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Research Mentor Program at UNH Manchester: Peer Learning **Partnerships**

Carolyn B. Gamtso University of New Hampshire - Manchester, carolyn.gamtso@unh.edu

Annie Donahue University of New Hampshire - Manchester, annie.donahue@unh.edu

Kimberly Donovan University of New Hampshire - Manchester, kimberly.donovan@unh.edu

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Case Study 13

RESEARCH MENTOR PROGRAM AT UNH MANCHESTER: Peer Learning Partnerships

Carolyn White Gamtso, Annie Donahue, and Kimberly Donovan

OVERVIEW Summary of the Program

At the University of New Hampshire at Manchester (UNH Manchester), the librarians, the Center for Academic Enrichment (CAE) professional staff, and the First-Year Writing Program faculty established a rich collaboration for supporting undergraduate students throughout the research process. The UNH Manchester Research Mentor Program trains peer writing tutors in information literacy skills so they can better assist students with research-based papers. After the completion of their training, the peer writing tutors earn the designation "research mentor." This effort was realized by adapting a highly effective peer-tutoring program, integrating basic information literacy instruction skills into the tutor training curriculum and incorporating the research mentors within library instruction classes and activities.



The Research Mentor Program started with a pilot project in fall semester 2003 in which three experienced peer writing tutors underwent ten hours of one-on-one training with an instruction librarian to develop and hone basic library research skills, thus becoming research mentors. These newly trained research mentors were each assigned to a first-year composition class and worked with the classroom instructor and an instruction librarian to assist students as they navigated the research cycle, from brainstorming ideas to researching specific topics to writing and editing drafts. White and Pobywajlo provided a detailed examination of that pilot project and the valuable lessons learned.¹

Learning about how to choose appropriate sources, and how to direct tutees to appropriate sources, was helpful. As a writing tutor, I might be working with students in disciplines different from my own. It is important to be able to evaluate sources for their relevance to the topic being explored, and this applies to sources which are allowed under a tutee's assignment but would not be permissible in my area of discipline.

Research Mentor, University of New Hampshire at Manchester

One of the strengths of the Research Mentor Program has been the deliberate effort to adapt and evolve the program in response to assessment findings over the years of operation. Following a successful pilot, the program was implemented and all peer writing tutors were trained as research mentors. Working with the instruction librarian, research mentors participated in the classroom instruction depending on their individual confidence level leading an activity. Outside the classroom, research mentors provided one-onone tutoring sessions that integrated research and writing holistically.

Originally, research mentor training was crafted to focus on resources and techniques suitable for supporting students in the First-Year Writing course, but gradually the scope broadened to include discipline-specific needs from gateway to capstone courses. For the first ten years of the program, the UNH Manchester Information Literacy Instruction program aligned with the Association of College and Research Libraries (ACRL) *Information Literacy Competency Standards for Higher Education.*² Information literacy instruction for first-year students focused on three of the ACRL standards: (1) students determine the nature and extent of information needed, (2) students access needed information efficiently and effectively, and (3) students evaluate information and sources critically. Instruction was delivered through three in-class workshops deliberately scaffolded to meet students' developmental abilities.

As the Research Mentor Program matured, information literacy instruction evolved from a tool-based to a skill-based pedagogy, and teaching styles progressed from demonstration of resources to active engagement with resources. The information literacy components of the curriculum were integrated into the Tutor Development course, and the instruction librarian served as co-instructor responsible for developing and delivering that content.

A decision to redesign the Tutor Development course curriculum in summer 2014 was predicated on several factors, including a recent leadership change in the CAE, the findings of a June 2014 research study that updated the 2005 review of the program's pilot semester, and ACRL's introduction of the *Framework for Information Literacy for Higher Education*.³ This course redesign did not critically impact administration or tutor hiring processes but did have a significant impact on the training aspect of the program. This chapter focuses on the current iteration of the Research Mentor Program, describing these recent changes, and examining valuable lessons learned throughout the program's evolution.

ADMINISTRATION

The management of the CAE falls under Academic Support Services at UNH Manchester. The research mentor training program, while co-taught with one of the UNH Manchester Library's instruction librarians, is part of the CAE's peer-tutor program; therefore, CAE professional staff assume overall responsibility for training, supervising, paying, and evaluating the research mentors. The unit's organizational chart (see Appendix A, Unit Organizational Chart) demonstrates the reporting structure: the CAE Director reports to the associate dean and the two other professional staff, who are also involved in research mentor training, report to the director.

The professional staffing of the CAE includes a full-time, year-round director who is also the writing support coordinator, an 80 percent-time science support coordinator, and a 100 percent-time math support coordinator, all supported by a full-time administrative assistant. The CAE is closely allied with the multilingual learner support coordinator, whose expertise informs training practices.

The CAE is funded in the college's general budget as a discrete organization. The budget accommodates salaries and fringe benefits of the unit's four staff members. Salary expenses for the research mentors, math tutors, and science tutors make-up approximately 10 percent of the unit's total budget. A generous allocation for supplies and services includes travel and conference support, allowing both the professional staff and peer tutors to attend several regional conferences annually.

The CAE and the library share the responsibility of training research mentors through the Tutor Development course (UMST 521). CAE professional staff create, implement, and assess the general tutoring curriculum. The participating instruction librarian develops

and teaches the information literacy components specific to the research mentor training aspects of the course. Research mentors, who are dual-trained as peer writing tutors, are enrolled in the same section of UMST 521 as the math and science tutors. All students participate in the weekly general tutoring sessions but only peer writing tutors attend the sessions focused on information literacy, which are led by the CAE director and the instruction librarian and include specific research mentor training activities.

The CAE strives to ensure that current and prospective students are aware of the services and programs available to them. The Research Mentor Program is promoted through a variety of embedded strategies, such as

- open house events;
- admissions and orientation tours;
- presentations in first-year seminars;
- presentations in individual writing and writing-intensive courses;
- print materials;
- visual messaging on monitors placed throughout campus; and
- the university blog.

The CAE communicates to faculty and the college community primarily through email and via the college's website⁴ and Facebook page.⁵ Students are able to book tutoring appointments directly through the CAE Facebook page or website. The website provides further information about the CAE mission, services, and policies.

Hiring

The CAE hires peer writing tutors/research mentors before both the fall and spring semesters, starting recruiting approximately six weeks prior to the end of each semester. Faculty are asked for potential tutor recommendations; also, because UNH Manchester is mainly a commuter campus with a large share of non-traditional students, recruitment likewise takes place face-to-face at tables staged at the entrance of the campus building and staffed with current peer tutors/research mentors. This method has proved to be the most successful at garnering tutor/mentor applications (see Appendix B, Center for Academic Enrichment Tutor Application).

Prospective tutors/research mentors are given a list of the job criteria, which includes a cumulative GPA of 3.0 or higher and a B+ or above in all courses the prospective tutor/ mentor plans to tutor. Tutors are required to enroll in Tutor Development (UMST 521) for two or four credits as well as attend and embed as a tutor/ research mentor with a writing course. They also commit to at least five hours a week of tutoring. Research mentors also need to have completed First-Year Writing (ENGL 401), and transfer students must be in their second semester of college. In addition, applicants must submit a writing sample. A

faculty recommendation is also required to complete the application packet (see Appendix C, Faculty Recommendation for Prospective Peer Tutor).

Subsequently, the prospective research mentor is interviewed by two CAE staff members. The interview questions are predetermined to ensure consistency, and the staff members take turns asking questions (see Appendix D, Peer Tutor Interview). At the end of the interview, one of the staff members role-plays a student with a paper, and the potential research mentor attempts to tutor the staff member. After this mock tutorial, the interview is complete and the staff subsequently makes the decision to hire.

I really enjoyed learning about the different frameworks. They gave me a whole new perspective on conducting research as a college student. They made me realize that college students' voices matter just as much as scholars' and other authority figures'. When tutoring students on research methods in the future, I will ensure that I emphasize that their research matters beyond the scope of receiving a passing grade. I also appreciate how the frameworks provide tips for evaluating sources and determining what information is pertinent to a topic.

Research Mentor, University of New Hampshire at Manchester

TRAINING The Tutor Development Course (UMST 521)

All trainee peer tutors at UNH Manchester are required to take a credit Tutor Development course (UMST 521) as preparation for working with students in the CAE. This interdisciplinary course is team-taught by the director of the CAE and either the math or science support professional of the CAE along with the participating instruction librarian for the information literacy portion of the research mentor sessions. The trainees study theories of learning and adult development as well as approaches to tutoring in the writing, math, or science discipline. The trainees also practice their tutoring and communication skills. The trainee research mentors accomplish these course goals through participating in experiential learning activities, reading pertinent articles, assessing themselves with questionnaires, reflecting on their understanding in writing, and collaborating in and out of class. They may take the course for either two or four credits. An instruction librarian co-teaches the writing portion of the class with the CAE director; the two collaborate to ensure that the librarian-led information literacy units mesh with the theories and pedagogy of the entire course. The librarian's primary goal is to demonstrate to the mentors that high-quality research is an essential component of high-quality academic writing. Indeed, both the librarian and the CAE director stress that appropriate source choice is a "higher-order concern"⁶ in a piece of student writing, so mentors must help students assess their sources as part of any tutorial involving a research assignment. Through the information literacy portion of the Tutor Development course, mentors are provided with the skills necessary to help tutees position themselves in the public or scholarly conversation around an issue, brainstorm topic ideas, develop researchable questions, use background sources (such as print and online encyclopedias) to explore and refine topics, and critically evaluate sources before incorporating them into a paper or project. The mentors are not trained to search the library's catalog or periodical databases with the tutees (although they have already learned the basics of these skills in their own first-year writing courses). Rather, the mentors are instructed to ascertain when a reference librarian's intervention is necessary to move a student's research forward and to walk with the student to the librarian at the Library and Information Technology Help Desk (co-located with the CAE in the college's Learning Commons).

The librarian uses the Association of College and Research Libraries' Framework for Information Literacy for Higher Education⁷ as a touchstone document throughout the course. The ACRL Framework document, adopted in 2016, identifies six threshold concepts for information literacy that library instructors are encouraged to explore as foundational ideas that can inform their pedagogy. According to Townsend, Brunetti, and Hofer,8 "threshold concepts are the core ideas and processes that define the ways of thinking and practicing for a discipline, but are so ingrained that they often go unspoken or unrecognized by practitioners." Jacobson and O'Keeffe9 note the pedagogical sea change necessary to shift from teaching through the use of standards, such as the ACRL's Information Literacy Competency Standards for Higher Education,¹⁰ to teaching students to engage with theoretical concepts; the shift is one that serves students well by preparing them for the realities of the current informational environment. Teaching threshold concepts requires library instructors to "occup[y] the role of coach, animator, or advisor leading the discussion, while encouraging students to become active agents in their own learning."11 The librarian discovered that the reimagined Tutor Development library sessions did involve a transformation of her teaching style as she and the research mentors learned together and from each other, exploring the threshold concepts as lifelong learners on the same path.

Each of the five ninety-minute in-person information literacy units focuses on one of the six frames, with five of the frames covered during the course. (Because the mentors are advised not to instruct their tutees in the use of the online catalog and periodical databases, the instruction librarians have elected not to formally introduce the mentors to the frame Searching as Strategic Exploration. The mentors are instead encouraged to bring their tutees to an instruction librarian for in-depth research queries.) Research mentors come to class having read the session's frame for homework, and each class begins with a discussion of the research mentors' thoughts regarding the frame and its implications for them as students, as researchers, and as research mentors.

Using a course-specific LibGuide as a platform,¹² the librarian leads the research mentors through a series of exercises that apply the frame's concepts to real-world information-gathering scenarios. The class is interactive and dynamic, encompassing hands-on activities, short films, and ample group discussion time. At the end of the class period, the librarian and the research mentors examine how the frame might inform their work with students in a writing tutorial, including the practical applications of the threshold concept for developing researchers. The following section describes each of the library sessions in detail, demonstrating the scaffolded approach used by the librarian to introduce research mentors to the information literacy dispositions as detailed in the *Framework for Information Literacy for Higher Education*.

Session I: Scholarship as Conversation

The first librarian-led session in the Tutor Development course introduces the research mentors to the frame Scholarship as Conversation. The research mentors come to class having read the frame, and the class begins with the research mentors completing an advanced planner with reflection questions designed to stimulate discussion around the concepts presented in the frame (see Appendix E, Research Mentor Training: Discussion Questions). The librarian leads mentors in a conversation about how they, as students, have developed the knowledge practices and dispositions enumerated in the frame and how they, as research mentors, can help novice researchers develop those practices and dispositions. After the group discussion, the librarian shows the mentors a short video developed by the Oklahoma State University Library that ties the concepts of the frame to actual research practice.¹³ The video describes the scholarly discourse of an academic discipline as a conversation with multiple threads and situates students in that discourse. The metaphor resonates with the research mentors, and the librarian focuses the discussion on the idea of students as creators as well as consumers of knowledge.

After discussing the video, the librarian asks students to brainstorm the ways in which information is disseminated, from newspapers to television to social media, and discusses these various media as part of a larger conversation about a particular topic or issue. The librarian uses an assignment suggested in an early draft of the Framework¹⁴ to follow a national event with personal impact for the research mentors. The class traces coverage of the event from the earliest firsthand accounts in social media, through initial (often inaccurate) coverage in media outlets, to the researched conversation of scholars in the peer-reviewed literature of a variety of disciplines. The class ends with a discussion of the best sources for familiarizing oneself with a topic and where the research mentors should direct students for background and context (print and online reference sources).

Session II: Research as Inquiry

The focus of the second librarian-led session in the Tutor Development course is the frame Research as Inquiry. The librarian uses the frame to reinforce concepts introduced in the first session, including the need for a contextual understanding of a topic and the use of appropriate background resources to provide this understanding. The session expands on those concepts by encouraging the research mentors to practice brainstorming techniques to help students refine topics. The session introduces research mentors to specific background sources to use with tutees.

After a group discussion during which the librarian encourages the research mentors to share their thoughts regarding the frame, the class considers what information gathering needs to occur before making an important professional or personal decision (such as adopting a puppy). The class collectively considers all aspects of the decision and ascertains what information is necessary to ensure a well-informed and satisfactory outcome. By taking the processes of brainstorming and defining an information need outside the realm of academics, the librarian demonstrates that information skills learned "in school" are transferable to other areas of an individual's life; she also demonstrates that the research mentors—and by extension the tutees—have already developed some of those skills but may need to be guided to draw the correlation between one's approach to a "real-life" information need and the requirements of an assigned research project.

The research mentors then reflect upon how they can use the frame Research as Inquiry to help a developing writer understand the conversation around a broad topic of interest, formulate a researchable question, brainstorm prior knowledge of the topic, and conduct basic background research. The librarian plays the part of a tutee with an overly broad research topic, and the research mentors use guiding questions to encourage her to sharpen the topic's focus. The chosen topic links back to the previous session's touchstone event. After a group brainstorm session that encourages the "student" to explore her current understanding of the topic, the librarian introduces the class to two online reference sources that provide further information—*CQ Researcher* and *Opposing Viewpoints*—and asks the research mentors to explore the sources for information that would help clarify the issue. The class ends with the research mentors reflecting on how they can help students critically read the source entries (by looking at subject headings, for example) and use them to help tutees refine topics and begin thesis formulation.

Session III: Information Creation as a Process

The third session introduces the research mentors to a variety of bibliographic formats, with class discussions centered on an analysis of how and why the formats are created, vetted, and produced. After watching a video developed by the Oklahoma State University Library entitled *Inform your Thinking: Episode 5—How Is Your Information Created?*,¹⁵ the research mentors are presented with print copies of periodicals in various formats, from

popular magazines to trade publications to peer-reviewed journals. The research mentors are asked the following questions about the periodicals:

- What is the purpose of this publication? Is it political? Educational?
- What is the intended audience? Are they experts in a certain field of study? Do they share political views or social identities?
- What are some of the distinct attributes or distinguishing characteristics of the publication? Are the articles long or short? Do they contain photographs? Charts and graphs? Bibliographies?
- What was the process of creation for the articles in the publication? Are they based on original research or observation?
- Who are the authors? Are they academics? Doctors? Journalists?
- What other markers give the reader a hint at the purpose, audience, and authorship of the source? Are there advertisements? If so, what are they marketing? Are there cartoons? If so, what or whom are they satirizing?

After the research mentors have handled multiple periodicals, the class analyzes the nature of each format, including its purpose, authorship, and audience. More specifically, the librarian and the research mentors discuss how the print format of the periodical provides markers—such as political advertisements and cartoons—that help the reader situate the publication in the wider scholarly or political discourse. The class discusses the difficulty of assessing articles from these publications when they are accessed online through the electronic databases, where such markers are not present or are more difficult to locate. For example, after handling a print issue of the *National Review*, research mentors can easily identify it as a conservative magazine by reading the headlines and analyzing the cartoons. However, when presented with a PDF of a single article from the *National Review* out of the context of the entire issue, the process of assessment becomes more complex. Now the research mentors—and their students—must do due diligence by looking up the author (in an encyclopedia or on the internet) and the magazine (in *Ulrichsweb*) to find out more information about the publication's perspective.

Having completed the hands-on exercise with the print periodicals, the class takes part in an activity gleaned from an early draft of the ACRL's *Framework for Information Literacy for Higher Education*.¹⁶ Together, the class reviews two articles on the same topic by the same author, one in a popular magazine and one in a peer-reviewed journal. The librarian asks the class why a scholar would choose to publish an article in a popular source, which leads to a discussion of authority and intended audience (foreshadowing a future frame). The class discusses how scholars may choose to extend their conversations to a lay audience so as to gain more widespread acceptance of their ideas. The exercise reinforces the processes by which information is created and disseminated, and for what purposes. The class concludes with a discussion of how research mentors can introduce the concepts of the frame Information Creation as a Process to their tutees when helping the tutees assess the sources selected for their papers and projects.

Session IV: Authority Is Constructed and Contextual and Information Has Value

The fourth library session begins with an in-depth exploration of the frame Authority Is Constructed and Contextual. The librarian asks the research mentors for their reactions to the frame, reactions which are always rich and animated as the research mentors respond to the ways in which the frame presents "authority" as a nuanced concept. The research mentors are drawn to the idea that expertise and authority can be possessed by those who may not have degrees after their names but whose personal experiences or research have resulted in new discoveries or new understanding. The class then discusses how authority can be erroneously granted (by media outlets or by the general public) to proclaimed "experts" without real competence in a discipline. A TED Talk by epidemiologist Ben Goldacre, "Battling Bad Science," presents this phenomenon in a humorous, compelling, and provocative manner.¹⁷

The librarian and research mentors trace a specific scholarly conversation in the popular media; the goal of the exercise is to analyze the nature of authority and to assess how that authority is granted and by whom. The research mentors explore articles by Harvard historian and law professor Annette Gordon-Reed and by journalist and independent scholar Henry Wiencek regarding Thomas Jefferson and slavery. The class discusses the difficulty of deciding which if either of the scholars has the greater authority. The research mentors also assess the forums in which these authors choose to take the conversation, including popular online sources such as *Slate* magazine and Smithsonian.com.

Although the research mentors come to appreciate the complexity of the issues around the concept of "authority," the class acknowledges that first-year writing students (who as novice researchers are only beginning to grasp the concept) need more direction when assessing the credibility and appropriateness of sources. The class discusses strategies for helping students evaluate sources using Mike Caulfield's "SIFT (The Four Moves)" method.¹⁸

The last part of class introduces the frame Information Has Value. After considering the various entities that serve to gain monetarily by controlling access to information, the librarian brings the theoretical discussion back to the practical task of assisting students with their research projects. The research mentors discuss the frame as it relates to intellectual property rights and the need to provide attribution and how the research mentors can help students with issues around correct citation of sources.

Session V: Mock Tutorials

The final library session presents the research mentors with an opportunity to bring together the skills they have practiced throughout the semester in small-group and class exercises through mock one-on-one tutorials. The librarian provides the research mentors with a handout that lists the preliminary questions they should ask tutees at the beginning of a session involving writing about research (see Appendix F, Mock Tutorials: Preliminary

Questions & Research Mentor Roles). The handout also reminds the research mentors of their roles, including assisting students with finding background information, evaluating sources, and seeking additional help from a reference librarian.

A second librarian visits the class to play the part of the tutee during the mock tutorials. The research mentors take turns conducting a tutorial with the librarian/tutee, which may involve reviewing a paper draft with inappropriate sources for the assignment, helping the librarian/tutee focus a broad topic, or guiding the librarian/tutee to appropriate background sources. At the end of each tutorial, the entire class discusses the challenges of each session, points out the strengths of the tutor's approach, and suggests how the session might have been even stronger.

ASSESSMENT Measuring Student Learning

Earlier in the program implementation, a range of assessment efforts were employed to determine the effectiveness of the Research Mentor Program and its impact on student learning. Initial student learning measurement approaches included formative techniques similar to the "one-minute paper" or the "muddiest point" tools described by Angelo and Cross in their handbook of classroom assessment.¹⁹ This assessment approach served as a checkpoint to determine what students were learning from library instruction sessions at a given point in the research cycle. In the First-Year Writing course, three instruction sessions were conducted across the semester. At the end of each instruction session, students completed the formative assessment tool and an online survey, identifying one learned concept and noting any uncertainties remaining. The results of these assessments were useful to confirm the effectiveness of the instruction session but were only an indirect measure of student learning.

Anecdotally, the program appeared to be successful but there was little firm data to confirm this assertion. Therefore, in January 2011, the instruction team developed an eighteen-month research study to gather evidence of the program's impact on student learning. A pre-test/post-test instrument was crafted using both fixed and open-ended questions designed to measure students' proficiencies on the first three ACRL Information Literacy Competency Standards. The open-ended questions were scored using a rubric. The study's findings demonstrated improved competency on each of the three information literacy standards measured: (1) ability to correctly use library resources, (2) ability to create an effective search strategy, and (3) ability to appropriately evaluate sources found. The positive results were encouraging and useful to informing curricular adaptation of the Tutor Development course.²⁰

Within the Tutor Development course, research mentors were assessed through a variety of methods. Research mentors completed a pre-course reflection essay in which they identified their individual expectations for the course and the role of the research mentor, and in a post-course reflection essay, they described the impact of the course on their own learning and development growth. Throughout the course, research mentors demonstrated knowledge through role-playing the reference interview and participating in mock-tutorial sessions. In these authentic assessment activities, students displayed their abilities as the course instructors observed competencies met and areas requiring further training. If the research mentor was assigned to work with a specific First-Year Writing course, the students and course instructor completed an end-of-semester evaluation on the research mentor's effectiveness in supporting the research and writing process.

Talking through how to spot bias or commercial interest in source material was also beneficial to me as a student, and as a tutor. Watching for bias is almost automatic for me at this point, which means that it's also challenging to help someone else understand my process. College students who are not as practiced at critical reading may need a tutor, a librarian, or a professor to assist with this important skill. The lessons in tutor development allowed me to brainstorm with other tutors about how to pass on the critical reading skills we use in our own research.

Research Mentor, University of New Hampshire at Manchester

Further evidence of student learning among research mentors was explored in a six-month research study conducted in 2014.²¹ This qualitative study utilized semi-structured interviews and a survey tool to gather data from a representative sample of eight research mentors who agreed to participate in the study. The research question sought to explore the impact of participation in the research mentor program on student learning from the perspective of the research mentors themselves. The study's findings validated that participants recognized an increased growth in their own information literacy, research, and writing abilities as a consequence of participating in the program. Furthermore, these participants credited the program with creating a reciprocal learning environment that enabled increased learning and development. An additional finding revealed that participants shared uncertainty and doubts about their abilities to initially succeed in the role of a research mentor. Participants recommended including additional practice opportunities with mock tutorials to assist new research mentors gain confidence in the role. Upon review of the study's findings, the Tutor Development course curriculum was adapted to incorporate additional activities and assignments that strengthen collaborative learning skills.

In the current iteration of the Research Mentor Program, reflective writing exercises connect applied concepts to weekly reading assignments. Practice reference interviews and mock tutorials provide a safe environment for gaining confidence in guiding the research process. At the close of each tutoring session, tutees are able to provide anonymous feedback on the support received from the research mentor, which is reviewed by the CAE Director with the mentor at appropriate points throughout the semester. Two applied projects, one at mid-term and the second at the end-of-term, allow research mentors to synthesize concepts presented and demonstrate the knowledge and skills developed through the course. Working in teams, research mentors complete a mock-tutorial assignment at mid-term in which they film two versions of a potential tutoring scenario—one that reflects good practice and one that does not. These films are viewed and discussed in class, the research mentor submits a self-reflection evaluating the work, and the project is assessed and graded by the course instructor. The final project requires each research mentor to write a collaborative learning case study integrating a variety of perspectives to make connections between theory and practice, thereby demonstrating learning acquired across the semester. A mix of graded and ungraded, formative and summative assessments measure student learning holistically and inform program effectiveness efficiently.

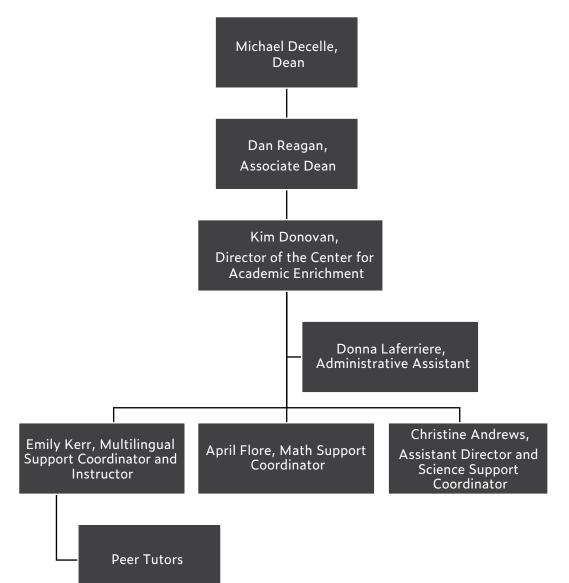
REFLECTION

The Research Mentor Program at UNH Manchester has evolved significantly since its inception in 2003, responding to tutor feedback as well as to broader philosophical shifts in information literacy pedagogy. The librarians and CAE professional staff members who oversee the project are all firm in their belief that an educational endeavor must be a constant work in progress; together, they engage in reflective practice and continue to ask what works in the program as well as what can be improved. When the results of the 2014 research study indicated that the research mentors at times felt overwhelmed by a perceived expectation that they were "research experts," the librarians responded by asking the mentors to help with background research and source evaluation but not with database searching. Such responsiveness is essential to maintain a strong program that best meets the needs of the research mentors and the students alike. The research study also indicated that, despite early feelings of trepidation, the research mentors did find that their own research and writing skills increased as a result of their participation in the Research Mentor Program.

The librarian and the CAE director are pleased with the current training model: the research mentors respond favorably to the use of the frames in the Tutor Development course as well as to the interactive, hands-on approach in the library sessions. While the librarian does not foresee immediate changes in the course's sessions, she hopes in the future to explore additional roles for the research mentors, such as including them in classroom library instruction sessions. Librarians and CAE professional staff anticipate the program to continue to evolve as new insights regarding threshold concepts, the Framework, and information literacy practice enter the profession's scholarly discourse.

APPENDIX A

UNIT ORGANIZATION CHART



APPENDIX B

CENTER FOR ACADEMIC ENRICHMENT TUTOR APPLICATION

Complete & return this form to Center for Academic Enrichment University of New Hampshire at Manchester • 88 Commercial Street, Manchester, NH 03101

Name	: Student ID:						
Date:_	Address:						
Phone	Cell : Home:						
Email	Major:Class Year:						
Name	of UNH Manchester Faculty Providing Recommendation:						
Subjec	ct/courses to tutor (please be specific):						
Do yo	u have any concerns about enrolling in our Tutor Development class?						
Do yo	u plan to enroll for 2 or 4 credits?						
1.	Why do you want to be a tutor?						
2.	. Please describe and comment on any previous tutoring, teaching, mentoring, or other related experience you have had.						
3.	. What do you think would be your three best qualities as a tutor and why?						
4.	What are your strengths and weaknesses in the subject area you are interested in tutoring?						

- 5. Describe one experience in which learning information, a skill, or a process was difficult for you. Describe how you learned it and when you realized learning had taken place.
- 6. What limitations are there on your tutoring time?

Please return this completed form to the Center for Academic Enrichment or email to kimberly.donovan@unh.edu

APPENDIX C



University of New Hampshire at Manchester

Faculty Recommendation for Prospective Peer Tutor

Learning Commons, 88 Commercial Street	Complete & return this form to Center for Academic Enrichment Learning Commons, 88 Commercial Street • Manchester, NH 03101 • 603-641-4113							
Student name:	Faculty name:							
Student email/phone:	Faculty email/phone:							
For what subject or skill do you recommend this student?								
Briefly describe how you know this student:								

Please rate the student on the qualities below:

Faculty signature: _____

	1 Poor	2 Below Average	3 Average	4 Above Average	5 Exceptional	Not applicable/ Don't know
Math skills						
Writing skills						
Reading skills						
Content area						
Interpersonal skills						
Reliability						
Trustworthiness						
Maturity						
Work Ethic						
Curiosity/Creativity						
Additional comments:						

Recommendations will be kept confidential. Please return the completed form to Kim Donovan via email (kimberly.donovan@unh.edu) or campus mail.

___ Date__

APPENDIX D

PEER TUTOR INTERVIEW

Student:

Staff Member:

Date:

- Why do you want to be a tutor?
- If you had previous experience as a mentor/tutor, describe that experience.
- Whom do you think uses the CAE?
- What do you expect to do as a tutor? ("Push" them on phrases like "help students." How? In what way? To what degree?)
- What concerns/fears do you have about being a tutor?
- Have you ever worked with a tutor as a student? If so, describe the experience.
- In what subjects are you confident you can tutor students? Would a faculty member confirm your ability to tutor in that subject?
- Becoming a peer tutor requires you to enroll and participate in a tutor development course. Are you able to do this?
- What hours would you be available to tutor? (courses enrolled in, other responsibilities)
- What questions do you have about becoming a tutor?

Mock interview notes:

APPENDIX E

RESEARCH MENTOR TRAINING— DISCUSSION QUESTIONS

1. Discuss the points that most struck you about academic discourse as described in the information literacy frame Scholarship as Conversation.

2. How have you, as a student, begun to develop the knowledge practices and dispositions listed under this frame?

3. How can you help the students you tutor to develop the knowledge practices and dispositions?

APPENDIX F

MOCK TUTORIALS—PRELIMINARY QUESTIONS & RESEARCH MENTOR ROLES

UNH Manchester

Tutor Development Class

- Preliminary questions research mentors should ask students about a researchbased paper at the beginning of a session:
 - 1. What is the class?
 - 2. Who is the instructor?
 - 3. What is the assignment?
 - 4. Do you have a copy of the assignment with you? (Check myCourses if necessary.)
 - 5. What is your topic?
 - 6. What is your research question/thesis/controversy/position/policy? (For some instructors, students need to know the controversy around the issue and/or a policy.)
 - 7. What types of sources do you need to use? (Should be on the assignment.)
 - 8. Have you already begun your research? What have you found so far? (Assess whether the student has conducted background research or has understood the research thus far.)
- The role of the research mentor regarding the research process:
 - 1. Assess whether the student understands the controversy, knows a policy, or has a position.
 - 2. Assess whether the student has conducted background research or has understood the research thus far.
 - 3. Brainstorm and refine a topic if necessary.
 - 4. Identify key players, opinions, laws, etc. (who, what, where, why, when).
 - 5. Review any sources the student has found (in bibliography, draft, or in hand). Assess the student's understanding of the sources.
 - 6. Help the student find background information to help understand the controversy and/or find a policy (who, what, where, why, when).
 - 7. Identify if the sources the student used are not appropriate for the assignment.
 - 8. Walk the student to the Learning Commons Help Desk when necessary.

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