

## Using Institutional Data in Curricular Decision Making

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*The purpose of this quantitative study was to provide empirical support for institutional decisions regarding the formulation, implementation and delivery mode of campus curricula at a Midwest branch campus. An ancillary goal of the study included the collection of student data on their preferred curricular delivery method—online or hybrid versus face-to-face—comparing general education courses and the students' major program of study. A review of the literature revealed a conflicting body of quantitative and qualitative studies suggesting a plethora of characteristics that influence a student's decision to enroll in an online course as well as the institution's decision to fund development of online learning. Adding to the institutional dilemma is how to accommodate individual faculty's desire to deliver online or hybrid courses. In an era of shrinking financial support for public higher education and increased competition from for-profit institutions, the administrative and pedagogical implications of these institutional decisions are critical to both the immediate and long-term success of the campus. In this study, the author surveyed 280 higher education students enrolling at the branch campus of a Midwest university in the fall of 2012. Descriptive statistics and t-tests were used to analyze the data. The findings suggest student online and hybrid delivery preferences are different between general education and major program of study courses. Additionally, the author found student online and hybrid delivery preferences differ by academic rank—contradicting previous findings found in the literature review. The author concludes with a discussion of the study's limitations, implications for practitioners, and suggestions for future research.*

### Introduction

In 2008, then Chancellor Eric Fingerhut of the Ohio Board of Regents, reported an historic initiative launched in the state of Ohio as a component of the *Strategic Plan for Higher Education*—conversion of all academic calendars to the semester system. One primary goal of a consistent academic calendar was to facilitate student transfer among Ohio's colleges in a strategic attempt to reduce dropouts or stopouts thus

increasing student retention and persistence toward degree completion. After decades of functioning on the quarter system, 17 of Ohio's colleges and universities were challenged to complete this semester transition by the academic term beginning in the fall of 2012.

### *Statement of the Problem*

Institutions converting their academic calendars faced a number of daunting challenges in this process but conversely these challenges provided an opportunity for the institution to enhance institutional efficiencies and align their curricula to better serve the educational needs of a student population in the midst of a demographic transformation. In an era of shrinking public fiscal support for higher education, institutional efficiencies assume an even higher priority in institutional decision-making. Certain higher education researchers such as Banta, Busby, Kahn, Black, and Johnson (2007) posit "Shrinking or static budgets are affecting higher education worldwide, as both public and private institutions face difficult choices that may determine their very survival" (p. 183). The problem for Ohio's colleges and universities converting to the semester calendar transcended the simple amplification of existing courses from 10 to 15 weeks. For example, at the author's campus under the quarter system the academic calendar for an enrollment of approximately 2,500 students averaged around 420 sections per quarter or over 1,200 sections per year. If the institution had ample faculty, staff or classrooms under the semester calendar, the institution could offer approximately 600 sections per semester term—not possible given current resources. In view of these infrastructure limitations, institutional decision-makers looked to distance learning as a methodology to increase curricular efficiency given the growth of online learning.

At the time of this transition in Ohio, the demographic composition of the student population in America remains in the midst of a transformation. The National Center for Education Statistics in 2008 reported postsecondary enrollments in the nation at approximately 18.2 million students (NCES 2009-20). Over the past 35 years, the demographic profile of the undergraduate student population has evolved with the proportion of females comprising 57% of the total student population in 2007 representing 29% of the total growth in full-time enrollments compared to 22% for males (NCES 2009-20). Additionally, the proportion of enrollments for undergraduate students between the traditional college age

of 18-24 decreased during the time period of 1997 to 2007, representing only 16% of the increased enrollments, while enrollments of non-traditional students above the age of 24 comprised an increasing number of full-time enrollments. NCES projects participation in undergraduate education will continue to evolve with females projected to comprise 60% of all enrollments by 2016 and projected college enrollments to increase an additional 10% by 2017 (NCES 2009-20). Given this decrease in traditional age college students, growth of non-traditional students and the access mission of branch campuses, institutions looked to online learning as a viable solution. Some researchers such as Howell, Williams and Lindsay (2003) posit many higher education practitioners believe online learning was appropriate for non-traditional students given their demographic characteristics. As can be seen from Table 1, data derived from the *Beginning Postsecondary Students Longitudinal Study: 2004/2009 (BPS:2004/2009)*, traditional age students are least likely to enroll in an online course when compared with non-traditional age students.

Table 1: *Percentage Distribution of First-time Beginning Student Participation in Distance*

**Education by Individual Characteristics**

Individual Characteristics	Any Course Distance Education			
	No	Yes	SE	Critical Value
<b>Estimates</b>				
Total	90.8	9.2	0.40	
<b>Age First Year Enrolled</b>				
18 or younger	92.6	7.4	0.56	3.94*
19	90.3	9.7	0.94	2.12
20-23	90.6	9.4	1.15	2.13
24-29	88.6	11.4	1.17	0.82
30 or older	86.8	13.2	1.36	###
<b>Gender</b>				
Male	91.5	8.5	0.50	1.77
Female	90.2	9.8	0.54	1.77
<b>Race/Ethnicity</b>				
White	90.4	9.6	0.48	###
Black	92.2	7.8	0.98	1.65
Hispanic	90.8	9.2	1.09	0.34

Asian	92.2	7.8	1.49	1.15
High School Grade Point Average				
0.5 – 0.9 (D- to D)	‡	‡	‡	‡
1.0 – 1.4 (D to C-)	93.4	6.6	2.79‡	‡
1.5 – 1.9 (C- to C)	91.1	8.9	3.01‡	‡
2.0 – 2.4 (C to B-)	92.4	7.6	0.91	1.27
2.5 – 2.9 (B- to B)	90.7	9.3	1.06	1.71
3.0 – 3.4 (B to A-)	90.5	9.5	0.81	0.81
3.5 – 4.0 (A- to A)	92.3	7.7	0.67	‡‡‡
Veteran Status				
Not a veteran	90.8	9.2	0.40	0.64
Veteran	88.8	11.2	3.09	
Disability 2004: Any				
No disability	90.8	9.2	0.43	0.94
Disability	90.8	9.2	1.17	
Weighted Sample Sizes (n/1,000s)				
	3,746.3			

*Source:* Derived from U.S. Department of Education National Center for Education Statistics, Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:04/09). ‡ Reporting standards not met. Computation by NCES PowerStats on 12/15/2010. \* $p < 0.0125$ . ‡‡‡ Reference group for Bonferroni familywise comparisons.

The challenge for higher education administrators was then to determine how best to align student course delivery preferences with institutional offerings given the fact that the latest research indicated 90.2% of first-time beginning students did NOT enroll in an online course nationwide. At the author's institution, the decision to deliver a course in an online or hybrid format seemed to follow faculty desire to instruct online or hybrid courses without any regard for student preferences or empirical support for this institutional decision from the literature. In fact, anecdotal evidence at the author's campus in the fall of 2012 suggested students in freshman composition classes desired more face-to-face delivery when nine (9) out of the (15) freshman composition classes were delivered by the campus in an online/hybrid format.

## Literature Review

The literature is replete with information on the growth of online learning in both private and public higher education institutions. The National Center for Education Statistics (NCES), reported that during the 1997-1998 academic year 62% of public two-year institutions and 78% of public four-year institutions offered any distance education courses. However, these numbers increased during the 2000-2001 academic year to 90% at public two-year institutions and 89% at public four-year institutions (NCES 2004-077). By the 2000-2001 academic year, enrollments had increased to 20% at public two-year institutions and 28% at public four-year institutions. The economic downturn of this past decade continues to fuel this growth. According to Allen and Seaman (2010) online enrollments continue to grow at rates exceeding the total rate of the higher education student population with over 4.6 million students enrolled in at least one online course.

Given this dramatic growth in online learning and the necessity to maintain institutional efficiencies, the question for higher education administrators and faculty becomes how does the institution decide which courses to deliver online or what student characteristics indicate a preference for online or hybrid delivery? Lieu (2011) developed an initial propensity model to predict a student's preference for online learning with statistical significance for five of the seven variables in the study. According to Lieu, students are more likely to prefer online learning or take an online course "...if he/she feels comfortable with technologies, has taken online courses before, works full-time, and learns better with more self-control on the pace of learning" (p.100). Similarly, Zacharis (2011) posits that a student's "...commitments outside university, technology competence and travel difficulties..." (p. 796) relate more closely to online instructional preferences than learning styles. Overcoming personal barriers that may inhibit enrollment in traditional classes defines the non-traditional student's preference for online or hybrid course delivery but what about the influx of traditional age students?

Other studies within the literature have attempted to identify student characteristics that influence course delivery preference. Wang, Shannon and Ross (2013) explored the relationship between student characteristics, self-regulated learning, technology self-efficacy, and satisfaction of learning outcomes. Similarly, Little-Wiles and Naimi (2011) investigated student perceptions and experiences using the university's

online learning management system—a necessary component of any online course. While others such as Mann and Henneberry (2012) suggest course discipline as an influencing factor. Business majors were the most likely to prefer online delivery while engineering majors or graduate students in biochemistry, biology, and botany were the least likely to enroll in an online course (Mann & Henneberry, 2012). Mann and Henneberry further posit that academic rank is an influencing characteristic with freshman and sophomores more likely than juniors and seniors to prefer online delivery—an assertion that contradicts the anecdotal evidence experienced by the author.

In addition to student characteristics, the literature contains examples of quantitative and qualitative studies investigating other factors thought to influence student decisions to enroll in online or hybrid course delivery. Richardson (2012) explored the role of tuition in student enrollment decisions and student attainment. Although Richardson's study focused on an open university in the United Kingdom, the issue of tuition may be particularly relative as a selection preference at universities or colleges in the United States with differential tuition rates for online versus traditional face-to-face classes. According to Bristow, Shepherd, Humphreys and Ziebell (2011) in their study of online versus traditional student perceptions and attitudes, time and location constraints were identified as factors influencing a student's decision to enroll in an online or hybrid course. Intuitively, greater access is perceived by students choosing online courses to be an influencing factor identified throughout the literature in a number of studies. A more compelling finding by Bristow et al. (2011) with implications for regional campus stakeholders was the negative perception of online education by over 30 percent of the respondents that had completed at least one online course. This finding illustrates a gap in the literature and the need for further research to determine factors influencing student perceptions of online education—from instructional design to curricular scheduling by administrators.

Hoyt and Howell (2012) posit in their study of branch campuses that "At a minimum, best practice would require branch campus administrators to know their students and why they attend in order to better serve their needs" (p.114). In the absence of a clear model to guide institutional curricular decisions other than faculty or administrative preferences, the author concluded a quantitative study of student preferences was necessary to provide empirical support and guidance for campus decision-makers.

Aligning campus curricula with student course preferences is a necessary component to enhance institutional efficiencies, foster student enrollments, and support student retention.

## **Method**

### *Research Questions and Hypotheses*

The purpose of this study was to explore student preferences in course delivery methods from a comparative context between traditional face-to-face instruction and online learning environment. The theoretical significance of this research is to provide empirical data on student online and hybrid course preferences to contribute to a perceived gap in this emerging body of research literature. Additionally, this study has practical significance for higher education practitioners with administrative responsibility for scheduling as well as pedagogical implications for faculty responsible for delivering the curricula. Based on the literature review, the following research questions were developed:

1. Are there differences in the course delivery preferences of public higher education students by academic rank?
2. Are there differences in the course delivery preferences of public higher education students by day of the week?
3. Are there differences in the course delivery preferences of public higher education students by time blocks?
4. Does the campus currently maintain the appropriate blend of traditional and online course offerings?
5. Are there differences in the course delivery preferences of public higher education students by academic discipline?

### *Research Design*

Based on the research questions, the author selected a non-experimental survey research design as the methodology for this study. This design enabled the author to collect data using an Internet survey and to delimit the population sample to currently enrolled students at the author's branch campus. Additionally, this methodology lends itself to quantitative data analysis consistent with the identified research problem. Further, this research design enabled the author to insure the informed consent of target population participants protecting the autonomy of students electing to participate in the study and satisfying ethical

considerations consistent with contemporary ethical research guidelines. Student research participants did not receive any compensation for their participation in this study. The author used descriptive statistics, cross tabulation and one sample t-tests between proportions to analyze the data.

### *Participants*

The target population for the survey data consisted of a convenience sample of public higher education students from a branch campus of a Midwest university where the author worked as associate dean. At the time of orientation and enrollment, students were asked to participate in the study by student services staff. Students who did not attend orientation or those who enrolled online were not solicited for participation. The overall sample consisted of 280 students. The author did not collect demographic information from the sample since it was not germane to the research questions and research hypotheses.

## **Results**

### *Discussion of the Findings*

The purpose of this study was to explore student course delivery preferences from a comparative construct between traditional face-to-face instruction and online course delivery. To answer this research question the author developed five (5) primary research questions. As mentioned in the methodology section, the author cross-tabulated the data based on the respondent's answer to the question "Have you ever enrolled or completed an online or blended (combination face to face and online delivery course?) to differentiate student preferences based on previous experience with an online course or hybrid course. The following section discusses results of each research question.

### *Research Question One*

Are there differences in the course delivery preferences of public higher education students by academic rank? As can be seen by in Table 2, the highest percentage of survey respondents who had previously enrolled in an online or hybrid course were seniors. Table 2 represents the percentage distribution of student responses to the question "What is your academic rank?"



Table 2: *Cross Tabulated Percentage Distribution of Student Preferences by Academic Rank (N=266)*

	Any Course Online Learning		Critical Value
	Yes	No	
Academic Rank			
Freshman	16.6 (36)	56.0 (28)	8.506*
Sophomore	25.0 (54)	26.0 (13)	0.228
Junior	23.6 (51)	8.0 (4)	4.711*
Senior	34.3 (74)	10.0 (5)	6.396*
Graduate	0.5 (1)	0.0 (0)	0.0

NOTE: Percentages may not round to 100 due to a qualitative option provided to the respondent. \*two-tailed  $p < 0.5$ .

This finding directly contradicts the assertion by Mann and Henneberry (2012) in their research that undergraduate students such as freshman and sophomores were much more likely to desire to enroll in an online course. Further, this finding supports the anecdotal evidence received by the associate dean and student services from freshman and students that the fall 2012 schedule contained too many hybrid freshman composition courses and not enough face-to-face offerings.

#### *Research Question Two*

Are there differences in the course delivery preferences of public higher education students by day of the week?

The findings for this research question support previous studies in the literature suggesting a link between previous experience with online delivery and student online course preferences. Table 3 represents student responses to the question, "My preferred DAY OF THE WEEK for scheduling classes."

Table 3: *Cross Tabulated Percentage Distribution of Student Preferences by Day of the Week (N=267)*

	Any Course Online Learning		Critical Value
	Yes	No	
Week Day			
Monday/Wednesday	29.8 (64)	36.5 (19)	1.349
Tuesday/Thursday	25.1 (54)	40.4 (21)	3.146*

Friday/Saturday	1.9 (4)	5.8 (3)	5.056*
Online	33.0 (71)	13.5 (7)	4.876*

NOTE: Percentages may not round to 100 due to a qualitative option provided to the respondent. \*two-tailed  $p < 0.5$ .

As can be seen from Table 3, students with previous experience enrolling in online courses remain the most likely to enroll in an additional online course. While preferences between Monday/Wednesday and Tuesday/Thursday remain relatively the same, both groups indicate little preference for Friday or Saturday coursework.

### *Research Question Three*

Are there differences in the course delivery preferences of public higher education students by time blocks?

Similar to days of the week, students were asked for their preference in course schedules by time block. Table 4 represents the percentage distribution of student responses to the question, "My preferred class TIME BLOCK assuming a 3-credit hour class."

Table 4: *Cross Tabulated Percentage Distribution of Student Preferences by Time Block (N=267)*

Time Block	Any Course Online Learning		Critical Value
	Yes	No	
8:00 AM – 9:20 AM	7.9 (17)	3.8 (2)	1.973*
9:30 AM – 10:50 AM	20.0 (43)	15.4 (8)	1.267
11:00 AM – 12:20 PM	20.5 (44)	5.8 (3)	4.889*
12:30 PM – 1:50 PM	13.5 (29)	15.4 (8)	0.578
2:00 PM – 3:20 PM	6.5 (14)	5.8 (3)	0.326
3:30 PM – 4:50 PM	8.4 (18)	13.5 (7)	1.791
After 5:30 PM	23.3 (50)	17.3 (9)	1.546

NOTE: Percentages may not round to 100 due to a qualitative option provided to the respondent. \*two-tailed  $p < 0.5$ .

Of interest to higher education practitioners with scheduling responsibilities is the distinction between morning, afternoon and evening classes that provides insight into student scheduling preferences. The

highest observed distribution preferring evening classes (23.3%) are students who have enrolled in an online or hybrid class.

#### *Research Question Four*

Does the campus currently maintain the appropriate blend of traditional and online course offerings?

Another critical component of institutional efficiency is the appropriate blend of online/hybrid and face-to-face course offerings. Table 5 represents student responses to the question, "As a campus, I believe (name omitted) offers the appropriate blend of face-to-face and online/hybrid classes (Select the response that BEST aligns with your beliefs)."

Table 5: *Cross Tabulated Percentage Distribution of Student Preferences by Blend of Course Offerings (N=264)*

	Any Course Online Learning		Crit. Value
	Yes	No	
Appropriate Blend			
Yes	50.0 (105)	59.3 (32)	1.451
No, more face-to-face	13.8 (29)	25.9 (14)	3.179*
No, more blended/hybrid	13.3 (28)	1.9 (1)	4.968*
No more ONLINE	22.9 (48)	13.0 (7)	2.722*

NOTE: Percentages may not round to 100 due to a qualitative option provided to the respondent. \*two-tailed  $p < 0.5$ .

The observed percentage distribution of both groups, those who have enrolled in online/hybrid classes and those who have not, indicated an overall satisfaction with the blend of course offerings at the time of the survey. A particular point of interest for the campus is the preference of those who have NOT enrolled in any online learning with a desire for more online classes rather than hybrid course offerings.

#### *Research Question Five*

Are there differences in the course delivery preferences of public higher education students by academic discipline?

One of the major goals of this study was to determine if there were differences in student preferences for online/hybrid or face-to-face classes between general education courses and the students' major program of

study as there is a conflicting body of research within the literature. Table 6 represents the percentage distribution of responses to the question, "What is your PREFERRED course delivery method for the following GENERAL EDUCATION, ELECTIVE OR CORE MAJOR classes (Select ONLY one response per row)."

Table 6: Cross Tabulated Percentage Distribution of Student Preferences by Course Subject

	Any Course Online Learning		Crit. Value
	Yes	No	
<i>Social Sciences (N=268)</i>			
Face to Face (Traditional)	39.1 (84)	77.4 (41)	6.213*
Blended (Hybrid)	22.8 (49)	15.1 (8)	2.064*
Online	25.1 (54)	5.7 (3)	6.108*
No Preference	13.0 (28)	1.9 (1)	4.915*
<i>English (N=271)</i>			
Face to Face (Traditional)	41.3 (90)	75.5 (40)	5.492*
Blended (Hybrid)	33.0 (72)	13.2 (7)	5.013*
Online	22.0 (48)	11.3 (6)	3.106*
No Preference	3.7 (8)	0.0 (0)	0.0
<i>Math (N=273)</i>			
Face to Face (Traditional)	75.5 (166)	79.2 (42)	0.492
Blended (Hybrid)	12.3 (27)	7.5 (4)	1.793
Online	10.5 (23)	11.3 (6)	0.283
No Preference	1.8 (4)	1.9 (1)	0.0
<i>Natural Sciences (N=264)</i>			
Face to Face (Traditional)	54.5 (115)	81.1 (43)	3.816*
Blended (Hybrid)	23.7 (50)	11.3 (6)	3.483*
Online	14.2 (30)	5.7 (3)	3.154*
No Preference	7.6 (16)	1.9 (1)	3.058*
<i>Arts &amp; Humanities (N=271)</i>			
Face to Face (Traditional)	34.9 (76)	67.9 (43)	5.667*
Blended (Hybrid)	28.4 (62)	20.8 (11)	1.794
Online	22.9 (50)	5.7 (3)	5.592*

No Preference	13.8 (30)	5.7 (3)	3.072*
<i>Foreign Language (N=268)</i>			
Face to Face (Traditional)	70.8 (153)	82.7 (43)	1.580
Blended (Hybrid)	9.3 (20)	11.5 (6)	0.791
Online	8.8 (19)	5.8 (3)	1.289
No Preference	11.1 (24)	0.0 (0)	0.0
<i>Core Major Course (N=268)</i>			
Face to Face (Traditional)	47.7 (102)	77.8 (42)	4.566*
Blended (Hybrid)	27.1 (58)	11.1 (6)	4.388*
Online	18.2 (39)	3.7 (2)	5.335*
No Preference	7.0 (15)	7.4 (4)	0.173

NOTE: Percentages may not round to 100 due to a qualitative option provided to the respondent. \*two-tailed  $p < 0.5$ .

There are a number of significant observations to note in Table 6. First, although the majority of students who have previously taken an online/hybrid class prefer social science classes in a traditional setting, the percentage is remarkably smaller than those students who have never taken an online course. The same observations hold true for English, Arts and Humanities, Core Major Courses and to a lesser extent Natural Sciences. However, when we examine the distribution of preferences in Math, students who have previously enrolled in an online class believe those courses should be offered in a traditional format (75.5%) at a percentage very similar to their counterparts who have never taken an online class (79.2%). A similar observation can be noted in Foreign Languages and to a lesser extent Natural Sciences.

## Discussion

The findings of this study met the primary goal of the author to contribute to the emerging body of literature on student preferences for online and hybrid course delivery as recommended by Hoyt and Howell (2012). Further, the study contained a number of significant implications for the audience served by the Association of University and Regional Campuses of Ohio (AURCO). First, the findings support the use of empirical data to guide the institution in the formulation, development, and delivery of online and hybrid content—not simply economics or faculty preference. Institutions should consider student academic rank and academic discipline

as primary factors in their decision to develop and deliver an online or hybrid course. Contrary to the findings of Mann and Henneberry (2012), this study found statistically significant differences and highest preferences for online or hybrid delivery among senior students—not freshman. This finding is not incongruent with researchers such as Lieu (2011) or Wang, Shannon, and Ross (2013) who posit technology self-efficacy as a factor associated with student preferences for online or hybrid course delivery. Although freshman students may have exposure to a diversity of technology in their personal lives, intuitively we could posit their aggregate familiarity with the institution's learning management system would increase with academic rank—along with preference for online or hybrid course delivery. A premise supported in the literature by researchers such as Zacharis (2011) who found seniors more likely to have commitments outside the university and be more familiar with institutional technology such as Blackboard or Moodle than freshman.

Analogous to academic rank, academic discipline should be a primary factor in institutional curricular decision-making when determining the type or number of online or hybrid courses to schedule. Although the data was cross tabulated for analysis between students who had never enrolled in an online or hybrid class and those who had enrolled in at least one online or hybrid class, both subsets of the study sample revealed statistically significant preferences by academic discipline. Study respondents indicated a high preference for the delivery of Math in a traditional face-to-face mode—75.5% for those students who self-reported enrollment in an online or hybrid class and 79.2% for those students without online or hybrid experience. This contrasts with Social Sciences where 39.1% of online or hybrid respondents desired traditional classes compared with 77.4% of respondents with no online or hybrid experience. Foreign language, natural sciences and to a lesser degree English remain disciplines requiring thoughtful analysis in concert with academic rank during the scheduling process.

Supporting this careful analysis by the institution are students' responses when questioned as to the appropriateness of the campus schedule. Nearly half of the online or hybrid students felt the schedule did not contain the appropriate blend of course delivery options compared to forty percent of the traditional students. Not surprisingly, almost 26% of the traditional students desired more face-to-face classes while nearly 23% of the online or hybrid students desired more online or hybrid options. In the

same way, student preferences for time, day and week yielded predictable results. Among the students who self-reported no online or hybrid enrollments, however, over 13% indicated a desire for more online or hybrid courses.

In the final analysis, the study accomplished its primary goal to provide empirical data to support institutional curricular decision-making. As public higher education in Ohio continues to compete for dwindling fiscal resources and emergent technologies continue to facilitate online or hybrid course delivery, institutions should strive to improve the strategic development of these courses mindful of student preferences. It is critically important to the sustainability of the campus that faculty course delivery preferences align with student preferences when determining the course schedule.

### **Implications for Policy and Practice**

Although there are a number of implications for policy and practice, it is first necessary to recognize the limitations inherent in this study. First, the convenience sample collected for this study contained over 200 online students affecting the generalizability of the findings between the sample and our target population of regional campus students. Similarly, the sample lacked demographic information as to age and gender that should be corrected in future research. Although age and gender were not specific variables of interest in this study, it is important to assess these variables to enhance the ability to generalize these findings beyond the author's campus. Similarly, future research should strive to increase the sample size to enhance the reliability and validity of future results.

Based on the findings of this study, institutional decision-makers should work with faculty to develop policies that recognize the significance of student academic rank and discipline in the determination of courses delivered in an online or hybrid mode. Stated differently, there remains a significant number of students who desire online or hybrid courses within all academic ranks and disciplines. The challenge for administrators and faculty is to resist the pressure to develop online or hybrid courses based solely on economic or faculty preferences but align faculty and student preferences for the mutual benefit of all. Not all freshman desire an online or hybrid English composition, Math or Natural Sciences course—but some do. Researchers such as Hoyt and Howell (2012) suggest, it is imperative that

the institution consider student preferences in order to appropriately meet their needs—especially when scheduling online or hybrid courses.

No discussion of the implications of online or hybrid course delivery to policy or practice is complete without an inherent reference to the institution's learning management system. Technology self-efficacy remains a consistent characteristic identified in the literature (Little-Wiles & Naimi, 2011). It stands to reason the more the institution enhances knowledge of the learning management system, the more likely students will opt for online or hybrid courses. Conversely, faculty can enhance knowledge of the institution's learning management system when they enrich their traditional classes with technology. Thoughtful administrative decision-making and pedagogical commitments to enhance learning through technology can meet the immediate and long-term curricular needs of the regional campus—to the benefit of our students.

## References

- Allen, I. E., & Seaman, F. (2010). Learning demand: Online education in the United States, 2009. Newburyport, Sloan Consortium Inc.
- Banta, T. W., Busby, A. K., Kahn, S., Black, K. E., & Johnson, J. N. (2007). Responding to a fiscal crisis: a data driven approach. *Assessment & Evaluation in Higher Education*, 32(2), 183-194.
- Bristow, D., Shepherd, C. D., Humphreys, M. & Ziebell, M. (2011). To be or not to be: That isn't the question! An empirical look at online versus traditional brick and mortar courses at the university level. *Marketing Education Review*, 21(3), 241-250.
- Hoyt, J. & Howell, S. (2012). Why students choose the branch campus of a large university. *The Journal of Continuing Higher Education* 60, 110-116.
- Howell, S. L., Williams, P. B., & Lindsay, N. K. (2003). Thirty-two trends affecting distance education: An informed foundation for strategic planning. *Online Journal of Distance Learning Administration*, 6(2), 1-23.
- Little-Wiles, & J., Naimi, L. L. (2011). Student perceptions of and experiences in using the blackboard learning management system. *Global Education Journal*, 4, 147-155.



- Liu, L. (2011). Factors influencing students' preference to online learning: Development of an initial propensity model. *International Journal of Technology in Teaching and Learning*, 7(2), 93-108.
- Mann, J. R., & Henneberry, S. R. (2012). What characteristics of college students influence their decisions to select online courses? *Online Journal of Distance Learning Administration*, 15(5).
- Richardson, John T. E. (2012). Face-to-face versus online tuition: Preference, performance, and pass rates in white and ethnic minority students. *British Journal of Educational Technology*, 43(1), 17-27.
- Snyder, T. D., Dillow, S. A., & Hoffman, C. M. (2009). *Digest of Education Statistics 2008* (NCES 2009-020). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C.
- U.S. Department of Education, National Center for Education Statistics. *Beginning Postsecondary Students Longitudinal Study: 2004/2006 (BPS:2004/2006)*. Washington, DC: U.S. Government Printing Office, 2007.
- Wang, C. H., Shannon, D. M., and Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education* 34(3), 302-323.
- Wirt, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., & Tobin, R. (2004). *The Condition of Education 2004* (NCES 2004-077). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office, 2004.
- Zacharis, N. Z. (2011). The effect of learning style on preference for web-based courses and learning outcomes. *British Journal of Educational Technology*, 42(5), 790-800.

### **Personal Biography**

Dr. James R. McKean is an Associate Professor of Law Enforcement Technology and Criminal Justice at Ohio University Chillicothe. Additionally, he serves as the Regional Campus Program Coordinator of Law Enforcement Technology providing programmatic oversight and support to the three regional campuses offering the Law Enforcement Technology degree. He instructs Criminal Justice Research Methods and Quantitative Applications in Criminal Justice for Ohio University's Bachelor of Criminal Justice degree as well as courses in the Forensic Chemistry Program at the Athens campus.