active working groups - the Arts, focusing on implementing the TEAMuP NSF Future of Work grant, and the Higher Education Student Services, which continued to operate by bringing some publications to fruition from data collected through interviews of UR student affairs staff, and by participating in the developed of a first prototype of an Ai-powered tool to support the analysis of students' transcripts on data Science graduate programs admissions.

• NSF grant on Cybersecurity Education

PROJECT DESCRIPTION: The main goal of this project is to leverage the collaboration between cybersecurity experts and LiDA Center staff to develop two parallel yet interrelated innovative professional learning programs for Cybersecurity Analysts and Cybersecurity Engineers, respectively, to develop the needed mindset, knowledge, and skills to effectively develop and use AI/ML in their work, while also promoting life-long collaboration between these two professions. An NSF grant was awarded in 2023 to support this project (see NSF grant proposal summary.

During this first year of the grant, *Miller, *Borasi and *Borys have worked with RIT faculty Jay Yang and Justin Pelletier to design and implement a first series of experiences for cybersecurity officers in the field.

5. 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.

The 2-year \$300K <u>EAGER grant</u> to the NSF program on "Research on Emerging Technologies for Teaching and Learning" (RETTL) was concluded with success achieving the development and pilot of a prototype for a software that will enable students and teachers to leverage machine learning algorithms for clustering in scientific inquiries.

6. RAPID-AI NSF Grants

PROJECT DESCRIPTION: In early summer 2023, several LiDA staff and affiliated faculty collaborated in submitting several proposals to NSF in response for a call for 1-year RAPID projects focusing on research on AI applications and implications for K-12 education. One of these projects, focusing on understanding and supporting K-12 leaders decision-making about uses of AI in their schools, was funded.

The awarded 1-year \$200K RAPID grant started in September 2023 with designing and conducting a set of over 40 semi-structured interviews with K-12 school and district leaders in various positions across 17 districts in the region. A preliminary analysis of these interview data informed the design of a survey, which was then administered in April 2024 to all the principals, superintendents, directors of technology and other district administrators in charge of curriculum/instruction across most counties within Western New York (which

received 159 responses to date). We are currently engaged in a more systematic analysis of these data, leading to publications, as well as preparing online resources for school leaders that could help inform their future decisions about uses of AI.

7. 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 [chair], Hursh, Otten)* successfully defended in December 2023.
- **Carson, Cynthia, *Coaching from a Distance: Exploring Coaching Practices of Video-based Online Coaches (committee: Choppin [chair], Luehman, Roth-McDuffie) -* successfully defended in Summer 2023.
- **Comstock, Keirah, ESOL Teachers' Technology Integration While Working with ITLs (committee: *Lammers [chair], Ares, Nogueron-Liu UC Boulder) defended in 2024
- Herbert, Paul. Using Augmented Reality to Enhance Learning and Motivation for Anatomy Students (committee: *Borasi, *Luehmann, Burke) – proposal defended in May 2023; final defense expected in Summer 2024
- Zhang, Yadi. "Learning Together: ESL Teachers' Identity Negotiation Alongside Refugee Adult Learners in a Community-Based English Program" (committee: *Shang-Butler, *Borasi, Ting Zhang) – working on the proposal
- Qinqin Xiao. "High School Students' Learning Gains, Motivation, and Cognitive Engagement When Exploring Through a Virtual Reality Robotics Simulator Game. Proposal defended in summer 2023; final defense expected in Summer 2024
- Elizabeth Desser completed her comp exams and is now working on her dissertation proposal around using data visualization in the in-the-job training of technical staff

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

8. LiDA Center website (part of Strategic Initiative B):

- **On-going posting on the redesigned** <u>LiDA Colloquium Series</u> page: Selected recordings and other online materials from each LiDA Colloquium have continued to be posted on the LiDA website, as a way to enable interested people to benefit from these events even when they may not have been able to attend the live session.
- GenAI Warner Wednesday Talk recording

- <u>Generative AI-assisted Qualitative Data Analysis Tools</u> by Han & Rashid (Apr 24, 2024)
- Using GenAI at Warner: Students' Experiences and Lessons Learned by Gama-Krummel, Rashid, & Zheng (Mar 27, 2024)
- <u>Al Issues Facing K-12 Schools Today: School Leaders' Perspectives</u> by Borasi, DeAngelis, Han, Mason, Miller, & Vaughan-Brogan (Mar 6, 2024)
- GenAl & Academic Writing: Current Approaches and Practices by Han (Jan 31, 2024)
- Focus Topic Page on Generative AI within the LiDA website
- Using AI to create the <u>Year 5 highlights video</u>

9. "Entrepreneurial Skills for Educators" Open Education Resources (OER) project:

PROJECT DESCRIPTION: A mini-grant from the UR Libraries is supporting the creation of a set of Open Education Resources (OER) for "Entrepreneurial Skills for Educators," and course designed and taught by *Borasi and *Miller. This set of OER resources will include at its core an open-access and updated version of the manuscript created as part of an Entrepreneurship Education grant funded by the Kauffman Foundation in 2004, that students could use and also contribute to for specific sections. It will also include a companion website for course instructors who may want to access more information about the design of possible assignments as well as other resources. See this <u>excerpt from the proposal</u> for more details.

The final version of both the <u>Pressbook</u> and its companion <u>Website</u> have been completed, and will be made publicly available shortly.

10. Teachers' online materials created from the NYSED Smart Start grants:

Building on the format created last year to report on <u>"lessons learned"</u> by MTF2 fellows during the pandemic (supported by the supplement received from NSF), we develop and implement a format to help participants in the NYSED Smart Start grants create online materials that could inspirational and useful for other teachers - as illustrated in the websites created for each of these grants:

- <u>Computer Science WFL BOCES Smart Start grant website</u>
- <u>T3 GST BOCES Smart Start grant website</u>
- <u>RESET</u>

11. Other innovative dissemination products:

• GenAl webpage created by *Han

- <u>Generative AI for Educators</u> and emodule (Rashid and Love)
- Focus Topic Page on Generative AI within the LiDA website

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.

Nothing to report

2. GenAl for qualitative research (NEW)

- The LiDA center dispatched Han and Rashid to attend a 2-day online webinar titled Using Generative AI for Qualitative Analysis by Dr. Christina Silver in Instat.org (Feb 1-2, 2024).
- After attending the webinar, Han and Rashid continued their exploration with GenAI for qualitative research and shared latest updates on Generative AI-assisted qualitative data analysis softwares in the Warner Wednesday Talk on April 24, 2024 (Recording).
- Han and Rashid are each preparing manuscripts for publication based on these experiences (<u>Han's report: Shortened-draft version</u>).

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

1. Awards and other recognitions:

- *Borasi is continuing to serve on a university-wide committee developing a proposal for a new Ph.D. in Data Science
- 2. Publications, presentations and internet presence:

- This year, LiDA staff have produced a total of 6 **publications** and 4 **presentations**; in addition to those listed elsewhere in this annual report, these also included:
 - Amador, J., Gillespie, R., Choppin, J. & Carson, C. (2024). Characteristics of mathematics coaches' suggestions to teachers, *Mathematical Thinking and Learning*, DOI: <u>10.1080/10986065.2023.2300862</u>
 - Hafsa, F.S., Morris, A., Miller, D.E., Borasi, R. (in press). Preparing educational psychology instructors to teach online: The role of identity development. In P. Thompson & C. Roseth (Eds.), *Teaching in online, distance, and non-traditional contexts*. Information Age Publishing.
 - Vaughan-Brogan, P. & Miller, D.E. (in press, 2024). Do we need AI policies for K-12 schools? *Vanguard Spring/Summer 2024*.
 - Borasi, R., Miller, D.E., Vaughan-Brogan, P., DeAngelis, K., Han, Y.J., & Mason, S. (May 2024). AI and K-12 schools: An initial "wishlist" from school leaders. *Kappan (May 2024)*.
 - Carson, C. & Deane-Moshier, S. (2023, November). Transforming Teaching with Technology (T3): An Overview of Digitally-Rich Learning Experiences. Presented at: Seventy-eighth annual meeting of the Association of Mathematics Teachers New York State. Annual Fall Conference, Syracuse, NY.
 - Han, Y. J. (May 23, 2024). *Creative writers' proactive use of Generative AI and its implications in language education* [Individual paper session]. Computer-Assisted Language Instruction Consortium (CALICO) 2024 Annual Conference, Pittsburgh, PA.
 - Han, Y. J. (May 23, 2024). Cross-disciplinary Synthesis: What insights can we gain from Instagram culture on using ChatGPT for language education? [Poster session]. CALICO 2024 Annual Conference, Pittsburgh, PA.
 - Han, Y. J. (Apr 27, 2024). *Boosting Language Production: The Intersection of GenAI and Student-generated Multimodal Content* [Workshop]. Korea TESOL International Conference 2024, Seoul, Korea.
 - Garrett, R., Simunich, B., Legon, R., & Fredericksen, E. (2023). CHLOE 8: Student Demand Moves Higher Education Toward a Multi-Modal Future,, The Changing Landscape of Online Education, 2023.
 - Love, K., King, N., & Carson, C. (2023, October). Supporting High-Touch Hy-Flex Learning Experiences in Teacher Preparation. Presented at: New York State Association of Teacher Educators/New York Association of Colleges Teacher Education Annual Fall Conference, Saratoga Springs, NY.
 - Love, K., Carson, C. & King, N. (2024, April). Imagining Possibility with Bimodal High-Touch Strategies in Hy-Flex Courses. Paper presented at the 2024 American Educational Research Association Annual Meeting. Philadelphia, PA.

- Kim, J., (2024) 3 Questions for the University of Rochester's Eric Fredericksen, Inside Higher Education. Retrieved from <u>https://www.insidehighered.com/opinion/blogs/learning-innovation/2024/01/18/thr</u> <u>ee-questions-u-rochesters-eric-fredericksen</u>
- Clayburn, C, (2024) 5 Basic of an Online College Course. US News and World Report (an article that included insights from Eric Fredericksen on the student experience in online courses) Retrieved from <u>https://www.usnews.com/education/best-colleges/articles/basic-components-of-a</u> <u>n-online-college-course</u>
- LiDA Center website: Between May 1, 2023 and April 30, 2024, website traffic included 2280 unique users for 6107 sessions and 7973 page views.
- **K12digital.org**: Between May 1, 2021 and April 30, 2022, website traffic included 312 unique users for 388 sessions with 939 page views.

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

- AMTE, Association of Mathematics TEacher Educators (February, 2024) Carson
- Creative Collision Challenge (Nov 10, 2023) (Miller, Borys, & Han)
- Music, Law, and AI Symposium (Feb 21, 2024) <u>Exploring Generative AI for</u> <u>Music</u> by Borasi, Miller, & Han
- George Eastman Circle Reception in Philadelphia, PA (Apr 11, 2024) -University of Rochester: Teaching for the Future by Peyre & Han
- Han (Mar 22, 2024). *Generative AI Toolkit for Academic Writing Instruction* [Workshop]. Writing, Speaking, and Argument Program (WSAP), University of Rochester. Rochester, NY.
- Miller, D.E., Blake, V., Leite, W., Li, C., Murphy, G., & Seddon, J.C. (March 2024). *Perspectives on AI.* Panel Session Webinar (as moderator). AERA, Division H, Online.
- 2023 OLC Accelerate (*Fredericksen)
- Quality Matter Research Online Conference February 2024 (*Fredericksen)
- OnlineEd 2024 May 2024 (*Fredericksen)
- Eduventures Research Webinar September 2023 (*Fredericksen)
- EDUCAUSE Webinar October 2023 (*Fredericksen)
- 2023 CHLOE Executive briefings (*Fredericksen)
- 2023 National Association for Bilingual Education (King)
- 2023 American Educational Research Association (King)

- 2023 Korea Teaching English as a second or foreign language (TESOL) Annual International Conference (Han)
- 2024 Korea TESOL Annual International Conference (Han)
- 2023 New York State TESOL Annual Applied Linguistics Winter Conference (Han)
- 2024 New York State TESOL Annual Applied Linguistics Winter Conference (Han & Rashid)
- 2024 New York State TESOL Annual VirtuaTELL Conference (Han)
- 2024 Annual CALICO (Computer-Assisted Language Instruction Consortium) Conference (Han)
- Borys, Z. (Nov, 2023)., Moving Forward with the NYS CSDF Standards, NYSCATE Annual Conference, Rochester, N.Y.
- Borys, Z. (Nov, 2023)., Supporting Teacher Reflection by Examining the Teacher Resource Representations, AMTNYS Annual Conference, Syracuse, N.Y.

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

- In his role as Associate Vice-President of Online Learning for the entire university, *Fredericksen organized a Symposium in November 2023, where four UR faculty shared their experiences with online teaching (Dr. Margaret Carno, Professor of Clinical Nursing, School of Nursing; Dr. Mitchell Lovett, Senior Associate Dean, Education & Innovation, Benjamin Forman Professor of Marketing, Simon Business School; Dr. Valerie Marsh, Associate Professor, Assistant Director Center for Urban Education Success, Warner School of Education; Dr. Tara Serwetnyk, Director, Academic Innovation, Associate Professor of Clinical Nursing, School of Nursing. Video recordings of each of these presentations are available at https://www.rochester.edu/online-learning/symposium/index.html
- The 6 LiDA Colloquia offered this year were advertised across the University of Rochester through @rochester (the UR daily e-newsletter).
- *Borasi was a co-PI in a successful internal proposal for a planning grant for a UR transdisciplinary institute on GenAI involving all other academic units of the university.
- *Borasi and other LiDA faculty collaborated in a major proposal to NSF for a \$20M grant to find the STRONG AI Institute (still pending)
- *Borasi has been part of a team designing new PhD in Data Science
- *Borasi was a panelist in a presentation on GenAI to the UR Board of Trustees

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

- LiDA Colloquia (Academic year 2023-2024)
 - Apr 9, 2024: Exploring GenAI tools for instruction
 - Mar 20, 2024: GenAI uses that can increase educators' productivity
 - Feb 1, 2024: GenAl Impact on Creativity/Creative Work
 - Nov 9, 2023: Policies and Practices about Using AI in Schools and Universities
 - Oct 11, 2023: Creative Learning Activities that Leverage Generative AI
 - Sep 18, 2023: LiDA Projects' Showcase and Connections
- K-12 Digital Consortium May 30, 2024 event
- Presentation to WFL & GV BOCES Joint Technology Group/Task Force on findings from our RAPID AI study.
- Han served as a guest speaker on the RBERNing Questions podcast, Mid-State Regional Bilingual Education Resource Network (RBERN) show, regarding the topic on "Generative AI for Teaching English to Speakers of Other Languages (TESOL)" on Dec 13, 2023.For the 45th New York State TESOL Annual Applied Linguistics Winter Conference (online), Han served as a conference advisory board, and Rashid served as a conference planning committee.
- Han is serving as a conference chair for the 4th Annual VirtuaTELL Conference of the New York State TESOL, which will be held fully online on June 15, 2024 with a theme "TESOL in New Academic Reality with Generative AI".

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

- *Fredericksen is serving as Associate Editor of the Online Learning Journal, a top research publication in the field of online education. *
- *Fredericksen is serving on the OLC Fellows Selection Committee, the highest level of individual recognition for the OLC organization

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 chose to focus the LiDA Colloquium Series on implications of GenAI for education - with the only expectation of the September event, which has been traditionally be devoted to showcasing LiDA-related projects to foster new connections and collaborations (see

https://www.rochester.edu/warner/lida/programs/lida-colloquium-series/ for recording of the conversation starters for each of these sessions):

- **Fall 2023 season**: During the Fall 2023 season, a total of 205 people registered and 132 attended the following sessions.
 - LiDA Projects Showcase and Connections
 - Creative Learning Activities that Leverage Generative AI
 - Policies and Practices about Using AI in Schools and Universities
- **Spring 2024 season**: During the Spring 2024 season, 249 people registered and 144 attended the following sessions.
 - GenAl Impact on Creativity/ Creative Work
 - GenAl Uses that Can Increase Educators' Productivity
 - Exploring GenAl tools for instruction
- 2. Growth in LiDA community members: Reached a total of 53 current members (as listed in the LiDA Community page on the LiDA website).
- 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:
 - Warner Gen Al Study Group (led by *Han & **Gong, and including *Borasi, Gama, Raschid, *Yamin Zheng) This is a study group that aims to create hands-on experiences and discussions on emerging generative AI applications. The group meets three times each semester to keep knowledge up-to-date.
 - Warner/LiDA AI Task Force (*Borasi, *Fredericksen, **M.Daley, Warner) Tasked by the Warner dean to promote and lead a strategic initiative to make Warner a thought-leader and a place to go to study AI and education.
- **Other on-going active collaborations:** The following existing collaborations were maintained and/or expanded:
 - Ain Center for Entrepreneurship Romania Fellowship program: *Borasi and * Miller have continued to support the Ain Center's project of hosting a group of Romanian faculty members in Rochester for a semester to learn from current initiatives related to entrepreneurship, by sharing lessons learned about

teaching online as well as launching new university programs; this year this involved a new group of Fellows, 4 in Fall/Spring 2024, and the final cohort, as far as we know.

- **WFL BOCES**: We worked closely with Gordon Baxter for the recruitment of the Computer Science strand of the Smart Start grant awarded to BOCES, and plan to continue to collaborate for the implementation of the new Computer Science Standards.
- **GST BOCES**: In addition to working with the coordinators of the two on-going NYSED PD grant writers for recruitment and redesign of these projects' PD programs, we also collaborated around the recruitment of fellows for the new Noyce MTF BeAJEDI grant.
- **Dr. Cesare Wright** (President of the Kino-Eye Center for Visual Innovation) has participated in the design and implementation of a section of the Computer Science Summer Institute, and continues this collaboration in Year 3 of the project. We also continue to explore other potential collaborations.
- **New collaborations:** New collaborations were explored with the following individuals/groups:
 - AI Horizons Institute planning grant
 - NYS VITAL Program (Miller)
 - Han is collaborating with tech experts at Teachers College, Columbia University on multiple research projects on generative AI for TESOL.
 - Computer Science Teacher Preparation working group (Borys)

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

1. New LiDA staff positions:

- Yu Jung Han, has join the LiDA Center in a full-time position as post-doctoral associate with LiDA for the 2023-24 academic year the first post-doc position for LiDA. This appointment has been renewed for the 2024-25 academic year.
- 2. New LiDA Affiliated Faculty: After piloting the new role of LiDA Affiliated Faculty last year, as described in <u>this document</u>, Warner faculty Andrea Barrett, Oliver Boxell,

Andrea Cutt, Mike Daley, Karen DeAngelis, and Pat Vaughan Brogan have agreed to serve in this role - joining Nicole King, Kristen Love, April Luehmann, Hairong Shang-Butler, and Carol St.George.

3. **Partnership with the Center for Professional Development and Education Reform:** The LiDA Center and the Center for Professional Development and Education Reform (CPDED) have continued to partner in the professional development grants from NYSED as well as the two active NSF-funded Noyce Master Teaching Fellowship (MTF) grants.

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

- LiDA Director (R. Borasi): 10% FTE
- LiDA Associate Director for Higher Education (E.Fredericksen): 5% FTE
- LiDA Associate Director for K-12 Education (D. Miller): ~10% FTE
- LiDA Assistant Director (Z.Borys): ~30% FTE
- LiDA Associate (C.Carson): 5% FTE
- LiDA Post-doc (Yu Jung Han): ~30% FTE
- Additional RA support:
 - Yamin Zheng: ~25% FTE (10 hours/week)
 - Md. Mamunur Rashid: : ~12% FTE (5 hours/week)
 - Adma Gama: ~6% FTE (5 hours/week in Fall only)
 - Jialin Yan: ~12% FTE (5 hours/week)

5. Personnel working on funded LiDA-related initiatives:

- LiDA Staff & RAs:
 - *Borasi: 2% FTE on Noyce MTF-DR grant; 10% on Noyce MTF BeAJEDI grant; 6% FTE on Future of Work TEAMup grant; 3% FTE on Moskowitz Foundation grants; 2% FTE on EAGER grant; 2% on NSF Cybersecurity Education grant; 2% on RAPID=AI school leaders grant + NYSED PD sub-contracts (covered in summer); + co-teaching 2 LiDA courses, directing HPE program, supervising LiDA dissertations & research (covered by Warner)
 - *Fredericksen (besides his role as Associate Vice-President for Online Learning for the University, covering 80% of his time): 5% FTE on supporting online teaching at Warner + teaching LiDA courses & supervising online teaching practicum, directing Online Teaching program, supervising LiDA dissertations & research (all covered by Warner)

- *Miller: 6% FTE on Future of Work TEAMup grant; 2% on NYSED PD sub-contracts; 6% on NSF Cybersecurity Education grant; 15% on RAPID=AI school leaders grant + teaching 2 LiDA courses & some digitally-rich practicum supervision, directing Digitally-Rich Teaching program & program advisor for Digitally-Rich Teaching and Online Teaching programs + HPE, supervising LiDA dissertations & research (covered by Warner)
- *Borys: 5% FTE on Noyce MTD-DR grant ;10% on Noyce MTF BeAJEDI grant; 6% FTE on Future of Work TEAMup grant; ; 6% on NSF Cybersecurity Education grant; 10% on NYSED PD sub-contracts; + Teaching some LiDA course (*covered by Warner*)
- *Carson: 10% on NYSED PD sub-contracts; 10% on Noyce MTD-DR grant; 40% on SYNC-ON 2
- *Han: ~10% FTE on Moskowitz projects; 20% on TEAMuP; 15% on RAPID-AI
- Mamunur Raschid (RA): 12% on TEAMuP; 5% on IT mini=grant (Fall) + 5% FTE on Moskowitz projects (Spring)
- **Anlun Wang (RA): ~10% FTE on Moskowitz projects
- Yamin Zheng (RA): ~10% FTE on RAPID-AI project
- Other personnel :
 - **Lisa Brown: Teaching 3 LiDA courses & online teaching practicum (covered by Warner)
 - **Callard (Center for Professional Development and Education Reform CPDER) : on Noyce MTD-DR and BeAJEDI grant
 - Jeff Choppin: on Noyce Scholarship grant; Sync=On 2
 - **Daley (CPDER): on Noyce MTF-DR & BeAJEDI grants;
 - **Luehmann: on Noyce Scholarship grant; COVID-19 unit grants from NSF
 - **Occhino: on Noyce MTF-DR & BeAJEDI grants
 - **Melissa Staloff: on Noyce MTF-DR & BeAJEDI grants
 - **Jen Kruger: on MTF-DR & BeAJEDI grants
 - Kelly Pearson: MTF-DR & BeAJEDI grants + RESET & T3 Smart Start grant
 - **St.George: on Moskowitz projects
 - Marsh: RESET grant
 - Meuwissen: RESET grant
 - **Vaughan-Brogan: on RAPID-AI grant
 - **DeAngelis: on RAPID-AI grant

Faculty and staff outside of Warner:

6. Free lancers: This year, our sub-contracts on the three NYSED professional development grants have allowed us to continue to support free-lancers to help sustain and expand LiDA's professional development services for K-12 schools; the following individuals have participated as mentors in one or more of the PDs offered this year:

- Heather Boyle (full-time elementary teacher & former Warner doctoral student)
- Tiffany LaPrade (full-time elementary teacher & MTF2 graduate)
- Michaela Marino (full-time middle school math teacher & MTF2 graduate)
- Seth O'Bryan (full-time STEM teacher & current Warner doctoral student)
- Marie Rice (full-time Kindergarten teacher, MTF2 graduate & Warner doctoral graduate)
- Kim Saccardi (full-time elementary teacher & MTF2 graduate)
- Angela Messenger (full-time STEM teacher & current MTFDR Fellow)
- Fred Young (full-time STEM teacher & current MTFDR Fellow)
- 7. Gifts secured to support the LiDA Center's infrastructure and unfunded core initiatives: A total of about \$50,000 in gifts has been received to date during the 2023-24 fiscal year to date, including contribution directed to support the following

core initiatives and positions:

- Support for the LiDA Assistant Director position
- Support for the pilot of the LiDA post-doc position in 2024-25
- Support for the LiDA Colloquium Series
- General support for the LiDA Center's infrastructure and unfunded initiatives

8. New grants and contracts awarded:

- NYSED: The CS Smart Start and T3 Smart Start NYSED grants have all been renewed for Year 4, for a total of about ~\$140,000 funding for the LiDA Center for next year
- The NSF Cybersecurity in collaboration with RIT, was awarded for a total of \$500,000.
- An NSF RAPID-AI grant was submitted and awarded, for a total of \$200,000
- The Madre Cabrini Healthcare Foundation grant was renewed for a second year
- Fulbright Distinguished Awards in Teaching (DAI) for Cultural, Pedagogical, and Linguistic Exchange (\$230,000) was funded and implemented for the period 8/15/2023-12/11/2023
- 9. New grant proposals submitted (and their status):
 - NSF RAPID-AI proposals a special call for 1-year (\$200,000) research projects on AI and K-12 Education:

- Understanding and Supporting K-12 School Leaders' Al-related Decision-making (PIs: *Dave Miller; Karen DeAngelis; Patricia Vaughan-Brogan, Jonathan Herington; Sharon Mason) - AWARDED
- Using Generative AI to Learn the Language of STEM in Secondary Classrooms (PIs: *Nicole King; Kristen Love; Raffaella Borasi, April Luehmann) - DECLINED
- A \$1.8M NSF ITEST proposal was submitted in summer 2023, but declined
- A \$1.2M Noyce Scholarship proposal was submitted in summer 2023 still pending

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

- Yunfan Gong, Adma Gama-Krummel, Md. Mamunur Rashid, and Yamin Zheng have all been accepted and have started the special NSF-funded training program in AR/VR
- Adma Gama-Krummel was also awarded a \$34,000 NSF Fellowship to support her work in the AR/VR program during the calendar year 2024.
- Yamin Zheng is taking courses in the Advanced Certificate in Data Science
- Adma Gama-Krummel, Mamunur Rashid, and Yamin Zheng have participated in the process of putting together the NSF RAPID-AI and ITEST proposals
- Mamunur Rashid working with Kristen Love on HyFlex eModules