Creating a Centralized Science Communication and Engagement Network on Campus

By: Kasra Zarei

This multi-purpose project completed by Kasra Zarei has two aims: 1) to write a proposal directed to the Board of Regents for developing a Science Communication and Engagement Center at the University of Iowa, and 2) to develop a suite of services, implemented through workflow, that can be used to collect and coordinate the creation of scientific writings in a language salient for a general audience and ideas for broader impact STEM projects.

Creating a Proposal for the Latham Science Communication and Engagement Center

The goal is to complete a proposal directed towards the Board of Regents for developing a science communication and engagement center at the University of Iowa. This entails performing a thorough needs analysis through discussing the identity, functions, and structure of such a center with all the major groups on campus.

Developing Services and Resources to Pilot Aspects of a Science Communication and Engagement Center

The goal is to create a page of growing services for researchers (faculty, staff, and students) on campus, and advertise and pilot all services
developed (URL: http://latham.uiowa.edu/services). The most notable service is the Latham Technical-to-General Translation Writing Service (URL: http://latham.uiowa.edu/services/technical-general-writing-translation-s...) which seeks to convert technical writings (manuscripts, grants, invention disclosures, patent applications) to writings in the language of a general audience (mainly press-releases), as well as pictorial and multimedia representations to supplement the writings. This workflow will increase the number of general audience writings on campus and provide a service that be used by any individual on campus.

LSEI - Latham Technical Writing Submission
• https://workflow.uiowa.edu/entry/new/1643
LSEI - Latham Service Evaluation
• https://workflow.uiowa.edu/entry/new/1642

A project proposal submission service (URL: http://latham.uiowa.edu/services/services/broader-impact-project-proposals) has also been developed to collect broader impact project ideas (related to grants) that future Latham fellows and outreach groups on campus could
implement. This workflow will streamline and centralize the way outreach is conducted on campus, and better connect professors, researchers, resources, and outreach groups and organizations more than ever.

LSEI - Broader Impact Project Proposal Collection
- [https://workflow.uiowa.edu/entry/new/158](https://workflow.uiowa.edu/entry/new/158)

Formal and Informal Interviews Conducted for this Project

*Latham Science Engagement Initiative (LSEI)*
- Dr. Bernd Fritzsch - DEO Department of Biology, Director of Latham Science Engagement Initiative
- Dr. Lori Adams – Deputy Director LSEI, Program Director Iowa Biosciences Advantage
- Brinda Shetty – Program Coordinator LSEI, Iowa Bioscience Advantage
- Advisory Board Members of LSEI

*Project IDEAL*
- Professor Matt Gilchrist – Department of Rhetoric, Director of IDEAL
Office of Strategic Communication
- Richard Lewis – Senior Writer, Office of Strategic Communication

Office of Research and Economic Development
- Dr. David Conrad – Assistant Vice President, Office of Research and Economic Development
- Ann Ricketts – Assistant Vice President, Office of Research and Economic Development
- Stephen Praderelli – Strategic Communications Director, Office of Research and Economic Development
- Leslie Weatherhead – Manager of Campus Communications, Office of Research and Economic Development

The Writing Center of the University of Iowa
- Dr. Carol Severino – Department of Rhetoric, Director of the Writing Center and Writing Fellows Program

School of Journalism and Mass Communication
- Kevin Ripka – Assistant Professor, School of Journalism and Mass Communication

University of Iowa Research Foundation
- Zev Sunleaf – Executive Director, University of Iowa Research Foundation

Miscellaneous Personnel
- Dr. Christine Blaumueller – Scientific Editor and Writing Consultant, Carver College of Medicine
- Professors and Staff from the College of Liberal Arts and Sciences and the College of Engineering
- Outreach groups and organizations on campus
Author Statement and Summary of the Project

Through this project, which will certainly extend beyond the scope of this semester, I have had the privilege of speaking to a multitude of groups on campus. I have been able to refine my interview skills and have become more proficient in using digital equipment. As an Iowa City native who has attended the University of Iowa for what seems like an eternity (thanks to post-secondary enrollment in high school), I have learned a lot more about the structure of the university institution as a whole. Specifically, in this project I explored the intricacies of science communication and engagement within academia on campus while researching other well established models.

At the moment, I do believe that there is a great need for more science communication and outreach from scientific researchers. From my discussions with people at this university and other institutions, I do think this need is realized. However, although the services I developed are in their embryonic stages, I have noticed a hesitance in scientists adopting freely available services on campus. My conversations with consultants and individuals that manage technical and general writing services have helped me realize that overall these types of services are not widely used. I have noticed this discrepancy and disconnect between the value expressed and the actual use. I need to investigate more if research scientists are simply stretched too thin, or if the efforts of public communication and engagement are not as rewarded and valued as the contributions of a serious scientist. I do believe that potential barriers need to be further discussed before a proposal for the center is submitted and implementation within the University of Iowa begins.

Feel free to register your opinion regarding a science communication and engagement center at any time through the following Qualtrics survey: https://uiowa.qualtrics.com/SE/?SID=SV_87laKr98pK9NOkZ
The services listed above (as displayed on the Latham Website: www.latham.uiowa.edu) are live and made for campus-use through workflow. For a current draft of the proposal for the Board of Regents, email kasra-zarei@uiowa.edu.

I would like to sincerely thank to Lori and Brinda for their continued mentorship and supervision on this project. Without their help, I would not have been able to augment my proposal and workflow services to reflect the needs of faculty, staff, and students on campus. I would also like to acknowledge Dr. Bernd Fritzsch, the “White Knight” of our university and my research mentor for several years, who provided an enormous amount of insight into my project directly and indirectly. I would also like to thank the LSEI Advisory Board for their insight into the services developed as well.

Many thanks to all the interviewees for sharing their experiences in science communication and engagement, and their discussions on how we can better centralize these two domains on campus. I would also like to sincerely thank Matt Gilchrist and the rest of the IDEAL team (Rebekah and Jared). I would also like to thank members of CLAS IT (Jose Jimenez, Michael Kaplan, Rebekah Ahrens and Jennifer Graham) for their supervision in developing the services through Workflow.

Finally, I would like to thank Mr. Latham for his extremely generous donation and providing me with this enriching educational experience that has been beyond valuable in terms of my development as a professional. I would like to refer Mr. Latham and any readers to an editorial I wrote that was recently published in the Daily Iowan: http://daily-iowan.com/2016/04/25/philanthropy-addresses-the-stem-crisis/. Despite the excellent work put into this initiative by so many people, I question whether it would actually exist without the philanthropic support.
While the decision to approve and implement a science communication and engagement center on campus is beyond my authority as a student and will likely extend beyond my time as an undergraduate student, I hope that the work I have done can provide a foundation for faculty and administrative officials to build from. In the near future and the event that such a center cannot be funded or ultimately implemented, I hope that at least the services I developed can be widely used and freely enjoyed on campus and increase the number of general audience writings about research the public (through press release, faculty websites, etc.) and broader impact outreach projects for outreach groups and fellows to work on.