ORIGINAL RESEARCH ARTICLE
OPEN ACCESS

PROMOTING PROFESSIONAL GROWTH AND INSTRUCTIONAL CHANGE WITH THE HIGHER EDUCATION FACULTY DEVELOPMENT PROGRAM MODEL

[1]*Lias, Allen R., [2]Dennis, Emily A. and [3]Holdan, E. Gregory

[1]Professor of Mathematics, Robert Morris University – Moon Township, PA –USA
[2]Talent Development Manager, West Virginia University – Morgantown, WV – USA
[3]Professor of Mathematics Education, Robert Morris University – Moon Township, PA –USA

ABSTRACT

An effective professional development program can have a profound impact on how higher education faculties teach and what their students learn. Building on survey responses by faculty at eighteen colleges and universities that have participated in professional development activities, a faculty development model that includes fourteen characteristics that are organized into four quadrants was created to assist instructors and administrators in higher education institutions to develop programs that aim to meet the teaching and learning needs of the faculty.

INTRODUCTION

The purpose of this study was to research the effectiveness of innovative and systematic characteristics of faculty development programs in higher education to produce a model for promoting professional growth and instructional change. Dennis, Lias and Holdan (2017) developed a survey based on twenty-seven characteristics organized into four sections identified by a thorough review of literature. Eight hundred sixteen faculty from eighteen institutions of higher education responded to the survey. Faculty indicated their rate of participation, implementation and perceived effectiveness of the twenty-seven characteristics. The researchers used the results of this study to aid in the development of a model that highlights specific characteristics of faculty development designs that are targeted at formulating effective pedagogical enhancements to encourage transformational leadership practices.

Corresponding author: **Lias, Allen R.,**
Professor of Mathematics, Robert Morris University – Moon Township, PA –USA.

Through the use of a model, faculty will have the opportunity to personally reflect upon their teaching and learning practices and develop the necessary skills to enrich education to enhance student achievement in higher education institutions. Most university faculty enter into teaching through the field in which they are hired to teach. Therefore, through successful implementation of a faculty development design model, a pedagogical gap can be filled to ultimately result in improved teaching and learning suggesting a shift in the process of teaching in higher education institutions. It is expected that with ongoing, sustainable professional development programs in place in universities and colleges, faculty will be better prepared to facilitate innovative pedagogical techniques through the development of partnerships though networking with colleagues to sustain catalysts for leadership in higher education to ultimately make strides in improving overall student achievement.

MATERIALS AND METHODS

The overall purpose of this research study was to identify the faculty development characteristics that are perceived to be most effective in having a positive impact on faculty members'

abilities to teach and learn in higher education and develop a model for effective faculty development. In many cases, faculty developers in higher education institutions are looking for tools and resources that are research-based and up-to-date on current practices to best serve their faculty members (Swanson and Kayler, 2010). When a formulated program does not exist, a list of random courses may be offered that do not have any consistency or direct relation to the university. Faculty members may be forced into taking courses that do not pertain to their specific field or department. Research shows that when faculty engage in an on-going sustainable faculty development program, immediate implementation and results of increased understanding of teaching and learning occurs (Centra, 1979; Eble and McKeachie, 1985; Sorcinelli, 2002).

Dennis, Lias and Holdan (2017) verified the need and importance of including a blend of multiple types of courses in any faculty development program. From their study four quadrants were developed for the proposed model. It is important to note the connection and relationship among the four quadrants including Content, Practices, Processes, and Curriculum and Instruction. Through the inclusion of all four quadrants in a faculty development program, leadership capacities can develop to engage faculty in innovative and strategic opportunities to engage in research-based courses and initiatives. Institutions of higher education may choose to incorporate all four quadrants and provide pathways and courses that blend all four types of offerings. Another option may include the opportunity for faculty development programs to focus intensely on one or more of the four quadrants each academic year to lay foundational content for each to allow participating faculty members to study a particular quadrant of their interest that aligns with their personal and professional goals.

Within each of the four quadrants, faculty development characteristics are included. These characteristics derived from the results of the quantitative study (Dennis, Lias and Holdan, 2017). The top six faculty development characteristics from each research question are included in their respective quadrant. Table 1 indicates each of the three areas including the consistencies between the six highest ranked characteristics.

Table 1. *Six Highest Ranked Characteristics in Participation, Implementation, and Effectiveness*

Participation	Implementation	Effectiveness
Technology Integration	Logistics	Subject-matter Knowledge
Logistics	Writing	Active Listening
Writing	Technology Integration	Writing
Mentoring	Active Listening	Logistics
Diversity	Subject-matter Knowledge	Project Management
Classroom Management	Mentoring	Coaching

Note: ▯ indicates characteristic common in all three areas.
▯ indicates characteristic common in two areas.

The characteristics in the implementation section were all indicated within at least two other areas with two characteristics appearing in all three areas. Therefore, the researchers chose to incorporate the top six characteristics in each area. Diversity and Classroom Management were found to be in the participation section only. Based upon the literature and the researchers' previous experience working with faculty, these characteristics were found to be important for inclusion within the model.

Additional research may need to be conducted to identify the best ways to teach faculty about effective diversity practices and classroom management strategies for students in higher education settings. In addition, Project Management and Coaching were found to be effective by participating faculty members in this study. These results indicate that the inclusion of these characteristics within the model is required to validate the effectiveness of these characteristics. Additional research may need to be conducted to identify what areas in Project Management and Coaching that participants believe to be as the most effective so that these areas may be included within future corresponding offerings. The top six characteristics were then organized in the model by their corresponding quadrants. In addition to the top six characteristics in each sub-category, Networking and Partnerships, Ethics, and Learning Styles were included within the model to balance the quadrants. These characteristics were included based upon a combination of the results from the implementation and effectiveness portions of the study. A listing of each of the four quadrants with the faculty development characteristics includes: Content (learning styles, ethics, subject-matter knowledge and diversity), Practices (project management, writing and active listening), Processes (coaching, team building, mentoring and networks and partnerships), Curriculum and Instruction (technology integration, logistics e.g. syllabi and classroom management).

The characteristics to be included within the model were identified by participants from higher education institutions who have participated in faculty development programs. These characteristics serve as suggestions for professional development topics, strategies, and initiatives that can serve as foundational objectives or goals of faculty development designs for sessions, courses, or professional development series. The model can serve multiple purposes with any type of higher education institution who is looking to develop an effective faculty development program.

The Higher Education Faculty Development Program (HEFDP) Model is designed to be on the cutting edge of faculty development programs in higher education institutions in the United States (Figure 1). Higher education institution administrators and faculty development experts can utilize this model to design a holistic faculty development programs that incorporates the necessary components to provide overall professional support and assistance to faculty members. Faculty development designers might use the characteristics as potential focuses for newly developed courses or areas of research or study. Characteristics in this model may be blended or woven into other previously designed courses to ensure overall implementation within all areas of the model.

Institutions can choose to organize their overall program through the four quadrants and develop specific pathways for their participants based upon the quadrants. This process could be similar to a traditional college student's progression through his or her major or course of study. Faculty members can choose a particular pathway via one of the four quadrants to study for their academic year. When this occurs, the faculty member can pursue opportunities that pertain to their specific focus. This will narrow the focus for a faculty member allowing for in-depth focus around one area of improvement. In addition, a cohort of faculty members can be formed where participating faculty members can work together to progress in their chosen quadrant of focus. They can meet and discuss what has or has not worked in the classroom with their

students, forming a professional learning community that is dedicated to increasing student achievement.

Adaptations can be made to the model to customize it to align within the university or college's mission and vision or faculty development goal. In some cases, specific characteristics may need to be updated or adjusted in order to fit the needs of the participating faculty members. Additional time may be allotted for characteristics that are found to be at a higher level of skill or rate of effective implementation. Therefore, the characteristics in this model may be weighted differently based upon the institution's preferences. Institutions that are smaller may choose to focus on one particular quadrant for an academic year. While institutions with a larger amount of participating faculty members may include all four quadrants in a program at the same time allowing each faculty member to progress in small groups. In addition, faculty development programs may choose to implement portions of all four of the quadrants within an academic year. Suggestions for faculty members' participation may be based upon previous performance evaluations, "Faculty Member Rank", and previous experience teaching in higher education. For example, if a faculty member is new to teaching in higher education, the expert on staff may suggest courses that include the Logistics, Subject-matter Knowledge, and Classroom Management characteristics. Piloting the model in multiple ways to develop an effective faculty development program can provide statistics for faculty developers to review and utilize to make the necessary adjustments for the next academic year.

In addition, faculty development programs that are already established can utilize this model as a gap-analysis tool. This model can assist institutions in identifying areas for improvement in order to establish a program that is holistic in nature. Characteristics or overall quadrants that are not present within an established faculty development model can be added to make improvements that align with what faculty members perceive to be the most effective in regards to participation, implementation, and effectiveness.

Next, administrators and faculty development designers can develop strategic goals and initiatives around the concepts presented within this model. Therefore, this model can provide the foundational tools for the development of goals and objectives that may not have been present prior to the use of this model for the established faculty development program. Users can identify connections among the characteristics to their institution's mission and vision and align the content presented to establish a common ground for all schools and departments within the institution.

RESULTS

This model includes the essential inputs from outside of the faculty development program that the literature supports to encompass a successful and ongoing faculty development program. Administrative Support, On-staff Expertise, and Alignment to the Mission and Vision of the institution were identified through this research study as the essential inputs for a successful faculty development program (Austin and Sorcinelli, 2013; Chang, McKeachie and Lin, 2010; Hill, Kim and Lagueux, 2007; Webb, Wong and Hubball, 2013). Administration must know about the program to be supportive of a faculty development program. Personnel in leadership roles within an institution should encourage faculty to participate in programs to ensure lifelong learning entities (Kouzes and Posner, 1995). In many cases, providing avenues and opportunities for multiple audiences fosters new partnerships that break down silos to build professional learning communities among faculty members throughout the university instead of individual educational departments and schools (Huston and Weaver, 2008; Tinto, 1997). Therefore, encouraging high-level stakeholders and administrators to participate in the faculty development offerings themselves may be beneficial for recruitment of faculty and other endeavors. By gaining the understanding and support of individuals with administrative roles within the institution can assist the faculty development program in becoming a staple within the institution.

Higher Education Faculty Development Program (HEFDP) Model

A *model* that can be used to develop or analyze a *faculty development program* in higher education institutions
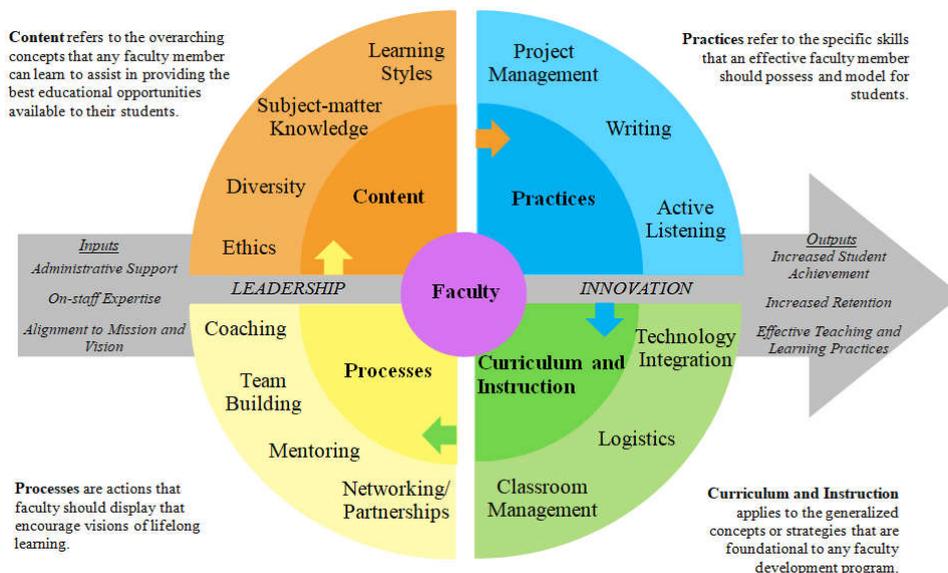

Figure 1. Higher Education Faculty Development Program (HEFDP) Model

In some cases, the output of this may be that certain portions of a faculty development program, potentially foundational and compliance courses, may be required and mandatory for new and incoming faculty members. In addition, experienced facilitators dedicated to the ongoing development of programs are crucial for success. On-staff experts benefit the university or college by supporting internal initiatives. When facilitators are on staff, a clear and consistent message is shared that is in alignment with the mission and vision of the university (Chang, McKeachie, and Lin, 2010; Glassett, 2009).

Participants within faculty development programs need to be able to directly apply the concepts and skills learned during sessions. When on-staff experts are present, they can assist participants in and outside of the training sessions. Co-teaching, peer mentoring, leadership development, and other new options become available for participants who need additional assistance after completing a faculty development program (Anderson *et al.*, 2014). When inputs are implemented into the foundation of any faculty development program, leadership capabilities are instilled within a model. Therefore, leadership development is woven through the input portion of the model in the center (Kouzes and Posner, 1995). As faculty is located at the center of the model, leadership leads to innovation among participants. When faculty feel empowered to collaborate with others and they are given the tools and resources to do so, innovation can be a result. Faculty develop new programs, departments, majors, and other fresh initiatives.

When all of the characteristics above are in place and functioning successfully, the following outputs may occur: Increased Student Achievement, Increased Retention, and Effective Teaching and Learning Practices. It is evident that the objective of any higher education institution is to encourage increases in student achievement. Successful and well-designed faculty development programs have the potential to have a positive impact on not only the faculty themselves, but also the students, as well. When faculty are more educated on their abilities and resources available to provide for students, faculty can more immediately and proactively respond to the individual needs of their students. Ultimately, these actions have the ability to have a positive impact on student achievement through increased grade point averages and increased student participation in academic programs, extracurricular activities, and community-based initiatives.

When faculty are empowered through faculty development programs, they may choose to fulfill their professional careers at that institution. Therefore, increased faculty retention may be an output of successful faculty development programs. When faculty feel valued and supported professionally within the institution, they may be more likely to complete their teaching careers within the institution. This benefits the institution by continuing to have faculty on staff that are skilled in effective educational processes. Faculty who participate in faculty development may receive additional assignments including chairperson positions, research projects, committee nominations, and community-based partnership projects, ultimately serving the university in a much larger capacity than simply fulfilling teaching duties. Innovative programs that include the characteristics listed in the model above (Figure 1) demonstrate effective teaching and learning practices that faculty may possess.

DISCUSSION

The findings of this study along with available supporting literature suggest several implications for effective faculty development programs in higher education institutions. When faculty development programs exist within the institution, schools can invest their time and energy within the school settings to save funds and resources. Additionally, a consistent and clear message is shared that is supported by the university's mission and vision. Established staff can continue to research and develop new offerings based on the individual needs of the faculty members within the institution (Sorcinelli *et al.*, 2006). When developing faculty development programs within the institution, it is important to incorporate a model like the HEFDP Model presented here. Utilizing a model like this ensures that faculty development characteristics perceived to be effective in having a positive impact on teaching and learning are woven together seamlessly so faculty members can pinpoint the connections and relationships among content to build and grow both professionally and personally.

Results of this study supported the potential variations of faculty development characteristics and their existence within a faculty development model. Multiple offerings including long and short-term commitments are suggested. Based upon the goals of the departments, faculty can choose from single options to more rigorous, series-based offerings including independent research studies, program evaluations, and coaching initiatives. Extended or long programs may also provide additional time for implementation and reflection of content. The HEFDP Model, developed as a result of this study, provides additional insight into effective faculty development programs in higher education. This innovative model provides characteristics that are organized into four quadrants that can be adapted to fit the needs of the individual university of college. These cutting-edge characteristics and techniques may assist in moving the university or college forward in the 21st century by demonstrating their dedication to providing the best educational opportunities possible to their students, faculty, and staff.

REFERENCES

Anderson, J., Bond, B. E., Davis-Street, J., Gentlewarrior, S., Savas, M. and Sheehy, D. A. 2014. Transforming the classroom – and the world: Voices from a culturally inclusive pedagogy faculty learning community. *Transformative Dialogues: Teaching and Learning Journal*, *7*(1), 1-18.

Austin, A., E. and Sorcinelli, M. 2013. The future of faculty development: Where are we going? *New Directions for Teaching and Learning*, *2013*(133), 85-97. doi: 10.1002/tl.20048

Centra, J.A. 1979. Determining faculty effectiveness. San Francisco, CA: Jossey-Bass.

Chang, T., McKeachie, W. and Lin, Y. 2010. Faculty perceptions of teaching support and teaching efficacy in Taiwan. *Higher Education*, *59*(2), 207-220. doi: 10.1007/s10734-009-9243-8

Dennis, E. A., Lias, A. R. and Holdan, E. G. 2017. Higher education faculty perceptions of professional development. *International Journal of Multidisciplinary Research and Information*, 3(1), 46-52.

Eble, K. E., McKeachie, W. J. 1985. Improving undergraduate education through faculty development. San Francisco: Jossey-Bass.

Glassett, K. 2009. A comparison of two types of professional development for content area teachers. *Southeastern Teacher Education Journal*, *2*(4), 17-23.

Hill, L., Kim, S. L. and Lagueux, R. 2007. Faculty collaboration as faculty development. *Peer Review*, *9*(4), 17-19.

Huston, T., Weaver, C. L. 2008. Peer coaching: Professional development for experienced faculty. *Innovative Higher Education*, *33*(1), 5-20. doi: 10.1007/s10755-007-9061-9

Kouzes, J. M. and Posner, B. Z. 1995. The leadership challenge: How to get extraordinary things done in organizations. San Francisco: Jossey-Bass.

Sorcinelli, M. D. 2002. Ten principles of good practice in creating and sustaining teaching and learning centers. In K. H. Gillespie, L. R. Hilsen, and E. C. Wadsworth, (Eds.), A guide to faculty development: Practical advice, examples, and resources (pp. 9-24). Bolton, MA: Anker Publishing.

Sorcinelli, M. D., Austin, A. E., Eddy, P. L. and Beach, A. L. 2006. Creating the future of faculty development: Learning from the past, understanding the present. Bolton, MA: Anker Publishing.

Swanson, K. and Kayler, M. 2010. Faculty development and adult learning: A model for transforming higher education. *International Journal for the Scholarship of Teaching and Learning*, *4*(1), 1-6.

Tinto, V. 1997. Classroom as communities. *Journal of Higher Education*, *68*(6).659-623.

Webb, A. S., Wong, T. J. and Hubball, H. T. 2013. Professional development for adjunct teaching faculty in a research-intensive university: Engagement in scholarly approaches to teaching and learning. *International Journal of Teaching and Learning in Higher Education*, *25*(2), 231-238.

****