THE UNIVERSITY OF MAINE
Graduate School

Graduate Board
Room 57, Stodder Hall
Thursday, March 29, 2018
3:00 – refreshments
3:15 -meeting

AGENDA

1. Discussion of the workshop for new TAs – Guest: Natasha Speer
2. Review/approval of the February 22, 2018 minutes
3. Quick items:
    a. Research Symposium update –Ali Abedi
    b. Enrollment management update
4. Review of Grad Certificate (High Leverage Practices to Promote Inclusion)
5. Substantive change proposal for a CAS in Instructional Technology
6. Continued discussion of DRAFT policy for amount of work required by RAs
7. Items arising

Graduate Board
Room 57, Stodder Hall
February 22, 2018

Attending: P. Agrrawal, J Ballinger, K. Beard, D. Bousfield, T. Bowden, D. Bradley, S. Butler, S. Delcourt, S. Ell, K. Evans, J. Ferland, C. Gerbi (proxy), L. Hicks, C. Isenhour, S. Jain, Z. Jin, J. Kelley, M. Kienzler, K. Kreutz (proxy), M. LaRocque, S. Marrs, I. Mette, D. Neivandt, S. Ohno, B. Olsen, E. Pandiscio, D. Rooks-Ellis, J. Rosenbaum (proxy), M. Shea, C. Sponarski, M. Tajvidi, K. Vekasi, C. Villacorta Gonzales, Y. Zhu

1. Review/Approval of the December 2017 Graduate Board meeting minutes. Motion to approve, seconded, unanimously approved
2. January/February 2018 Curriculum Committee Reports
   S. Delcourt presented the following courses which were recommended by the Curriculum Committee at their January/February meetings for approval by the GB.

   New Courses:
   PSY 507 Multicultural Issues in Clinical Psychology
   EDT 528 Designing Technology Systems to Optimize Learning
   EDT 531 Studio in Computing for Learning

   Modifications:
   CIE 534 Environmental Microbiology
   ERS 592 Climate Analysis
   HTY 519 Modern Britain and Empire

   Motion to approve, seconded, unanimously approved.

3. Short Items
   a. Maine Impact Week/Student Research Symposium
      S. Delcourt provided a status report on planning for Maine Impact Week and the 2018 UMaine Student Symposium (UMSS). He distributed informational flyers requesting volunteers for judging at the UMSS and explained that there will be two judging sessions (morning and afternoon); each session is expected to run approximately 90 minutes. Graduate student presentations will be evaluated by three faculty member judges and undergraduate student presentations will be evaluated by two faculty member judges and one graduate student judge.

      D. Neivandt gave an update regarding the Celebrating Scholarship event; currently, there are 32 faculty members who will be recognized for their major scholarly output. The event will be from 5:00 to 7:00 pm on April 19, 2018. Since the nomination period is still open, additional nominations are encouraged and should be submitted through the college deans or directly to D. Neivandt. Final nomination lists will be verified with the deans.

      S. Delcourt mentioned that there is a schedule of events for Maine Impact Week on the VPRDGS/CUGR websites and new events will be added as appropriate.

b. Graduate Commencement

S. Delcourt provided an update regarding Graduate Commencement. The event will be held in the Collins Center for the Arts (CCA) and the start time has been moved up from 4:00 pm to 3:00 pm to avoid any potential scheduling overlap with the Nursing School pinning ceremony. There are currently 175 students registered to participate. It is expected that each student will be offered 3 to 4 tickets and unneeded tickets will be added to a pool to help accommodate students who need additional tickets. A video projection of the ceremony will be shown outside the CCA for those who do not have tickets. It was suggested that the video feed should also be live-streamed on the Internet for those who cannot attend in person.

The keynote speaker for the graduation ceremony will be UMaine graduate alumna, Lisa Liberatore.

c. Graduate enrollment management update

S. Delcourt discussed how overall application numbers are holding steady despite a very large (nationwide) decrease in international applications. The topic of uncoupling the admission decision from the financial decision for master's students with the aim of speeding up the acceptance notification process for the students was discussed. Currently, the College of Education has admitted 67% of the applications that have been completed; College of Engineering has admitted 70%; the Business School has admitted 60%. CLAS and NSFA have admitted 27% and 12%, respectively. Due to TargetX and the immediate availability of acceptance notifications, confirmations of accepted applications are much faster now and confirmations are about 100% higher than last year. However, the possibility of losing students to other schools due to delayed acceptance notification is a problem.

S. Delcourt gave a reminder that the deadline for pre-proposals for UMaineGold is March 2nd. It was explained that the program includes three incentive profiles: New programs may receive up to $35,000 in program development funds, and certificate programs may receive up to $15,000. There is a revenue-sharing option as well, where programs can receive $200 per student per three-credit course.

S. Delcourt provided information and literature regarding the 3-minute-thesis competition and workshop series which will be held in cooperation with the Foster Center for Student Innovation.

d. FYI: Dual concentration/certification in Special Education

S. Delcourt presented the topic of creating a dual concentration certification in Special Education as an FYI to the Graduate Board. The Master's Degree in Special Education currently has three concentrations: high incidents disabilities, low incidence disabilities, and early intervention. The faculty has proposed modifying a program to allow students to receive a dual certification in both high and low incidence disabilities. D. Rooks-Ellis discussed the additional credit requirements for the dual certification and that this plan was developed in response to an established need across the state in this area.

4. Review of Graduate Certificate proposal in Surveying Engineering
   S. Delcourt presented the proposal to offer a Graduate Certificate in Surveying/Engineering as an alternative to students earning a full Professional Science Master's degree in Engineering and Business.

   Motion to approve moving the proposal forward in the approval process; seconded, unanimously approved.

5. Review of substantive change proposal for MS in Economics
   S. Delcourt presented the proposal for approval of a MS degree in Economics through a "substantive change to an existing degree program" process, which would provide an alternative approval track to the traditional program approval process and allow for the modification of an existing degree curriculum to create a new degree option (for example, creating a MS degree program from a MA program by requiring an additional (existing) quantitative class). The purpose of having both the MS and MA degree options is that the MA degree would be used for non-thesis and dual degree students, and the MS would be a quantitative-research oriented degree appropriate for students who are interested in earning a PhD. There is also a benefit to international students in that students graduating from STEM-focused programs and approved for optional practical training (OPT) may remain in the US for a longer period of time.

   Motion to approve moving the proposal forward in the approval process; seconded, unanimously approved.

6. Additional items
   S. Delcourt discussed the status of the advisor/advisee guidelines discussed during the December GB meeting and asked that GB members whose programs have student handbooks that address the issues of work schedules, leaves, and vacation time send them to the Graduate School. It was reiterated that the 20-hour work requirement for research assistantships does not include the additional hours students are expected to put into developing his or her thesis. It is expected that the discussion on this topic will be continued in next month's meeting.

   There was a discussion regarding the role of graduate stipend levels in graduate recruitment success. It was noted that stipend levels do tend to vary by discipline, so it is best for each program to benchmark itself against a set of peer programs. S. Delcourt stated that the Graduate School would look into national data.

   S. Delcourt described the need to identify other sources of potential graduate students due to the declining availability of marketing lead lists based on GRE testing. Many schools are no longer requiring GRE scores and, as a result, fewer students are taking the exam.

   A question was asked regarding the status of the Business School proposal. S. Delcourt provided information regarding the interim dean, Jim Simpson, and the search for permanent Graduate Dean of Business. The proposal is moving forward and more integration between the UMaine and USM MBA programs is planned.

S. Delcourt reminded the board that the deadline for abstract submissions for UMSS18 is March 9, 2018.

Meeting adjourned at 4:13 pm.

A Proposal for STEM Graduate Student Teaching-Focused Orientation

Prepared by Natasha Speer, Associate Professor of Mathematics Education and RiSE Center member, and Susan McKay, Professor of Physics and RiSE Center Director

The need (nationally)

Global economic challenges facing the United States are profound and the nation's ability to prosper relies substantially on the educational preparation of its citizens. The extent and urgency of the need for more and better-prepared graduates who possess skills and competencies in science, technology, engineering, and mathematics (STEM) are detailed in reports such as *Engage to Excel* (Holdren & Lander, 2012), *The World is Flat* (Friedman, 2005) and *Rising Above the Gathering Storm* (Augustine, 2005).

A crucial element of improving teaching and learning in undergraduate STEM is teachers who are equipped to provide high quality instruction in their courses. As noted in *Engage to Excel*, "The first two years of college are the most critical to the retention and recruitment of STEM majors" (Holdren & Lander, 2012, p. ii), and since graduate students often teach in introductory courses taken early in their programs by students planning to major in STEM, they play an important role in retaining and recruiting STEM majors. Choices about continued study in STEM and feelings about its relevance to other endeavors are influenced during these early experiences (Marincovich, Prostko, & Stout, 1998; Seymour, 2005).

Despite the important roles they play in undergraduate education, historically, little attention has been focused on the preparation of graduate teaching assistants for the classroom. However, although it was not common 30 years ago, today most doctorate- and masters-granting institutions provide some kind of TA preparation for teaching (Border, Speer & Murphy, 2009).

The importance of teaching-related professional development for graduate students increases further with the recognition that subsequent generations of higher education faculty are drawn from current pools of graduate students. In the current academic environment, once graduate students become faculty members, they will have limited opportunities for teaching-related professional development (Holdren & Lander, 2012), making the preparation received during graduate school even more crucial to their development as effective STEM instructors.

The need (locally)

To address these needs in our local UMaine context, in 2010 we began offering a two-day, teaching-specific professional development program to STEM graduate students. Our broad goals are to help address national needs for improve teaching in STEM, to help ensure that UMaine graduate students provide quality instruction to our STEM undergraduates, and to prepare those graduate students for the teaching-related responsibilities they will have in their future careers. This professional development is designed to complement the summer orientation sessions provided by The Graduate School and the discipline-specific graduate student teaching seminars offered in several STEM departments on campus. Our focus is on education research findings and instructional practices that are related to STEM disciplines.

Our more specific goals are:

- Raise the graduate students' awareness of the important roles they play in STEM education and in addressing national needs for improving enrollment and retention rates
- Convey the sense that they are now apart of a community on the UMaine campus that talks about and cares about the instructional opportunities we provide to our undergraduates
- Provide opportunities to learn specific, concrete teaching practices that can be utilized in a variety of teaching contexts to increase student engagement and learning

- Allay anxiety by providing opportunities to plan for, practice and receive feedback on their lesson plan for their first day of class

Our program
Below is an overview of the schedule for the two days (this is the 2014 schedule and each year has been similarly organized). Between the two days (as homework) the graduate students read an excerpt from *Engage to Excel* that describes the need for improvements in STEM education and they prepare their first day lesson plan.

Activity 1 begins with the graduate students discussing the strategies and approaches they use when they are faced with the challenge of learning a difficult idea in their field (e.g., science, mathematics, engineering). The list generated serves as a jumping off point for a discussion of what is known from education research about effective learning strategies and the importance of active engagement.

Activity 2 provides graduate students with opportunities to experience what it is like to be a **student** in a class that utilizes collaborative groupwork and other forms of active learning. Faculty orientation leaders act as the teachers, modeling group discussion facilitation and questioning practices. During the whole-group debriefing discussion that follows we discuss what it was like to be a student in such a situation and what the "teachers" did (and did not) do as they were facilitating the discussions and work.

Activity 3 also focuses on strategies for helping students to learn effectively in collaborative groups. This activity utilizes a videocase study from the *Videocases for College Mathematics Instructor Professional Development* (Hauk, Speer, Kung, Tsay, & Hsu, 2015) project that provides participants with opportunities to focus on (and learn about) verbal and non-verbal strategies for facilitating small group collaborative learning.

Activity 4 also utilizes a videocase, this time to illustrate a range of approaches one might take to the first day of class. As part of the activity, graduate students create a list of impressions they would like their students to get about what being a student in their class will be like, what the big ideas are that will be explore in the course, and what typical ways of learning will be for the course. These lists serve as the starting point for their own first day lesson planning.

Activity 5 begins with discussion of the excerpt from *Engage to Excel* and the information provided in it about STEM enrollment trends, the importance of introductory-level courses to students' career trajectories, and evidence about effective college teaching practices. Then the graduate students read a case study from *Teaching Mathematics in Colleges and Universities: Case Studies for Today's Classroom* (Friedberg et al, 2001) about several TAs' start-of-semester experiences where students are wishing to switch among various discussion sections for a course. The case illustrates the profound impact that TA-student interactions can have on student attitudes and engagement.

Microteaching gives graduate students opportunities to practice how they will introduce themselves and their course to their students. The graduate students are divided into discipline-specific groups and a faculty member from that discipline serves as facilitator for the practice teaching and feedback discussions.

Meet with your course instructor is an opportunity for faculty instructors to meet with their new and returning graduate student TAs to hold the first course planning meeting of the semester.

Schedule for Tuesday, August 26, 2014

Start time	
8:30	Continental breakfast available
9:00	Welcome
9:15	Activity 1: How do we learn?
10:00	Activity 2: Being a student
10:30	Break
10:45	Activity 2: Being a student, continued
11:15	Activity 3: Orchestrating active discussions
12:15	Lunch
1:00	Activity 4: First Day video case
2:00	Break
2:15	Microteaching: Planning and homework assignment
2:30	Feedback survey and questions for facilitators
3:00	End of Day 1

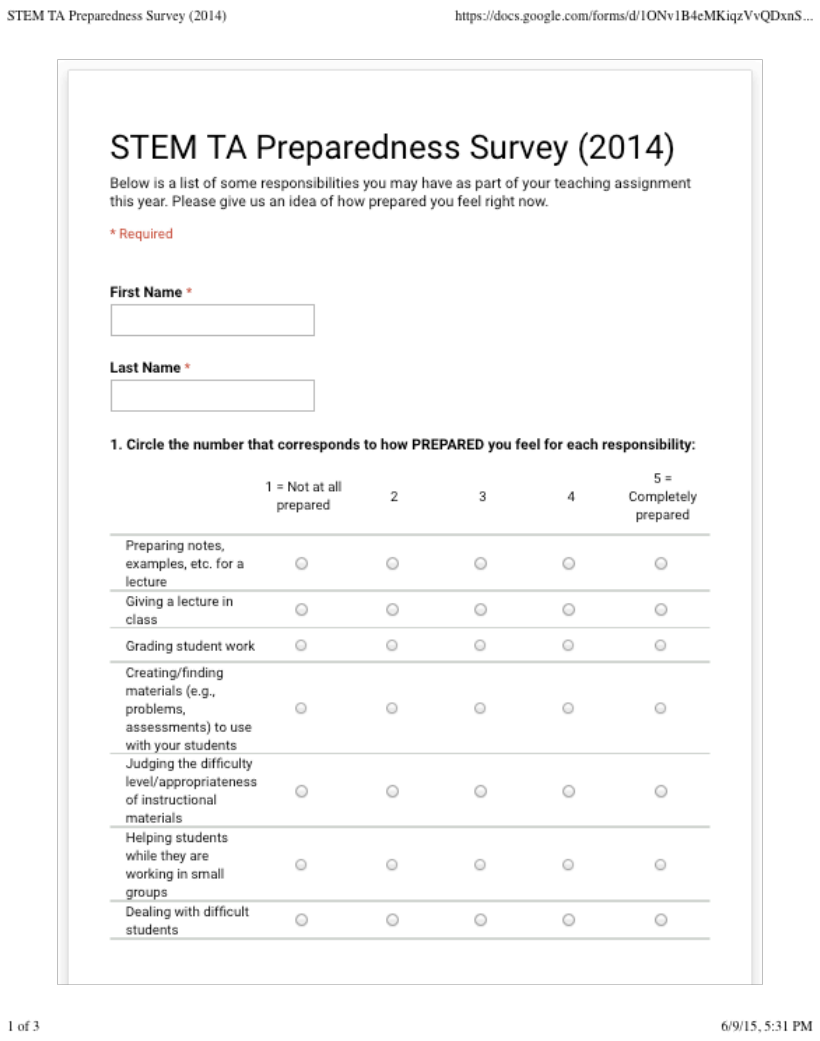
Maine Center for Research in STEM Education
119 Barrows Hall
August 26 & 29, 2014

Schedule for Friday, August 29, 2014

8:30	Breakfast available	
9:00	Activity 5: Reading discussion + Changing Sections case study	
10:00	Microteaching prep	
10:10	Microteaching	Barrows, 123, 125, 130 131 and 133
Self-assigned	Break	
12:00	Lunch	
12:45	Q&A + final surveys	
2:00	Meet with your course instructor/coordinator	

Data and feedback[1]

We have gathered and analyzed several types of data for both formative and summative assessment of the program. We survey students about their level of preparedness for various teaching responsibilities before and after the program. We have found positive, statistically significant gains on nearly every question. Questions with significant gains include how prepared graduate students feel they are to create notes and examples for class; give a lecture in class; create or find materials such as activities and assessments; help students as they work in groups and deal with "difficult" students. Below is a sample of the questions and the analysis for data from 2014.



STEM TA Preparedness Survey (2014) https://docs.google.com/forms/d/1ONv1B4eMKiqzVvQDxnS...

STEM TA Preparedness Survey (2014)

Below is a list of some responsibilities you may have as part of your teaching assignment this year. Please give us an idea of how prepared you feel right now.

* Required

First Name *

Last Name *

1. Circle the number that corresponds to how PREPARED you feel for each responsibility:

	1 = Not at all prepared	2	3	4	5 = Completely prepared
Preparing notes, examples, etc. for a lecture					
Giving a lecture in class					
Grading student work					
Creating/finding materials (e.g., problems, assessments) to use with your students					
Judging the difficulty level/appropriateness of instructional materials					
Helping students while they are working in small groups					
Dealing with difficult students					

1 of 3 6/9/15, 5:31 PM

*Q1		*Q2		Q3		*Q4		*Q5		*Q6		*Q7	
PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST
3.21	3.88	3.00	4.00	4.00	4.21	3.21	3.67	3.12	3.53	4.21	4.61	2.91	3.94
0.0001		0.0000		0.1093		0.0113		0.0016		0.0030		0.0000	

[1] We have included just a sample of our data and findings. We can provide additional data and analysis if that would be useful.

We also ask graduate students open-ended questions about how prepared they feel for their teaching responsibilities. Sample comments include:

I feel well prepared in general for my first class next week.

This orientation was very helpful, and provided a much better idea of what to expect, great advice on teaching approaches, thoughtful discussion from the group, and helpful practice.

I very much enjoyed this seminar and I learned a lot about how to get students to interact.

Last Monday I would have responded with 1 [not prepared at all] all the way down [for all of the questions]. I feel my time was well spent and it has really helped me feel better prepared.

When asked for final/summative comments about the workshop, responses from graduate students included:

The STEM curriculum was so helpful for me to understand how students can feel problems with study[ing] and in that case what are our responsibilities.

After attending the seminars I have gained better knowledge on how to interact with the students from a professional level, but still make it appear casual. The techniques we discussed on Tuesday and Friday on how to make the figurehead lecturer into an interactive media player were minor changes, but make a huge difference in the atmosphere of the classroom.

I feel as though I am more prepared for my TA position that I would have been without this course. I was introduced to ideas and concepts that I would not have thought to use while teaching.

Very informative. I feel better after having attended this seminar.

Honestly the workshop went way above my expectations. I first went just to get paid and thought it was going to be fairly boring. However by the end of the seminars I felt very invested in learning and almost forgot about the money :) Everything seemed very relevant to teaching and our jobs.

Wisely saying I had no expectation. I thought it would be very boring. But I was totally wrong. I found it very interesting and helpful. I will try my best to attend the next seminars or any other gathering arranged by STEM.

I think the workshop was highly relevant and actually necessary to ensure teaching can take new dimensions. It is also at the perfect timing: entry level to teaching because it's best to start young!

Resources needed to offer the program

¼ month summer salary for two faculty members to prepare and provide this professional development @ $2,000 each: $4,000 salary plus 8% benefits – $4,320

2 coffee and snack breaks for both days @ $12 per day per participant for estimated 50 participants – $1,200

Food for working lunch on Day #2 @ $15 per participant for estimated 50 participants – $750

Photocopying for items for activities @ $2.50 per participant – $125

Administrative support for publicizing and making arrangements for rooms, etc. – to be provided by the Graduate School

TOTAL BUDGET: $6,395

References

Augustine, N. R. (2005). *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*. The National Academies Press.

Border, L., Speer, N & Murphy, T. (Eds.) (2009). Research on graduate students as teachers of undergraduate mathematics: Studies in graduate and professional student development (Vol. 12). Stillwater, OK: New Forums Press.

Friedberg, S., Ash, A., Brown, E., Hughes Hallett, D., Kasman, R., Kenney, M., and Zia, L. (2001b). *Teaching Mathematics in Colleges and Universities: Case Studies for Today's Classroom: Graduate Student Edition*. Providence, RI: American Mathematical Society.

Friedman, T. L. (2005). *The World Is Flat: A Brief History of the Twenty-First Century*. New York: Farrar, Straus and Giroux.

Hauk, S., Speer, N., Kung, D., Tsay, J.-J., & Hsu, E. (Eds.) (2015). *Video Cases for College Mathematics Instructor Professional Development.*

Holdren, J. P., & Lander, E. S. (2012). *Engage to excel: Producing one million additional college graduates with degrees in science, technology, engineering, and mathematics*. Washington, D.C.

Marincovich, M., Prostko, J., & Stout, F. (Eds. . (1998). *The professional development of graduate teaching assistants*. Bolton, MA: Anker.

Seymour, E. (2005). *Partners in innovation: Teaching assistants in college science teaching*. Boulder, CO: Rowman and Littlefield.

Proposal for a Graduate Certification: High Leverage Practices to Promote Inclusion

Data from the National Center for Education Statistics indicate that 62% of all students identified with a disability are educated in the general education setting for 80% or more of the school day. The High Leverage Practices to Promote Inclusion Graduate Certificate responds to this critical and growing need for teachers to have appropriate support for serving all students in their classrooms, including students with disabilities, at risk students, and typical learners.

In this certificate program, you will learn the practical tools to implement instructional changes that promote diversity and foster inclusivity in your classroom and within the school culture. You will join students from a variety of backgrounds and fields and participate in active learning experiences using evidence-based inclusive practices for students. You will learn about high leverage practices (HLPs) that are critical to helping students learn and for supporting students' social and emotional development. Field-based experiences are threaded throughout the program so candidates receive first-hand opportunities to translate research and theory into practice.

Ideal candidates for this Graduate Certificate include

- practicing teachers in areas such as elementary education or content area teachers at the middle or high school levels seeking knowledge and skills that will enhance their ability to serve all students within inclusive settings.
- practicing teachers in special education seeking to enhance their knowledge and skills in this area. This certificate can be used as a Stepping Stone to the Master in Education, Special Education program, with a complete transfer of credits to the master's program of study.

Certificate program outcomes

The Graduate Certificate in High Leverage Practices to Promote Inclusion prepares candidates to:

- Understand current issues and challenges relating to effective learning interventions
- Apply the latest research in educational intervention
- Promote positive learning and inclusive education
- Interpret assessment data
- develop knowledge and skills to better meet the diverse needs of students in all educational settings

PROGRAM REQUIREMENTS (15 credits).

We understand that the typical certificate is 9-12 credits, but we ask that the Committee consider that these 15 credits (5 courses) were chosen specifically because the content of the courses will best support general education teachers to meet the unique and diverse needs of ALL students in the classroom, designed to foster inclusion and promote positive behavior and learning. Additionally, districts typically have a pay increase for a bachelor's plus 15 and/or a master's plus 15.

The certificate program includes five courses (a total of 15 credits). For students enrolling in one course per semester, the Graduate Certificate will be completed in two academic years. For CA&I students, this would be in conjunction with the student's CA&I program of study. Students have the option to take more than one course during a semester.

Courses include existing courses within the special education master's program. After completion of the 15 credits, those wishing to complete the Master's in Special Education may do so with an additional 21 credits

Fall semester: SED 532 – Behavior management and intervention

Spring semester: SED 598 – Writing Intervention for Students

Summer semester: SED 598 – Executive Functioning (course has been taught twice and will be submitted for COEHD Curriculum Committee approval spring 2018)

Fall semester: SED 545 – Intervention for reading difficulties

Spring semester: SED 544 – Math methods in special education

Approvals:

Special Education Program Chair:

School of Learning and Teaching, Director:

College of Education and Human Development, Associate Dean of Accreditation and Graduate Affairs:

College of Education and
Human Development

THE UNIVERSITY OF MAINE

5766 Shibles Hall
Orono, Maine 04469-5766
Tel: 207-581-2441
Fax: 207-581-2423
www.umaine.edu

March 26, 2018

Dear Provost Hecker,

The attached document is a proposal to offer a Certificate of Advanced Study (CAS) in Instructional Technology. As you know, the University of Maine, the University of Maine at Farmington, and the University of Southern have collaborated to develop and successfully offer an online Masters Degree in Instructional Technology as well as two graduate certificate programs. We are seeking an expedited review process to gain approval for this new CAS. Given the dynamic nature of the broad field of instructional technology, the faculty of this program have developed new courses and revised existing courses to meet the growing demand for graduate training. As a result, the collaborative program in Instructional Technology currently has enough course offerings to support the proposed program. This CAS will build upon coursework already available through the previously mentioned programs, but will have the flexibility to individualize course offerings to provide, to deliver advanced training for prek-12 technology specialists and course designers, as well as expand it's reach to those professionals seeking to gain the technology-related skills necessary for modern libraries.

On behalf of the Johanna Prince, the program coordinator, and the faculty, thank you for considering this proposal for expedited review.

Sincerely,

Jim Artesani
Associate Dean of Graduate Studies, Research, and Outreach

University of Maine System
Statement of Intent to Plan
Substantive Change to an Existing Degree Program

_X_ Graduate
__ Two-Year
__ Four Year

Institution Name: this program is a collaborative offering of UM, UMF, and USM

1. **Title**
   a. Degree: Certificate of Advanced Studies in Instructional Technology
   b. AREA
   c. CIP Code

2. **Person Responsible for Planning**
   a. Name: Johanna Prince
   b. Address: Education Center | University of Maine at Farmington
   c. Department: Collaborative Master of Education in Instructional Technology

3. **General Objective of the Proposal**

Currently the University of Maine, University of Maine at Farmington, and the University of Southern Maine collaborate on offering a 100% online Masters in Instructional Technology, and two 12-credit certificate programs. We would like to build on this collaborative and offer a Certificate of Advanced Study (CAS) in Instructional Technology. A CAS is an advanced degree for students to build upon work during a masters and to enhance their leadership skills and knowledge. The Certificate of Advanced Study (CAS) in Instructional Technology will require a minimum of 30 credit hours to complete.

We currently offer about 16 courses in our program each year, and these are listed with the EDT course prefix. Our MEd program has doubled in size over the last two years, and we therefore are planning to offer both new courses and additional sections in the upcoming academic year to meet current demand. With these new courses, and new sections we can easily support a CAS student who seeks to deepen and expand his/her knowledge in the field with rigorous course of study. The exact course of study will be planned in careful consultation with an academic advisor and/or the program coordinator. We believe we can support the growth of professionals in the field of educational technology as they seek leadership positions and continued academic study.

4. Documented Evidence of Need

Recently, jobs searches in Maine have shown that Instructional Designers are needed in K-12, institutions of higher education, science laboratories and hospitals. For example, a recent leading state-level job for a director for "Learning Through Technology, Educational Team and Policy" was advertised in November 2016 with a salary range between $60,000 and $82,000.
According to CNN Money, there are an estimated 217,700 Instructional Designers nationwide, with an expected need growth of 28.3% over the next 10 years. Payscale.com states that Instructional Designers rate a 5 out of 5 in the "extremely satisfied" job satisfaction scale. The national average salary for an Instructional Designer is $61,000. The Bureau of Labor Statistics uses the term "Instructional Coordinators" for those who work in K- 12 to "develop instructional materials, coordinate its

implementation with teachers and assess its effectiveness." In 2014, there were 151,100 Instructional Coordinators with a 7% projected growth rate in this profession over the next 10 years. In New England, there are 7,490 Instructional Coordinators; 580 of those are in Maine alone and are also projected to grow by 7% over the next 10 years. In the broader category of "Training and Development Specialists," there are 252,600 positions nationally; in New England, there are 12,480 position and approximately 830 in Maine, with a similar predicted growth rate of 7%.

Across Maine, and beyond, a graduate degree has become essential for career advancement and leadership opportunities. The collaborative MEd in IT is preparing educators who understand the technology needs of a district, and the pedagogy of innovative practices to help districts navigate the new practices afforded by technology. For Instructional Designers, many working in higher education settings, a graduate degree is essential for their work supporting higher education faculty. Over the last several years within the UMS alone, the campuses have added a total of 10 new learning designers in order to keep up with the demands of a faculty who needs support in online and technology-enhanced learning. This need for learning designers and other instructional technologists will only increase as more and more faculty members turn to technology in teaching to improve learning outcomes.

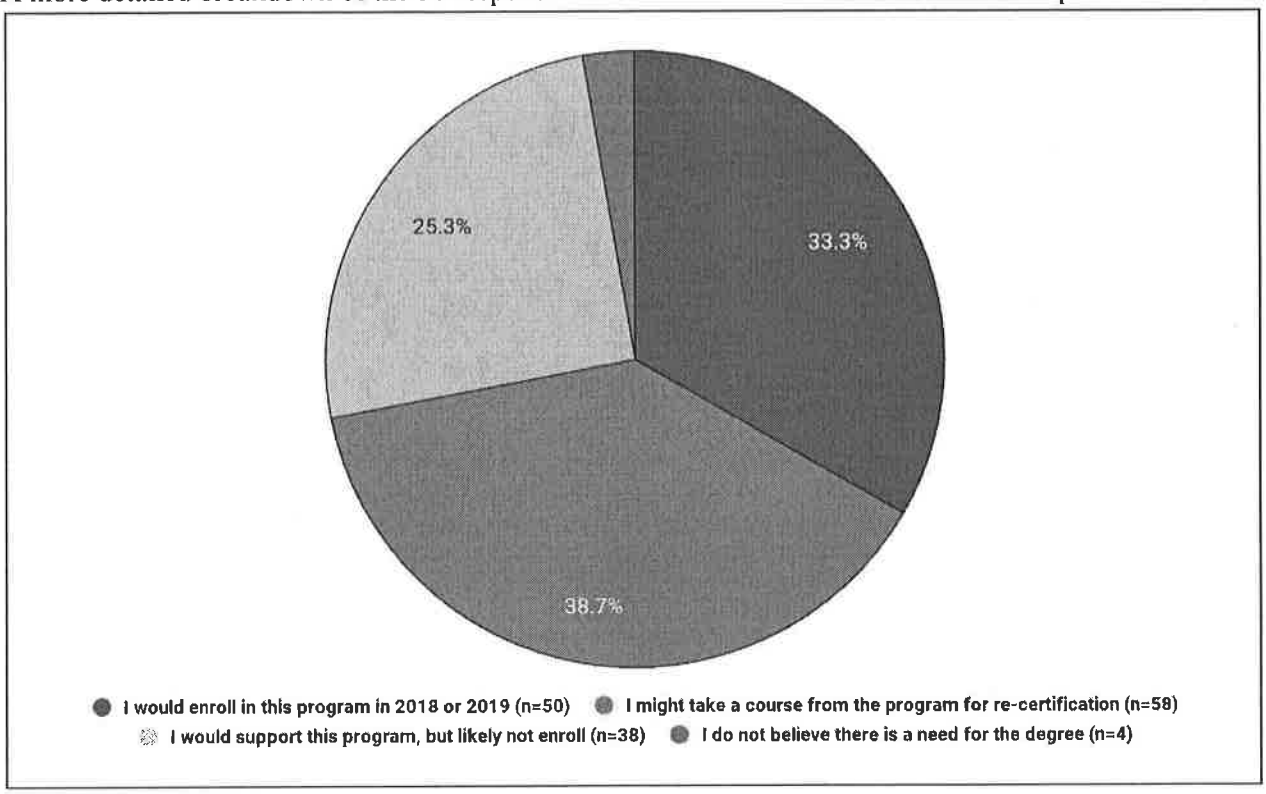
We expect that successful candidates for the program will have already been awarded an MEd, MSEd, MAT or other master's degree related to education, learning, computer science, or library science. The CAS will be at least 30 credits of additional study. However, depending on the field of initial master's degree a student may need more credits to fulfill the requirements.

Since the MEd in IT has a history of preparing educators for roles in PK-12 schools, we wanted to ensure our planning was in line with needs from this field. We have met with statewide associations such as the Association of Computer Technology Educator in Maine (ACTEM) and Maine Association of School Librarians (MASL) to discuss needs and curriculum. In July of 2017 the Program Coordinator met with the ACTEM Board in Maine who also supported the addition of coursework past the Master's degree and shared ideas with how Maine DOE Certification might serve to incentivize participations. In September 2017 the MEd in IT program coordinator met with MASL to explore how coursework might support the needs to the state's school librarians. We believe that we can meet the need for an advanced degree through adding to our existing offerings in our Masters of Instructional Technology program. This will not only enhance the range of electives for our Masters students, it will optimize enrollment across CAS, MEd, Certificate and non-degree students in our courses.

In the Fall of 2017 a Needs Assessment was sent to stakeholders across the state, and the following responses were collected. A needs analysis of our current EDT, alumni EDT, certificate and non degree students showed that many individuals are interested in this proposed path of study. We had 150 responses to our Needs Assessment conducted in Fall 2017.

We asked survey participants to indicate their support and interest in a CAS degree. Fifty respondents indicated a desire to the begin the program in 2018 or 2019. There also was support for the program as coursework to support recertification. In reviewing the data for those who indicated support, but "not likely to enroll" we see many individuals who already obtained a CAS in another field, or those who do not have employer support to continue past the master's degree level.

A more detailed breakdown of the 50 respondents who indicated their desire to enroll is provided below.



Current Role	
Classroom Educator	9
Higher Education	6
Librarian	17
Tech Coordinator	2
Tech Director	7
Tech Integrator/Instructional Coach	7
Other	2

Curriculum Interests and Career Goals	
Adult and Higher Education	16%
Leadership of Educational Technology	36%
Modern Information and Libraries	38%
Other	10%

In addition to asking for general support, role, and track interest, we also asked respondents to select five courses from a list of approximately 30 courses that they would be most interested in. This data was analyzed, and we project the following existing courses may be options for students. These existing and new courses would be designed to support multiple populations for concurrent course enrollment. The following table provides a starting place for curriculum tracks, and curriculum development. Given the anticipated diversity of roles in the CAS program there will be additional courses that may appeal and fit with a students program of study. Curriculum offerings will be monitored for enrollment and relevancy.

Curriculum

We currently have 17 EDT courses developed, with 3 more in progress right now for AY 18-19. In addition we have coordinated with Special Education (SED) faculty across the system to open pathways to courses in Universal Design and Assistive Technology. In addition there are online courses in administration, educational leadership, adult education, digital curation, and information systems that are appropriate for students seeking a CAS in Instructional Technology. The program coordinator for the MEd in Instructional Technology has communicated with faculty from all these areas across the system, and there is willingness for future CAS students to enroll in these courses. After approval is granted for the CAS program, the Program Coordinator will continue these conversations to ensure open channels of communication.

Given the changing nature of the instructional technology field, we are always re-assessing our curriculum for relevance and currency. We anticipate each year there will be a need for Seminars and Special Topics course. Depending on the nature of these courses, some may become standing courses; this would open more choice for current MEd students, and allow new curriculum choices for the CAS students.

5. **Which campuses, agencies, organization, institutions or individuals have you involved in the program?**

Name	Address	Contact	Title
Monique LaRocque	Chadbourne Hall UM	mlarocque@maine.edu	Associate Provost Division of Lifelong Learning
Tim Reagan	Shibles Hall UM	timothy.reagan@maine.edu	Dean, College of Education and Human Development
Jim Artesani	Shibles Hall UM	arthur.artesani@maine.edu	Associate Dean of Graduate Education, Research, and Outreach
Kathy Yardley	Kalikow Education Center UMF	kyardley@maine.edu	Associate Provost and Dean of the College of Education, Health, and Rehabilitation
Johanna Prince	Kalikow Education Center UMF	johanna.prince@maine.edu	Director of Graduate Programs in Education
David Nutty	Glickman Library USM	david.nutty@maine.edu	Director of Libraries and Professional and Continuing Education
Paul Cochrane	Glickman Library USM	paul.cochrane@maine.edu	Director of Online Teaching and Learning

6. **Which type and/or extent of support is presently available?**
    a. Personnel

Currently this program is offered through a collaborative of UM, UMF and USM. The steering committee has seven members from the three campuses (listed above in question 5). Additionally the program has the following faculty involvement from the three campuses.

Name	Campus	Role	Course Per Year
Dr. Justin Dimmel	University of Maine	Full Time Assistant Professor	1 Course In Load
Dr. Donna Karno	University of Maine at Farmington	Full Time Associate Professor	1 course every other year
Dr. Walter Kimball	University of Southern Maine	Full Time Professor	None
Dr. Ashley Montgomery	University of Maine at Farmington	Full Time Professional Staff with teaching responsibilities	2 Courses Overload
Dr. Theresa Overall	University of Maine at Farmington	Full Time Associate Professor	None
Dr. Johanna Prince	University of Maine at Farmington	Full Time Professional Staff with teaching responsibilities	1 Course in Load 1 Course Overload
Dr. Peter Schilling	University of Maine	Full Time Professional Staff	2 Courses Overload
Dr. Meredith Swallow	University of Maine at Farmington	Full Time Assistant Professor	1 Course Overload
Alana Margeson	University of Maine at Presque Isle	Full Time Instructional Designer	1 course per year Adjunct
Mia Morrison	Adjunct	Adjunct	4 courses per year Adjunct
Andrew Wallace	Adjunct	Adjunct	1-2 courses per year Adjunct
Jessica Ludders	Adjunct	Adjunct	1-2 courses per year Adjunct

b. Facilities

This program is run 100% online as an academic program. However, the Division of Lifelong Learning (DLL) staff, comprised of UMaineOnline and the Center for Innovation in Teaching and Learning (CITL), contribute heavily to the operations of the program, and have office space on campus. UMF and USM personnel also have office spaces, and these facilities costs are in-kind contributions to the collaborative from each campus.

c. Equipment

Campus faculty all work from laptops issued by the respective campus units. Audio and visual recording equipment is available through the Center for Innovation in Teaching and Learning (CITL) at UM.

d. Funding Sources

The program currently uses a revenue sharing model for all EDT courses. The program has also been the recipient of a Program Innovation Fund grant in AY 17-18 for the amount of $100,000.00. We are seeking a second round of funding through program innovation for AY 18-19.

e. Library Resources

All students in this program are considered UM students and as such have access to library and database resources with their @maine.edu account. Additionally, a course librariarian is able to work with faculty to develop a course library guide when appropriate. With the new program we do not anticipate increased library needs.

f. Other

g. What additional new costs are required in any or all of the above categories

We do anticipate growth in this program will necessitate a lecturer position. For example, in Spring 2018, enrollments in all EDT courses are full with waiting lists. We are seeking Program Innovation Funds to cover salary and benefits associated with a 2-year fixed length lecturer position begin in AY 18-19. If we are unsuccessful with this funding, In FY 19 and FY 20 the COEHD is committed to supporting this investment, and in subsequent years we believe the program revenue will cover this position.

7. Briefly describe preliminary plans for regular program evaluations, formative and summative

This program will be annually reviewed through an internal program evaluation with alumni and recent program completers. Additionally this program will comply with UM campus guidance for annual NEASC reporting. As an education program, this program will also work with the COEHD leadership to meet state and national demands for the Council of the Accreditation of Educator Preparation (CAEP).

8. Time Frame

a. Estimated Planning Time

We have identified 3 new courses for AY 18-19 that are in development now for current MEd students. These would be excellent offerings for the CAS students as well. In AY 18-19 we will continue to survey the field and add new courses through the formal approval process at UM

b. Estimated Implementation Time

We hope this program will be implemented in a phased approach in the AY 18-19 and AY 19-20.

c. Estimate of Program Lifetime

We believe there will be continued demand for this program, however we will engage in regular review of the program to ensure that the resources needed, student outcomes, and institutional priorities are aligned.

9. **Complete for Graduate Program Only: On what other campus, if any, will this program be available? What plans are there to insure transferability from other campuses into this program, or to deliver this program to other campuses?**

This program is being collaboratively developed.

10. **Other Pertinent Data and/or Information**

11. Submitted By:
    a. Name: James Artesani
    b. Signature

12. Approved by
    a. CAO Name
        i. CAO Signature
        ii. Date
    b. President Name
        i. President Signature
        ii. Date

Current:

15.2 Assistantships

Assistantships are available in most departments offering work leading to an advanced degree and generally require up to 20 hours of effort per week. The awarding of such assistantships is the responsibility of the department concerned but is contingent upon admission of the applicant to graduate study. Visiting graduate students in good standing in an approved program of study may be awarded assistantships. Graduate Assistants, although appointed through the professional payroll system of the University, do not accrue vacation or sick leave. To avoid misunderstandings, duties during the semester, any assignments during student holidays, and any other expectations should be defined by the faculty member, or the department to whom the graduate assistant reports. Graduate Assistants may not normally be employed in any other capacity by their department or by other units of the University.

This is a half-time appointment (i.e. an average of 20 hours per weeks over the length of the appointment), unless the main responsibility consists of conducting research related to one's area of thesis/dissertation topic, in which case the 20 hours condition does not apply

Proposed:

Graduate assistantships are available in most departments offering work leading to an advanced degree, and include teaching assistantships (TAs) and research assistantships (RAs). A number of assistantships that are funded through Federal financial aid are also available. The time spent performing the duties of an assistantship should generally not exceed an average of 20 hrs/week. An exception to this policy is for research assistants whose main responsibility involves conducting research related to their thesis/dissertation topic. In this case, the 20-hour limit may not apply, due to the thesis research requirements of the Graduate School and of the individual graduate program. The awarding of such assistantships is the responsibility of the department or unit concerned, but is contingent upon admission of the applicant to graduate study. Visiting graduate students in good standing in an approved program of study may be awarded assistantships. Graduate Assistants, although appointed through the professional payroll system of the University, do not accrue vacation or sick leave. To avoid misunderstandings, duties during the semester, any assignments during student holidays, and any other expectations should be defined by the faculty member, or the department to whom the graduate assistant reports. Graduate Assistants may not normally be employed in any other capacity by their department or by other units of the University.