Assuring Student Learning Outcomes Achievement Through Faculty Development: An Online University Example

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Abstract

Asynchronous discussions in the online teaching and learning environment significantly contributes to the achievement of student learning outcomes, which is dependent upon qualified and engaged faculty members. The discourse within this article addresses how an online university conducted faculty development through its unique Robust Learning Model (RLM) and its associated unique pedagogy and learning management system, which is also utilized by the university's students. The results revealed that shared engagement between faculty members in the faculty development activity similar to the university's students, honed faculty members' teaching skills that lend to assuring student learning outcomes achievement in the online learning environment.

Introduction

Assuring student learning outcomes (SLO) achievement is a daunting task in higher education and especially in an online university, which has a global and diverse student body such as in Touro University Worldwide (TUW). In TUW, faculty training and development is an ongoing process focused on shaping faculty members to become highly engaged in assuring students achieve the SLO. One way to assure SLO achievement is through the Robust Learning Model (RLM). Drs. Yoram and Edith Neumann initially engendered the RLM as the basis of the development of a forward-looking and sustainable on-line university, which was pioneered in 1998 within Touro University International (TUI), an independent branch campus of Touro College New York (Neumann & Neumann, 2016). Drs. Neumann developed this "multi-factorial model based on the basic belief that successful learning outcomes depend on multiple factors employed together in a holistic approach" (Neumann & Neumann, 2010, p. 28), which can be used to manage an entire university (see figure 1). The management of TUW adheres to this pioneering model utilizing the same key components that form interrelationships of the RLM's holistic approach, which is briefly summarized below.

- Faculty (more than 80% possess doctoral degrees; responsive [24 hour turnaround to student email inquiries and 72 hour turnaround for assignment grading]; flexible with assignments deadlines; timely, constructive and supportive feedback; stimulates meaningful asynchronous exchange in discussions; assures SLO achievement via written assignments composed with critical thinking competencies commensurate with the level of degree)
- Information Technology (a proprietary web-centric and integrative platform; developed specifically to support the pedagogical approach and student learning environment created by the RLM; provides administration, at all levels, and faculty members the ability to manage students records; provides students a secure transparent and accountable one stop management system to submit assignments, participate in discussions, as well as receive faculty feedback)
- Learning Effectiveness (assessments via surveys from the institutional and course levels, faculty evaluations, quality of faculty teaching, and ensuring top down alignment process that flows from the university mission to student learning outcomes).

- Organizational Effectiveness (multivariate concept that includes transparency, accountability, and productivity gains of each component and student learning effectiveness)
- Student Services (provides each functional area access to their specific area of interests according to a need-to-know basis such as Registrar, IT department, Enrollment Center, Advisement, Finance/Bursar, Library, etc.)
- Unique Pedagogy (8 week module-based courses across all degree levels with a final/integrative module in each course; courses developed by faculty members who are subject matter experts; case analysis approach addresses learning outcomes and critical thinking competencies; threaded discussions with student-to-student and faculty interaction)
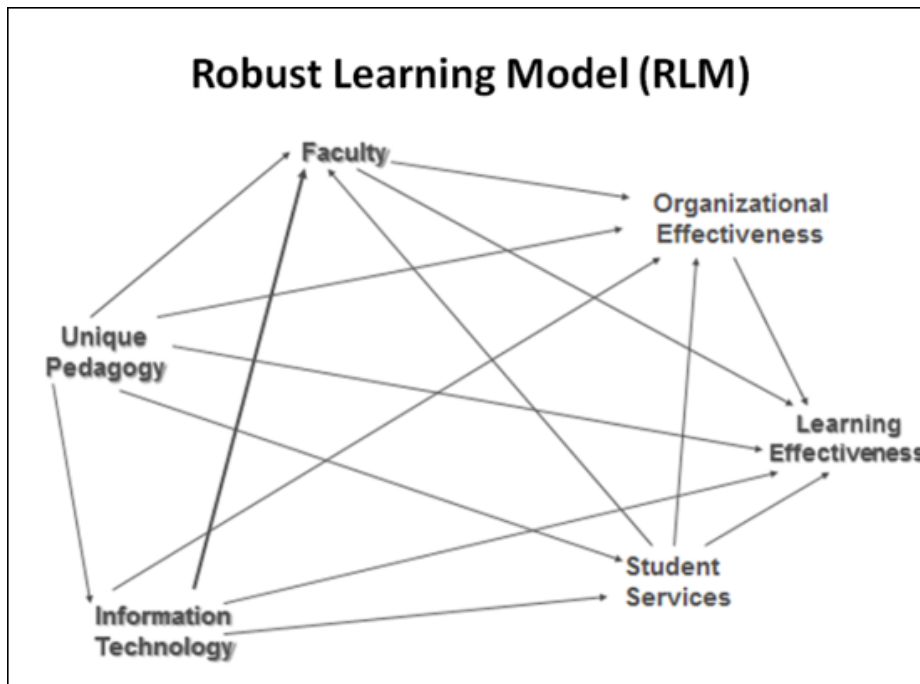

Figure 1. The Robust Learning Model (Neumann & Neumann, 2010). The above figure illustrates the faculty component in the RLM and the interaction between the unique pedagogy and the information technology (in this case Integrated Campus system), which impact overall student learning effectiveness.

Two factors of the RLM are essential to student learning outcomes (SLO) achievement. First and foremost is the faculty factor that allows faculty to assess course quality while simultaneously assessing input and output of students' quality of learning. A variety of assessments are possible based on the collection and storage of data in the integrated system, echoing a best practice identified by Betts & Heaston (2014). In every assessment, SLO achievement is measured either directly such as through the quality and content of the written assignments in course work, or indirectly in student feedback, email, etc. Triangulating assessment results are captured through a proprietary system known as Integrated Campus (IC), which lends to the next major factor of the RLM; technology. Although the IC is not the initial impetus, it contributes significantly to the RLM because it embeds a learning platform system designed to meet the specific needs and unique pedagogy of the university. The holistic approach and underlying technology provide faculty members a window to the "learning effectiveness" of the RLM and, by extension, to TUW's unique pedagogy that lend to SLO achievement. Thus, the focus in this article is to explore the crucial faculty component of the RLM and how IC may be used for faculty development to assure SLO achievement within the university.

The Challenge

The TUW faculty members are expected to adhere to established best practices to provide high quality education, which include, but are not limited to responsiveness, flexibility on course assignments and deadlines (Yu & Brandenburg, 2006), constructive feedback (Dewald & Rhynders, 2015) and engage students in meaningful learning through written discussions with both peers as well as the assigned faculty members (Noce, Scheffel, & Lowry 2014). Although faculty engagement is crucial to the success of any online teaching environment (Huett, Moller, & Young, 2004; DeLoughry, 1995; Jones, & Moller, 2003), engaging students in meaningful, scholarly discourse in order to assure students achieve the SLO has shown

to be one of the most challenging aspects for faculty members within the purview of the RLM. Within the university, several factors contribute as challenges towards faculty members assuring student success in achieving the learning outcomes, which include:

1. Although trained on the RLM, it takes about two academic sessions (two eight week sessions totaling four months) for new faculty members to adjust to the best practices of online learning with TUW.
2. Adjunct faculty members teach for several universities, where the focus may be on courses developed via vendors who specialize in pre-packaged courses that include their own learning outcomes (Ferdig & Dawson, 2006).
3. Students at TUW are not required to purchase textbooks; courses are developed by faculty members who are subject matters experts in a specific course's discipline (Ferdig & Dawson, 2006).
4. The written case based approach is utilized in lieu of quizzes and exams (Roberts & Roberts, 2008).
5. There is less focus on mandated academic rubrics to guide teaching (Heidi, 2005); on the other hand, each faculty is the driving force towards the students achieving the SLO.

Importance of Faculty Development

Since TUW relies on the expertise of about 80% doctoral faculty members to develop and provide continuous improvement through course revisions, there is no reliance for external academic course vendors. Thus, achievements of student-learning outcomes are highly dependent on faculty members actively engaged in teaching their courses. In fact, Huett, Moller & Young (2004) argue that "[it] takes disciplined faculty and an appropriate administrative structure to ensure that the... course continues to offer each student the best opportunity to acquire the knowledge and skills specified in the course" (Huett, Moller, & Young, 2004, p. 262-263). In the online teaching and learning environment, it is vital to both train and develop faculty members who have various teaching backgrounds; both online and on-campus. Training and development is a continuous process and faculty feedback is essential through a variety of means such as faculty evaluation survey results, direct student communication (email and telephonic), university-wide faculty WebEx teleconferences led by the Provost, university led faculty retreats, and Program Director-driven faculty WebEx conferences. Faculty meetings via teleconferences is the most effective means to develop faculty, yet it still poses a challenge to reach each faculty member for a synchronous meeting because of (1) varied geographic locations, and (2) other commitments faculty members may have outside the university (Amburgey, 2006; Thomas, Karr, Kelly, & McBane, 2012).

In an effort to address our faculty development challenges, the Director of the School of Business and Management conducted an asynchronous faculty peer-to-peer training experience via a Threaded Discussion (TD) session using the same learning platform and format experienced by our students. It is hoped that this constructivist approach of faculty development will help scaffold experiences and lessons that would help enhance the online classroom teaching skills by our faculty (Estepp, Roberts, & Carter, 2012). To provide a brief overview of the online learning pedagogy at TUW, both students and faculty use the aforementioned Integrated Campus (IC) system, which allows for asynchronous discussions similar to blog structures. Both students and faculty members have the ability to view all discussion postings at one time as opposed to clicking on one student's (or faculty member's) post and responding to each one separately.

The intent of IC is to replicate the best aspects of the brick and mortar classroom. The lecture is represented in the weekly introductory statements and assigned background materials (articles and online videos) in each module, along with the Socratic prompt and response that mirrors the dialectic discussion in the physical classroom. There is an argument that the asynchronous, written nature of this discussion is at least equal (Russell, 1999), but perhaps superior to verbal interaction based on the amount of time and research required to properly address either the prompt or the faculty member discussion posting(s). The following section addresses how this unique interaction between faculty members was conducted to enhance faculty development, in order for them to experience what students do in their requirements to achieve the SLOs.

Faculty Development Through the Threaded Discussion (TD)

Faculty development was conducted with 35 TUW School of Business and Management faculty members. The faculty members were required to post an initial response to a question and at least one reply to another colleague in a 7-day period (Monday through Sunday), thus allowing faculty members to showcase their experience and expertise in the arena of online learning (Betts & Heaston, 2014), and particularly to

showcase their instructional methods to assure SLO achievement. The faculty members were divided into two separate groups of 17 members each to keep the TD to a manageable number of participants (e.g., A - J and K - Z), because the blog style format would become overwhelming.

The theme of the faculty development discussion was "Maintaining Quality in Achieving Student Learning through Faculty Engagement." The intent was for faculty members to share their knowledge of TUW's unique pedagogy as a component of the RLM and share how faculty engagement contributes to quality learning as the university continues to grow. Within the faculty hiring process and continuously teaching in the TUW Integrated Campus throughout their tenure, faculty members are trained on the RLM and its components, along with receiving the RLM article by Neumann & Neumann (2010). As a refresher reading, the Neumann and Neumann (2010) article was attached as a document within the faculty development TD. Subsequently, faculty members were required to (1) describe how they prepare in advance to engage students in TDs/Assignments, and (2) share techniques used to assure their students achieve the desired learning outcomes (see Table 1 below for specific questions). Additionally, through the TD session, faculty could emulate the student experience and articulate techniques used to assure meeting the SLOs. As stated earlier, doing so would better prepare faculty members to interact with learners based on shared experience (Elliott, Rhoades, Jackson, & Mandernach, 2015). In other words, if faculty members understand what is required to both teach and learn SLO by TD participation, they are better positioned to assure students achieve learning outcomes beyond their grading of student coursework and/or providing arbitrary feedback such as "Good job!"

Table 1
Questions for Faculty Threaded Discussion (TD)

1. What do you do to prepare yourself to make sure the students achieve the Student Learning Outcomes (SLO) for TD, case and signature assignments? In other words, how do you prepare yourself to engage students that lead to them achieving the SLO?

2. What techniques do you use to ensure students achieve SLO for one or more of the following settings in letters a through c below? For example, you may render global responses, provide templates, contact students via email or telephone, etc. (Feel free to respond to one or more settings applicable to the courses you teach).
 	
    a. Small Class (between 1 – 9 students)
    b. Medium Class (between 10 – 20 students)
    c. Large (more than 20 students)

Subsequently, faculty members posted comments to the original threads and communicated with each other sharing their tips and techniques, which reinforced shared learning. Overall, faculty members posted 113 times, which means that each faculty member posted at least one initial post and responded to one or more colleagues. Interestingly, both groups posted about an equal number of postings (Group 1, $n = 57$ and Group 2, $n = 56$). Appendix A provides an illustration of a lengthy initial post with cited references from a participant in Group 1, and an illustration from Group 2 with responses addressing SLO and associated short responses. The patterns of lengthy versus short responses were replicated between groups.

Notably, the faculty TD interaction mirrored the type of postings normally generated by the TUW's students. Thus, the goal was met to engage in a shared learning experience similar to TUW's students. The bullets below provide a synopsis of faculty member postings that are similar to characteristics of student postings, which provide insight on how the TD faculty development session gave a qualitative snapshot of faculty member's perspective of how students are able to achieve the learning outcomes:

- Lengthy responses supported by literature and/or background readings
- Minimal responses, but supported by literature and/or background readings
- Multiple postings (e.g., to other faculty members or interaction with the Director)
- Minimum 2 postings (Initial post and one response to another faculty member)
- Answered the specific questions in the TD that achieved stated learning outcomes
- Did not answer or partially answered questions in TD (especially Question 1)

- Some faculty members needed reminders (email, text and/or telephone) up to and after the TD deadline to provide a discussion response

Lessons Learned

Because of conducting the faculty member threaded discussion, several lessons emerged regarding using the TD as a method of faculty development that lend to assuring SLO achievement. First, the presupposition is supported that faculty members who teach for several universities (especially online) are challenged by the unique pedagogy embedded within the RLM. For example, a review of the TDs revealed at least five (5) faculty members provided short responses that did not address how they prepare themselves for responding to student discussion threads nor explain how they guide their students towards achieving the SLOs for the course(s). In fact, those faculty members continued to place the burden of achieving the outcomes on the student with responses such as "I have not undertaken any special preparation other than the kinds of things that I have done for the past...years I have been teaching." Next, faculty members who ensure successful achievement of SLO augmented their responses by citing literature supportive of their responses on how they assure students achieve the SLO. Perhaps most compelling are the faculty members who stated they read the background material and associated learning outcomes prior to engaging students in the TDs. In essence, those faculty members focus on knowing what is required prior to engaging in discussions, and are able to add probing statements/questions when students miss the mark of achieving the SLO, and/or the desire for deeper critical thinking responses commensurate with the students' level of degree.

Based on the faculty TD, the Director of the School of Business and Management reviewed courses taught by the faculty members mentioned above coupled with the end of course student evaluations and observed the following:

1. Engaged faculty members who are SLO achievement driven received an increase in student enrollment within their course(s) over subsequent academic sessions and positive student comments on their end of course surveys.
2. Faculty members, who are not driven towards SLO achievement provided less feedback to students regarding SLO, were prone to focus on grade metrics rather than quality instruction/SLO achievement, there was a noticeable decline in student enrollment within their course(s) over subsequent academic sessions, and/or received negative student comments on their end of course survey.

Summary of the Faculty TD

Overall, the faculty member TD provided an innovative way to interact with faculty regardless of their location while simultaneously providing a shared forum for faculty development in assuring SLO achievement within the School of Business and Management. Mirroring student engagement within the learning platform, the faculty TD proved to be a good indicator of the success of assuring SLO achievement via faculty engagement/participation (or lack thereof) within their own courses. Faculty had the opportunity to understand both their importance and role in the RLM by their shared experiences through participation in the role of both student and colleague.

Additionally, veteran faculty members (those familiar with the RLM for 1 year or more) shared SLO achievement techniques with recently hired faculty members, while recently hired faculty members also had an opportunity to both learn and submit their ideas to engender quality in SLO achievement. Consequently, the crucial component of faculty in the RLM is enhanced by faculty member contributions in the threaded discussions, which is a tool to both develop and enhance online faculty teaching in a collaborative setting, where all of them can participate regardless of time constraints or geographic location.
One key institutional mission of TUW is for students to achieve the SLO with the evidence embedded in their TDs and written assignments. The quality of the initial discussion prompt itself makes a difference in the quality of the subsequent discussion postings generated by the faculty members. Thus, faculty development in an online environment via participation in the threaded discussion experience is just one example of how the teacher (faculty member) also becomes a learner, which hones faculty members' teaching skills and techniques to assure the university's students achieve the desired learning outcomes.

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Appendix A

Sample Faculty Members Threaded Discussion Responses (Groups 1 and 2)

GROUP 1

February 17th

Hello Everyone,

Students have many choices when it comes to education. TUW presents students with a unique learning environment, which incorporates the Robust Learning Model with its methods of accessing course quality and student learning outcomes (Neumann & Neumann, 2010). Being on the TUW faculty provides us opportunities to develop and learn together to create the best educational institution possible, enabling students to achieve carefully develop program and learning outcomes.

Before the class begins, it is essential for the faculty to make sure that each discussions, assignments, and reading materials are carefully chosen to meet the outcomes and consider Bloom's Taxonomy. In addition, I keep in mind that all learners are diverse with different needs so provide a variety of information transmission forms to meet the range of learners taking the course as suggested by Virtanen, Myllämiemi, & Wallander (2012).

I find that making comments on a daily basis leads to a better discussion. Getting off to a good start is key to having a high quality discussion, so in all size classes I begin on day one with personalized replies to individual introductions. Finally, I reach out to individually to students by email and provide my phone number. I respond to all student questions quickly, making sure they know I am here to help them.

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February 17th
Hi,
You have been teaching with TUW for a while and I am sure you have taught quite a few students with various backgrounds. Did you ever have a need to update an assignment/reading or course based upon student responsiveness to any of your courses? Give us an example.

February 17th

Yes, that has happened. There are a number of reasons I would update an assignment or course due to student responsiveness. The most obvious is that a reading is no longer accessible or a link is broken. More recently, I updated several discussion questions before an upcoming term to clarify based on student reports that they were confused. I also have added supplemental material to clarify or an additional post to explain a question during the term before an update is possible. Finally, I update readings and materials to be more relevant. Sometimes, these updates are due to student interests, current events, or students mentioning a timely subject.

GROUP 2

February 17th

Thanks. A lot of students are not used to the level of critical thinking and writing embedded in our model so providing them helps is a good thing. On another note, what do you do to prepare yourself to make sure students achieve student-learning outcomes?

February 20th

Hi, I do research and ensure that I keep current with the concepts being taught; which allows me to interact with students and assist them in achieving the outcomes.

Your approach to working with your students is similar to mine. I am always asking students in a private reply if they need more help or that there are specifics that they need to watch for.

February 18th

I think that is a good idea, I normally email the student via the email to discuss the specifics, using the private reply is a great idea.

I will use that in the future.