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A Higher Education Leadership Distance Ph.D. Program: An Assessment Using Blocher's Ecological Learning Theory

Linda Kuk, James H. Banning

Colorado State University, Fort Collins, USA
Email: Linda.Kuk@Colostate.Edu, James.Banning@Colostate.Edu

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Abstract

This study utilized a case study approach to discuss the issues of distance education in the delivery of doctoral education. The case study provided abroad background to the issues of distance education graduate programs and an assessment of the case. Blocher's (1974) Ecological Learning Theory is applied to the case to provide for analytical generalization. The results support the need for distance delivery of academic programs to consider both the content and the program's delivery structure as important components in realizing student success.

Keywords

Distance Ph.D Program, Distance Learning, Leadership Education, Virtual Learning

1. Introduction

The foundation of this article is within the spirit of a case study where a particular case is presented to help inform a general issue (Stake, 2005). As noted by Mills, Durepos, & Wiebe, 2010, there is often the "convergence of case study and program evaluation: The fusion of method with purpose" (p. 740). They note that the convergence of the two approaches is especially useful for innovative programs. The purpose of this study was to evaluate a new innovative higher education leadership distance Ph.D. program. Using the methods associated with a single case study to guide the evaluation, the outcome provided not only descriptive and evaluative program data, but the "lessons learned" (Creswell, 1998: p. 62) were presented within an established learning model (Blocher, 1974) to establish "analytical generalization" (Swandt, 1997). To accomplish this transfer from the particular to the general we begin with a broad based introduction to the issues of doctoral education and distance education. Next we describe our particular program located at a Research University in the Western US, including both

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process and outcome data. From the analysis of this information, a set of themes was derived and then associated with the ecological learning theory of Blocher (1974).

1.1. Background: Doctoral Programs and Distance Education

In the work, *Envisioning the Future of Doctoral Education* (2006), Virginia Richardson discussed the essential goals and characteristics of a doctorate in education. She points out, that a fundamental characteristic of education differentiates it from other disciplines, suggesting that the Ph.D. degree might also differ. The term *education* in her discussion "stands for both the study of the field and for the formal enterprise (or system) that is being studied" (pp. 251-252). One of two major purposes of education as a field of study is to help understand the enterprise. She goes on to discuss how that complexity, the interdisciplinary nature of education, and it's dual role of understanding and applying theory to practice divides this broad field into three categories: *Traditional disciplines of education*, such as educational psychology and science education, *Special interest fields*, such as higher education and educational administration, and *Cross disciplinary are as* such as social and cultural education.

Richardson indicates that all education Ph.D. programs need to focus on the development of *Practical Knowledg*e, *Examination of Beliefs and Misconceptions, as well as Formal Knowledge.* In the past, she argues, that the focus had been predominately on formal knowledge. While this area of inquiry is an essential focus, it is not sufficient for the future of doctoral education (p. 254). Depending on the type of doctoral program, faculty will likely approach the three educational objectives somewhat differently.

An argument similar to Richardson's can be applied to how doctoral education is conducted and how these three areas of learning and supporting goals are integrated into various Ph.D. programs' pedagogies, delivery mechanisms and program structures. Given the nature of education, doctoral education does not need to be conducted in the same fashion as other disciplines, or even the same way as other *categories* of education. Because of the dual role and the need to include the practical knowledge and the examination of beliefs in the application of theory to practice, the approach to offering doctoral education in some areas may require field work and applied settings to more fully engage doctoral students in "understanding the enterprise". In fact one can argue that diversity of program delivery may be a key to enhancing a program's overall learning, its research results and program objectives.

The field of Higher Education Leadership is among the educational program areas that lend themselves to study from within its context. More specifically having one's employment aid in serving as the field or laboratory for studying, understanding and applying learning about the enterprise might serve as an important aspect of a program's curriculum. This combination of ongoing campus experience in concert with a program's curriculum is the key to a transaction between theory and practice and calls for a distance format to support this transaction.

This work is focused at presenting a hybrid model of Ph.D. delivery that incorporates the three areas of knowledge acquisition cited by Richardson (2006) within its program goals, as well as the general aim of the transaction between theory and practice. The focus of the assessment is not specifically on the learning outcomes related to these goals, but rather more directly on the assessment of the structure and design of the program's delivery system, a hybrid, distance Ph.D. program.

1.2. Distance Doctoral Programs

On-line learning has become a standard delivery process within higher education. As of the fall 2011, over 6.7 million post-secondary students in the US (32%) took at least one course on-line (Allen & Seaman, 2013). While on-line, distance, and hybrid courses, and numbers of students accessing these courses have increased dramatically over the last 20 years at both the undergraduate and the masters levels, the presence of such offerings at the doctoral level have not been as wide spread. The presence of distance, hybrid and on-line Ph.D. programs are a relatively newer phenomenon in higher education. Programs that are offered appear to be programs in nursing and in information technology related areas, with few in traditional educational areas of study. In fact, there has been some resistance to hosting these types of programs among traditional research university faculty. Singleton and Sessions (2010) in a review of studies on the participation of faculty in non-traditional and distance doctoral programs, found both intrinsic interests and institutional factors as major influences in the wil-

lingness and resistance of faculty to participate in these types of programs.

Fast forward to 2013, distance/hybrid programs are facing the challenges of innovation in the midst of reduced institutional resources and resisting perceptions associated with change. For example, some programs are challenged by the resistance of faculty to see the value and understand the need for new ways of delivering doctoral education, arguing that they take more time and there is inadequate financial incentive to engage in these programs (Singleton & Sessions, 2011). Another challenge is the need for faculty to adopt new pedagogies in the use of technology and non-face to face instructional and advising approaches. These challenges are exacerbated by faculty's sense that there is little institutional support and training for their extra effort (Pachnowski & Jurczyk, 2003). It is interesting to note from our experience that the desire to hang on to the old paradigm of how to conduct doctoral education has become disguised under the myth of questionable quality. There is the continued belief that face to face interaction between students, advisors and faculty is the only way to conduct doctoral education. Some have even sought to diminish the value of this new approach to program delivery, by suggesting that meeting the needs of students in terms of convenience somehow challenges the notion of rigor. In reality, there does not appear to be any evidence that these assumptions are necessarily true. In fact, the opposite has been found. In a series of studies by Allen and Seaman (2003, 2004, 2005, 2008) findings indicate that learning outcomes for distance instruction were ranked equal to face to face courses. And there is some evidence that they may be surpassing traditional face to face instruction. This may be due to a number of factors including the improvement in technology.

Those who have ventured out into this arena of hybrid or distance program offerings appear to be doing so for a number of different reasons. Some doctoral programs have been mandated to do so by their governing boards and institutional leadership as a means of improving access (Rubin, 2013). Some doctoral programs see this pool of students to be a new source of untapped revenue and seek to augment shrinking institutional resources (Rubin, 2013). In other cases, the faculty understand that the increased costs of education is requiring a shift in the paradigm of how students access doctoral studies, especially education, where most older students cannot afford to forgo full-time employment to engage in doctoral studies full-time (Koehler et al., 2013). Some also see the development of distance programs as a way to adapt to the reality that the proportion of traditional doctoral students is diminishing, and the number of non-traditional doctoral students is becoming more prominent in higher education (Singleton & Sessions, 2011).

As our understanding of program assessment is becoming more refined, issues about pedagogy, faculty engagement and program structure are increasingly becoming important and central to educational programs. As a result, program assessment includes a focus on the delivery of programs and the components that deliver the curriculum. Some recent assessments of non-traditional doctoral programs indicate that the overall success of programs, the rate of graduation, satisfaction of students and the long term success of students is as much dependent on how programs and curriculum are delivered as the curriculum itself (Bollinger & Halupa, 2012).

This article focused on a distance Ph.D. program that was developed to specifically address the needs of working mid-level administrators in higher education, who want to pursue a Ph.D. and at the same time remain employed full-time.

2. Brief Description of the Methodology

The intrinsic single case study (Stake, 1995) provided the general framework for the study. The study was bounded by the parameters of the case: The Education Leadership Distance Ph.D. Program, located at a Research University in the Western US. Multiple sources of information were utilized in the study: program descriptive data, data regarding participant characteristics, outcome data, and participant survey data. The survey data included an opportunity for the collection of responses to open-ended survey questions. The following are the open-ended categories of questions that were presented to the participants: Recruitment and Selection, Pre-Orientation and Orientation, Ongoing Communications and Expectations, Mid-Year Campus Program, Campus Residency, Curriculum/Course Feedback, and an opportunity was given for any additional comments.

The written responses to the open-ended questions were compiled and a question based inductive coding approach (Lewis & Silver, 2007) was utilized to organize the participant's feedback into a thematic structure. Prior to presenting the resulting thematic structure, a program description, the characteristics of participants and traditional outcome data are presented to insure context for the themes developed through the analysis of the responses.

3. The Higher Education Leadership Program Description

The Higher Education Leadership doctoral specialization was initiated in the summer of 2008. The program was designed to serve the needs of mid-level higher education practitioners/administrators who desire to achieve a Ph.D. while remaining in full-time employment. The design for the program grew out of data from surveys and discussions with higher education administrators from around the country, along with the experiences of faculty who had served in senior leadership roles in colleges and universities.

3.1. The Program Objectives and Design

The Higher Education Leadership specialization was designed to meet the needs of persons interested in leadership positions within administration at higher education institutions. The program specifically enables current practitioners and administrators to develop the competencies and improve practice in order to become more accomplished leaders and to enable them to seek more advanced leadership roles within higher education.

The programs objectives include:

- To provide a comprehensive doctoral curriculum that develops the competencies needed to successfully and ethically lead higher education institutions.
- To develop research knowledge and skills to enable practitioners and administrators to become scholar/practitioners and expand the knowledge base related to higher education organizations, practice and outcomes.
- To provide opportunities to explore and develop ways to strengthen commitment to access, learning, institutional mission, quality and educational outcomes.

The program consists of 60 hours beyond the master degree, 30 hours of content focused on administrative issues and competencies, and 30 hours of research focused on research competencies and guidance in writing a dissertation. Students are also required to take prelim exams before they can propose their research dissertation topic to their committee, and also are required to submit findings of their dissertation for publication in a referred journal in their field.

The program is organized as a cohort model where students engaged in course work in a pre-determined, 2 courses, 3 credits per course, for 6 credit hours per semester. The courses are mapped out across the 4 years of the program. Another 3 hour course is held in the summer for a total of 15 credit hours in a calendar year over 4 years. At the end of the course work the student takes a prelim exam and then advances to candidacy to write a dissertation. The specific topic of the dissertation is determine with the advisor and then refined with the student's full committee. The program expectations are that students will finish in 5 to 6 years, and they must be completed by the time the 10^{th} year is realized.

The hybrid instructional delivery process consists of enrollment in two classes that meet each week on the same night, using video conferencing, and alsoan on-campus course for 6 - 7 days in the summer. The video conferencing enables students to interact in real time and visually see and connect with each other and the instructor during the interactions. The software also enables the use of slides, video feed and a chat space for ongoing interaction. Students are able to conduct presentations and the process is set up to enable groups to break out from the main instruction to engage in small group interaction.

Students also meet each week in smaller regionally derived cohort groups of 4 - 5 students for an hour for each course. The meeting time is determined by the students according to their schedules and these meeting are also conducted through the use of video conferencing. During these meetings the students work on assigned group projects from their courses and also address other class related activities. Every class is structured so there is some version of group projects assigned as part of the course work. These projects can be case studies, group presentations, problem solving exercises, and project development activities to name a few possibilities.

Students come to campus twice each year. They come to campus every summer to participate in an intense 6 - 7 day course which occurs in a face to face modality. Students are sent reading and pre-course materials a few months before class begins so they are prepared to participate in the summer course. They also have time while on campus to meet face to face with advisors, access other campus based services, and meet the faculty for their fall classes. Students return to campus each January for a two day program that consists of workshops that assist them in using the electronic data bases in the library, using electronic data analysis software, discussing dissertation issues with faculty and their cohorts, dealing with logistical issues, and meeting their faculty for spring classes.

Advising is conducted using a variety of methods including; face to face interaction, video conferencing, emails and texts, as well as the telephone. Traveling to campus twice a year also enables the advising process. Students have an academic advisor and a 4 person committee, which includes the advisor. Meetings and defenses can also be held in person or using video conferencing.

3.2. The Admission Process

Admission to the program is the result of an extensive review process by a team of faculty that review all collegiate academic work, GRE scores, a statement of personal and professional goals, prior and current professional work experience and references. The requirements for admission and for graduation are the same as those of students who are engaged in a Ph.D. program in residence on campus. The program has received between 64 (the first year) and 120 applications each of the last six years. The GRE was required for the first time for the 2013 cohort. Applicants are finally admitted after a faculty member agrees to work with them as their academic advisor.

The program has admitted between 12 - 20 applicants to the program annually. The program admitted 14 students in the first cohort group and one student withdrew after the first year due to personal issues. Since the first cohort group, the program admitted a 2009 cohort of 15, a 2010 cohort of 20, and a 2011 cohort of 16 students. One student took a year leave in the 2009 cohort, and another in the 2010 cohort. They have both since returned to continue their program with the following year's cohort. No new students were admitted in 2012, and 12 new students were admitted in the 2013 cohort group. The 2013 cohort is in their first year of the program and has not been engaged in the annual assessment process. This assessment includes the data gathered on the 2008 cohort, the 2009 cohort, the 2010 cohort, and the 2011 cohort groups which total 64 students.

3.3. Demographics/Characteristics of Participants

The students from the four cohort groups included in this study, reflected a very diverse student mix by gender, race, and types of institution where they work (See **Table 1** and **Table 2**).

Table 1. HEL admitted students gender and race/ethnicity.

Cohort Groups	Gender		Race/Ethicity				
	M	F	AfA	H	AsA	NA	C
2008 Cohort	3	11	3	2	1	1	7
2009 Cohort	8	7	3	0	2	1	9
2010 Cohort	8	12	1	2	0	1	16
2011 Cohort	7	9	0	1	1	0	14
Total	26	38	7	5	4	3	45

Table 2. Type of institution employing HEL students.

Type of Institution	Cohort Group			
	2008	2009	2010	2011
Research	6	9	5	6
Comprehensive	6	5	5	4
Liberal Arts	0	0	7	3
Community College	1	1	1	1
Professional School	0	0	1	2
Other	0	0	1	0
Total	13	15	20	16

Students in the program have been essentially mid-level practitioners/administrators across the varied types of administrative roles found on college campuses. They ranged in age from late 20 s to mid-50 s. They resided in 34 states across the US. This level of diversity has been intentionally built into the program and has shown to be a very valuable source of student engagement and self-reported enhancement of their learning. These factors are reported more extensively in the following sections.

4. Program Outcomes

4.1. Program Retention

Retention to graduation is a major goal of this program and efforts are made by faculty and the program chair to provide support and assistance to students to enable them to continue in the program. Like any program that takes five plus years to complete, life gets in the way and students find themselves in situations that can easily cause them to drop out. Over the five years the students in this program have experienced a number of serious issues including family deaths, illness, loss of jobs, and divorce, etc. and they have demonstrated remarkable resilience to moving forward in the program. The level of motivation to continue has remained high and students have experienced tremendous support and assistance from their cohort members and the faculty.

To date, only one student has withdrawn from the program and another student appears to be behind in making sufficient progress toward program completion. This resulted in a 98.5% rate of program retention over the full five years of the program. It also reflects an annual retention rate of 98.5% after the first year, 100% after the second and third year, a 96.92% retention rate the fourth year and a 100% retention rate after the fifth year. (Two students, one from 2009 and one from 2010 left the program for a year and returned the following year, and their stepping out of the program for a year is indicated in the 4th year retention rates).

4.2. Progress toward Degree Completion

Currently the four cohort groups are all making progress toward attaining their degrees or have graduated. Only one student does not appear to be making timely and sufficient progress toward completing the Ph.D. At this point two cohort groups have moved through the course and prelim process. **Table 3** indicates the cohort groups and where they stand regarding progress toward completing their degrees.

Eighteen students have graduated or defended their dissertations by the fall of 2013. Another 8 students from both cohorts are in the final stages of writing their dissertations and most of these students will be completed by spring/summer of 2014. The 2011 cohort is still taking courses and most of the 2010 cohort group has taken the prelim exam, but some have not finished defending them as of December 2013.

4.3. Promotions and Higher Level Positions

One factor often involved in program assessment is the issue of student placement into professional or faculty roles once they complete their degrees. In this program, the students are already employed full-time, generally in mid-level positions or higher, and placement to jobs is not really an outcome variable. However, students have indicated in their goal statements that they entered the program with the hope that completion of the Ph.D. would place them in a position to secure a promotion or a higher level position in a different institution. Over the course of the program's five years of operation, 32.81% (21 students) have been promoted within their institu-

Table 3. Cohort progress toward a degree.

Progress	Cohort Groups			
	2008	2009	2010	2011
Completed Ph.D.	8	10	0	0
Writing Dissertation	5	3	0	0
Completed Prelims	13	13	15	0
Not Completed Prelims	0	1	5	0
Taking Courses	0	0	0	17

tions and another 43.75% (28 students) have secured a higher level position at another institution, for a total of 76.56% (49 students) enrolled in the program. This number breaks out as 92.30% (12) of the 2008 cohort, 64.28% (9 students) for the 2009 cohort, 65% (13 students) for the 2010 cohort, and 82.35% (14 students) for the 2011 cohort.

5. Qualitative Assessment and Thematic Structure

Each year beginning with the 2009 summer, the returning cohort groups completed a survey indicating to what extent their educational goals and expectations were being met by the program and also regarding their perceptions of the various aspects of the program, specifically the program's communications, advising, classes, technology, and the cohort model, as well as the summer and winter programs on campus. These assessment surveys were designed to provide the program with information about how the program was working and if there were ways that the program could be improved. For the summer of 2009, 14 surveys were submitted; for summer 2010, 28 surveys were submitted; for summer 2011, 47 surveys were submitted and in 2012, 48 surveys were submitted for a total of 137 surveys.

The written responses were compiled and a question based coding strategy was utilized (Lewis & Silver, 2007) to organize the inductive analyses to the responses. The questions were primarily directed at the components of the program; however students made comments about other issues and components of the program as they answered the specific questions and these comments were included in the analysis. The following thematic structure organized the responses to the questions: Meeting the students' educational goals, communications, advising, instruction, technology, the cohort model, and face to face interaction. The results have been used to restructure aspects of the program as it developed. Review of the year to year assessment was also used to gauge whether the same or new issues were raised during the assessment. The following provides a thematic structure of the summary of the findings from the survey responses gathered from the students over five years.

5.1. Meeting the Students' Educational Goals

One of the most important central elements of the program was ensuring that the students' educational goals and expectations were being met by the program. The students were asked to comment on the extent that the program was meeting their expectations and goals and second, what could be done to better address their educational needs related to the program. Students were nearly unanimous about the program meeting their goals and expectations. They commented on the structure of the program, the courses, the competency of the instructors, and the flexibility of the program, all being part of their very positive experience. They especially commented that the theory to practice curriculum and the cohort model were two components of the program that were very important to them and exceeded their expectations. Only one student indicated that the program was meeting individual goals and expectations in some ways and not in others. The student did not elaborate on what was not meeting her/his goals.

5.2. Communications

Communications is a very critical and central component of this hybrid doctoral program. Students are located all over the United States, and beginning in 2013 in Peru and Egypt, and are only on campus, for the most part, twice a year. As a result effective and timely communication is a critical issue for these students as they engage in the program. At present students receive regular communications from the program, from the School of Education, from the Graduate Programs office and from the University. The vast majority of such communication is handled through email, although the students use Skype, Web Ex, Face Book, Twitter, texts and telephone.

Each year, the students have been asked if the communication they have received has been both timely and thorough. Overwhelmingly, the students have responded through each of the 5 years of assessment, that communications has been both thorough and timely. Only two students had issues with the communications, indicating that the contact email address was incorrect and another that it would be helpful to be able to know the dates for winter and summer campus visits much earlier.

5.3. Advising

Overall most students indicated that their advising was sound and very helpful, and they appreciated the guid-

ance they were receiving. Most felt they received timely and helpful advice. They felt for the most part that their advisors were readily accessible and they reached them by phone, emails, Skype and texting during the year and met with them when they were on campus.

However, this was one of the areas within the survey that changed over the years. Initially, a few students expressed concerns regarding access to their advisors and the unevenness of advising efforts on the part of faculty. Most were happy with the advising they were receiving, but some expressed concern about the failure of faculty to communicate with them when they tried to contact them. They expressed distress with some advisors not being available to meet with them when they were on campus, and the timeliness of faculty returning emails and feedback on papers and questions. In some cases, students indicated a desire to change advisors. Issues were addressed on an individual basis with each student who expressed concerns.

Issues around prelims, research and the role of the advisor began to appear more frequently in the students' comments as the first and second cohort groups grew closer to initiating their research, engaging in prelims and crafting their proposals. These issues focused more on the advising process and rumors around passing and failing prelims, rather than on the quality and access of advisors. It has become increasingly clear that the advising process for this program is very individualistic for both the student and the faculty member, and the basis of success has been finding a good fit not only on the basis of research interests, but also on the basis of temperament, and expectations regarding communication and interaction.

5.4. Instruction

The students overwhelmingly indicated that they felt their classes were appropriate, rigorous and enabled them to take theory and apply it directly to their roles in their workplaces. They were pleased with the enhancements that had occurred to upgrade technology, and overall were pleased with the caliber of instruction they received. They expressed really enjoying the learning process and the fact that the program aligned the content to their perceived needs and research interests.

5.5. Technology

The use of technology and having adequate technology that enables and enhances the learning and engagement process is essential to a doctoral program and even more so to a hybrid distance delivery program. Technology used in the program has been enhanced over the years as technology has improved. The program began with a primarily audio interaction and has moved to audio video conferencing over the last four years. This program component received increasingly stronger satisfaction on the part of the students as the technology was enhanced over the six years of the program. There have been times when the technology has not worked, but for the most part this has not appeared as a major issue with students. What appeared to concern them more was the faculty's ability to use the technology appropriately. Some indicated that there should be more training for newer faculty who were not familiar with the technology. Students expressed appreciation for the ability to use different media to interact with faculty and to use the video conferencing system for meetings, faculty conferencing, prelim exams and dissertation defenses. Students overwhelmingly felt the technology was user friendly and they received very prompt assistance when they had technology issues.

5.6. Cohort Model

The cohort model was overwhelmingly the most appreciated component of the program. Students expressed consistently very strong support for this component of the program. They felt that they learned a lot from their interactions with classmates who were in other institutions around the country, as well as in different roles and levels of responsibility. They expressed that the most important aspect of the cohort model was the formation of a strong support system that provided friendship and professional networking in addition to being a strong component of the learning process.

5.7. Face to Face Interaction

As a hybrid program, students come to campus twice a year to interact face to face with each other and with faculty. During the summer visit they participate in an intense 3 credit course and nearly all of them stay together in campus/community based housing. The program begins with the first summer course and this enables the

students to get to know each other and find a connection to the program. The students indicated that this is a very satisfactory component of the program and that it has enabled them to meet and then re-engage with each other, faculty and the institution on a regular basis. They have indicated that the courses they have experienced during this component were taught well and that they provided quality learning experiences. They also appreciated the time for face to face interaction with their advisors and with some of the campus services, such as the library.

The winter campus program is the other face to face interactive time students have on campus each year. This component of the program was designed into the program to provide an opportunity for an additional annual face to face interaction, as well as to provide time for advising, faculty interaction, and trainings that would generally be available informally for students who are residential doctoral students. This meeting time is not credit bearing and include training in the use of electronic data bases and electronic software for data analysis, discussions about prelim preparation, proposal development and dissertation issues. Students also have the opportunity to meet their faculty and participate in their first spring semester classes.

This component of the program has been the most controversial. Initially it was only a day and a half in length and it has now evolved to two full days, based on student feedback. Students have felt that the time should be longer and more credit bearing given the costs to travel to campus. Some would like to have a full class just as the summer and others would like more class sessions from their spring courses. They concur that the idea of having time to reconnect to each other and to faculty has been a plus. As they have moved closer to the prelim and dissertation process they have appreciated the time to focus on the logistic of these processes during this component of the program.

6. Summary of the Program Assessment

Attrition in doctoral programs in higher education have historically been a major issue with rates running between 40% to 50% in traditional doctoral programs, and according to Terrell (2005) attrition rates for distance doctoral programs can be 10% to 20% higher. Studies have shown the that majority of doctoral students are capable of completing their degrees and many of the barriers that students face pertain to institutional and program characteristics (Bowen & Rudenstine, 1992; Golde, 2005; Lovitts, 2001; Smallwood, 2004).

Based on the assessment, this higher education leadership Ph.D. program appears to be perceived by students to be meeting their educational goals. For the most part they were very satisfied with the various components of the program. They appreciated the access they have had to faculty and to their advisors, and they believed the communications they received were both timely and thorough. They believed the faculty competently delivered courses that provided quality learning, and enabled them to apply theory to their practice.

It appears that this mode of delivery has successfully assisted in ensuring that students are making timely progress toward completing their degrees. Both retention rates and graduation rates are considerably higher than would be expected based on research related to traditional and distance education rates. Students also reported that participation in this program has enabled them to advance their careers to other leadership roles.

The final aspect of the study was to explore whether the findings, particularly those associated with the thematic structure fit any theory or conceptual framework of learning that would allow the findings "lessons learned" to be incorporated. The incorporation of single case findings into an established conceptual framework is the essence of analytical generalization, "the inquirer links the findings from a particular case to a theory" (Schwandt, 1997: p. 2). Blocher's (1974) ecological learning theory was the theory chosen to link our findings. This theory has been used to describe a number of educational programing efforts from assessing the elements of a rope courses (Banning & Burfeind, 1993) to evaluating digital media applications (Folkestad & Banning, 2010).

7. Blocher's Ecological Learning Theory

Blocher's (1974) model stems from an ecological foundation and looks at learning from the perspective of what conditions in the learning or program environment need to be in place for individual learning to flourish. The outcome data that has been presented suggested that the Higher Education Leadership Distance Ph.D. program has been successful in retention, progress toward degree, and promotions and advancement in higher level positions. The last question to be addressed was: Does the thematic structure associated with the processes and procedures of the program of study link to the conditions noted as necessary for learning and development posited

by the Blocher model?

The assessment of this program revealed that the various components of this program were contributing to the creation of an effective learning environment in each of the three subsystems of opportunity, support and reward as noted as necessary by Blocher (1974). The Blocher model notes the importance of seven conditions that need to be present in the learning or program environment and these seven conditions are organized as the subsystems within the ecology. The first subsystem is the *opportunity subsystem* and it provides the task structure within the program environment. In order for the tasks within the program or learning environment to contribute to learning or positive outcomes of the program these tasks should provide conditions for involvement, challenge, and integration.

The second Blocher subsystem is the *support subsystem*. The support subsystem focuses on the support for students within a learning or program environment. This subsystem has two conditions: structure and support. The condition of structure provides a more advanced framework about the content of the learning that was previously available to the student and the condition of support is best described by the program environment providing a diversity of supportive relationships.

The final subsystem of Blocher's model is the *reward subsystem*. Reward in the Blocher model has two conditions: feedback and application. Feedback is simply the program environment giving information to participants that is continuous and accurate. It is through this feedback that new learning and successes are recognized. The condition of application directs attention to how the learning can be employed in applied settings. The new learning is utilized in the intended setting.

The following section considers each of the ecological subsystems and associated conditions in relation to the themes of the thematic structure representing the qualitative analysis of the participant's responses. The conditions are presented in italics followed by the themes within the parenthesis.

7.1. Conditions of the Opportunity Subsystem (Involvement, Challenge, Integration)

It appears that the design of the program which was intended to provide opportunities for working practitioners and administrators to secure a Ph.D. and continue to work full time was successfully meeting the expectations of participants and was also addressing their desired educational goals. The program participants believed the program has enabled them to be *involved* (*meeting the students' educational goals*) directly in the learning process in a way that matches their goals, their abilities, as well as their other professional and personal responsibilities. They believe the curriculum and the caliber of the faculty provided engagement in learning, and presented *challenges* (*instruction and advising*) that enhanced their learning and enabled them to effect theory to practice that is useful and timely to their work as well as their professional development. The blended nature of the program, with both face to face interaction on campus twice a year, and video conferencing for weekly course interaction, along with the use of other technologies have enabled an *integrated* (*communications, technology and winter/summer programs*) learning experience that permitted them to access a quality Ph.D. program that would not be available to them in a pure face to face environment. These combined program modalities has also allowed time for both personal and group based reflection. The continued enhancement of technology and attention to ongoing communications has improved their opportunity for interaction and involvement in the curriculum and in the shared learning experience with other students. The students specifically felt the opportunity to learn from and with other students from across the country was an important contributor to their learning.

7.2. Conditions of the Support Subsystem (Structure and Support)

The program participants have overwhelmingly indicated that the cohort model, the curriculum, advising process, and use of interactive technology as components of the program that have provided a *structure* (*instructions, advising, and communications*) for effective learning and has enabled them to feel ongoing *support* (*cohort model, communications, and summer/winter program*) for their learning and advancing their educational goals. Students believe that the programs' communication and their individual interaction with advisors and program faculty, as well as with other students through their participation in the cohort model, had greatly enhanced their ability to stay focused and be retained in the program. The actual numbers of students making progress to graduation and the high retention rates are also indications of student satisfaction and personal success. The regular interaction with others in an increasingly open and supportive environment has enabled them to understand theory and to apply it more effectively to their roles and responsibilities and as a result, has enhanced their leadership abilities.

7.3. Conditions of the Reward Subsystem (Feedback, Application)

As a distance blended program the focus on effective communication with students, and between faculty and students was reported as a strong component of the program at all levels. The students have indicated that the level of ongoing communication and *feedback* (*communications and advising*) was very strong and effective. The students reported that they felt privileged to be part of the program and were highly motivated to be engaged because of their commitment to other students and to the program. They expected and were dependent on ongoing feedback from faculty and from other cohort members related to their work and their work as team members. The cohort component of the program has enabled strong relationships between students and with faculty. These relationships have promoted honest interactions that have enabled openness to change and new dimensions of learning and new approaches to *applying* (*nature of the participant's dual roles*) their learning to practice. The application aspect of the program was built in by the very nature of the fact that the participants of the program were at the same time students of higher education leadership and "doing" higher education leadership in their respective administrative roles on their campuses. The condition of application was built into the program by virtue of participants holding campus leadership positions where they engaged in theory to practice.

8. Application for Distance Delivery Doctoral Programs

As new approaches to the delivery of educational graduate programs emerge, it will be increasingly clear that there is no one way to deliver quality education. This higher education leadership program appears to be providing a successful alternative for non-traditional working professionals to access doctoral education through a non-traditional, hybrid distance approach. This success has important linkages to Blocher's ecological model and has demonstrated successful program assessment. The results support the need for distance delivery of academic programs to consider both the content and the program's structure as important components in realizing student success.

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