A HYBRID EDUCATION MODEL: EXPERIMENTAL RESULTS USING INTRODUCTORY LEVEL MARKETING COURSES

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ABSTRACT

The primary goal of this study was to develop a standardized and effective education model that includes both teaching and mentoring components based on the Hybrid Education Model (HEM). This study was designed to test (1) if the HEM could serve as a department store for lecturers, and (2) if a rebuilt model could perform effectively in both education and mentoring during introductory marketing or business courses. Experimental results using an introductory business course indicate that the application of the HEM resulted in a significant increase in knowledge acquisition when compared to student performance in previous course offerings.

INTRODUCTION

Instructors face various challenges in order to increase levels of student satisfaction and engagement (Tinto, 1993; Pascarella & Terenzini, 2005). This can be even more challenging for instructors who are constantly teaching introductory marketing or business courses.

We have made and presented a standardized and effective education model that includes both teaching and mentoring components, especially for introductory level courses. We call the model as the Hybrid Educational Model (HEM).

This time, our objectives are to test (1) if HEM could serve as a department store for lecturers, and (2) if the model we rebuilt could perform effectively, in both education and mentoring, in introductory marketing or business courses at a small liberal arts college.

In order to test the model's impact on educational performance, the authors' chose three educational goal areas. The first area is *education performance*, where students are expected to learn basic knowledge, technical skills, basic application expertise, and a complete process of business and marketing (J.D. Day & Cordon, 1993; Stephani, 1998; Trotter, 2006; and Jeltova, et al., 2007). The second area is *mentoring performance*, where students are expected to establish appropriate relationships with their instructors, while maintaining "personal level communications" with the instructors (Light, 2004; and Cox & Orehovec, 2007). The third area is *student satisfaction*. The authors propose that satisfied students will enjoy improved learning experiences throughout the course, positive attitudes and behaviors towards advanced business courses in general, increased retention, and "shorter time to degree." (J.D. Day & Cordon, 1993; Jeltova & et al., 2007).

BLENDING EDUCATION AND MENTORING FOR INTRODUCTORY BUSINESS AND MARKETING COURSES AT LIBERAL ARTS COLLEGES

Gillmor (1999), Vinten (2000), and Chew and McInnis-Bowers (2004) found that persons who have sufficient liberal arts education, or "blending" education, tend to show strong competitive advantages in managerial flexibility in constantly changing marketing environments.

Chew and McInnis-Bowers (2004) pointed out that the "blending" education would enhance students' capability to utilize various information (applicability) acquired through liberal arts education, once employed. Specifically, the authors postulate that blended education can ease the development of basic managerial skills, including observation, assessment, flexibility, adaptation, learning, emotional intelligence, leadership, and effective communication.

Cox and Orehovec (2007) pointed out the importance of mentoring and educational interactions between faculty members and students, in order to enhance learning performance from "blending" education.

Light (2004), believes successful mentoring relies not only on mentors, but also on mentees and their respective attributes. According to Light, students should be certain about the academic and personal "meanings of learning" first and foremost. Secondly, they should possess basic and effective time management skills, allowing them to have sufficient time to work on their tasks. Thirdly, they should be able to appreciate the benefits of delayed gratification, and the positive impact from both short-term and long-term perspectives.

HYBRID EDUCATION MODEL (HEM)

HEM contains various preconditions in making education and mentoring effective in the related introductory courses. The authors believed HEM could continuously synchronize both the blending education and mentoring components throughout an introductory course. Interestingly, this synchronization has also been suggested as an integral part of marketing education standards by the Texas State Board for Educator Certification (Texas Board for Educator Certification, 2003).

The mentoring components of HEM focus on supporting and increasing both the students' self-efficacy with this subject matter, and their learner satisfaction with the course experience as a whole. These components also aim at accelerating the student learning progress, via the relative benefit of the four levels of interaction explored in the data, especially through the in-class and out-of-class group activities with instructors. Specifically, both the out-of-class mentoring and the out-of-class group activities, promise to be very effective (Smart, Kelley, & Conant, 1999; Hernandez, 2002; Laverie, 2006; Boud & Falchikov, 2006; Bicen & Laverie, 2009).

We redesigned this course in order to apply the HEM education model and subsequently test its effectiveness in blending education and mentoring. The HEM application included one "ice breaking" activity, two research projects, four in-class workshops, two out-of-class workshops, and a final comprehensive exam. The ice breaking activity was the first group activity, using cross-disciplinary teams, and theoretically helped create a comfortable environment in support of good rapport between participants and instructors (Hunt & Laverie, 2004;

Yong, 2005; Laverie, 2006; Wheatley, 2006; Bicen & Laverie, 2009).

METHOD

Data was collected through fifteen questions, utilizing a standard Likert scale (1-5). Additionally, the authors used both summative and formative forms of assessment to explore the relationship between project performance and exam performance. Questionnaires were considered a formative tool, while the final exam was considered a summative tool (York, 2003; Bloxham & West, 2004).

Data was analyzed using a pooled-variance t-test, to examine the difference between two mean values from the two separate sections (Berenson, Levine, & Krehbiel, 2006; Wagner, 1992).

Since the t-test simply measures the compared mean values of section one and section two, with the absence of any predicted direction, a two-tailed non-directional analysis, employing both 0.05 and 0.01 levels of significance, was chosen. In addition to the t-test, the observed significance level of our mean values was also explored. This level could be measured by p-value. Our critical p-value was 0.05 given sufficient evidence existed to conclude that the mean value of the first section is not equal to the mean value of the second section, especially if the p-value is smaller than 0.05 (Berenson, Levine, & Krehbiel, 2006; Wagner, 1992).

RESULTS

As tables 1, 2, 3, and 4 indicate, our students in both sections self-reported high levels of learning, relative to market research and business development planning. In addition to their self-reported learning performance, they reflected confidence in their market research outcomes. Their business development plan confidence has high, but did not reach statistically significant levels.

The researchers believe the students realized the importance and meaning of market research projects and related business development planning. They reflected reasonable gains in confidence with further applications of learned knowledge, in market research and business development planning, as applied to varied situations. Such confidence is likely to evolve from their recognition of the practical (applied) usefulness of the class-related experiences to their future career(s). In fact, multiple student comments encouraged the instructor to keep these projects into the next semester.

While our education model, within the HEM framework seemed to perform well, some concerns about the benefits from the cross-disciplinary team activities, and acquisitions of technical knowledge and skills, emerged. The students were highly satisfied with two workshops for each project. However, they were less than fully satisfied with the out-of-class workshops.

Although not statistically significant, the authors believe they have evidence reflecting a student preference for the in-class workshops. Anecdotally, the researchers received numerous student e-mails and office visits expressing concern about the out-of-class workshops. Almost all of the concerns surrounded a preference to perform all workshops during the class, and if the instructor could change the out-of-class workshops to the in-class workshops. The researchers noticed that the students struggled with making arrangements for the out-of-class workshops, especially because the cross-disciplinary teams required extra coordination. Since team members were in different departments, they had different time schedules, making it very difficult for both the students and the instructor to make coordinated arrangements for the out-of-class workshops.

Learning through cross-disciplinary team activities is considered one of the primary "student-focused" advantages of business education at smaller liberal arts colleges. While the authors did not statistically confirm these benefits, from the cross-disciplinary team activities this time, the students reported enjoying their experiences with cross-disciplinary teams and related activities.

While the students reflected confidence in their acquisition of basic technical knowledge and skills, via market research and business development planning, the authors were unable to statistically confirm these results. Concurrently, the authors needed to confirm any increase in the students' level of learning these business related concepts. In order to see this, average scores of the final comprehensive exams were reviewed by comparing the two sections to previous exams in the same class. The experimental sample of students reflects increased knowledge acquisition, when compared to students in the past semesters. The average score of the first section was 89, while the average score of the second section was 93.15. These average scores reflected increases when compared to scores of 80.81 and 82.21, respectively, in the fall semester of 2007, with scores of 89.14 and 84.39 in the spring semester of 2008, and 84.21 and 86.67 in the fall semester of 2008.

The results confirmed that students generally comprehended instructor expectations, shared information with team members, established personalized levels of communication with the instructor, and were satisfied with the projects. Although not statistically confirmed, the students also seemed to be continuously motivated. Lastly, the results confirmed that the students strongly recommended keeping the same projects and methods of instruction for future semesters.

SUMMARY

The authors believe a principled argument has been made in supporting the HEM framework as a valid educational model, when applied to business and marketing educational environments in small liberal arts institutions. Furthermore, the model satisfies both educational and mentoring requirements in the small liberal arts college environment. However, caution should be taken given the authors' experience with the practical difficulties with out-of-class workshops and cross-disciplinary team activities. Instructors should be encouraged to develop their own style in creating "personal level" communications in class. Additionally, they should monitor cross-disciplinary team activities to assess students' real-time level of satisfaction and engagement.

APPENDIX

Table1: Results of the pooled-variance t-test for the project 1

Questions	T-stat 0.05	T	P	T-stat 0.01	T	P
Final	1.986	-2.71*	0.008*	2.631	-2.71**	0.008**
Learned basic process of market research (E)	1.986	-3.11*	0.002*	2.631	-3.11**	0.002**
Understood the instructor's expectations to this project (M)	1.986	4.609*	0.0000*	2.631	4.609**	0.0000**
Learned technical knowledge and skills of market research (E)	1.986	-0.821	0.4137	2.631	-0.821	0.4137
Gained confidence in your market research (E)	1.986	-2.036*	0.0446*	2.631	-2.036	0.0446
Get motivated for this project (M)	1.986	0.3753	0.7082	2.631	0.3753	0.7082
Enjoyed personal level communication with the instructor (M, S)	1.986	3.8059*	0.0003*	2.631	3.8059**	0.0003**
Information sharing among team members (M)	1.986	3.998*	0.0001*	2.631	3.998**	0.0001**
Understood value and meaning of market research (E)	1.986	3.733*	0.0003*	2.631	3.733**	0.0003**
This project should be kept for the next semester (E, S)	1.986	2.93*	0.0042*	2.631	2.93**	0.0042**
All out-of-class workshops should be done in class (E, M)	1.986	0.085	0.9323	2.631	0.085	0.9323
Enjoyed working with my cross-disciplinary team members (E)	1.986	-1.174	0.2431	2.631	-1.174	0.2431
This project will be useful in my career (E)	1.986	-2.752*	0.0071*	2.631	-2.752**	0.0071**
Satisfied with workshops (M, S)	1.986	-4.037*	0.0001*	2.631	-4.037**	0.0001**
Satisfied with this project (S)	1.986	2.799*	0.0062*	2.631	2.799**	0.0062**
Gained confidence in another market research (E)	1.986	-4.541*	0.0000*	2.631	-4.541**	0.0000**

Note. E = Educational performance; M = Mentoring performance; S = Learning satisfaction
*p = .05 (Two-tailed). **p = .01 (Two-tailed).

Table 2: Descriptive statistics for project 1

Questions	Sample	Mean	SD	Kurtosis	Skewness
Final	44	89	6.8318	2	-1.3896
	48	93.15	7.77	1.42	-1.46
Learned basic process of market research	44	4	0.5888	1	-0.5325
	48	4.4	0.64	-0.56	-0.59
Understood the instructor's expectations to this project	44	5	0.7624	2	-1.4838
	48	4.33	0.63	-0.61	-0.39
Learned technical knowledge and skills of market research	44	4	0.685	-1	-0.6161
	48	4.13	0.82	3.14	-1.22
Gained confidence in market research	44	4	0.8053	-1	-0.3026
	48	4.35	0.84	5.07	-1.9
Get motivated for this project	44	4	0.7721	-1	-0.1574
	48	3.94	0.76	-0.42	-0.2
Enjoyed personal level communication with the instructor	44	5	0.7313	2	-1.4947
	48	4.44	0.68	-0.44	-0.82
Information sharing among team members	44	5	0.5865	0	-1
	48	4.44	0.74	1.26	-1.25
Understood value and meaning of market research	44	5	0.6647	0	-0.9953
	48	4.5	0.62	-0.23	-0.84
This project should be kept for the next semester	44	5	0.5865	0	-1
	48	4.6	0.71	3.39	-1.9
All out-of-class workshops should be done in class	44	3	1.025	-1	0.3937
	48	2.98	1.21	-0.66	0.27
Enjoyed working with my cross-disciplinary team members	44	4	0.9732	2	-1.5386
	48	4.25	1.06	1.22	-1.42
This project will be useful in my career	44	4	0.7537	0	-0.5343
	48	4.42	0.71	-0.56	-0.81
Satisfied with workshops	44	4	0.68	2	-1.0133
	48	4.56	0.65	0.37	-1.21
Satisfied with this project	44	5	0.5906	0	-0.7095
	48	4.63	0.67	1.15	-1.57
Gained confidence in another market research	44	4	0.6954	0	-0.8318
	48	4.6	0.57	0.37	-1.13

Table3: Results of the pooled-variance t-test for the project 2

Questions	T-stat 0.05	T	P	T-stat 0.01	T	P
Learned basic process of business planning (E)	1.986	4.282*	0.0000*	2.631	4.282**	0.0000**
Understood the instructor's expectations to this project (M)	1.986	4.565*	0.0000*	2.631	4.565**	0.0000**
Learned technical knowledge and skills of business planning (E)	1.986	2.291*	0.0242*	2.631	-2.291	0.0242
Gained confidence in your business planning (E)	1.986	-1.567	0.1205	2.631	-1.567	0.1205
Get motivated for this project (M)	1.986	-0.211	0.8327	2.631	-0.211	0.8327
Enjoyed personal level communication with the instructor (M, S)	1.986	3.771*	0.0002*	2.631	3.771**	0.0002**
Information sharing among team members (M)	1.986	-1.915	0.0586	2.631	-1.915	0.0586
Understood value and meaning of business planning (E)	1.986	4.708*	0.0000*	2.631	4.708**	0.0000**
This project should be kept for the next semester (E, S)	1.986	2.927*	0.0043*	2.631	2.927**	0.0043**
All out-of-class workshops should be done in class (E, M)	1.986	-0.231	0.8176	2.631	-0.231	0.8176
Enjoyed working with my cross-disciplinary team members (E)	1.986	-1.172	0.2441	2.631	-1.172	0.2441
This project will be useful in my career (E)	1.986	-2.563*	0.012*	2.631	-2.563	0.012
Satisfied with workshops (E, M, S)	1.986	4.054*	0.0001*	2.631	4.054**	0.0001**
Satisfied with this project (S)	1.986	3.415*	0.0009*	2.631	3.415**	0.0009**
Gained confidence in another business planning (E)	1.986	4.044*	0.0001*	2.631	4.044**	0.0001**

Note. E = Educational performance; M = Mentoring performance; S = Learning satisfaction
*p = .05 (Two-tailed). **p = .01 (Two-tailed).

Table 4: Descriptive statistics for project 2

Questions	Sample	Mean	SD	Kurtosis	Skewness
Learned basic process of business planning	44	4	0.5865	-1	-0.4478
	48	4.54	0.62	0.06	-1.01
Understood the instructor's expectations to this project	44	5	0.6287	0	-0.882
	48	4.38	0.67	1.86	-1.05
Learned technical knowledge and skills of business planning	44	4	0.7338	1	-0.9037
	48	4.35	0.73	0.95	-1.01
Gained confidence in business planning	44	4	0.7078	-1	-0.5484
	48	4.27	0.92	3.04	-1.62
Get motivated for this project	44	4	0.9103	-1	-0.5732
	48	4.04	0.9	1.04	-0.82
Enjoyed personal level communication with the instructor	44	4	0.6988	-1	-1.0707
	48	4.42	0.77	-0.7	-0.89
Information sharing among team members	44	4	0.685	-1	-0.6161
	48	4.31	0.85	0.46	-1.09
Understood value and meaning of business planning	44	5	0.627	0	-1.068
	48	4.29	0.8	-0.04	-0.85
This project should be kept for the next semester	44	5	0.7309	2	-1.579
	48	4.56	0.71	2.77	-1.71
All out-of-class workshops should be done in class	44	3	1.1281	-1	0.0395
	48	3.06	1.34	-1.16	-0.01
Enjoyed working with my cross-disciplinary team members	44	4	0.9783	2	-1.3693
	48	4.25	1.06	1.22	-1.42
This project will be useful in my career	44	4	0.7338	1	-0.7142
	48	4.4	0.76	0.74	-1.12
Satisfied with workshops	44	4	0.6249	0	-0.6288
	48	4.54	0.65	0.18	-1.13
Satisfied with this project	44	5	0.57933	1	-1.2197
	48	4.56	0.65	0.37	-1.21
Gained confidence in another business planning	44	5	0.6283	0	-0.973
	48	4.46	0.65	-0.36	-0.81

References available upon request