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Congruence between Course Modality and Professor Communication: A Study of Pedagogical Impact using Sales Techniques

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Congruence between Course Modality and Professor Communication: A Study of Pedagogical Impact using Sales Techniques

Cindy B. Rippé, Suri Weisfeld-Spolter, Shannon Cummins and Yuliya Yurova

Purpose of the Study: Given the similarities between influencing others when teaching and when selling, this work explores student perceptions of selling techniques used by professors. This work investigates faculty instructional methods informed by the prospecting and follow-up sales process’s steps to positively affect student perceptions, and to attract and retain students in online and traditional formats. Selling efforts are developed, described, and examined to see how prospecting and follow-up can be used to increase course learning, retention, and subsequent course enrollment.

Method/Design and Sample: The study used a 2 (Professor Communication Type: Face-to-face vs. Virtual) by 2 (Selling Stage: Prospecting vs. Follow-up) within subjects experimental design with a third between subjects factor measuring Student Modality Type (Online vs. Ground). Student modality refers to the students’ preference for online or in-person classes. 274 completed surveys were collected from online and traditional business school students from two large U.S. universities in the southeast.

Results: The results suggest that applying steps of the sales process in the classroom positively impacts student perceptions relating to instructor responsiveness, pedagogical affect, and likelihood to enroll. These findings endure across course formats, before or during a class, and virtually or in-person. Importantly, we find if faculty match their communication methods (Face to face vs. Virtual) to the course modality type (Ground vs. Online) there is higher pedagogical affect from the sales techniques utilized.

Value to Marketing Educators: This work proposes a starting point for faculty engagement within the higher education marketing effort by utilizing personal selling techniques to appeal to online and traditional ground students. Examples of how educators can use sales techniques in the classroom are shared. The findings guide administrators in applying marketing concepts to higher education as a solution for enrollment and retention issues without micromanaging teaching methods, and also provide guidance for engaging student learning, using prospecting and follow-up techniques.

Keywords: Prospecting, Follow-Up, Pedagogical affect, Selling, Retention.

Declining enrollments, shrinking budgets, increased competition, and faculty and university cuts (Allen & Seaman, 2013; National Student Clearinghouse Research Center, 2015) are challenges necessitating a focused effort to recruit and retain students. This student focus is representative of a shift in higher education to a market orientation where academic actors adapt to consumer (student) needs (Helgesen, 2008). The shift in mindset to a market orientation has transformed higher education. Parents and students are treated as valuable prospects by college admissions and marketing departments; and nonacademic perks (eateries, extracurricular facilities) gain clout in in the school choice process (Chory & Offstein, 2016; Helgesen, 2008).

While the reality of market-driven academia is widely acknowledged in admissions offices, it is not so widely accepted within colleges and faculty offices. Faculty bemoan consumeristic students who seem to believe they are entitled to an “A” because they have paid registration fees for a class (Singleton-Jackson, Jackson, & Reinhardt, 2010). Singleton-Jackson et al. (2010) suggest that today’s students see themselves as consumers of knowledge, but professors do not see themselves as salespeople. “We want to teach scholars, not shoppers” (p. 354).

While there is much heated debate regarding the idea of the student consumer (Bay & Daniel, 2001; Clayson & Haley, 2005), what if opponents on both sides of the issue could agree with Singleton-Jackson...
et al.'s (2010) suggestion that students are, for the most part, behaving as consumers in the classroom? If students perceive themselves as consumers, can faculty better engage them by adopting a market orientated approach cognizant of student role expectations? In this work, we explore what happens when faculty adopt such an approach.

Narrowly, this paper shows that when consumers’ preference for course modality (Ground vs. Online) is congruent with professor communication methods (Face-to-face vs. Virtual) of sales techniques, higher pedagogical affect is observed. More broadly, we suggest that a sales orientation, where faculty utilize sales techniques to engage with student consumers is consistent with a market orientation applied to academia. Models of relational selling are focused on understanding consumers’ unique needs and providing customized solutions that benefit both parties (Jolson, 1997). If students view themselves as consumers—or even as a subset of consumers such as ground or online—faculty use of sales techniques as teaching tools may be an effective means of classroom communication when delivered in a congruent manner (Face-to-face or Virtual). The primary purpose of this study is to determine if faculty can use instructional methods informed by the prospecting and follow-up portions of the sales process to positively affect students’ perceptions.

**APPLYING MARKETING AND SALES CONCEPTS TO HIGHER EDUCATION**

This paper is founded on the marketing knowledge that consumers can be attracted and retained through marketing techniques based on the sales process. In applying this concept within teaching pedagogy, the approach views the professor/student interaction as a sales situation—complete with opportunities to enhance the sales experience and create satisfied customers (students) devoid of post-purchase regret, and likely to become repeat customers.

While unique in that this is the first paper to apply the sales process as an instructional teaching method, this work builds upon previous studies that apply marketing concepts to higher education such as using market segmentation (Ghosh, Javalgi, & Whipple, 2007) and services marketing concepts (Voon, 2007). Yet, the application of the personal selling process (sales process) to education is largely unexplored. Faculty members are in an ideal position to fill this void as they are the frontline service providers of higher education to college students (Vander Schee, 2010); just as salespeople are the frontline providers to customers in the marketplace (Román, 2003).

Selling and teaching share commonalities. The sales literature highlights the sales process, which engages a potential prospect by using a customer-centric approach (Dubinsky, 1981). Similarly, in teaching, Blumberg (2016) suggests that using a learner-centered approach engages students by helping them to realize the value of the content. Both selling and teaching attempt to engage the desired target in order to convince them of a value proposition. While professors are not salespeople, they do influence student perceptions, attitudes, and behaviors in measurable ways. Student experiences with professors can affect student socialization, motivation, and involvement (Chickering & Gamson, 1987; Weidman, 2006). Faculty build relationships with students that impact student success (DeAngelo, Mason, & Winters, 2016). Student perceptions of faculty enthusiasm (March 1984) and caring for students (Teven & McCroskey, 1997) drive student evaluations. Given the ways faculty can influence students and the similarities between influencing others when teaching and when selling, this work explores students' perceptions of selling techniques used by professors.

**BACKGROUND**

**Steps in the Sales Process**

The sales process includes: (1) prospecting, (2) preapproach, (3) approach, (4) presentation (5) handling objections, (6) closing, and (7) follow-up (Dubinsky, 1981). For this work, to discover if professors can use sales techniques to impact recruitment and retention, the prospecting and follow-up steps were operationalized following Dubinsky's (1981) seminal study. Dubinsky' (1981) framework is appropriate due to its wide acceptance and potential to engage students with sales techniques that can be customized to fit different teaching styles.

During prospecting, the first step of the sales process, “the salesperson searches for and identifies potential buyers who have the need, willingness, ability, and authority to buy the salesperson's offering” (Dubinsky & Rudelius 1980, p.66). Initially, prospecting may not seem applicable to the classroom since students are already registered; however, a student may be enrolled because the class is required and may not have a willingness to “buy the product” or learn. Additionally, students often enroll for more classes than they intend to take; trying out classes before the drop date passes, with the intention of refining their course selection early in the term (Hagedorn, Maxwell and Cypers 2007). Faculty can also prospect in current courses for students who will enroll in a future course. Word of mouth on campus and through websites like RateMyProfessor.com are realities (Casidy, 2014); and sales techniques can create professor brand preference. Although prospecting is not part of traditional teaching duties, it has the potential to increase enrollment and support retention, two key issues for higher education in today’s competitive profit and non-profit environment (Sandlin & Peña, 2014).

Follow-up is the last step of the sales process where “the salesperson tries to reduce the customer's post-purchase concerns, thereby developing a satisfied customer and increasing the chances of future repeat sales” (Dubinsky & Rudelius 1980, p. 66). Follow-up is a means of ensuring students’ learning and concept buy-in. Follow-up can occur across modalities. For example, instructors can post an announcement using
online channels including social media, or in-person efforts, to summarize the main points of the lesson and remind students why the lesson is important. Written communication in any channel can thank students for their engagement while simultaneously building rapport and previewing the next session’s product offerings/learning objectives. Utilizing this final step of the sales process can increase the likelihood of satisfied students who intend to use the knowledge and skills discussed in class.

HYPOTHESIS DEVELOPMENT

This paper examines professor use of prospecting and follow-up to determine impact on student perceptions. Pedagogical affect was chosen as the key dependent variable for both prospecting and follow-up as it is among the most widely researched outcomes of education and has been shown to have a direct effect on perceived student learning (Abrantes et al., 2007).

Prospecting, Responsiveness, Initial Pedagogical Affect, and Likelihood to Enroll

Prospecting is used in sales to find customers who have an interest, need, willingness, and the authority to purchase a product (Dubinsky, 1981; Ingram, 1990; Moncrief & Marshall, 2005). In a similar way, professors can use prospecting to find students who have an interest in enrolling in a class and learning what they are teaching. Dubinsky (1981) suggests that prospecting techniques are categorized by external sources, internal sources, and personal contact. Personal contact can be used as a prospecting tool for educators. For example, a professor can invite students to join a class by handing out flyers on campus that explain the benefits of taking an upcoming class. External sources, such as referral and community contact, are other prospecting techniques (Dubinsky, 1981). For example, a professor teaching online can email electronic invites regarding the next semester’s class, asking current students to forward the invite to friends.

Responsiveness and likelihood to enroll are the main outcomes of prospecting, as these constructs are strongly correlated with retention of students and are indirectly related to student learning (Abrantes et al., 2007). The conceptual model in Figure 1 presents prospecting and follow-up as antecedents of student’s perceptions; whereby prospecting leads to responsiveness, initial pedagogical affect, and likelihood to enroll. Follow-up leads to pedagogical affect, which is proposed to be higher (after the student experiences follow-up) than the initial pedagogical affect, which is measured after prospecting. Both follow-up and prospecting are moderated by student modality and professor communication type. Student modality is the students’ stated and historical preference for either in-person or online classes (ground vs. online). Professor communication type is the professor’s use of either in-person or electronic messaging (face-to-face vs. virtual).

Figure 1. Conceptual Model
Instructor Responsiveness

In the services literature, “responsiveness concerns the willingness of employees to provide service” (Parasuraman, Zeithaml, & Berry, 1985, p. 48). The construct addresses the employee’s timeliness, such as calling back quickly and providing prompt service. Providing prompt service is the definition of responsiveness as applied to professors (Abrantes, Seabra, & Lages, 2007) and is important to investigate given that today’s students demand prompt service (Singleton-Jackson et al., 2010). Students view responsive instructors in a positive manner, feeling cared for as a result of an instructor’s responsiveness (Aylor & Oppliger, 2003). Instructor responsiveness occurs when the instructor shows an understanding of other’s needs and conveys that understanding with empathy and active listening (Aylor & Oppliger, 2003). Instructor responsiveness is important in both online and ground classes, but online classes impair instructor responsiveness because the virtual environment prevents the sharing of gestures and other visual cues (Easton, 2003). Brodke and Mruk (2009) establish that online instructor’s responsiveness is expressed through online instructional methods. According to Aylor and Oppliger (2003), responsive instructors are more likely to engage in teacher-student interactions outside of class probably because in unfamiliar service settings, patrons have a tendency to act based upon available cues (Giebelhausen, Robinson, & Cronin, 2011), and when students perceive instructor responsiveness in class, they are more likely to approach instructors outside of class. Prospecting activities can be viewed as means of expressing caring about courses, materials, and students; which is shown to improve student perceptions of faculty (Teven & McCroskey, 1997). Thus, a professor who engages in prospecting will serve as a positive cue; and will be perceived as being more responsive able to meet the needs of both online and ground students.

- H1a: Prospecting will lead to an above average student perception of instructor responsiveness for both online and ground students.

Initial Pedagogical Affect

Pedagogical affect means a student has positive feelings about instructional methods used in a class (Abrantes et al., 2007). Indeed, positive teacher-student interactions increase student interest in a class (Paswan & Young, 2002); and by extension, may positively affect student interest in taking another class with that instructor. Pedagogical affect enhances learning outcomes and student perceptions of learning (Abrantes et al., 2007). When instructional methods that students prefer are used, increases in pedagogical affect occur (Young, Klemz, & Murphy, 2003). For example, Fife, Nelson, and Clarke (2014) report increases in pedagogical affect from using Twitter as an innovative instructional method. Additionally, when students see an involved professor, this perception has a positive impact on pedagogical affect (Frost, Matta, & MacIvor, 2015). Similarly, it is proposed that when a professor shows involvement by using prospecting with students, the effort will lead to a favorable impression of the professor’s instructional methods resulting in a positive initial pedagogical affect.

- H1b: Prospecting will lead to an above average initial pedagogical affect for both online and ground students.

Likelihood to Enroll

When online and ground students are choosing classes, they often rely upon word of mouth on campus (Casidy, 2014) and consult friends, academic advisors, other students, and rating websites before registering for classes (Hayes & Prus, 2014). Similarly, when consumers are searching for a service, they rely upon personal resources including friends and experts to advise them (Zeithaml, 1981). Students are shown to evaluate knowledgeable faculty favorably (Rubin 1981). Additionally, students are shown to have higher satisfaction with professors they view as enthusiastic (Marsh, 1984). We propose that prospecting may serve as a proxy, or signal, for both a professor’s knowledge or expert status, and their enthusiasm for the course and students. While all course choices are not based on preference (some are required), often there are many courses that will satisfy a given degree requirement or there are different faculty teaching the same course. Thus, we suggest that word of mouth, driven by prospecting activities, can influence some student course selection.

- H1c: Prospecting will lead to an above average likelihood to enroll for both online and ground students.

Follow-up and Pedagogical Affect

Follow-up is used to ensure customer satisfaction and inspire future business (Dubinsky, 1981; Ingram, 1990; Moncrief & Marshall, 2005). Dubinsky (1981) suggests different types of follow-up actions can occur thorough the following activities: customer service, customer satisfaction, and customer referral. Student-teacher interaction provides an opportunity to customize follow-up based upon the course modality and professor communication type. For example, following the reassuring customer activity (Dubinsky, 1981) for ground students, follow-up can be utilized at the start of a new class by summarizing the main points of the previous lesson and then asking for questions and concerns before moving on. For online students, follow-up can occur by using the sending thank you notes activity (Dubinsky, 1981) by emailing a note thanking students for participation, reviewing the main points of the lesson, and reminding the students why the learning was important. Follow-up encourages consumers who have a positive feeling towards a company to be more likely to engage in repeat business and maintain customer satisfaction (Dubinsky, 1981). In a similar way, it is suggested that the professor’s use of follow-up will encourage students to have positive feelings towards a class, otherwise known as pedagogical affect (Abrantes et al., 2007).
• H2: Follow-up will lead to an increase in pedagogical affect for both online and ground students.

In sales, it is well established that the more similar a prospect perceives the salesperson to be to themselves, the higher the likelihood that the sale will occur (Evans, 1963). This perceived similarity has been found to be congruent across categories such as physical characteristics (height), objective factors (education), and personality-related factors (politics) (Evans, 1963). Lieven (2016) reports consumers match-up brand and salesperson gender. For example, if asking advice for a feminine/masculine brand, the customer preferred a feminine/masculine salesperson who aligned with their views of the brand (Lieven, 2016). Relatedly, we propose that students will prefer the type of communication within the prospecting and follow-up steps that is congruent with the type of class they are taking. Indeed, prior research by Abrantes et al. (2007) and Young et al. (2003) has shown that students have a positive attitude toward a professor’s teaching style when that style is in line with a student’s learning style. It is proposed that this perceived similarity based upon student modality (online vs. ground) will affect the student’s preference for the professor’s communication type (virtual vs. face-to-face).

• H3a: Online students will have higher pedagogical affect for virtual prospecting as compared to face-to-face prospecting; and ground students will have higher pedagogical affect for face-to-face prospecting as compared to virtual prospecting.

• H3b: Online students will have higher pedagogical affect for virtual follow-up as compared to face-to-face follow-up; and ground students will have higher pedagogical affect for face-to-face follow-up as compared to virtual follow-up.

While follow-up occurs as the last step of the sales process, its effectiveness is a result of the salesperson’s implementation of the previous steps of the sales process (Ingram, 1990). The activities and steps within the sales process build on each other and results are cumulative. Therefore, if a salesperson does not make a positive impression in earlier steps of the sales process, such as prospecting, then the customer’s reception of follow-up attempts may be hindered. In our context, if a student receives the professor’s prospecting efforts with an initial positive pedagogical affect, it is hypothesized that the student will be receptive to the professor’s follow-up attempts. This “double-exposure” will result in an increase in the total pedagogical affect as compared to the initial pedagogical affect measured at the time of prospecting. Thus, we suggest the initial pedagogical affect from prospecting will increase when follow-up is used.

• H4: The use of follow-up will lead to an increase in pedagogical affect as compared to the initial pedagogical affect that resulted from prospecting.

METHOD

The study used a 2 (Professor Communication Type: Face-to-face vs. Virtual) by 2 (Selling Stage: Prospecting vs. Follow-up) within subjects experimental design with a third between subjects factor measuring Student Modality Type (Online vs. Ground). Controls for age and gender were included. This method has been used in a similar way to gauge student perceptions of faculty feedback (Ackerman, Dommeyer, & Gross, 2016). Data was collected from business school students from two large U.S. universities in the southeast with a total of 300 students who participated voluntarily and for extra credit through a survey link provided on social media with 274 fully completed surveys (91% response rate). IRB approval was granted.

Among participants, 28.8% were males (n = 79), 34% aged 17-22 years, 33% aged 23-30 years, 33% older than 30 years. About a third of subjects (33.6%) were online students (n = 92) who had not taken any ground-based classes in the previous year. Ground students in the sample (n = 182) took, on average, 7.7 ground classes in the previous year. The distribution of ground and online students among the three age groups was as follows: about 95% of ground students aged 17-22 years; 63% of ground students aged 23-30 years; and 39% of ground students older than 30 years. To measure student modality type, respondents indicated if they were mostly online or ground-based students; and this information was verified using enrollment records.

Four scenarios (see Appendix) of selling approaches and selling stages were developed to describe face-to-face prospecting, virtual prospecting, face-to-face follow-up, and virtual follow-up. Evidence shows that subjects respond to questions about scenarios in similar ways to how they have previously behaved (Hawes, Strong, & Winick, 1996; Widmier & Jackson, 2002). In order to ensure realism, face validity, and accurate depiction of prospecting and follow-up, scenarios were pretested with five sales scholars whose feedback was used to enhance realism. The scenarios were based on the work of Dubinsky (1981) who suggests that there are different types of prospecting and follow-up activities. In the survey, scenario order was randomized and counterbalanced to avoid order effects. For survey clarity and reliability of the questionnaire design, a pretest with 10 respondents was conducted before administering the survey; no discrepancies were uncovered. All participants received face-to-face and virtual prospecting exposures, as well as face-to-face and virtual follow-up exposures (see Appendix).

Measures

Previously validated instruments were used to measure likelihood to enroll (purchase intention) (Ajzen & Fishbein, 1980), pedagogical affect, and student perceptions of instructor responsiveness (Abrantes et al., 2007). Likelihood to enroll consisted of four questions assessing likelihood of taking the class on a
7-point semantic differential scale (Unlikely: Likely, Improbable: Probable, Uncertain: Certain, Definitely Would Not: Definitely Would). In measuring pedagogical affect, the statement “Overall, in this class, the methods of instruction are” was responded to with four items (Ineffective: Effective, Useless: Useful, Unsatisfactory: Satisfactory, Bad: Good) on a scale from 1 to 7 (Abrantes et al., 2007). The responsiveness scale measured agreement with three statements ("The instructor will serve students promptly; is eager to provide assistance; tells students when they will be served") on a 5-point Likert-type scale from Strongly Disagree to Strongly Agree (Abrantes et al., 2007). The values of Cronbach’s α was 0.93 for likelihood to enroll, 0.87 for responsiveness, 0.96 for pedagogical affect at the prospecting stage and 0.97 at follow-up stage. Confirmatory factor analysis of individual constructs did not detect departures from unidimensionality. Given the results of CFA and reliability analyses, the items were summed to form the purchase intent, pedagogical affect, and perceived instructor responsiveness measures.

**Results**
To test hypotheses H1a, H1b, H1c and H2, a one-sample one-sided upper tail t-test was performed on each variable for the participants in the prospecting and follow-up conditions for both professor communication types (face-to-face and virtual selling). The midpoint of the scale was selected as the comparison point (scale midpoint=4 for a 7-point measures and midpoint=3 for a 5-point scale measure). Analysis of the sample distribution revealed that 62% of students in face-to-face prospecting scenario and 59% of students in virtual prospecting scenario rated their likelihood to enroll higher than mean scale. Similarly, 73% (face-to-face prospecting) and 69% (virtual prospecting) of students rated pedagogical affect above mean scale, while 74% (face-to-face prospecting) and 72% (virtual prospecting) of students rated responsiveness above mean scale. Table 1 reports means, standard deviations, and results of the hypothesis testing. In the collected sample, sufficient evidence was found to conclude that prospecting leads to an increase in responsiveness, pedagogical affect, and likelihood to enroll (supporting H1a, H1b and H1c). Additionally, follow-up leads to an increase in pedagogical affect (supporting H2) for both professor communication types.

**Table 1. Variable Means and Hypotheses H1a, H1b, H1c, and H2 Test Results for Likelihood to Enroll (LE), Responsiveness (RESP), and Pedagogical Affect (PA)**

<table>
<thead>
<tr>
<th>Selling Stage</th>
<th>Professor Communication Type</th>
<th>Mean</th>
<th>SD</th>
<th>t-stat</th>
<th>Significance</th>
<th>Hypotheses Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE</td>
<td>Prospecting Face-to-face</td>
<td>4.75</td>
<td>1.41</td>
<td>8.85</td>
<td>p &lt; .01</td>
<td>H1c supported</td>
</tr>
<tr>
<td></td>
<td>Virtual</td>
<td>4.63</td>
<td>1.63</td>
<td>6.50</td>
<td>p &lt; .01</td>
<td>H1c supported</td>
</tr>
<tr>
<td></td>
<td>Prospecting Face-to-face</td>
<td>3.85</td>
<td>.79</td>
<td>17.85</td>
<td>p &lt; .01</td>
<td>H1a supported</td>
</tr>
<tr>
<td></td>
<td>Virtual</td>
<td>3.80</td>
<td>.75</td>
<td>17.67</td>
<td>p &lt; .01</td>
<td>H1a supported</td>
</tr>
<tr>
<td></td>
<td>Prospecting Face-to-face</td>
<td>5.18</td>
<td>1.34</td>
<td>14.75</td>
<td>p &lt; .01</td>
<td>H1b supported</td>
</tr>
<tr>
<td></td>
<td>Virtual</td>
<td>5.10</td>
<td>1.39</td>
<td>13.18</td>
<td>p &lt; .01</td>
<td>H1b supported</td>
</tr>
<tr>
<td>Follow-up</td>
<td>Prospecting Face-to-face</td>
<td>6.22</td>
<td>.97</td>
<td>37.89</td>
<td>p &lt; .01</td>
<td>H2 supported</td>
</tr>
<tr>
<td></td>
<td>Virtual</td>
<td>5.99</td>
<td>1.24</td>
<td>26.66</td>
<td>p &lt; .01</td>
<td>H2 supported</td>
</tr>
</tbody>
</table>

Notes: * A one-sided upper-tail t-test was used to test whether the mean exceeds the mid-point of the scale (LE: 4, PA: 4, RESP: 3).

As a supplemental analysis, a repeated measure of analysis of covariance tested for the differences in the level of pedagogical affect (PA), likelihood to enroll (LE), and responsiveness (RESP) when different professor communication types (within-subject factor) at the prospecting stage were employed. Comparison of PA, LE, and RESP levels between online and ground students exposed to different types of communication was conducted using mixed ANOVA model. Professor communication (face-to-face/ virtual) was a within-subject factor, student modality (online/ ground) was a between-subject factor. Age and gender were used as covariates in both models. No significant covariate effects were found in this sample. Additional analyses involving gender as a fixed-effect factor also did not detect interaction due to gender differences.

For both LE and RESP at the prospecting stage, there were no significant main effects of either student modality type (LE: F=1.68, p=0.20, partial η2=.006; RESP: F=0.21, p=0.65, η2=0.001) or professor communication type (LE: F=0.07, p=0.80, η2=0.00; RESP: F=1.24, p=0.27, η2=0.005). Similarly, repeated measures model did not detect significant differences in average level of pedagogical affect between students (F=2.06, p=0.15, η2=0.008) and professor communication type (F=0.40, p=0.53, η2=0.001) during the prospecting stage. In contrast, the interaction effect of student modality and selling communication types was significant for PA (F=4.97, p=0.03, η2=0.018),
suggesting that there is no overall effect of either student modality or professor communication, but there is an interaction. The effect of communication type on pedagogical affect depends on the modality (online/ground) of a student. Post-hoc tests revealed that when the instructor uses a face-to-face prospecting activity, there are no differences in PA levels for either type of student (ground: M= 5.18; online: M=5.20; Tukey’s D=0.02, p=0.92). Ground students had a significantly lower PA than online students (ground: M= 4.91; online: M=5.45) when the instructor uses virtual prospecting (Tukey's HSD test for between-subject differences D=2.40, p=0.02). Plot of means on Figure 2 represents average PA between student modality type and professor communication type. Results suggest that ground students prefer in-person prospecting, while online students prefer virtual prospecting. Analysis within student modality types across communication methods similarly imply that ground students prefer face-to-face prospecting, while online students prefer virtual prospecting, with both preferring face-to-face follow-up.

**Figure 2. Pedagogical Affect Within Selling Stages**

(a) Prospecting  
(b) Follow-up

To test hypotheses H3a and H3b, the differences in pedagogical affect at the follow-up stage of the selling process were examined using repeated measures and mixed ANCOVA following the procedures described above. The results of these analyses are presented in Table 2 and Table 3. Significant differences in average pedagogical affect were found between face-to-face and virtual follow-up (F=5.91, p=0.02, η2=0.02). At the same time, no significant differences were found between the two modality types of students (F=0.127, p=0.72, η2=0.00). The two-way interaction between student type and professor communication type was also insignificant (F=1.51, p=0.22, η2=0.006). These results suggest that both types of students, on average, prefer in-person follow-up (ground: M= 6.24; online: M=6.19) to the email follow-up (ground: M= 5.93; online: M=6.10). Thus, hypothesis H3a and H3b were partially supported.

**Table 2. ANOVA Analysis of Pedagogical Affect (PA) at Prospecting and Follow-up Stage: Hypothesis H3a and H3b**

<table>
<thead>
<tr>
<th>Selling Stage</th>
<th>Student Modality</th>
<th>Face-to-Face Selling Mean (SD)</th>
<th>Virtual Selling Mean (SD)</th>
<th>Difference in Means a</th>
<th>Hypotheses Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA Prospecting</td>
<td>Ground</td>
<td>5.18 (1.30)</td>
<td>4.91 (1.43)</td>
<td>p &lt; .05</td>
<td>H3a Supported for ground modality</td>
</tr>
<tr>
<td></td>
<td>Online</td>
<td>5.20 (1.41)</td>
<td>5.45 (1.23)</td>
<td>n.s.</td>
<td>H3a Not supported for online modality</td>
</tr>
<tr>
<td>Follow-up</td>
<td>Ground</td>
<td>6.22 (.97)</td>
<td>5.99 (1.29)</td>
<td>p &lt; .05</td>
<td>H3a partially supported</td>
</tr>
<tr>
<td></td>
<td>Online</td>
<td>6.22 (.97)</td>
<td>5.78 (1.43)</td>
<td>n.s.</td>
<td></td>
</tr>
</tbody>
</table>
Follow-up | Online | 6.19 (.97) | 6.10 (.99) | n.s. | H3b Not supported for online modality
Ground | 6.24 (.97) | 5.93 (1.34) | p < .05 | H3b Supported for Ground modality

Notes: a Greenhouse-Geisser correction was used to test within-subject differences between two professor communication types.

<table>
<thead>
<tr>
<th>Table 3. Comparison of Pedagogical Affect (PA) Means at Prospecting and Follow-up Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Communication Type</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>PA</td>
</tr>
<tr>
<td>PA</td>
</tr>
<tr>
<td>PA</td>
</tr>
<tr>
<td>Virtual</td>
</tr>
</tbody>
</table>

Notes: a Greenhouse-Geisser correction was used to test within-subject differences between two selling stages (Prospecting/ Follow-up).

To test H4, the size of pedagogical affect at follow-up and prospecting stages were compared in Table 3. Repeated measures ANCOVA was used to exclude the effect of any confounding or unobserved factors (for example, individual difference in the baseline level of pedagogical affect) and correct for potential endogeneity problem. To statistically account for the potential bias permeated by the circularity effect of the repeated measures data, Greenhouse-Geisser correction was applied to test within-subject differences (Greenhouse & Geisser, 1959; Vasey & Thayer, 1987). For both groups of students, pedagogical affect was significantly higher at the follow-up stage when compared to prospecting stage (online: F=89, p=0.00, η2=0.285; ground: F=177, p=0.00, η2=0.128) and no differences between types of students were detected. Moreover, in-person follow-up (M=6.22) was more effective than the email follow-up (M=5.99) (F=5.91, p=0.02, η2=0.022), while no significant differences were found between in-person and email prospecting (F=0.40, p=0.53, η2=0.001). Thus, the results support hypothesis H4.

DISCUSSION

If students view themselves as consumers in the classroom (Singleton-Jackson et al. 2010), they may also view faculty as frontline service employees (Vander Schee, 2010) who deliver a majority of student interaction experiences. This work proposes a starting point for faculty engagement within the higher education marketing effort by utilizing personal selling techniques to appeal to online and traditional ground students with this customer orientation. Faculty may struggle with using these selling techniques because they "do not see education as a commodity or service they are selling" (Singleton-Jackson et al. 2010, p. 354). The reward for transcending this mindset with small efforts has the potential to improve student retention, encourage repeat business, and increase student preference for a faculty member or department brand. This innovation does not suggest faculty need to embrace a mind-shift or comprehensive change in how they design or communicate course material. Nor does it require a change in self-perception; faculty do not need to become salespeople. Instead, the changes suggested are a means to reinforce student learning through proven methods from the sales literature. All faculty prefer students who are intentional course enrollees rather than grudging credit seekers; and this small teaching innovation can help drive class populations who have chosen to enroll in, and complete, courses. Utilizing this innovation also has the potential to improve branding of courses and departments, attitude of student body towards a subject, enrollment, and the creation of more positively inclined students; and, is accessible to faculty across disciplines and modalities.

This study explored professor use of selling activities informed by the prospecting and follow-up steps of the sales process with different communication styles (online and virtual), to students in different modalities (ground and online), and occurring at different times (before registering for a class and during a class).
Tested hypotheses regarding professor use of prospecting suggests that prospecting activities may positively affect student perceptions of instructor responsiveness (H1a), pedagogical affect (H1b), and likelihood to enroll (H1c). Educators can use these findings to help students have a positive inclination towards a professor’s class before even taking it. Some educators may not see it as their role to be concerned with students’ initial impressions; however research shows that because of primacy, a theory about impression formation, one’s first impression of an individual has staying power and more influence with later impressions not allowing for diminution (Anderson, 1965; Asch, 1964). Indeed, this primacy effect has been confirmed to occur in both teaching and selling (Clayson and Sheffet, 2006; Evans, 1963; Goebel and Cashen, 1979). The results suggest that prospecting can similarly serve as a trait influence in the minds of students. A professor who uses a prospecting technique before a class begins, creates an initial positive effect, which makes prospective students more likely to enroll in the professor’s class.

While the initial idea of using prospecting even before a class begins may be met with faculty resistance due to demanding workloads and mounting service responsibilities (Mamiseishvili, Miller, & Lee, 2016), findings suggest that students respond favorably to faculty who are engaged in the prospecting efforts of their own class. Professor communication type should match student modality when using prospecting. Findings from this study show that online students prefer online prospecting and ground students prefer face-to-face prospecting (H3a). In terms of implementation, the time commitment low. Faculty can utilize a simple prospecting activity for online students such as sending an email that is easily duplicated across sessions to invite prospective students to enroll. For ground students, professors can create a flyer showing benefits of an upcoming class and walk around campus, the building, or the cafeteria to visit with students discussing the benefits of taking an upcoming class. The rewards of this effort, again based in primacy theory, can cue students to feel positive toward an instructor, evoking perceptions of responsiveness even before the class begins.

Theoretically, this study replicates the importance of instructor responsiveness in the online environment (e.g. Brodke & Mruk, 2009), but it also expands this literature. Prospecting has the potential to improve online students’ ability to gauge instructor responsiveness, a problem due to the modality’s limitations in communicating body language and responding to visual cues (Easton, 2003). Online educators can use prospecting as a cue to communicate instructor responsiveness in the online environment. Additionally, prospecting has utility for instructors who wish to increase enrollment in an upcoming class, a new class, or a trial class that the department may be running before adding to the schedule more permanently.

However, prospecting is not just limited to before the course begins. It can be used as an instructional technique before each class to keep students interested in learning at-hand. For example, following the personal observation method of prospecting (Dubinsky, 1981), whereby one looks and listens to find prospects; an instructor can participate in a discussion taking place online or in-person. A consumer behavior class may discuss how they are going to buy a car and this information can be used to prime students for an upcoming lesson about buyer’s decisions.

Follow-up encourages consumers who have a positive feeling towards a brand to be a repeat customer (Dubinsky, 1981). Instructional use of follow-up can happen at the end of each lesson to encourage students to maintain a positive inclination toward the class, PA (H2). Like prospecting activities used as an instructional technique, follow-up can be done with minimal effort by the instructor. For example, an instructor teaching a ground class can begin a new class (or end a current one) by following the reassuring customer activity (Dubinsky, 1981) where follow-up can be utilized to summarize the main points of the previous lesson and then ask for questions and concerns before moving on. For online students, follow-up can occur by using the sending thank you notes activity (Dubinsky, 1981) through emailing students or sending an announcement that thanks students for participation, reviews the main points, and reminds them why the learning was important. Interestingly, and in partial support of hypothesis H3b, both ground and online students preferred face-to-face follow-up. Therefore, in online classes, professors can be advised to record a quick video using Jing, a free software that allows for up to five minute recordings (Techsmith Corporation, 2016), or another video recording tool that works within the learning management system to deliver a follow-up appeal at the end of the lesson. Sharkey and Nurre (2016) used videos in a hybrid class and found they increased the students overall learning experience. Lyons, Reysen, and Pierce (2012) report support for a relationship between instructor presence in videos and online students’ positive evaluation of the course. While some educators may be hesitant to the idea of using follow-up, the research found that follow-up actually has the ability to increase the initial pedagogical affect observed from prospecting (H4). Impacting PA through frontline faculty is an opportunity to drive higher education strategic priorities such as program growth, improve utilization of resources (faculty or classroom space) by equalizing enrollment distributions, or improve word-of-mouth and social media marketing by current students and alumni with positive pedagogical affect improving student and alumni attitudes toward majors of study (Richard et al., 2000).

This study extends the work of Tam (2008) which established that marketers should familiarize customers with the service while they experience it. As an overall contribution, this research extends key service and marketing concepts to the higher education classroom context to better understand ways professors can help increase enrollment and retention. Both online and traditional ground courses were studied side-by-side to elucidate differences in preferences and responses to
sales techniques, appeal timing, and message construction. Students’ are increasingly demanding classes catered to different learning styles (Boswell, 2012; Greenberger et al., 2008) such as online or hybrid courses and results inform servicing more diverse student populations to help improve enrollment and profit growth from this consumer segment.

LIMITATIONS

This paper is a first attempt to show that sales techniques can be used by academic instructors to impact student choice and perception of the course experience. One limitation that should be noted is the presentation of a limited number of sales tactics. Future research should expand on the selection of sales techniques investigated. This study also relies on a dichotomous delineation of student modality. That is, we categorize students as preferring (and taking) mostly online or in-person courses. While we validate the self-reported modal tendency with student records, we understand that students may not prefer their end-choice. That is, some students may want to take in-person classes, but circumstances prevent it. Future research could investigate if there are differences among students who truly prefer and freely choose online courses as compared to those who feel they must take this route despite their preferences for in-person courses. We thank a reviewer for this keen observation.

CONCLUSION

It is important for department heads and administrators to attract and retain students to support departmental efforts, maintain support for their programs and expand understanding of their discipline. This paper developed and described selling efforts to students who view themselves as consumers; investigating if prospecting and follow-up can be used to increase course learning, retention, and subsequent course enrollment. The results showed that faculty can utilize techniques from the first step of the sales process (prospecting) to increase student enrollment; and, that the last step (follow-up) can be used to increase retention. In the sales field, securing a sale motivates the use of the selling techniques, likewise, the results of this paper encourage professors to use these simple techniques to “sell” students on learning.


DeAngelo, L., Mason, J., & Winters, D. (2016). Faculty engagement in mentoring undergraduate students: How institutional environments regulate and


Sharkey, T. C., & Nurre, S. G. (2016). Video tutorials within an undergraduate operations research course: Student perception on their integration and creating a blended learning environment. INFORMS

APPENDIX: Scenarios

Prospecting (face-to-face): Suppose for a moment that you are on campus and a professor who you have never seen before approaches you and invites you to take an upcoming class. The professor speaks with you for a few minutes explaining the benefits of taking this professor’s upcoming class and then hands you a flyer detailing the benefits of taking the class.

Prospecting (virtual): Suppose for a moment that your friend is currently enrolled in a required marketing class. Your friend gives the professor of the class your email address and the professor sends you an electronic invite to take an elective marketing class with that professor for the next session.

Follow-Up (face-to-face): Suppose for a moment class is beginning. “Your instructor starts class by following up and summarizing the main points of last week’s lesson and then says, “Does anyone have any concerns or questions before we move on?”

Follow-Up (virtual): Suppose for a moment that you just finished class where you learned about a concept called Customer Lifetime Value. The next day you receive an email from the professor thanking you for your participation, reviewing the main points of the lesson, and reminding you why the learning was important.