

APPLICATION FOR PROMOTION/TENURE

(Revised September 28, 2017)

Application for Promotion: [Promotion](#)

Name of Applicant: [Joseph Christensen](#)

Department: [Department of Math and Physics](#)

Present Rank: [Associate Professor](#) Date of Appointment: [2007 \(when hired\)](#)

Rank Applying For: [Professor](#) To Become Effective: [2019](#)

If Applicant Holds Tenure, Date of Appointment: [2011](#)

If Applying for Tenure, Date Appointment is to be Effective: --

Beginning in Fall 2017, all faculty wishing to provide primary materials for promotion and/or tenure are required to submit these in digital form:

1. Application
2. Cover letter
3. C.V.
4. Recommendation Letters
5. Supporting items (if they can be digitized efficiently)

If Supporting Items cannot be scanned/digitized, they can be placed in a binder

General Criteria for Evaluation of a Faculty Member (Faculty Policy Manual):

The evaluation of a member of the faculty ... on the occasion of promotion in rank or appointment with tenure is based upon his/her actual and potential contribution to the general community of scholars, to students, to the faculty of which the member is a part, and to the College.

Educational and Professional Background (Faculty Policy Manual):

It is assumed that a person recommended for appointment to the faculty will have the educational experience appropriate to the position proposed. The record should show the completion of requisite academic work and possession of recognized earned degrees attesting to educational background, and an employment and professional history relevant to the teaching field and of sufficient duration to satisfy the requirements of the rank to which appointment is sought.

I. Educational and Professional Background

A. Degrees

	Institution	Year	Degree
Undergraduate	Bradley University	1990	B.S. Math and Physics
Graduate			
Doctoral	University of Kentucky	Dec 1998	Ph.D. Lattice Gauge Theory
Other			

B. Academic Honors Received (please include a description, the institution, and the date): --

C. Academic Work Beyond Last Degree (courses, current and past, please include date): --

II. Educational and Professional Background

A. Current and past experience in professions other than teaching (business industry, government, religious organizations, etc. – please include profession, description of activity, and the date):

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B. Teaching experience prior to Thomas More College (please include the institution, discipline, your rank, the dates of appointment, and courses taught):

McMurry University, Physics, 1999-2007

Associate Professor: 2005 – 2007

Tenured: Spring 2004

Assistant Professor: 1999 – 2005

Courses taught: Introductory Physics (Conceptual-, Algebraic-, and Calculus-based),
Electricity & Magnetism, Quantum Mechanics, Electronics, Modern Physics,
Advanced Modern Physics, Human Knowledge, Calculus II, Pre-Calculus, College Algebra

Centre College, Physics, Visiting Assistant Professor, Jan 1998 – May 1999

Courses taught: Introductory Algebra-based Physics (1-term version), Classical Mechanics,
Electronics, Interfacing (LabVIEW software)

C. First appointment at Thomas More College:

Date: Fall 2007 Rank at appointment: Associate Professor

Promotions at Thomas More College (please include your rank, department, and dates of promotions):

Tenured: Spring 2011

D. Teaching experience at Thomas More College (please list courses taught):

In order of frequency

- Introductory Physics with some labs,
 - PHY 121-122/L (Algebra-based)
 - NSC 220/L “Anything Physics” (Conceptual Physics)
 - PHY 142, PHY 241 (Calculus-based)
- MAT/PHY 301-301 Mathematical Methods
- MAT 310 Partial Differential Equations
- PHY 432 Electricity & Magnetism
- PHY 416 Quantum Mechanics
- PHY 490 Senior Research Proposal
- PHY 491 Senior Research Project
- PHY 411 Nuclear & Particle Physics
- MAT 115 Pre-Calculus
- PHY 251/L Electronics
- MAT 303 Numerical Methods
- MAT 123 College Mathematics
- MAT 094, 096 Developmental Math
- FYS 150 First-Year Seminar

III. Effective Teaching

The quality of teaching is a primary consideration in the...promotion of faculty members. Effective teaching includes superior classroom performance, organization, development, and articulate presentation of subject matter. Involvement of the student in the learning process with due concern for motivation, and an appropriate respect for the intellectual needs of students. The conduct of seminars, colloquia, or other forms of planned faculty-student interaction, and the supervision of papers, student projects, and independent study, when these are appropriate to the faculty member's duties, shall be considered an important part of effective teaching.

Providing a stimulating atmosphere within which students can learn and grow intellectually is also a major professional contribution the faculty member can make to the development of students. This includes frequent and active presence on campus, student counseling and advising, and participation in activities that promote interaction between student life and the academic environment.

Student evaluations of teaching effectiveness shall be important tools in ascertaining teaching effectiveness... (Faculty Policy Manual).

A. Assess your effectiveness as a teacher, and describe the evaluative techniques used to determine effectiveness in teaching:

I have been teaching physics and math courses for about twenty years. While half that time has been at Thomas More, only about a third of the courses have been. This is because in my third year here, I took on some administrative duties that reduced my course load. Much of my development happened in the first third of my career and as I innovated and found techniques that worked I gradually relied more and more heavily on those techniques. I continue to reflect on my teaching and I have both sat in others' classes as well as asked others to sit in on my classes¹. By far I get more out of sitting in somebody's class for an entire semester and have done that four and about a half² times.

I am now in a place in my career where I am refining innovations and ideas from previous courses more than I am creating new ideas that are unrelated to the successes I have had in the past. Nonetheless, I took the Director of the QEP role in part because I saw it as a mechanism for being exposed to entirely new ideas that could potentially revolutionize my teaching. It did not revolutionize my teaching, but it provided a new language that continues to help me reflect on important aspects of my teaching with a new mechanism for framing the reflection.

In the first part of my career, my attention was swallowed up by how I could present the content in a new and better way that would make sense to the students. I have come to realize that there is no best way (although there are many bad ways, which should be avoided!). The "best" way depends on who you are talking to and what their background is, which not only changes from year to year, but isn't even uniform in a single classroom. I now focus, instead, on how to build communication and I try to work with the students to together find a way to fit the information into their ear. While I think it might be useful to describe my approach to the classroom in a little more detail, it also seems

¹ See, for example, the recommendation by Dr. Haverkos.

² The last time I tried this, I asked to sit in on a course in the biology department because I am teaching the biology majors. I was only able to keep up with the information for the about half the term because I was not doing the homework or studying sufficiently to develop a reliable understanding.

distracting from the three sections asked for in the application. So I created a section, Classroom Approach, in Appendix D to explain it. It is not necessary to read that to understand the rest of this document.

Ultimately, the message I am trying to convey to them is that it is less about what I say and more about what they hear. If they aren't hearing me, then it doesn't do me any good to keep talking. The dialog that I try to achieve in the classroom is about how we can work together to get the information to fit in their ear.

The anecdotal evidence of classroom interactions indicates to me that if I can convince them that my primary goal is their understanding and their success, then I find that they are much more willing to open up and risk revealing their confusion so that we can work together to fix it. That these anecdotes indicate that I am an effective teacher is reinforced by the thank-you notes in Appendix B.3 and by the patterns in my student evaluations in Appendix B.2. In the next section I will describe my development as a faculty member through the various innovations I have tried in a variety of courses. Most of these are direct applications of the approach I attempt to implement as expressed above. I also provide syllabi of the courses to show the pattern of development and the form of the implementation.

Despite the small number of courses that I have taught over the past seven years since applying for tenure, I believe I can show a history of effective teaching. Regarding my classroom performance, I have been rated highly fairly consistently in my student evaluations. On the 4-point scale, my average tends to be between 2.8 (70%) and 3.4 (85%). On the 5-point scale (implemented in Fall 2013), all of my scores tend to be above a 4.0 (80%). The comments (summarized in a Table in Appendix A) are fairly consistent and positive. The most common comments are about my passion and knowledge-base. The overall trend that I would like to draw to your attention is that there is a thread throughout about my interest and willingness to explain in a variety of ways and to make sure people are understanding the material at some reasonable level. Frankly, I believe (granted without evidence) that this is the point that leads to the smattering of comments indicating that some (small) fraction of my students claim that I am either their favorite teacher or the best teacher they have had either this term or even through their entire time at Thomas More.

Another trend that I think emerges from the student evaluations is that while the positive comments tend to be about my ability to connect and inspire the students to put in the time and effort it takes to learn what can often be an esoteric or daunting topic (math and physics), the negative comments tend to be about classroom management. While these comments exist throughout, they do not appear as frequently as the positive comments and on balance, based on the overall scores the student rank me, the good outweighs the bad by a significant amount. To some extent, I think these time-management issues are due to the amount of time I have spent doing administrative work (See Service for details). Once I step back to being full-time faculty, I do not expect these comments to continue. As evidence that students recognize the value added by my classes, I have compiled (in Appendix B) images of several thank you cards that students have sent me. These are not usually delivered at the end of the class, but rather at the end of a subsequent year when the student is graduating. This tells me that I have made a lasting impression in their lives.

To address my classroom organization, Appendix A catalogs a selection of syllabi for the courses I have taught at Thomas More College. These are fairly representative. In addition to providing the relative

weight of coursework in the grade, expectations, and policies, you will note that they include a schedule of topics. I am typically able to stay within about a week of the schedule, although I prefer to maintain a level of understanding at the expense of the schedule if I feel that the class does not generally understand it sufficiently. In the courses where the students complain about the organization, it is because I have fallen behind the schedule listed in the syllabus and have to adjust the due dates. Nonetheless, the topics are still in the right order so that I can start my classes by asking the students what we did last time and what we are supposed to do today. Some of them will have their syllabus out already. Some of them will have checked their notes to be ready with a quick review.

It happens that I do not have many Chair Evaluations (See Appendix B), but Drs. Haverkos and Ryle both have comments about my teaching. Dr. Haverkos is in the Education Department and has sat in on some of my classes. I also sat in on her Science Education course for one semester to better understand how pedagogy is applied. It was during that course that I offered to them the use of the video I took of my class. The video was created because there were a significant number of student who needed to miss class for an event and I had scheduled an example that I have found very helpful for students to work through. The education students gave me some good feedback that helped me reflect on my teaching style. Dr. Ryle, on the other hand, is in the Physics Department and was Chair for several years. He has sat in my courses in his role as Chair and was kind enough to address both reference to our conversations about the classroom and reference to my classroom performance. Some of his knowledge is from his direct observations and some is from the math and physics majors. Dr. Ryle is one of the more popular faculty in the department and the students tend to gravitate towards him. Some of our conversations have been about student comments about everybody in the department and that has also provided me with fodder for reflection on my own courses.

Finally, regarding effectiveness, I will add that being the Director of the QEP (see Service) has also opened my eyes to the research on critical thinking. The more I learn about the difficulty of information transfer between courses, the more I realize how important it is to be explicit about how students can connect the current information to future-unknown information by discussing the surrounding context from each course that uses that information. Furthermore, I have been able to pick up some few techniques that allow me to help the students develop a thought process around the material that enables them to “think like a [physicist]...” (You may feel free to substitute your own discipline in the square brackets.) I will address some of these ideas in the next section.

B. Discuss innovations tried in teaching:

While I do not innovate in every course, mainly because I am generally satisfied with how most of my courses are going, I do try to reflect on my courses as they progress. When I do try to innovate, it does not always go well, but even then it is possible to learn and grow. Sometimes innovations fail for complex reasons and revisiting them in a different context can provide new and different insight. For example, I tried small-group work in a class about twelve years ago. The students came away frustrated with each other and confused about the material. The learning curve for my implementation at that time was too steep for my and my students' patience. On the other hand, I tried a think-pair-share a month ago and students seemed encouraged. Apparently it is time to revisit the idea. I mention these struggles to indicate that while I am highlighting some examples below, our entire department regularly discusses classroom development and how to connect with our majors as they step from one class to another. *Hot-bed of innovation may overstate it, but I would like to take one sentence to note that with three people from our department up for promotion this year, you should have a good sense of the types of conversations that everybody in our department participates in throughout every year.*

I would like to share the details of some approaches I have tried over the past several years. As I do so, I will reference the syllabi in Appendix A and some other assorted documents in Appendix B.4. In the appendix, I have sorted the syllabi so that the first five address innovations and the last two address course design (see Section III.C); within each of these categories, the syllabi are chronological because (embarrassingly) the early ones do not have student learning outcomes and I wanted to as acknowledge my development as I worked my way through the QEP (see Service-QEP) and paid more attention to education research.

You may notice that some of the syllabi contain the result of developing the concepts that were discovered in the QEP. I will start with Quantum Mechanics, where I attempted to implement both the Central Question and the Fundamental and Powerful Concepts.

Central Question (CQ). In principle the CQ should be a question that a person might ask about the subject before they have taken the course, but which also allows one to repeatedly ask throughout the course in a way that illuminates the content by connecting it to a touchstone. Unfortunately, for Quantum Mechanics, I chose a bad CQ. In many subsequent courses I have thought through this, but I have yet to be satisfied with my choices for a good and enlightening CQ. I have since stopped trying to incorporate it.

Fundamental and Powerful Concepts (F&PC). The F&PC are 3-5 ideas in a course which are fundamental in that they capture the essence of the field and powerful in that they enable one to understand previously-unrecognized relationships. You may notice that in Quantum Mechanics, I also chose a bad set of F&PC. Unlike with the CQ, I will point out that in Electricity & Magnetism (E&M) and Elements of Physics, I was able to recognize some F&PC in each of these courses. For Elements of Physics, introducing the idea did not change the course except that I now say it explicitly. The course was already (though only implicitly) organized in a manner consistent with this idea. This is essentially also true for E&M. For Quantum Mechanics, this would take a significant reorganization of the material.

This implementation and organization of the course fit so well that it allowed me to create NSC220 “Anything Physics”, which will be discussed in the next section.

I will address additional work in applying the QEP in the Scholarship section. It turns out that through these minor implementations, it was revealed to me that those experiences also fed into the QEP and provided the insights needed to present clearer workshops and connect with everybody who had an interest in exploring these ideas.

MAT 115: Pre-Calculus. This course is taken by anybody who is not prepared for calculus, both MAT 143 and MAT 151. The majority of these students are business majors or biology majors. Some of these are academically mature but interested elsewhere, but many approach this class with trepidation. These students are not as extreme as the developmental math course, but are still somewhat uncomfortable with the material, self-conscious about their math skills, and expecting to have difficulty. I had tried a similar approach in the GEC course I taught in 2007 to mixed results³. Some loved it and visited me through the next semester to let me know how they were doing in their next class. Others were not so enthusiastic.

It is my understanding, based on discussions with a friend in Texas who is trained in the field of Cognitive Learning, that students do best when given only enough homework to gain proficiency. Unfortunately, this varies from student to student, especially in a beginning math course. Often the online homework can test for proficiency, vary the assignment length by student, and save me the trouble of grading, but in that case, it is difficult for me to see the details of the student thinking. What I am trying this semester (See the Pre-Calculus syllabus) is:

1. tell the students ahead of time which section we will be covering,
2. ask them to look it over and try as many problems as they can do, and
3. start class by asking “Are there any questions from the section that will cover today’s section that you would like to ask about?” [Answer whatever questions they have, generalizing their questions to relevant issues.]
4. When they feel they understand it (as expressed by not having more questions), then I give them a quiz over the material.
 - a. The catch (their incentive) is that if they ask enough questions to fill the lecture time, then there is no quiz.
5. Then⁴ I collect the work they have attempted and grade it based on number of problems tried and not on accuracy.
 - a. Since the odd answers are in the back, they get 1 pt per odd problem attempted and 2 pts for every even problem attempted. Both of these are independent of getting the right answer.
 - b. To get a “perfect” score, they need to do all odd problems or half of the even problems or some combination that reaches that number.

³ This was discussed in my tenure application.

⁴ This is the innovation beyond the previous attempts.

- c. It is possible to score well over 100% on every one of these. This is like having extra credit readily available and gives them a cushion against a failing exam.
6. For the first few chapters, I ended the chapter by giving them an assignment that would be graded for accuracy before the exam. On the most recent chapters, I decided that I had to change this to a small accuracy-assignment for every section, but (unlike the attempt-assignment) this is due after we discuss the material.
7. At the end of each chapter, there is a test that covers all of the topics, even if they haven't been quizzed.

The point is that they need to see that they can figure it out; I am only guiding their attention. My saying it does not count as them understanding it. In this way, they all work as many problems as they need to in order to understand it. If they can't understand the problems, they can ask until they do; but they have to ask questions if they want to hold off the quiz. This idea is also related to the "flipped classroom" idea of making the class time be about asking the questions they need to know. It is different in that before class, they are reading the book rather than watching a video.

The result is that I had more people than I expected drop the class or just stop attending. The people who are willing to try the experiment seem to like it and are rather interactive in class. So, far the grades still have a pretty big spread, so I am not yet sure if I can rate it a success.

Just in Time Teaching. One idea that I tried for a couple of years (and can be seen on some syllabi in the "Grading" section) is the JITT⁵ questions. For this, I created a quiz sheet (PDF included with the syllabi); students had their own sheet that they always used. On the day when I wanted to ask a question, I handed their sheets out to them while they came into the room. I asked them a question and could review the results with them to figure out which details I needed to discuss and emphasize. I included this technique in E&M and Elements of Physics.

You might notice that the true JITT is not intended to be a quiz summatively assessing their outgoing knowledge or skill, which is what is described on the Elements syllabus. Firstly, the JITT question is an opportunity to understand what baggage (or lack thereof) the students bring to the table. Unfortunately, I discovered that if there were no grade and no right answer, then rather than trying to help me understand what they brought to the classroom, the students lost their shame at not doing the pre-class work and only took it seriously when it became a quick-quiz (as described on the Elements syllabus). So, this became a tiny version of Pre-Calculus: We reviewed the previous question, I asked if they had any questions (although it was limited to 5 minutes unless it was an exceptionally good question), and then they answered the quiz.

Multiple Homeworks. The Math Methods class used to be taught for junior physics majors in preparation for the senior level courses.⁶ For the upper-level physics majors, the motivation is generally already present and the innovations here have been primarily in terms of developing techniques that enable the students to develop insight and deepen their skill set. To this end, I have

⁵ JITT = Just in time teaching in which you do a quick assessment before discussing an idea specifically so that you can modify your discussion based on the responses of the students.

⁶ The 301-302 series has since been replaced by MAT 220 and MAT 310. It has been about four years and we are re-assessing the idea.

altered the usual⁷ homework assignment technique (c.f. NSC220homework.pdf) of assigning the problems at the end of the chapter to be due at the time we finish discussing material for the chapter, usually about a two-week period. In fact, the technique mentioned above for Pre-Calculus is an extreme version of my approach with the upper-level majors. Before I cover any material in a new chapter, I assign a set of sample problems that I think the students can figure out entirely on their own. These are called “homework a” and are due the day I start the chapter. Then the students are given a second assignment in that same chapter that involves difficult problems that require an awareness of some subtlety, which is due by the time we finish discussing the chapter. This can be seen in MP301_homework.pdf for Chapters 2, 3, and 7.

⁷ The “Due”, “Assigned”, and “Extra” categories were discussed in my tenure portfolio. “Due” means that these are the problem you have to turn in; solutions are not posted until after the due date. “Assigned” problems are ones for which I will post the solutions early so that you can use the solutions to clarify how to do the Due problems. “Extra” problems are ones I thought were useful, but I will not collect and I will not post a solution.

C. List new courses designed and old courses revised:

There are two courses I would like to showcase as my creations. The first was created before I heard of the Fundamental and Powerful Concepts introduced to me through the QEP study, nonetheless, it happens to have exactly the structure advocated by that technique. The second came from a departmental discussion about our student research projects. For both of these courses, I have provided a section in Appendix B with samples of the homework.

NSC 220: Anything Physics. My first example is an NSC course for the non-science majors that I successfully taught at my previous institution and did not have a chance to teach at Thomas More until this past spring. It requires minimal algebra and touches on student interest. We spend half of the term covering basic physics concepts such as motion, force, and energy – these would be called the Fundamental and Powerful Concepts in the language of Nosich’s critical thinking teaching techniques – and then, having established a common language and a specific skill set in problem solving, we cover whatever the students in the class decide is of interest. I tell them that it is open to their every whim, so long as they can ask it with physics-language. Examples of topics that course has explored are: “How do traffic police figure out who is at fault in a traffic accident?”⁸, black holes, relativity, nuclear bombs versus TNT, the motion of the stars and planets, the phases of the moon, the function of various household appliances, and weather and climate models. Last spring, the class got caught up in the physics of Star Wars and Star Trek. Fictional science got a bit distracting and made it difficult to revert back to actual science. In any case, these are all student-selected topics. It usually takes the students a week or two to realize that they have this measure of control over the course and in one instance the course turned into “stump the professor” in a good-natured competition that included the reciprocal game of “bluff the student”, requiring research on their part as well.

PHY 490: Research Proposal. My second example is a course for the junior physics majors. We were having some trouble with students who would take the Senior Research course without any idea of what their project would be. We would spend some time exploring and eventually assign (or agree to) a project. The students would get part-way into it and then realize that it was either too simple or too difficult (or they just didn't want to do that particular project). So, I created a 1-hr course where they could spend an entire semester testing the feasibility of several ideas. The result of the course would be essentially a grant proposal for departmental funds for a specific project. I have taught the course three times and it seems to be consistently not doing what it needs to do. I thought at first that it was the students, but last year we had a good student and it still failed to fix the trouble it was created to solve. I am evaluating ideas for how to change it for the coming spring, but I have not yet decided.

*Please attach in APPENDIX A syllabi of old courses and syllabi of courses revised as well as syllabi of new courses designed (include a minimum of 5 and no more than 8 syllabi).

*Please attach in APPENDIX B documentation of effective teaching (student evaluations, chairperson’s evaluation, peer evaluations, etc.).

*Please attach in APPENDIX C a letter of support and recommendation from the department chairperson as well as letters of support and recommendation from colleagues.

⁸ In Texas, I brought in an Accident Reconstructionist and he independently explained the technique using the same methods we had already learned.

IV. Service

1. Service Within the College:

A. **Counseling and advising (please describe your recent and current responsibilities for counseling and advising):**

Over the past decade I have retained some advisees, but, since I have been half-time faculty, I have only covered about half to two-thirds as many advisees as the others in the department. This year, I have taken on a few more and most of them first-year students because my current advisees are set to graduate soon.

On the other hand, in my capacity as Assistant Dean and now as Provost, one of my jobs has been to handle student problems that impact the classroom. Some of these have been medical issues. Some have been student complaints about faculty. Some of these have been faculty submitting academic violations. Throughout the years, my goal has been to hear both sides, mediate the conversation so that both sides not only feel heard, but come together to a solution that is acceptable and reasonable. I think I have contributed significantly in this regard, but I do not have an accurate count of the number of students and faculty that I have interacted in this regard. I would estimate that the numbers were around five each year while I was Assistant Dean and around ten as Associate Provost. The difference in the latter seems to be an increasing number of students with clinically treated anxiety. While these numbers are small, they don't get to the Dean's office unless they are pretty severe or sensitive. Often a parent is involved. Sometimes the President is involved. Many times there are issues that affect the student's financial aid or possibly impact whether or not the student will be lost to higher education for the foreseeable future.

One last thought that I will include here, although I don't think it falls under the original intent of the category. At least half of my job as the Director of the QEP was about serving and supporting faculty as they evaluated their classrooms. I did not think to ask for a letter of recommendation about this specific topic, but I think most of the faculty who participated in the QEP will attest, a significant fraction of "supporting the faculty" was counseling and advising the faculty, expressed through hashing out ideas and offering advice and feedback to them as individuals. This was, I think, my most significant contribution to the community from my time in the QEP.

B. Committee responsibilities (please describe your recent and current committee responsibilities and describe any special contributions you have made in these committees):

I have served on many committees and these are detailed on my Curriculum Vitae. Some of these are in my capacity as a faculty member. In other cases, I was either *ex officio* or guest. An extreme example of the complications not captured in the CV is the CAC. During my first year, I was there as a faculty member, then my role became the QEP representative. Once I became Assistant Dean, I was replaced with Dr. Ernst as the QEP representative. Shortly thereafter, I was put back on that committee as the representative of the Dean's office. Independent of the representation issue, I am proud of the efforts of the committee to tackle the complex issue of reconsidering the core curriculum. Because developing a curriculum is about more than selecting the appropriate courses, we began by developing the student outcomes and then set to the task of using those outcomes as a guide for selecting courses that would enable our students to reach the goals of our curriculum. While I was by no means the sole contributor to this committee, I think any of those members would agree that I carried at least my fair share of the effort in bringing these ideas forward to the faculty.

For a second example of my contributions, in my role as first Assistant Dean and now the Associate Provost, I have served as a guest in FCC and Academic Affairs where my role is to be a resource for the committee whenever they are deliberating an issue.

A third example that I would like to highlight is my effort with the book-rental programs. Working through the various issues that arose took diplomacy, a sense of calm, an ability to collaborate and problem solve, and an awareness of serving multiple, competing goals for the program. I think I contributed significantly to enabling this program to the benefit of many students and the repair of difficulties some faculty faced. This effort was significant enough that I thought it would be appropriate to ask Ms. Erin Garnick for a letter of recommendation, which she graciously agreed to do.

While there are other committees I could discuss, the committee work I am most proud of is that of the revisions to the Faculty Policy Manual. The committee is in charge of reviewing the changes made by Stephen Lazarus and comparing it to our culture at Thomas More. This committee has met during the spring and throughout the summer as well as into the fall. I have been the recorder during this time. My role has been in tracking the conversation during the meetings and then translating that into recommendations for Stephen Lazarus to consider when he edits the document.

In general, my CV also indicates the positions I held on those committees. Throughout this there have also been meetings between staff departments, such as the START committee, which bring together representatives from Student Life, the Academic Dean, Security, Financial Aid, Admissions, Athletics, Religious Life, HR, Counseling, etc. to coordinate efforts and figure out how to best support the students and the broader Thomas More Community. My strongest take away from this experience has also been the strongest driving factor in my desire to contribute in service to the institution: that we belong to an academic community that is driven to support not only each other, but the students who pass through, contribute, and are changed by their experience here. I say this to highlight the comments with which Dr. Ryle ended his recommendation. I am able to support individuals specifically because I feel the support of the broader community through this committee structure.

C. Other college service activities (please describe other activities you have recently and currently participated in – moderator of student activities, special assignments performed for the college, special department services, etc.):

You may note from my Curriculum Vitae that I started accepting half-time administrative roles in 2010, when I threw my name in the ring for the position of Director of the QEP. When the position was offered to me, I made the commitment to serve through the fifth-year SACS-COC report, which I did. In the middle of this commitment, we hired a new president, which led to my accepting a position as Assistant Dean. While these situations will become more clear below, I should indicate that I believe that accepting each of these roles was mostly for the good of the institution and to the detriment to the department. The other faculty have had to shoulder a significant portion of the load that I neglected in taking these positions and for that I am grateful to them.

While this section is fairly long, I think it would be useful to provide some context about my experiences prior to Thomas More University. To that end, I have added a short narrative about my Administrative experiences at McMurry University that is relevant to my accepting the role of Assistant Dean.

Director of the Quality Enhancement Plan. I came to Thomas More in the fall of 2007 after having built up some administrative experience at my previous institution. There were aspects of that experience that I found rewarding even though I was not yet convinced that it was a role that I would strive for. When the discussion about a topic for Thomas More's Quality Enhancement Plan (QEP) came up, I vocally argued for critical thinking. I felt that my voice had some small sway in the polls and, when asked to throw my hat in, I decided to take the opportunity. I started my role as the Director of the QEP in 2010-2011 and kept the half-time position through the 2016-2017 academic year. Virtually all of this time was after my most recent promotion/tenure application with was due in November of 2010, resulting in my tenure being granted in the spring of 2011.

My duties as a half-time Director of the QEP included: overseeing the implementation of the QEP, managing the QEP budget, work with the Assessment Coordinator to ensure appropriate assessment is done, supervise faculty development, promote student awareness, prepare annual reports, promote faculty involvement (as "3D"-cohorts who will Discover, Develop, and Deliver), design the 3D-cohort meeting structure, facilitate the 3D-community, design and structure the 3D success and scholarship, and oversee the QEP library resources. During this time, I had extensive help from the QEP Assessment Coordinator, Dr. John Ernst, who I have asked to write a letter of recommendation. Others have also commented on my efforts in the QEP in their letters of recommendation.

The skills and knowledge required for this job were, in order of relevance, self-motivation, independent oversight of 8-10 individuals who had their own ideas of how things ought to be done and who changed every year, cajoling colleagues to participate, develop and maintain a working knowledge of both pedagogy and critical thinking techniques at a level sufficient not only to implement, but also to train the faculty who would be implementing these techniques, and to maintain a budget.

During the "zeroth" year of the QEP (2010-2011), the cohort had to literally discover and develop the critical thinking knowledge base across campus and figure out how to deliver this to the campus community, including not only the students in their class (although that was the initial focus), but also the faculty colleagues across campus in any and all disciplines. This group remained as a cohort during

the first year to implement the previous discoveries. There were then four additional cohorts, lasting through 2015-2016. During the 2016-2017 academic year, I remained the Director of the QEP as a quarter-time position to manage the transition as we investigated how to make a Center for Teaching and Learning, to maintain whatever support I could for faculty who continue to implement the critical thinking techniques, and to write the QEP section of the SACS-COC fifth-year report. This report was required to include a quantitative assessment the five years of implementation, with data, all within ten pages.

The process of this work lead to several scholarship opportunities, which I will discuss in Critical Thinking and the Classroom. These opportunities and the work I did with colleagues also influenced my teaching, which I discuss in Innovations in Teaching.

The result of this endeavor was that SACS-COC accepted the QEP Impact Report with no findings (see page 2 of that document). This is an outstanding endorsement of all of the hard work that the nearly fifty full- and part-time faculty invested in this process. I am very proud to have been a part of this activity. I believe, and have the assessment to support, that the process had a positive impact on the campus and has enhanced many faculty members' teaching implementation across campus.

Assistant Dean. I came to Thomas More in the fall of 2007 after having been at McMurry University for eight years. During my time at McMurry, I had built up some administrative experience during a tumultuous time there. In 2013, Thomas More hired President Armstrong, who saw his mandate as being a change-agent. For various reasons, in the spring of 2014, the previous VPAA / Dean of the College left our institution and he was replaced with Dr. Wolper. Among some other changes taking place, this caused some disruption and, in an attempt to seed peace, President Armstrong offered the faculty a new administrative position of Assistant Dean of the College which would be selected from among the faculty and recommended by the faculty. Several names were put forth and, based on my prior experience (c.f., Appendix D.2), I was chosen from among them.

I served for one year under Dr. Wolper, who was an Interim Dean, and we worked well together, but had to figure out the details of what needed to be done since there was no previous administrator who could provide direction. My role in this was primarily to help the administration understand the culture of the faculty and help the faculty understand the goals of the administration. I believe I was able to serve both the faculty and the Administration during my time in this role. After my first year in the position, the President hired Dr. Jagger to be the permanent Dean. She was kind enough to allow me to stay on for another two years. I have included my employee evaluation from 2015 by Dr. Wolper and my employee evaluation from 2016 by Dr. Jagger. Both indicate that I have been successful in fulfilling this role.

The duties for this job are many and varied. Most of them are in service to the institution, including work on committees (mentioned above), helping people (faculty, students, and staff) who come in with a last minute problem fix the situation, helping the Dean process information, and mediating between the Administration and the faculty when necessary.

During the 2016-2017 year, I made the decision to step down from the position in part to get back to faculty, in part to allow some other faculty member gain the experience of a high-level administrator position, and in part to take a sabbatical so that I could get a little scholarship worked out. I was

replaced by Dr. Garriga and, after three years of being an Assistant Dean, I took my sabbatical and then returned to faculty-hood. Mostly, I felt comfortable stepping out of the role because we had completed the transition to a stable leadership in the Dean's Office with a person I felt I could trust. I could return to helping my Department, knowing that I had contributed in significant ways to the overall benefit of the institution. It was somebody else's turn to serve in this capacity.

Associate Provost. As the College restructured into a University, the Dean changed title to Provost, the Assistant Dean position became an Associate Provost position, and three College Deans were hired. Two of these Deans came from TMU faculty and one was hired externally. Then, near the end of May 2018, President Armstrong announced that he was leaving. After some consideration, the Board of Trustees decided to make Dean Jagger the Acting President. Subsequently, this moved the Assistant Dean up to the Dean/Provost position. Since the Acting President, Acting Provost, and new Deans all had limited experience with their new positions, it seemed to me that the institution would be better off if we did not also have to train a new Associate Provost. So I interviewed for the position.

The duties are very similar to what they were in the Assistant Dean position. There are two to three times as many student problems (especially with anxiety). There are about the same number of committees to serve on, but by now these staff committees have got their feet under them and are running notably smoother. There are significantly more retention efforts. This half-time job will expand to fill whatever time you give it. It was easily a three-quarter time position previously. I am now working to ensure that my students do not get neglected while I continue to serve out the 2018-2019 academic year in this role.

Member, Thomas More University Board of Trustees. In the spring of 2017 as I was stepping down from the Assistant Dean position, the Faculty nominated me for the role of Faculty Representative to the TMU Board of Trustees. This role lasts through June 1, 2019. The duties of this role are to participate in the full Board meetings as well as serve on one Board subcommittee. In addition, it is useful to spend some time getting up to speed on the landscape of higher education and to be prepared for the full board discussions.

2. Service Beyond the College/Extension of Professional Experience:

A. Outreach into local community unrelated to professional expertise (please list activities such as serving on local governing boards, Boards of Educations, participating in community organizations, seminar and discussion leadership, church leadership, etc.):

In the early years of my career, prior to earning tenure at Thomas More, I was active in areas beyond the institution. Some of these are listed on my Curriculum Vitae under "Community" and "Interests". However, once I found the need for service within our own community and that I could address it in my position as Director of the QEP and as the Assistant Dean, I gradually pulled my attention away from those efforts and towards campus activities. Consequently, this category has very few entries. Nonetheless, I can point out a few items from my CV.

First, you may note under "Presentations" that there is a section on the professional development for regional high school teachers through the TSI program. While this is a contribution within the College, it has broad impact beyond the institution. Similarly, the TSI and Adventure Camps impact the regional high school and grade school students. The items listed under "Invited Talks and Public Lectures" also allow me to use my professional expertise to (hopefully) enhance the lives and outlook of the broader community.

B. Outreach beyond local community unrelated to professional expertise (please list activities such as serving on local governing boards, Boards of Educations, participating in community organizations, seminar and discussion leadership, church leadership, etc.):

Member, Thomas More University Board of Trustees, 2017-2019.

V. Creative, Scholarly and Professional Development

A broad scholarly knowledge of the field in which one teaches is requisite for effective teaching at all levels. Creative work and production of significant scholarship are essential to effective teaching...Evidence of development, scholarship, and creativity includes the publications of significant scholarly contributions, publication of teaching methodology and materials, public lectures, participation in responsible positions in professional organizations, creative production and performance and other professional activity that demonstrate concern with the advancement of the faculty member's discipline (Faculty Policy Manual).

A. Publications (please list books, monographs, periodical articles, reviews, etc. – please include title, publisher or journal, and date):

Work in progress:

Physics Textbook, "Connected Physics", self-published, available online, but only two chapters are posted as of January 2018.

<http://physics.thomasmore.edu/ConnectedPhysics/>

Physics Labs (adapted to online format from paper, with original modifications)

<http://physics.thomasmore.edu/Labs/TMC-lab-setup.html>

<http://physics.thomasmore.edu/Labs/121/>

<http://physics.thomasmore.edu/Labs/122/>

<http://physics.thomasmore.edu/Labs/220/>

I have other publications from 1999-2006, but my understanding is that this is only supposed to list items since my previous promotion, which I take to be either 2007 when I was hired as an Associate Professor or 2011 when I was granted tenure. These are listed in an attached document called "Appendix D - Publication List"

B. Other creative work (please list art, music, drama film, choreography, and other creative original productions – please include description and date):

Click here to enter text.

C. Speaking engagements (please include the audience, topic, place, and date):

National “April Meeting” of the American Physical Society (APS);

“Using PreTeXt to produce a better online text (or lab manual)”; Columbus, OH; April 2018

<http://meetings.aps.org/Meeting/APR18/Session/U10.7>

SACS-COC National Conference; J.Ernst and **J.Christensen**

“QEP Engagement: An Innovative 3rd-Year Review”; Nashville, TN; December 2014

Ideas-to-Action (I2A) Institute;

“Paul-Elder Intellectual Virtues”; University of Louisville, Louisville, KY; May 2014

Faculty Brown Bag, open to all faculty;

“Using PreTeXt to produce a better online text (or lab manual)”; TMC; April 2018

Faculty Development Day, mandatory for all full-time faculty;

Poster: “Third-Year Report; Where are we now?”; TMC; January 2014

Poster: “Proficiency Development”; TMC; January 2012

“Critical Thinking at TMC”; TMC; January 2011

“Critical Thinking Implementation”; TMC; August 2010

QEP Workshop open to all TMC faculty (full- and part-time);

“Paul-Elder Elements of Reason”; TMC; multiple versions 2011-2016

“Paul-Elder Intellectual Standards”; TMC; multiple versions 2011-2016

“Paul-Elder Elements of Reason”; TMC; multiple versions 2013-2015

“CAT Analogs”; TMC; October 2013

“Close Reading”; TMC; February 2012

“CAT Skills Assessment”; TMC; September 2010

Multi-Session 2-Day Workshop Series open to all TMC Faculty (full- and part-time);⁹

“Critical Thinking Techniques” [Six 30-90 minute workshops]; TMC; May 2016

“Critical Thinking Techniques” [day-long series of 30-minute workshops]; TMC; May 2012

“Critical Thinking Techniques” [day-long series of 30-minute workshops]; TMC; May 2011

Summer-Training Workshops for QEP Participants;

“Peer-Mentors Help Teaching” [a 3-day series of training workshops]; TMC; Summer 2015

“Critical Thinking Techniques” [a 3-day series of training workshops]; TMC; Summer 2013-2014

“Critical Thinking Techniques” [seven bi-weekly 2-hour workshops]; TMC; Summer 2010-2012

⁹ We hosted a “featured speaker” (See also “Section G Special Projects) and supplemented with a series of Faculty Development Workshops. I was not the only person to present workshops, but I gave 3+ each year.

D. Outreach into local community that reflects professional expertise (please list activities such as serving on local governing boards, Boards of Educations, participating in community organizations, seminar and discussion leadership, church leadership, etc.) that are not already listed in section IV #2:

Professional Development for local high-school faculty, through the Thomas More STEM Initiative (TSI):

"Predicting Train Wrecks", June 2015

"Managing Data in Excel", Jun 2013

"Excel Dynamic Graphing", Jun 2013

"Language of Calculus", Jun 2012

"Data Analysis", Jun 2011

High-School and Grade-School STEM Camps for students

Grade-School Secret Adventure Camp, Jul 2012

High-School TSI Camp: "Weighing the Untouchable", Jul 2012

Grade-School Secret Adventure Camp, Jul 2011

High-School TSI Camp: "Why Toast Falls Jelly-side Down", Jul 2010

High-School TSI Camp: "Weighing the Earth", Jul 2009

Invited Talks and Public Lectures:

Invited Talk: "A Liberal Arts Education", Sept 2015

Astronomy Lecture Series: "Charming Quarks", Feb 2013

Astronomy Lecture Series: "Superluminal Neutrinos", Oct 2011

Astronomy Lecture Series: "Big Questions: Relativity", Feb 2010

Astronomy Lecture Series: "Big Questions: Quantum Mechanics", Nov 2010

Astronomy Lecture Series: "Big Questions: Black Holes", Sep 2009

Astronomy Lecture Series: "The Science of Angels and Demons", May 2009

E. Membership, participation, and leadership in scholarly organizations (please list scholarly organizations in which you are a member, any special office you have held in the organization, and papers delivered at a professional organization, etc.):

Of the memberships listed below, some memberships were not continuous. They are listed in order of level of participation and then by date joined.

American Association of Physics Teachers (AAPT), joined 1996

I have attended conferences and workshops (Section H), and I am a reviewer (seven articles in six years) for the American Journal of Physics (AJP).

American Physical Society (APS), Joined 1987

I have attended conferences and workshops (Section H), presented in 2018 (above), and in the past I brought students to these meetings.

American Association of University Professors (AAUP), joined 2002

I was the recorder for the local chapter from 2003-2004.

Project Kaleidoscope, F21 Member, joined 2002; inactive

Attended workshops on classroom techniques.

Organizations in which I have limited association with and even more limited activity

Omicron Delta Kappa (Leadership Honors Society), joined 2003

Kappa Mu Epsilon (Mathematics Honors Society), joined 2000

Sigma Pi Sigma (Physics Honors Society), joined 1999

Society of Physics Students, joined 1987

F. Consultation service:

[Click here to enter text.](#)

G. Special projects (please list grants applied for, those awarded, and list and special projects you have engaged in):

Grants:

KY Space Grant Consortium (Co-PI) \$5000, Nov 2010

Projects:

Thomas More University:

Recorder, Faculty Policy Manual revisions

Pre-Engineering Projects:

Pre-Engineering course 3-day training, UK College of Engineering July 2018

Pre-Engineering Advisor Conference, UK College of Engineering Aug 2009, Aug 2010

American Journal of Physics:

Reviewer, American Journal of Physics, 2012-Present

Quality Enhancement Plan:

Host QEP 1-Day Workshop (Benander/Lightner) May 2012

Host QEP 2-Day Workshop (Stewart Ross) May 2011

Host QEP 2-Day Workshop (Gerald Nosich) May 2010

QEP Newsletter 2010-2013

Led Scoring Session for CAT Assessment (usually 2x/year) 2010-2016

H. Please list workshops, seminars, etc. which have aided in your professional development:

Physics Teacher Education Coalition (PhysTEC);

webinar on “A Study of Thriving Physics Teacher Education Programs”; Nov 13, 2018

<https://www.phystec.org/thriving/>?

National APS; Columbus, OH; April 2018 (Physics Education)

<https://www.aps.org/meetings/april/abstracts.cfm>

Pedagogicon, ECU Richmond, KY May 2017 (Innovations in Teaching and Learning)

<https://studio.ecu.edu/2017-pedagogicon>

ACAD Conference, Milwaukee, WI Jun 2016 (Academic Leadership)

“Catching the Wave: Energy and Renewal in Liberal Arts Education”

<https://acad.org/meetingsevents/conferences/>

Multiple Ideas-to-Action, Louisville, KY (Critical Thinking and Classroom Techniques)

<http://louisville.edu/ideastoaction/programs/institute>

May 2014

May 2010

Multiple SACS-COC Conferences (Accreditation and Assessment)

Nashville, TN Dec 2014

Atlanta, GA Dec 2013

Dallas, TX Dec 2012

Multiple CAT¹⁰ Train-the-Trainer Workshops (<https://www.tntech.edu/cat/training/>)

CAT-Analogs Workshop, Kona, HI Jun 2013

CAT Training Workshop, Boulder, CO Oct 2009

APS Experienced Faculty Workshop; College Park, MD; Apr 2013 (Physics Education)

<https://www.aapt.org/Conferences/efw.cfm>

Int'l Conference on Critical Thinking, Berkeley, CA Jul 2010 (Critical Thinking and Classroom Techniques)

<http://www.criticalthinking.org/pages/30th-international-conference/740>

OH-section APS, Ohio Northern, OH Apr 2009

I. Other interests (please list cultural, intellectual, recreational, avocational, voluntary, and service oriented activities not mentioned above):

Current: Disc golf, horse camping (AQHA and APHA member), baking bread, backgammon, scrabble, strategy games, dogs, cats, home improvement.

Past avocations: Bicycling, racquetball, soccer

Past involvements: Northern Kentucky Horse Network, Equine Rehabilitation¹¹, vintage base ball.

¹⁰ CAT = Critical thinking Assessment Test

¹¹ Rehabilitation for disabled children (and some adults) via physical therapy on horseback.

VI. Additional Information

- A. Please include any additional information you may wish to support your application. Use the heading “Additional Information” on each page.**
- B. Cover Letter: IMPORTANT:** After reviewing the documentation you have prepared for your application, you should prepare a formal letter to the Tenure and Promotion Committee stating in your assessment why you merit promotion or tenure. This letter should be enclosed in an envelope addressed to the Tenure and Promotion Committee and should be your own assessment of how you meet the criteria for tenure or promotion which are identified in the Faculty Policy Manual.

****Note:** All documentation to support your application should be attached in clearly separated and lettered appendices (Appendix A, B, C, etc.). Each appendix should indicate its purpose and the relevant page in the application it documents.

Books, monographs, reviews, copies of publications, art and music, films, photographs, etc. are to be included in an appendix and these should be contained in special folders, envelopes, or boxes with relevant labels.

****Note:** Please consult with the Dean of the College for any questions or information you may need.