

To: Natalie Eddington, PhD

Dean, University of Maryland School of Pharmacy

From: Mary Lynn McPherson, PharmD, MA, BCPS

Professor, and Vice Chair for Academic Affairs

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Subject: Master of Science in Palliative Care via Distance Education

The University of Maryland School of Pharmacy is ranked among the best in the nation for our outstanding Doctor of Pharmacy program, which we deliver in a face-to-face fashion. The purpose of this memo is to propose the development of a Master of Science degree in Palliative Care, offered entirely through distance education. I envision this as a multimedia rich program that will reach the four corners of the globe; the balance of this memo will detail this proposal that will enhance our already outstanding reputation.

First, why choose palliative care as the theme for a new Master's degree program? Palliative care is defined by the World Health Organization (2015) as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual." Palliative care is provided by a team of expert practitioners including physicians, nurses, pharmacists, social workers, spiritual advisors and others. The University of Maryland Baltimore is a campus of multiple health professions (pharmacy, medicine, nursing, social work, dentistry, law) and is therefore well-suited to take on this task. My vision is that this Master's degree

would be taught, and received, in an interprofessional fashion. Both the teachers and the learners would span a wide range of health care disciplines, culminating in a transdisciplinary group of graduates ready to provide stellar palliative care services.

More importantly, I would like to address why I believe offering this program through a distance education manner would be beneficial, which is a clear departure from our traditional face-to-face teaching. As presented by Ally (2008, pp. 17-18) there are several obvious benefits of distance education from the learner perspective. Importantly, distance education renders time zones and physical location of learners and teachers moot. Learners can participate in coursework whenever and wherever they choose, working at their own pace. This is particularly important for the proposed program, where the learners are practitioners actively engaged in providing care during traditional school hours. It is essential that these practitioners have the freedom to study in an asynchronous fashion.

Lest you think that distance education is a compromise simply to accommodate differing schedules, let me hasten to assure you that distance education programs today are completely informed by cutting edge learning theories. Three major theories of learning emerged in the 20<sup>th</sup> century – behaviorist, cognitivist and constructivist (Harasim, 2012, p. 9). The behaviorist school of thought views the brain as a black box that simply responds to stimuli. Having student learn facts is an example of utilizing behaviorist learning strategies (Ally, 2008, p. 20). The cognitivist theory acknowledges that the brain is more than a black box; in fact this theory represents the mental processes that are put in motion by the stimulus (Harasim, 2012, p. 47). Per Ally (2008, p. 21) including "memory, thinking, reflection, abstraction, motivation, and metacognition." In

other words, cognitivism refers to "making sense" of new information. Constructivism is the holy grail in learning; this theory has learners constructing their own interpretation and knowledge of the world (Harasim, 2012, p. 60). Ally sums these three theories up as behaviorist strategies teach the what (facts), cognitivists represent the how (processes and principles) and constructivists teach the why (higher-level thinking) (Ally, 2008, p. 20). For example, in this Master's program we will have a course on "Opioid Conversion Calculations." Asking students to memorize the equianalgesic table is a behaviorist strategy. Having learners explain the process of an opioid conversion calculation is an example of cognitivism. Given an actual or simulated presentation of a patient requiring an opioid conversion calculation, learners can embrace constructivism by explaining how they temper their calculation with clinical judgment. Observing the patient's response to the proposed intervention will further allow the student to enhance their personal meaning and contextual learning (experience is a valuable teacher).

In the most recent curriculum refinement in our face-to-face curriculum we embraced the "flipped classroom" model to increase active learning, and maximize the constructivist approach. We can adopt this same philosophy in this proposed distance education Master's degree program by adopting the "online collaborative learning" (OCL) philosophy (Harasim, 2012, p. 89). Harasim elaborates that the OCL theory "refers to educational applications that emphasize collaborative discourse and knowledge building mediated by the Internet; learners work together online to identify and advance issues of understanding, and to apply their new understanding and analytical terms and tools to solving problems, constructing plans or developing explanations for phenomena" (p. 88). We can incorporate strategies in this online experience to allow learners to build knowledge as a community through discourse, collaboration and reflection. The teacher is

not only a facilitator in this environment, but also serves as a conduit between learners and the teacher's area of expertise (commonly referred to as his or her knowledge community).

Courses taught in the proposed online Master's program will employ a variety of rich multimedia learning objectives, beginning with a robust learning management system (LMS). Not only can learning objects be posted in the LMS, but quizzing features can provide formative and summative feedback to learners, and discussion boards can host robust discussions among learners, and learners and teachers. Multimedia objects such as audio and video files, and pictures (e.g., infographics) can be posted to enhance learning. A primary advantage of multimedia learning is maximizing human learning by appealing to "two information processing systems – one for verbal material and one for visual material" (Mayer, 2009, p. 6). Mayer states that multimedia learning is a "sense-making activity" which supports the theory of constructivist learning (p. 17).

While online learning has become quite popular worldwide for all the reasons cited above, the larger question is how does it compare to traditional face-to-face teaching, such as we do in our current curriculum? The US Department of Education conducted an extensive investigation into this very issue, and published their results in 2009, stating "On average, students in online learning conditions performed better than those receiving face-to-face instruction" (Means et al., 2009).

Indisputably, we all must shuffle off this mortal coil, and to do so free of pain (physical and psychosocial/spiritual) is a moral imperative. The development and implementation of this high

quality online Master's program in Palliative Care completely meets every element of the University of Maryland School of Pharmacy mission statement:

"The University of Maryland School of Pharmacy leads pharmacy education, scientific discovery, patient care, and community engagement in the state of Maryland and beyond."

I look forward to furthering our discussion about this exciting proposal.

## References

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