

The educational benefits of CURE-type instruction were clear as early as 2005 when the first CURE course for D/HH LST students was taught at RIT/NTID. The CURE focused on the isolation and analysis of isoeugenol from nutmeg and served as a capstone course for the program that was interdisciplinary (as it had chemistry and biology components). Chemical extractions, instrumental analyses (spectroscopy and chromatography), bacterial inhibition testing, and general laboratory techniques were used in the research. The level of research and scientific details of this earlier CURE offering can be found in the publication of Pagano and colleagues (2016). Although this effort predated the structured assessment movement for CUREs, strong student learning and technical skill development were evident. Due to scheduling and program logistics, the course was not taught again for some time.

In 2020, RIT/NTID offered a newly designed LST CURE. Similar to its predecessor, the course involved the use of laboratory analytical techniques—this time through the analysis of honey. In this iteration, CURE-enrolled students were given precourse and postcourse surveys to self-assess aspects of their experience (Grinnell College 2020). All students who completed the survey ($n = 11$) either agreed or strongly agreed that the CURE “. . . was a good way of learning about the subject matter,” and most ($n = 9$) students also agreed or strongly agreed that the CURE was a good way of “learning about the process of scientific research.” The student responses demonstrated that the significant benefits of the CURE included “becoming part of a learning community,” “learning lab techniques,” “skill in the interpretation of results,” and the “ability to analyze data and other information” (all students identified these items as areas in which they believed that they experienced a moderate to very large gain). The demonstrated learning outcomes from the redesigned CURE are encouraging, and the course is expected to continue as a program fixture.

Graduates of the LST program either enter the workforce (often as laboratory technicians) or matriculate into baccalaureate degree programs. Students’ reactions to the CURE indicate that it provides them with vital skills that can assist in their transitions to the workplace or baccalaureate, graduate, and professional education. Given that the students are undertaking authentic research projects using the scientific method, they are inherently confronted with critical thinking and problem-solving scenarios that can build their skills for future academic and professional careers. After experiencing CUREs, D/HH participants may also be more likely to continue in faculty-mentored research projects—a positive development, as D/HH students frequently have fewer research opportunities compared to their hearing peers (Pagano, Smith, and Ross 2015). In addition to providing students with a strong experiential curriculum, this initiative can bring a much-needed focus on the D/HH experience in science programs

and demonstrate the advantages of providing students with inclusive CUREs.

References

- Grinnell College. 2020, May 25. “CURE Survey.” Accessed February 12, 2021. <https://www.grinnell.edu/academics/resources/ctla/assessment/cure-survey?v2node>
- Hensel, Nancy H. (Ed.). 2018. *Course-Based Undergraduate Research: Educational Equity and High-Impact Practice*. Washington, DC: Council on Undergraduate Research.
- Lynn, Matthew A., David C. Templeton, Annemarie D. Ross, Austin U. Gehret, Morgan Bida, Timothy J. Sanger II, and Todd Pagano. 2020. “Successes and Challenges in Teaching Chemistry to Deaf and Hard-of-Hearing Students in the Time of COVID-19.” *Journal of Chemical Education* 97: 3322–3326. doi: 10.1021/acs.jchemed.0c00602
- Pagano, Todd, Annemarie Ross, and Susan B. Smith. 2015. “Undergraduate Research Involving Deaf and Hard-of-Hearing Students in Interdisciplinary Science Projects.” *Education Sciences* 5: 146–165. doi: 10.3390/educsci5020146
- Pagano, Todd, Mark Goik, David C. Templeton, Annemarie D. Ross, and Susan B. Smith. 2016. “Exploring Nutmeg’s Intriguing Place in History using Narrative and Project-Based Approaches in the Science Laboratory.” *Journal of Laboratory Chemical Education* 4: 9–18. doi: 10.5923/j.ljce.20160401.03
- Patton, Madeline, and Ellen M. Hause. 2020. *Community College Undergraduate Research Experience Summit Proceedings Report*. Washington, DC: American Association of Community Colleges. Accessed February 12, 2021. <https://www.aacc.nche.edu/URESummit>
- Smith, Susan B., Annemarie D. Ross, and Todd Pagano. 2016. “Chemical and Biological Research with Deaf and Hard-of-Hearing Students: Ensuring a Safe and Successful Laboratory Environment.” *Journal of Chemical Health and Safety* 23(1): 24–31. doi: 10.1016/j.jchas.2015.03.002

For the Benefit of All: Faculty-Led Undergraduate Research in the Humanities at LaGuardia Community College, CUNY

Naomi J. Stubbs

LaGuardia Community College, CUNY, nstubbs@lagcc.cuny.edu

doi: 10.18833/spur/4/3/6

Although undergraduate research at community colleges is gaining more attention, the opportunities for faculty-student collaboration within the humanities in these institutions is still neglected. Given the assumption that humanities research is “necessarily more individualistic than research in the social or natural sciences,” requiring years of training and immersion (Schantz 2008, 27), it is often not given much attention at two-year institutions that have a limited time to develop strong, discipline-specific, student-faculty connections. Yet students and faculty alike have much to gain from such work. This case study highlights

the benefits of one example of humanities student-faculty collaboration at LaGuardia Community College, CUNY, in which a critical editing project was enhanced by student contributions, while the students gained skills that encouraged retention and nurtured future success.

In 2012, Naomi Stubbs (LaGuardia Community College, CUNY) and Amy Hughes (Brooklyn College, CUNY) began collaborating on two critical editions of the diary of actor, manager, and playwright Harry Watkins (1825–94; Hughes and Stubbs 2018a and 2018b). The goal was to produce a fully annotated print edition of selections of the diary and a digital edition of the full text, which would be freely available online. Early in the process, they sought ways to work with students to enhance the collaborative nature of the project as well as to create opportunities for students at their respective colleges. As someone with a considerable teaching load at a community college, Stubbs was also keen to identify ways to convert some of her workload into time on this project.

Students involved in the project were either paid as editorial assistants (through grant funding) or offered college credit for work as interns. They variously transcribed, encoded, and proofread pages of the manuscript; developed original projects related to the diary; tagged playbills; researched play titles; and presented on the project for external audiences. In these ways, they directly contributed to the project through completing tasks and helped Stubbs and Hughes clarify goals and policies. Interns were also required to develop an original project that would involve an external audience, which led to creative products (such as a song, poem, and fan fiction), pedagogical tools (a primer for Watkins's handwriting and how-to video for XML encoding), research projects (building Watkins's family tree and tracing the touring circuits described in the diary), and publicity for the project (blog posts, promotional postcards, the Twitter feed @WatkinsDiary, and a college newspaper article). These projects drew upon the particular skills and interests of the students, as well as enhanced the quality and reach of the project.

Beyond the benefits to the faculty members (Stubbs 2019), the students gained tremendously from their work on the project. Far from performing routine and mundane tasks, the students identified unique contributions they could make to the project and developed a variety of skills and abilities. Students reported developing specific skills (such as close reading, locating and assessing sources, XML encoding, and managing time) and familiarity with software (Excel, oXygen, and PowerPoint) that helped them in their studies at LaGuardia and beyond.

Community college students tend to enter postsecondary education needing more academic and pastoral support

than those at four-year institutions; many are first-generation students who may doubt their abilities. Two students reported that working on the project allowed them to feel like they were “part of something”; they came to LaGuardia via two previous colleges and completed their degrees at LaGuardia. After mastering challenging material, several students presented publicly on the project in roles such as conference presenter, workshop co-leader at New York University, and participant in a roundtable on humanities research. From specific skills and experiences to the less tangible benefits of building community and pride, this work was of great benefit to all concerned.

There were challenges, certainly; there were frustrating moments, limited funding, and an inability to view the physical manuscript. Still, this project illustrates the rich potential for faculty-led research projects at community colleges in the humanities that embrace student participation and lead to increased retention and success for students.

References

- Hughes, Amy H., and Naomi J. Stubbs. 2018a. *Player and a Gentleman: The Diary of Harry Watkins, Nineteenth-Century American Actor*. Ann Arbor: University of Michigan Press.
- Hughes, Amy H., and Naomi J. Stubbs. 2018b. *The Harry Watkins Diary: Digital Edition*. Technology Director: Scott D. Dexter. Ann Arbor: Michigan Publishing. Accessed March 1, 2021. <https://quod.lib.umich.edu/h/hwatkins/>
- Schantz, Mark S. 2008. “Undergraduate Research in the Humanities: Challenges and Prospects.” *CUR Quarterly* 29(2): 26–29.
- Stubbs, Naomi J. 2019. “What’s in It for Me? Student-Faculty Collaboration and Critical Editing.” In *Teaching Undergraduates with Archives*, edited by Nancy Bartlett, Elizabeth Gadelha, and Cinda Nofziger, 48–59. Ann Arbor: Maize Books, an imprint of Michigan Publishing.

Developing UREs at a Community College Branch Campus: A Collaborative Approach

Beatriz Villar-Fernandez, Danielle N. Ringhoff, John K. Leiser, and Jacalyn D. Speicher
Northampton Community College, bvillar@northampton.edu

doi: 10.18833/spur/4/3/7

Northampton Community College (NCC) is an open-enrollment institution that has grown to become the largest postsecondary institution in Pennsylvania’s Lehigh Valley. Today, NCC offers college degrees, certificates, and specialized diploma programs to more than 30,000 students on three campuses. As such, NCC serves industry partners with employee career training, offers professional degrees and certifications in high-demand jobs, encourages community engagement through Smart Workshops for children, and offers adult education programming.