

2019 PROVOST'S LEARNING INNOVATIONS GRANTS CALL FOR PROPOSALS

The **Provost's Learning Innovations Grants** (PLIG) program was developed to broaden and enrich the learning experience of RIT students by funding faculty-initiated projects that enhance student learning. Managed by the Innovative Learning Institute (ILI), this program has been designed to:

- Better support dissemination of individual faculty learning to the wider faculty population
- Integrate funding with Institute priorities
- Support the scholarship of teaching and learning

I. ELIGIBILITY

All full-time RIT faculty (tenured, tenure-track, visiting, lecturers, etc.) are eligible to apply.

II. GRANT TYPES

There are two types of grants—Exploration and Focus—for PLIG 2019. Full details are available on the [Grants Types](#) page of the PLIG website (www.rit.edu/plig).

III. USE OF GRANT FUNDS

Provost's Learning Innovations Grants for 2019 may range from \$1,000-\$5,000.

Examples of the use of PLIG funds include:

- Course release (reasonable, actual replacement costs for faculty members removed from teaching)
- Development of new technology-based learning tools and/or environments
- Technologies or equipment required that are not normally provided by the department/college
- Resources for research design and consultation, data collection and aggregation, instrument development and/or purchase, secure data storage, data analysis, and report generation
- Travel to support research activity and/or meet with potential funding sources

IV. PLIG TIMELINE AND TASKS

The grant timeline assumes that most recipients will use the Spring 2019 and/or Summer 2019 term(s) to plan and develop their PLIG-funded project for delivery or implementation during the Fall 2019, Spring 2020, and/or Summer 2020 term(s). The full [timeline](#), including grantee tasks, is available on the PLIG website.

V. SELECTION COMMITTEE AND EVALUATION CRITERIA

Applications for PLIG funds are evaluated by the [PLIG selection committee](#) according to the following criteria:

- *Utility* (solves a defined problem; has potential to benefit many courses/faculty)
- *Creativity* (is a novel approach or application; represents a new paradigm)
- *Efficacy* (uses an evidence-based approach; impact to student learning and/or the student experience can be demonstrated)

The criteria are further defined, illustrated, and explained in the [Proposal Evaluation](#) section of the PLIG website.

VI. QUESTIONS

Please email plig@rit.edu with any questions about the PLIG process.

(Examples of previously funded projects are available in the [Previous Awards](#) section of the PLIG website).

2019 PROVOST'S LEARNING INNOVATIONS GRANTS

APPLICATION

INSTRUCTIONS

1. Complete this Application Form and save as "Lastname_Firstname_APP" (*using your name*).
2. Ask your Department Head to complete the Department Head Certification, scan and save as, "Lastname_Firstname_SIG" (*using your name*).
3. Email all documents to plig@rit.edu, **no later than 11:59pm ET, January 21, 2019.**

If you have any questions about completing this application, please contact Michael Starenko at 585-475-5035 or mssetc@rit.edu.

APPLICANT INFORMATION

This application is for a (please select *one* type of grant):

- Exploration Grant
 Focus Grant – Active Learning Across All Course Modes

Principal Applicant Name: Ann Hager

Faculty Title: Associate Professor Email: amhnbt@rit.edu Phone: (585) 475-6880
(Full-time only)

College: NTID Department: Business Studies

Department Head Name: Mark Pfuntner Email: mjpnvd@rit.edu

Others involved in the project (if any): Dr. Scot Atkins, Kelly Metz-Davis and Kathleen Brady

Project Name: Tutoring with Technology: Say Goodbye to Pen and Paper

Total Funds Requested (*as calculated on the budget worksheet on the next page*): \$4,525.00
(requests of \$1,000 to \$5,000 will be considered)

BUDGET

Complete the table below to calculate your budget

- The total shown on this worksheet must match the “Total funds requested” in the Applicant Information section on page 1 of this application form.
- If awarded, additional funds will be provided to cover any benefits and ITS expenses associated with the salary budget requested.
- Note that any equipment or other materials purchased with grant funds are the property of your department and revert to the department after your project is completed

Personnel	Purpose/Justification	Amount
Full-time Faculty/Staff		
Adjuncts, Part-time Faculty/Staff, Summer Salary		
Student Workers, Graduate Assistants		
One Student	Assist with survey development and data collection. (2 hours per week for 15 weeks @ \$11.10 per hour)	\$333.00
Personnel Total		\$333.00
Equipment	Purpose/Justification	Amount
4-12.9 inch iPad Pro's (\$949.00 each)	Technology that will be used for Tutoring sessions.	\$3,796.00
4-Apple Pencils (\$89.00 each)	Required equipment for iPad project	356.00
Notability App (\$9.99 each)	Required app for iPad project	40.00
Equipment Total		\$4,192.00
Travel	Purpose/Justification	Amount
Travel Total		\$ 0.00
Other (Specify)	Purpose/Justification	Amount
Other Total		\$ 0.00
Total Award Requested		\$4,525.00

STATEMENT OF UTILITY (two pages maximum)

Using the evaluation criteria outlined in the [Proposal Evaluation](#) section of the PLIG website, please provide an overview of the project you are proposing, including:

- Project objectives
- An explanation of the teaching/learning problem(s) it is designed to address
- An explanation of the significance of the project to student outcomes and/or the student experience.
- A brief description of how the project integrates with activity already underway at RIT in a priority area and/or how this approach has been successfully used at RIT already.

Background:

The National Technical Institute for the Deaf (NTID), one of nine colleges here at RIT, was established 50 years ago as a career focused University offering 2 year associate degrees to qualified Deaf and hard of hearing students. As the college grew, deaf and hard of hearing students started to enroll in classes and degrees offered in the other colleges of RIT, which led NTID to provide access and academic support services to students pursuing baccalaureate and graduate degrees. Based on the 2017 NTID Annual Report, there were 1,081 deaf and hard of hearing students enrolled at NTID with 520 (48%) of those students enrolled in baccalaureate degrees programs at RIT.

NTID has six Academic Support Teams that reside within the individual colleges at RIT. Academic support is a unique blend of resources available to each deaf and hard of hearing student who is mainstreamed into RIT classes. Students can meet with NTID faculty tutors who have content expertise in the student's major program, are proficient in sign language and work closely with the faculty teaching the courses. Students can also take advantage of faculty advising and mentoring to optimize their path to academic success.

Problem Statement and Project Objectives:

Why do we feel the need to change the way we do business? Today's college students use their cell phones, tablets and laptops to access MyCourses, read their textbooks, do their online homework, participate in group project assignments and conduct research to complete any number of assignments. Deaf and hard of hearing students also access their class notes through the myAccess website at RIT. Tutoring utilizes a variety of teaching and learning strategies which are predominantly demonstrated through highly visual examples (on a white board or on paper) however, there has been limited use of innovative technology to enhance the effectiveness of tutoring sessions.....until now. Current classroom technology is not available for tutoring so this proposal will support a tutoring experience that embraces innovative technology that we believe will improve the outcomes of our services.

The goal of this project is to introduce the use of iPad technology with the Notability App to make our tutoring sessions more visual, interactive and malleable for students. Notability is a note-taking app that allows users to download Power Points or other faculty provided media/resources and overlay notes, drawings, graphs, formulas, and other visual aides to enhance student understanding. The app also allows users to embed video examples, and audio clips if applicable, to bring theory examples to life. Faculty tutors currently expand on topics covered in class by using online research, websites, videos, drawings, graphs and formulas that are shared with students during one-on-one or group tutoring sessions. These problem solving strategies are limited to the sessions unless the student takes notes or snaps photos. Use of the notability app on a large tablet would replace white board drawings and paper demonstrations that can be lost or erased, losing out on valuable learning examples that a student might want to revisit or have handy for their own personal studying. In addition, tutors would be able to create a "digital repository" of tutoring strategies that have been developed during our meetings with students, for future use. Saved items in this repository will be shared with other students enrolled in the same class and with tutors who are working with students enrolled in different courses who review similar type problems. (ie. Time value of money concepts and formulas are taught in multiple courses in the SCB)

The grant will be integrated in three parts:

Summer 2019: The faculty tutors will be involved in training with the Notability App and developing materials to share with students describing the new technology and the plan to evaluate the use of the App for all supported courses in the SCB during the 2019 Academic year. The pre and post survey instruments will be prepared for use in our data collection/evaluation. Video waiver forms will be created for our students in preparation of videotaping sessions that will showcase the utilization of Notability.

Fall 2019 & Spring 2020: The Business Support Team will utilize iPads and Notability in all tutoring sessions offered to Deaf and hard of hearing students during the 2019 academic year. Our student worker will be responsible for distributing/collecting the pre and post surveys each semester to evaluate the effectiveness of the technology and the potential impact on student success. The student will also help to videotape 3 to 4 tutoring sessions each semester to use during conference presentations and training workshops with all NTID support team faculty.

We are not aware of any RIT/NTID department currently using iPads and the notability app for tutoring or classroom teaching activities.

STATEMENT OF CREATIVITY (three paragraphs maximum)

Provide a brief description of how this is a novel approach, or a new application of an existing mode or model of teaching and learning, and/or research about how teaching and learning represents a new paradigm.

Traditionally, tutors use white boards or legal size note pads and a large collection of colored pens and markers to work through problems or demonstrate examples of concepts and theories taught in courses across the institute. Deaf and hard of hearing students are traditionally visual learners, so creating a vibrant visual example is critical to the effectiveness of our tutoring sessions.

With the use of this technology, we will be able to say, "Gone are the days when paper and pen are the only option for breaking down problems". As educators, we are constantly changing our approach to teaching to match the learning styles of our students. This innovative use of iPad technology can be used in any classroom or tutoring format. It helps involve students in the learning process, and encourages them to dig deeper into topics, allowing for immediate online access and upload for appraising topics being covered.

While students can type up notes, we believe that the kinesthetic act of physically writing out information helps students be able to better recall the information that they need to learn and retain. Notability can easily convert handwritten information into text if the student prefers that modality (low vision students and students with additional learning disabilities). The app also offers different paper options (graph paper for economics, math or engineering) and paper color choice. A sticky note feature can be used to remind students to review a problem or strategy demonstrated during tutoring. Additional benefits of this app include the ability to backup to google drive and iCloud, which is always accessible on an iPad or cell phone. It also supports easy organization of information with dividers and categories for topics which can be searched and sorted at any time.

The following video tutorial describes the benefits of the notability app:

<https://www.youtube.com/watch?v=aGX33DNL0oo>

STATEMENT OF EFFICACY (two pages maximum)

Provide a brief description of the experiment/research design, methodology, and methods of data collection and analysis you will use to gauge efficacy.

Pre-experimental survey

For this specific project, we will be using a modified pre/post experimental design to ascertain the nature of the use of the software and hardware on tutoring and its impact on student success. A pre-experimental survey will be distributed to the deaf and hard of hearing students (DHH) before they are exposed to the use of the new technological tools for tutoring. This initial 15 question survey, utilizing a Likert scale will focus on the experience of tutoring using traditional tutoring tools. Our goal is to have 25 students completing the survey (n=25) (number determined based on a percentage number of students actually taking advantage of tutoring services at SCOB). These students must be in a position to continue with tutoring services at SCOB for one semester (or one year). Another 25 students will take the survey, but will not be exposed to the experimental treatment.

Treatment

During the treatment period, students will be exposed to the use of iPads/Notability for tutoring for one academic year through any of the faculty tutors using the technology. During this period, there will be a mid-semester survey with 10 questions asking about their experiences using the new technology.

Post-experimental survey

A survey will be disseminated to the 25 treated students at the end of the semester. The questions, a modified version of the pre-experimental survey will focus on the effectiveness of the new technology and their ability to retain the learnings through the tutoring process. The other 25 students (control group) will take the survey as well. Statistical analysis will determine whether or not the intervention (the iPads/Notability) had a significant effect with the treated group.

ADDITIONAL CONSIDERATIONS

Please address these questions, if needed.

Will your project require assistance for extensive or unusual media, multimedia, simulation, and/or software development? If so, please explain?

None required.

All courses offered by RIT must be accessible to students with disabilities, according to Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990 (rit.edu/studentaffairs/disabilityservices/info). Is your proposed teaching approach accessible to all students, with reasonable accommodation? If not, please explain.

Yes.

RIT abides by the Family Educational Rights and Privacy Act of 1974 (FERPA), which prohibits instructors from making students' identities, course work, and educational records public without their consent (rit.edu/xVzNE). Will any data gathering or sharing for your project raise any FERPA issues? If so, please explain.

No.

DISSEMINATION AGREEMENT

By completing this grant application, I agree to provide the materials and services described here, in support of disseminating what is learned from this project to the RIT community.

I also agree to return all/a portion of the funds that I receive for this project to RIT if I fail to complete or provide the materials described here:

- Full Project Plan (*including roles and responsibilities, milestone dates, and pertinent project details*)
- Preliminary Findings report (*may include experiment/study design, lessons learned, initial data collection, and/or literature review summary*)
- Participation in an ILI/TLS Preliminary Findings Roundtable dissemination event (*share and discuss your preliminary findings with your PLIG cohort*)
- Final Summary of Findings (*including data collection, lessons learned, implications for further study, and which may be in the form of an article abstract, conference presentation outline, or short report*)
- Final budget accounting (*reconciliation of budget provided with your application and the actual project expenses*)
- Participation in an ILI/TLS PLIG Showcase dissemination event (*present a poster or other display at the annual Showcase*)

By submitting this application, I accept this agreement. AMH (*applicant, please initial here*)

TIMELINE AND TASKS

Please indicate any variances to the planned PLIG 2019 schedule as described in the above Dissemination Agreement and the reasons for this variance. *If you do not intend to deviate from the schedule, you may leave this section blank.*

Task	Date	Proposed Variance and Reason
Full Project Plan submitted to TLS	August 16, 2019	
Preliminary Findings report submitted to TLS	January 10, 2020	
Participation in an ILI/TLS Preliminary Findings Roundtable dissemination event	February, 2020	
Summary of Final Findings report submitted to TLS	August 21, 2020	
Final Budget Accounting report submitted to TLS	August 21, 2020	
Participation in an ILI/TLS PLIG Showcase dissemination event	November 2020	

DISSEMINATION PLAN (*optional*)

Provide details about the journals, conferences, shows, or other external vehicles with strong potential for dissemination of your results (in addition to the ILI/TLS Preliminary Findings Roundtable and PLIG Showcase dissemination events). Include supporting documentation, such as preliminary interest or acceptance, with your application, if available. *(Please note that special consideration will be given to proposals that have a defined opportunity for external dissemination, such as an academic journal or professional conference.)*

We plan to submit proposals detailing the innovative use of iPad technology and Notability in a tutoring function and the findings of our research results to the following conferences:

- The Annual Conference of the Association on Higher Education and Disability (AHEAD)
- The 2020 Biennial Conference of the National Tutoring Association (NTA)
- The 2020 Biennial Best Practice in Mainstream Education of Deaf and Hard-of-Hearing Students Conference
- The 2020 Biennial Conference of the National Association of the Deaf (NAD)
- The 2020 American Accounting Association “Conference on Teaching and Learning in Accounting” Annual Conference
- The 2020 Annual Conference of the CSUN Assistive Technology Conference
- The 2020 Annual International Association of College Educators-Deaf and Hard of Hearing

DEPARTMENT HEAD CERTIFICATION

I support this PLIG application and verify that the principal applicant is a full-time faculty member in good standing in my department.

Principal Applicant Name: Ann M. Hager

Department Head Name (PRINT): _____ **Email:** _____

Department Head Signature: _____ **Date:** _____

NOTE: When signed, please scan and email with your Application Form to: plig@rit.edu