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The purpose of this journal is to assemble researched and documented ideas that help drive successful learning and motivate business students to learn. The intention is to draw ideas from across both methods and disciplines and to create a refereed body of knowledge on innovation in business education. As a result, the primary audience includes business education faculty, curriculum directors, and practitioners who are dedicated to providing effective and exciting education.

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This particular issue includes a number of interesting classroom innovations in diverse areas.

Peter J. Billington  
*Editor*

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# Identifying the Specific Behaviors that Define Teamwork – A Review of the Literature and Integrative Meta-Model for Business School Applications

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## ABSTRACT

Seven prominent research-based models of teamwork effectiveness were reviewed and content analyzed. The result was a meta-model consisting of 41 specific positive and negative behaviors, grouped into four critical competencies and two major factors. Applications of the meta-model in teaching, assessing, and developing teamwork skills in collegiate business schools are discussed along with suggestions for future research.

**Keywords:** teamwork, teamwork effectiveness, teamwork meta-model

## INTRODUCTION

Organizations in the United States continue to emphasize the importance of teamwork skills in new college graduates. In a survey conducted by Hart Research Associates (2016) of 400 U.S. employers, the “ability to work effectively with others in teams” was identified as the second most important learning outcome for college graduates, cited by 83% of respondents. The “ability to effectively communicate orally” was most important with 85%. Similarly, a survey of 144 member organizations of the National Association of Colleges and Employers (NACE) found the teamwork was among the four most valued career readiness competencies (Gray, 2016).

Not surprisingly, U.S. collegiate schools of business have continued to rely upon and expand the use of team-based assignments throughout the curriculum (Betta, 2015; Betts & Healy, 2015; Cannon-Bowers & Bowers, 2011; Hughes & Jones, 2011; Sashittal, Jassawalla & Markulis, 2011). However, in spite of decades of research on teamwork and how teams might be utilized in business classes, there is no generally accepted behavioral model of teamwork. While several have been proposed (and will be discussed below), a unifying, integrative model has not been purposed.

The purpose of this paper is to review seven major research-based behavioral models of teamwork in order to identify content commonalities and formulate an integrative meta-model.

## TEAMWORK MODELS

An exhaustive review of the literature on teamwork produced several hundred research-based studies, seven of which proposed models identifying essential teamwork competencies for individuals. These seven studies, listed below chronologically, represent the research content analyzed in this paper.

1. Bales, R.F. (1950). A Set of Categories for the Analysis of Small Group Interaction, American Sociological Review, 15(2), 257-263.
2. Stevens, M.J. & Campion, M.A. (1994). The Knowledge, Skill, and Ability Requirements for Teamwork: Implications for Human Resource Management. Journal of Management, 20(2), 503-530.
3. Cannon-Bowers, J.A., Tannenbaum, S.I., Salas, E., and Volpe, C.E. (1995). “Defining Competencies and Establishing Team Training Requirements.” In R. Guzzo & E. Salas (Eds.), Team Effectiveness and Decision Making in Organizations, 333-380. San Francisco: Jossey Bass.
4. Chen, G., Donahue, L.M., & Klimoski, R.J. (2004). Training Undergraduates to Work in Organizational Teams, Academy of Management Learning and Education, 3(1), 27-40.
5. Baker, D.P., Horvarth, L., Campion, M.A., Offermann, L., and Salas, E. (2005). “The ALL Teamwork Framework.” In T.S. Murray, Y. Clermont, & M. Binkley (Eds.), International Adult Literacy Survey, Measuring Adult Literacy and Life Skills: New Frameworks for Assessment, Ottawa: Ministry of Industry.

6. Salas, E., Sims, D.E., & Burke, C.S. (2005). Is There a “Big Five” in Teamwork? Small Group Research, 36(5), 555-599.
7. Hobson, C.J., Strupeck, D., Griffin, A., Szostek, J., Selladurai, R., & Rominger, A.S. (2013). Facilitating and Documenting Behavioral Improvements in Business Student Teamwork Skills, Business Education Innovation Journal, 5(1), 83-95.

### Model one

The first major model of teamwork behavior was proposed by Bales (1950). He conducted a review of the research on the participation of individuals in small groups in order to identify a set of behavioral categories to analyze interaction. The results of his review were two major interaction categories (Task Area and Social-Emotional Area), with four sub-categories and 12 specific behaviors, as depicted in Figure 1.

**Figure 1: Major Teamwork Model One (Bales, 1950)**

1. Task Area
  - 1) Attempted Answers
    - a. Gives suggestion, direction, implying autonomy for other
    - b. Gives opinion, evaluation, analysis, expresses feeling, wish
    - c. Gives orientation, information, repeats, clarifies, confirms
  - 2) Questions
    - a. Asks for orientation, information, repetition, confirmation
    - b. Asks for opinion, evaluation, analysis, expression of feeling
    - c. Asks for suggestion, direction, possible ways of action
2. Social-Emotional Area
  - 1) Positive Reactions
    - a. Shows solidarity, raises other’s status, gives help, reward
    - b. Shows tension release, jokes, laughs, shows satisfaction
    - c. Agrees, shows passive acceptance, understands, concurs, complies
  - 2) Negative Reactions
    - a. Disagrees, shows passive rejection, formality, withholds help
    - b. Shows tension, asks for help, withdraws out of field
    - c. Shows antagonism, deflates other’s status, defends or asserts self

### Model two

Chronologically, the next major teamwork model was one formulated by Stevens and Campion (1994). The authors conducted a comprehensive review of research on groups and teams in order to identify the knowledge, skill, and ability (KSA) requirements for successful teamwork. They described two overall KSA categories (Interpersonal and Self-Management), five sub-categories and 14 specific KSA’s. as represented in Figure 2.

**Figure 2: Major Teamwork Model Two (Stevens & Campion, 1994)**

1. Interpersonal KSAs
  - 1) Conflict Resolution KSAs
    - a. The KSA to recognize and encourage desirable, but discourage undesirable, team conflict
    - b. The KSA to recognize the type and source of conflict confronting the team and to implement an appropriate conflict resolution strategy
    - c. The KSA to employ an integrative (win-win) negotiation strategy rather than the traditional distributive (win-lose) strategy
  - 2) Collaborative Problem Solving KSAs
    - a. The KSA to identify situations requiring participative group problem solving and to utilize the proper degree and type of participation
    - b. The KSA to recognize the obstacles to collaborative group problem solving and implement appropriate corrective actions
  - 3) Communication KSAs
    - a. The KSA to understand communication networks, and to utilize decentralized networks to enhance communication where possible

- b. The KSA to communicate openly and supportively, that is, to send messages which are: (1) behavior- or event-oriented; (2) congruent; (3) validating; (4) conjunctive; and (5) owned
- c. The KSA to listen nonevaluatively and to appropriately use active listening techniques
- d. The KSA to maximize consonance between nonverbal and verbal messages, and to recognize and interpret the nonverbal messages of others
- e. The KSA to engage in ritual greetings and small talk, and a recognition of their importance
- 2. Self-Management KSAs
- 1) Goal Setting and Performance Management KSAs
  - a. The KSA to help establish specific, challenging, and accepted team goals
  - b. The KSA to monitor, evaluate, and provide feedback on both overall team performance and individual team member performance
- 2) Planning and Task Coordination KSAs
  - a. The KSA to coordinate and synchronize activities, information, and task interdependencies between team members
  - b. The KSA to help establish task and role expectations of individual team members, and to ensure proper balancing of workload in the team

### **Model three**

Model 3 of teamwork was developed by Cannon-Bowers, Tannenbaum, Salas, and Volpe (1995). After reviewing the literature on teamwork competencies they identified and defined eight primary skill dimensions. They are summarized in Figure 3 below.

**Figure 3: Major Teamwork Model Three (Cannon-Bowers, Tannenbaum, Salas and Volpe, 1995)**

1. Adaptability - The process by which a team is able to use information gathered from the task environment to adjust strategies through the use of compensatory behavior and reallocation of intrateam resources.
  - 1) Flexibility
    - a. Capacity for closure
    - b. Development of innovations
    - c. Mutual adjustment
  - 2) Compensatory behavior
    - a. Backing-up behavior
    - b. Provide/ask for assistance
    - c. Fail stop
  - 3) Dynamic reallocation of functions
2. Shared Situational Awareness - The process by which team members develop compatible models of the team's internal and external environment; includes skill in arriving at a common understanding of the situation and applying appropriate task strategies.
  - 1) Situational awareness
    - a. Orientation
    - b. Team awareness
    - c. Development of integrated model of environment
    - d. Development of system awareness
  - 2) Shared problem-model development
3. Performance Monitoring and Feedback - The ability of team members to give, seek, and receive task-clarifying feedback; includes the ability to accurately monitor the performance of teammates, provide constructive feedback regarding errors, and offer advice for improving performance.
  - 1) Intramember feedback
    - a. Performance feedback
    - b. Planning review
    - c. Feedback/reinforcement
    - d. Acceptance of/giving suggestions, criticism
  - 2) Mutual performance monitoring
    - a. Monitoring and cross-checking
    - b. Systems monitoring
    - c. Performance monitoring



- d. Error identification/correction
  - e. Inrateam monitoring
  - f. Strategy development
  - g. Procedure maintenance
4. Leadership/Team Management - The ability to direct and coordinate the activities of other team members, assess team performance, assign tasks, motivate team members, plan and organize, and establish a positive atmosphere.
    - 1) Task structuring
      - a. Delegation and assignment
      - b. Task assignment
      - c. Resource distribution
      - d. Resource management
      - e. Performance direction
      - f. Establishment of priorities
    - 2) Mission analysis
    - 3) Motivation of others
      - a. Leadership control
      - b. Goal setting
      - c. Drive to completion
      - d. Goal orientation
  5. Interpersonal Relations - The ability to optimize the quality of team members' interactions through resolution of dissent, utilization of cooperative behaviors, or use of motivational reinforcing statements.
    - 1) Conflict resolution
    - 2) Cooperation (interpersonal)
    - 3) Assertiveness
    - 4) Morale building (behavioral reinforcement)
    - 5) Boundary spanning
  6. Coordination - The process by which team resources, activities, and responses are organized to ensure that tasks are integrated, synchronized, and completed within established temporal constraints.
    - 1) Task organization
      - a. Coordination of task sequence
      - b. Integration
    - 2) Task interaction
      - a. Technical coordination
      - b. Response coordination
    - 3) Timing and activity pacing
  7. Communication - The process by which information is clearly and accurately exchanged between two or more team members in the prescribed manner and with proper terminology; the ability to clarify or acknowledge the receipt of information.
    - 1) Information exchange
      - a. Closed-loop communication
      - b. Information sharing
      - c. Procedural talk
      - d. Volunteering/requesting information
    - 2) Consulting with others
      - a. Effective influence
      - b. Open exchange of relevant interpretations
      - c. Evaluative interchange
  8. Decision Making - The ability to gather and integrate information, use sound judgment, identify alternatives, select the best solution, and evaluate the consequences (in team context, emphasizes skill in pooling information and resources in support of a response choice).
    - 1) Problem assessment
    - 2) Problem solving
      - a. Emergence of solutions
      - b. Probabilistic structure
      - c. Hypothesis formulation

- d. Information processing
- e. Information evaluation
- 3) Planning
  - a. Plan development
  - b. Use of information
- 4) Metacognitive behavior
- 5) Implementation (jurisdiction)

#### **Model four**

The fourth major teamwork model was constructed by Chen, Donahue, and Klimoski (2004). In this paper, five graduate students observed individual undergraduate student performance in 25 different leaderless group discussion exercises. They identified specific effective and ineffective behaviors, which were then combined into the five competencies contained in Figure 4.

**Figure 4: Major Teamwork Model Four (Chen, Donahue and Klimoski, 2004)**

1. Orients team to problem-solving situation
  - 1) Assists the team in arriving at a common understanding of the situation or problem
  - 2) Determines the important elements of a problem or situation
  - 3) Seeks out relevant data related to the problem or situation
2. Organizes and manages team performance
  - 1) Helps team establish specific, challenging, and accepted team goals
  - 2) Monitors, evaluates, and provides feedback on team performance
  - 3) Identifies alternative strategies or reallocates resources to address feedback on team performance
3. Promotes a positive team environment
  - 1) Assists in creating and reinforcing norms of tolerance, respect, and excellence
  - 2) Recognizes and praises other team members' efforts
  - 3) Helps and supports other team members
  - 4) Models desirable team member behavior
4. Facilitates and manages task conflict
  - 1) Encourages desirable and discourages undesirable team conflict
  - 2) Recognizes the type and source of conflict confronting the team and implements an appropriate resolution strategy
  - 3) Employs "win-win" negotiation strategies to resolve team conflicts
5. Appropriately promotes perspective
  - 1) Defends stated preferences, argues for a particular point of view
  - 2) Withstands pressure to change position for another that is not supported by logical or knowledge-based arguments
  - 3) Changes or modifies position if a defensible argument is made by another team member
  - 4) Projects courtesy and friendliness to others while arguing position

#### **Model five**

Baker, Horvath, Campion, Offermann, and Salas (2005) published the fifth major model. They conducted a comprehensive review of international research on teamwork, in order to identify a set of universal, culture-free dimensions essential for working in a team (not leading a team). Their analysis produced a set of four core teamwork skill competencies, as defined in Figure 5 below.

**Figure 5: Major Teamwork Model Five (Baker, Horvath, Campion, Offermann and Salas, 2005)**

1. Communication is defined as establishing effective communication between self and others; it involves the exchange of clear and accurate information and the ability to clarify or acknowledge the receipt of information. Strong communication skills are demonstrated by team members who:
  - 1) Provide clear and accurate information
  - 2) Listen effectively
  - 3) Ask questions
  - 4) Acknowledge requests for information
  - 5) Openly share ideas

- 6) Attend to non-verbal behaviors
2. Interpersonal Relations is a broad area that encompasses cooperation and dealing with conflict within the team. Therefore, effective interpersonal relations include working cooperatively with others, working together as opposed to working separately or competitively, and resolving disputes among team members. Strong interpersonal relations skills are demonstrated by team members who:
  - 1) Share the work
  - 2) Seek mutually agreeable solutions
  - 3) Consider different ways of doing things
  - 4) Manage/Influence disputes
3. Group Decision Making/Planning is defined as the ability of a team to gather and integrate information, use logical and sound judgment, identify possible alternatives, select the best solution, and evaluate the consequences. Strong group decision making and planning skills are demonstrated by team members who work with others to:
  - 1) Identify problems
  - 2) Gather information
  - 3) Evaluate information
  - 4) Share information
  - 5) Understand decisions
  - 6) Set goals
4. Adaptability/Flexibility is defined as the process by which a team is able to use information gathered from the task environment to adjust strategies through the use of compensatory behavior and reallocation of intra-team resources. Strong adaptability/flexibility skills are demonstrated by team members who:
  - 1) Provide assistance
  - 2) Reallocate tasks
  - 3) Provide/Accept feedback
  - 4) Monitor/Adjust performance

#### **Model six**

The sixth major model of teamwork was formulated by Salas, Sims, and Burke (2005). These researchers conducted a review and thematic analyses of the literature on groups. Based upon this work, five core teamwork components were identified, four of which were behavioral and one was attitudinal. They are described in Figure 6.

#### **Figure 6: Major Teamwork Model Six (Salas, Sims and Burke, 2005)**

1. Team leadership
  - 1) Ability to direct and coordinate the activities of other team members, assess team performance, assign tasks, develop team knowledge, skills, and abilities, motivate team members, plan and organize, and establish a positive atmosphere.
    - a. Facilitate team problem solving.
    - b. Provide performance expectations and acceptable interaction patterns.
    - c. Synchronize and combine individual team member contributions.
    - d. Seek and evaluate information that affects team functioning.
    - e. Clarify team member roles.
    - f. Engage in preparatory meetings and feedback sessions with the team.
2. Mutual performance monitoring
  - 1) The ability to develop common understandings of the team environment and apply appropriate task strategies to accurately monitor teammate performance.
    - a. Identifying mistakes and lapses in other team members' actions.
    - b. Providing feedback regarding team member actions to facilitate self-correction.
3. Backup behavior
  - 1) Ability to anticipate other team members' needs through accurate knowledge about their responsibilities. This includes the ability to shift workload among members to achieve balance during high periods of workload or pressure.
    - a. Recognition by potential backup providers that there is a workload distribution problem in their team.
    - b. Shifting of work responsibilities to underutilized team members.

- c. Completion of the whole task or parts of tasks by other team members.
- 4. Adaptability
  - 1) Ability to adjust strategies based on information gathered from the environment through the use of backup behavior and reallocation of intrateam resources. Altering a course of action or team repertoire in response to changing conditions (internal or external).
    - a. Identify cues that a change has occurred, assign meaning to that change, and develop a new plan to deal with the changes.
    - b. Identify opportunities for improvement and innovation for habitual or routine practices.
    - c. Remain vigilant to changes in the internal and external environment of the team.
- 5. Team orientation (an attitudinal variable)
  - 1) Propensity to take another's behavior into account during group interaction and the belief in the importance of team's goal over individual members' goals.
    - a. Taking into account alternative solutions provided by teammates and appraising that input to determine what is most correct.
    - b. Increased task involvement, information sharing, strategizing, and participatory goal setting.

**Model seven**

Hobson, Strupek, Griffin, Szostek, Selladurai, and Rominger (2013) formulated the seventh major model by reviewing research literature, beginning in the late 1940's, to identify the most commonly cited positive and negative teamwork behaviors. Their results included 15 positive behaviors and 10 negative behaviors, as displayed in Figure 7 below. The authors rated videotaped student performance in leaderless group discussion exercises on each of the 25 specific behaviors, using the following 0-4 scale: 0=Never, 1=Rarely, 2=Occasionally, 3=Frequently, and 4=Always.

**Figure 7: Major Teamwork Model Seven (Hobson, Strupek, Griffin, Szostek, Selladurai and Rominger, 2013)**

Positive Behaviors	Negative Behaviors
1. Listened attentively (eye contact, comprehenders) when teammate was talking 2. Piggy-backed on teammate idea 3. Gave positive feedback to teammate (that's a good idea) 4. Politely asked for input from a quiet teammate 5. Offered task-related input during team discussion 6. Took notes on team discussion 7. Attempted to achieve win-win resolutions to conflict 8. Kept team focused and "on-track" 9. Sought clarification by asking questions or paraphrasing 10. Called teammates by their first name 11. Summarized areas of team agreement and disagreement 12. Constructively criticized teammate ideas, not the person 13. Appropriately used humor to help team stay relaxed 14. Answered teammate questions 15. Expressed empathy for teammate feelings	1. Failed to offer verbal input to team discussion 2. Interrupted teammate who was talking 3. Gave personalized, derogatory criticism to teammate 4. Brought-up topic that was completely unrelated to the team discussion 5. Started a side conversation while teammate was talking 6. Dominated discussion by failing to allow others to talk 7. Refused to compromise 8. Insisted that his/her idea was the only correct one 9. Inappropriately tried to create humorous situations 10. Pessimistic, negative, and/or complaining

**Major themes**

A content analysis of the specific positive and negative behaviors represented in the seven models presented above produced a set of nine major themes. They included: (1) Conflict Resolution, (2) Problem Solving, (3) Task Management, (4) Communication, (5) Goal Setting and Performance Management, (6) Planning and Organization, (7) Promotes Positive Team Environment, (8) Promotes Own Perspective, and (9) Negative Behaviors.

The extent to which each theme is represented in the seven models is summarized in Figure 8. Notice that while Problem Solving and Goal Setting & Performance Management are represented in all seven of the teamwork models, Negative Behaviors are represented in two of them.

**Figure 8: Representation of Nine Major Themes Within the Seven Research-Based Studies**

Major Themes	Bales	Stevens & Campion	Cannon-Bowers et al.	Chen et al.	Baker et al.	Salas et al.	Hobson et al.	Total
<b>Problem Solving</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
<b>Goal Setting and Performance Management</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
<b>Conflict Resolution</b>		Yes	Yes	Yes	Yes		Yes	5
<b>Planning and Organization</b>		Yes	Yes		Yes	Yes	Yes	5
<b>Task Management</b>	Yes		Yes		Yes	Yes	Yes	5
<b>Communication</b>	Yes	Yes	Yes		Yes		Yes	5
<b>Promotes Positive Team Environment</b>	Yes		Yes	Yes		Yes	Yes	5
<b>Promotes Own Perspective</b>	Yes		Yes		Yes			3
<b>Negative Behaviors</b>	Yes						Yes	2

#### Meta-model

Further content and conceptual analysis of the nine major themes identified above yielded a meta-model of teamwork behavior, consisting of two well-known and documented principal categories: Task and Social. Within the Task Category, there is one primary competency, termed Task-Completion, with an accompanying set of 10 specific positive behaviors and three specific negative ones (the full teamwork meta-model is represented in Figure 9 below). The Social Category consists of three primary competencies (Communication, Member Relations, and Disagreement Management), each with specific associated positive and negative behaviors.

**Figure 9: An Integrative Meta-Model of Teamwork**

<p><b>Task Category</b></p> <ol style="list-style-type: none"> <li>1. Task Completion Competency             <ol style="list-style-type: none"> <li>1) Positive Behaviors                 <ol style="list-style-type: none"> <li>a. Agrees with a team member</li> <li>b. Answers teammate's question</li> <li>c. Builds on another's idea/piggy-backs on the idea (beyond mere agreement)</li> <li>d. Takes notes on team discussion</li> <li>e. Seeks clarification by asking questions/paraphrasing another's input</li> <li>f. Keeps the team focused and "on-track"</li> <li>g. Keeps track of time</li> <li>h. Helps the team establish goals/plans</li> <li>i. Provides team-based feedback/ praise/reinforcement</li> <li>j. Expresses own opinion that adds value to the discussion</li> </ol> </li> <li>2) Negative Behaviors                 <ol style="list-style-type: none"> <li>a. Brings up topic that is unrelated to team discussion</li> <li>b. Dominates discussion by failing to allow others to talk</li> <li>c. Distracts team with inappropriate humor, repetitive/nervous behavior, and/or by being overly pessimistic, negative, dramatic or by complaining excessively</li> </ol> </li> </ol> </li> </ol>
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**Figure 9 continued: An Integrative Meta-Model of Teamwork**

**Social Category**

1. Communication Competency
  - 1) Positive Behaviors
    - a. Speaks in a clear/understandable manner
    - b. Displays open body language (sitting upright, slight lean forward, oriented toward team, arms/legs/hands not crossed)
    - c. Maintains appropriate eye contact with teammates while speaking
    - d. Maintains appropriate eye contact when listening to teammates
    - e. Uses non-verbal comprehenders while listening (uh-huh, head nods, etc.)
  - 2) Negative Behaviors
    - a. Speaks in an unclear/not understandable manner
    - b. Speaks in a verbose, rambling manner
    - c. Appears distracted, disinterested, pre-occupied
    - d. Allows note taking to interrupt active listening
    - e. Displays closed, defensive body language (slouching, leaning back, oriented away from the team, crossed arms/legs/hands)
    - f. Avoids eye contact
2. Member Relations Competency
  - 1) Positive Behaviors
    - a. Recognizes and praises team members' contribution
    - b. Ensures input and participation of all team members/Invites quiet teammates to participate
    - c. Expresses empathy toward team members
    - d. Uses appropriate humor to reduce anxiety and stress
    - e. Calls teammates by first name
  - 2) Negative Behaviors
    - a. Interrupts speaker
    - b. Engages in a side conversation while teammate is talking
    - c. Disregards a teammate's input
3. Disagreement Management Competency
  - 1) Positive Behaviors
    - a. Plays devil's advocate
    - b. Uses critical analysis, rather than emotions, to evaluate ideas/actions
    - c. Constructively disagrees with teammate ideas
    - d. Employs an integrative (win-win) approach to disagreement resolution
    - e. Expresses willingness to compromise
    - f. Mediates disagreement among teammates
    - g. Accepts feedback from teammates without defensiveness or "shutting down"
    - h. Asks teammates about agreement concerning proposed team decisions
  - 2) Negative Behaviors
    - a. Gives personalized, derogatory criticism to teammates
    - b. Responds defensively/aggressively to feedback from teammates
    - c. Refuses to compromise; insists that his/her idea is the only correct one
    - d. Withdraws from interaction after feedback from teammates

Until future empirical research is conducted, the Task and Social Categories are posited to be equally important in determining teamwork effectiveness. Likewise, the three competencies within the Social Category are deemed equally important. Finally, the specific positive and negative behaviors within each competence are considered equally important. These weighting issues are significant when evaluating and scoring individual student teamwork performance, as described below.

### Recommended scoring rubric

Based upon the work of Hobson et al. (2013), it is recommended that raters (professors, students, external evaluators) be initially trained on the specific behaviors represented in the meta-model. This training can be facilitated by observing video-taped group interaction and identifying the target behaviors when they occur.

In essence, the rating task involves recording the frequency with which each specific behavior is viewed during a team interaction session. As mentioned above video-taping this interaction allows a rater to pause or “rewind the tape” as needed to accurately record behavioral frequencies.

Behavioral frequency counts can be converted into ratings on a 0-4 scale using the following:

Behavioral Frequency	Rating
0	0
1-3	1
4-6	2
7-9	3
≥10	4

After obtaining ratings (0-4) for all of the specific positive and negative behaviors in the meta-model, an overall score on teamwork effectiveness can be calculated, using the following five steps.

1. For each of the four teamwork competencies (Task Completion, Communication, Member Relations, and Disagreement Management), compute a sum of the scores for the individual items included in each competency, using negative numbers for the ratings on the negative behaviors.
2. For each of the four competencies, divide the sum of the item scores by the number of items to produce a mean value on the measurement scale from -4 to +4.
3. For each of the four competencies, convert the mean value (on the 8-point scale, from -4 to +4) to a percentage by adding 4 and then dividing that sum by 8. This will yield a percentage score for each competency.
4. Compute a score for the Social category by adding the percentage scores for the three competencies within this major category (Communication, Member Relations, and Disagreement Management) and then dividing this sum by three. Given that there is only one competency (Task Completion) within the Task category, the percentage score for Task Completion also represents the score for the category.
5. Calculate an overall teamwork score (percentage) by summing the percentage scores for the Task and Social categories and then dividing this sum by two, resulting in a mean overall percentage score.

### CLASSROOM APPLICATIONS

The meta-model of teamwork effectiveness can be usefully applied in business school classroom settings in several ways. First, it provides a content summary of seven prominent research-based models of teamwork behavior, in the straightforward format of two major categories and four distinct competencies. Second, the meta-model summarizes the specific positive and negative behaviors that impact teamwork effectiveness, making it easier for students to understand this topic.

The meta-model can also be very helpful in assessing individual student teamwork performance, as reflected in a video-taped leaderless group discussion exercise. Students can learn how to assess their own performance, using the scoring rubric discussed earlier. These self-assessments can be compared with peer and/or instructor assessments to formulate a comprehensive understanding of one’s teamwork strengths and weaknesses.

Building upon this behavioral assessment, another potential application of the meta-model is as a framework for teamwork coaching. Scores on an initial assessment can be used to identify specific behavioral strengths, to be further leveraged, and specific behavioral weaknesses, for which explicit improvement strategies can be developed.

Finally, if used as a pre-post-measure, the meta-model can offer an excellent mechanism to assess individual student progress in improving teamwork skills. Combining assessments for an entire class can offer a professor invaluable information to enhance the coverage of material in future classes. Finally, teamwork skill improvement data can be useful in documenting a business program’s impact for accreditation purposes.

## FUTURE RESEARCH

Future empirical research with the proposed meta-model of teamwork is clearly needed. Particularly important areas include:

1. The teamwork meta-model needs to be field-tested in college classrooms, to include procedures to train students/ faculty, video-tape team exercises, and conduct ratings.
2. It is essential to assess the meta-model's inter-rater reliability. This could be accomplished by utilizing multiple trained evaluators to rate the performance of individual students functioning in leaderless group discussion exercises.
3. After establishing the meta-model's reliability, it would be important to construct large-sample norms for the instrument, consisting of measures of central tendency and dispersion, as well as percentiles. This would allow individuals to interpret their own scores in comparison to the normative sample.
4. With large sample data, it would be interesting to confirm the proposed factor structure of the meta-model and determine if the individual items cluster together as hypothesized.
5. The validity of the meta-model could be evaluated by correlating overall scores with indices of team success, personality measures of team orientation, and biographic measures of teamwork involvement/achievement.
6. Finally, it would be helpful to examine potential sub-group differences in overall teamwork scores as a function of such demographic variables as sex, race, age, and college major.

## REFERENCES

- Bales, R.F. (1950). A Set of Categories for the Analysis of Small Group Interaction, *American Sociological Review*, *15*(2), 257-263.
- Baker, D.P., Horvath, L., Campion, M.A., Offermann, L., and Salas, E. (2005). "The ALL Teamwork Framework." In T.S. Murray, Y. Clermont, & M. Binkley (Eds.), *International Adult Literacy Survey. Measuring Adult Literacy and Life Skills: New Frameworks for Assessment*. Ottawa: Ministry of Industry.
- Betta, M. (2015). Self and Others in Team-based Learning: Acquiring Teamwork Skills for Business, *Journal of Education for Business*, 1-6. doi: [10.1080/08832323.2015.1122562](https://doi.org/10.1080/08832323.2015.1122562)
- Betts, S. & Healy, W. (2015). Having a Ball Catching on to Teamwork: An Experiential Learning Approach to Teaching the Phases of Group Development, *Academy of Educational Leadership Journal*, *19*(2), 1-9.
- Cannon-Bowers, J.A. & Bowers, C. (2011). Team Development and Functioning. In S. Zedock (Ed.), *APA Handbook of Industrial and Organizational Psychology*, 1, 596-650. Building and Developing the Organization. Washington, DC: American Psychological Association.
- Cannon-Bowers, J.A., Tannenbaum, S.I., Salas, E., and Volpe, C.E. (1995). "Defining competencies and establishing team training requirements." In R. Guzzo & E. Salas (Eds.), *Team Effectiveness and Decision Making in Organizations*, 333-380. San Francisco: Jossey Bass.
- Chen, G., Donahue, L.M., & Klimoski, R.J. (2004). Training Undergraduates to Work in Organizational Teams, *Academy of Management Learning and Education*, *3*(1), 27-40.
- Gray, K. (2016, April 14). Employers Identify Four 'Must Have' Career Readiness Competencies for College Graduates, *National Association of Colleges and Employers*, Washington, D.C.
- Hart Research Associates (2016). Falling Short? College Learning and Career Success, *NACTA Journal*, May, 1-6.
- Hobson, C.J., Strupeck, D., Griffin, A., Szostek, J., Selladurai, R., & Rominger, A.S. (2013). Facilitating and Documenting Behavioral Improvements in Business Student Teamwork Skills, *Business Education Innovation Journal*, *5*(1), 83-95.
- Hughes, R.L. & Jones, S.K. (2011). "Developing and Assessing College Student Teamwork Skills," *New Directions for Institutional Research*, *149*, 53-64.
- Salas, E., Sims, D.E., & Burke, C.S. (2005). Is There a "Big Five" in Teamwork? *Small Group Research*, *36*(5), 555-599.
- Sashittal, H.C., Jassawalla, A.R., & Markulis, P. (2011). "Teaching Students to Work in Classroom Teams: A Preliminary Investigation of Instructors' Motivations, Attitudes, and Actions," *Academy of Educational Leadership Journal*, *15*(4), 93-106.
- Stevens, M.J. & Campion, M.A. (1994). The Knowledge, Skill, and Ability Requirements for Teamwork: Implications for Human Resource Management. *Journal of Management*, *20*(2), 503-530.



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# Team Assignments: Planning a Collaborative Online Learning Environment

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## ABSTRACT

Teamwork is an essential part of an organization's success. Yet many online business programs do not use a methodological approach for ensuring students are learning critical teamwork skills and effectively applying them during the course of a semester. The purpose of this paper is to present best practices for implementing teamwork into an online business class and how assessment rubrics can assist in making meaningful changes and improvements to enhance student collaboration in online experiences.

**Keywords:** teamwork, collaboration, online instruction, adult learner, assessment

## INTRODUCTION

Business coursework can provide real-world work experiences for adult learners by providing opportunities for students to work effectively in teams. It is the instructor's role to make connections to academic teamwork theorizing and to showcase how academic study can present new skills and knowledge to improve workplace team experience. The MBA Global Leadership course designed and taught by the coauthor draws upon student experiences in working with teams by providing opportunities to explore and apply new skills aimed at increasing student effectiveness in the workforce where teamwork plays a critical role in achieving organizational goals. Working with the author in eLearning services, the course was evaluated to identify whether or not MBA program learning goals for teamwork and leadership in teams were met. The learning goals include demonstration of: 1) appropriate group techniques to participate in team tasks resulting in effective performance, and 2) effective leadership skills in a group project. Results were assessed using peer evaluation rubrics for both teamwork and leadership in teams. In addition, mid-term and end-of-term evaluations were used to assess the effectiveness of instruction and student satisfaction with the team building learning experience.

## ONLINE TEACHING STRATEGY FOR THE ADULT LEARNER

Research by Czerkowski (2014) and Rosie (2000) argued that online learning can promote students' critical thinking skills, deep learning, collaborative learning, and problem-solving skills. However, designing, developing and delivering an online course presents instructors with new challenges since there are clear differences in teaching strategies for online versus traditional instruction. Some of the challenges include the change of role and responsibilities for instructors (Muirhead, 2000), use of technology (Valentine, 2002; Palloff & Pratt, 2003), interaction with students, and changes in interpersonal relations (Bower, 2001, cited in Yang & Cornelious, 2005). Ascough (2002), promotes the role of facilitator versus instructor since there is less control of the class environment in online learning. Also, since most instructors are more likely to have been trained in traditional instruction, it can be a new practice for them to plan interactive strategies in course delivery. Since the level of interaction is different, instructors must change from conventional lecturer to learning champion as suggested by Volery (2000). Therefore, as noted by Zheng and Smaldino (2003), the instructor must design instruction as well as facilitate learning. Since designing instruction for online learning is not always a role where instructors excel, Lawrence Technological University eLearning Services requires that instructors work alongside instructional technologists for designing, developing, and delivering online coursework.

In addition to online design and delivery challenges, designing instruction for the adult learner is equally important and has its own set of challenges. According to Merriam (2009), andragogy methods call for adult learning participation in the learning and drawing upon life experiences. Andragogy is defined as "any intentional and professionally guided activity that aims at a change in adult persons" (Knowles, Holton, & Swanson, 2015, p. 39-40). This aligns with Czerkowski's (2014) definition of deeper learning that "promotes students' active engagement in learning environments, so they can continuously explore, reflect and produce information to build complex knowledge structures" (p. 29). Instructors who include adult learning theories in their teaching approach by focusing on human qualities and explanatory skills can have a positive impact on students' perception of quality teaching (Ramsden, 2013). Lawler and King (2000) stated that focusing on the learner and including active participation

embodies adult learning principles. Development of a course therefore needs to incorporate breadth of knowledge, industry-accepted best practices for design, and teaching and learning effectiveness.

The design of adult learning instruction typically concentrates on ‘doing’ and action learning while at the same time ensuring the learning is relevant to the student’s professional experience. Knowles et al. (2015) recommends that designers of instruction assess existing knowledge, consider the experience of the adult learner, and provide motivation to develop an applicable learning experience. Thus, the instructor of adult learning takes on the role of moderator and coach performing the functions of assessing students’ needs, engaging students in the planning process, and connecting students to learning resources. The inclusion of what the student is required to learn along with institution learning goals is recommended and reinforced using a variety of communication modes.

## COURSE DESIGN AND FORMATION OF TEAMS

The Global Leadership class is typically the inaugural course in the MBA program. Most, if not all, courses in the MBA program emphasize teamwork since students who work in collaborative learning environments tend to learn at a deeper level, retain information longer, are less likely to drop out of programs, acquire greater communication skills, are more effective team members/team leaders, achieve higher grades, and gain a better understanding of the environment that they will be working in as professionals (Oakley, Relder, Brent, & Elhadj, 2004). Course assignments are structured to engage students in learning what a team is and bringing awareness to how teams function effectively. This begins the first week of class. Each course activity is purposely structured to teach and provide experience in the application of new knowledge. The authors followed the Oakley et al. structure for building effective teams (Table 1).

**Table 1: Oakley, B., Relder, R. M., Brent, R., & Elhadj, I. (2004). Turning student groups into effective teams. *Journal of Student Centered Learning*, 2(1), 9-34.**

Form	When Used	Objective
Getting to Know You	First day of class	Divide students into teams
Team Policies	First day of class	Define rules and procedures for teamwork
Student Expectations Assignment	First week of class	Develop a team contract
Coping with Hitchhikers and Couch Potatoes on Teams	First week of class	Deal with dysfunctional teams
Evaluation of Progress Toward Effective Team Functioning	1/3 through semester, 2/3 through semester	Identify team problems
Team Member Evaluation	2 <sup>nd</sup> or 3 <sup>rd</sup> week, mid-semester, end of semester†	Peer rating
Peer Rating of Team Members	Mid-semester, end of semester†	Peer rating
Auto rating Spreadsheet	Mid-semester, end of semester††	Use peer ratings to adjust team grades for individual effort
†The first administration is a ‘trial run’—the forms are filled out and shared among the team members but not collected by the instructor. ††This form is not given to students.		

To be successful as a team member or team leader, understanding what a team is and determining key attributes for effective teamwork are critical to “development of essential skills, as opposed to only knowledge acquisition” (Hobson, Strupeck, Griffin, Szostek, & Rominger, 2014, p.191). Getting to know the instructor and class members is the first order of business. Using the instructor’s introduction as an example, the first class session begins with student introductions where each student posts a structured introduction including three questions related to effective teamwork: 1) what are the qualities of an effective team, 2) as a team leader, what attributes do you feel are most critical, and 3) as a team member, what attributes do you feel are most critical? This exercise prepares students with first steps in contributing as a member of a team and leader (Hobson, et al., 2014). Students learn from the student body by reading other student contributions placed in the discussion forum. Learning where potential team members differ, basic characteristics of quality team attributes, and other student experiences assist with students self-selecting team members for completion of weekly group assignments and class projects (Rico, Antino, Sánchez-

Manzanares, & Lau, 2012). Where students do not complete the self-select process by the end of the first week, the instructor places students in teams.

Instructional material reinforcing the importance of effectual teamwork for organizational success includes recorded lectures on the subject of team formation, communication, collaboration, and conflict resolution skills. Student teams then demonstrate their understanding of working as an effective team, with the completion of pre-work. This important work empowers team members to cope with hitchhikers, evaluating progress with assigned course work, and team evaluation. A team charter is developed documenting their understanding of the course work they will be responsible for. The charter includes agreement on rotating roles for completing course work, schedule of assigned tasks, methods of dealing with non-participation, and advancing team concerns to the instructor. This approach empowers the learner with ownership of their knowledge therefore becoming more interested in their learning in a safe inclusive learning environment (Missingham & Matthews, 2013).

The team charter is reviewed by the instructor and returned with supporting feedback or requests for follow-up. With this information the instructor monitors the team online collaboration space. Using the collaboration work space teams communicate, share documents, track progress, and discuss concerns. This collaboration space and assignment submissions are monitored to confirm teams are working effectively.

Clear instructions with specific guidelines in multiple communications are provided by the instructor for dealing with noncontributing team members (hitchhikers and couch potatoes). The ramifications include reaching team consensus for recommending firing a team member. This formal written request is presented to the instructor. Although the instructor makes final decisions for firing a team member, this rarely occurs for a number of reasons: 1) the student who has been terminated from the team would then need to request admittance into another team and 2) if other teams do not accept the fired team member, this individual will work independently to complete all remaining team assignments. For these reasons, most often team members are able to come to a productive understanding before the situation becomes unmanageable. This process provides students with real-world lessons regarding the importance of pulling one's weight for the good of the team and also helps to bond the team by promoting a collaborative effort.

### **MONTIORING TEAMWORK, FEEDBACK AND CLEAR COMMUNICATION**

For the Global Leadership course, teamwork comprises 50 percent of the student's class grade. Teamwork assignments include weekly practical application exercises based on chapters in the textbook to lengthier and more formal projects such as researching, developing and writing a leadership research paper. Additionally, teams rotate leadership and followership roles weekly. This approach allows students to understand when to lead and when to follow. Students also learn from watching how different team leaders and followers approach work distribution and responsibilities. The instructor provides weekly feedback regarding the quality of team submissions (parts of submissions that were strong and the areas where improvements are needed). And, when improvements are needed, teams are allowed an opportunity to make revisions prior to submission of their grade (particularly when assignments are submitted before the due date). When merited, rewarding excellent work and providing positive reinforcement, builds team motivation and increases effort (Schwartz & Castelli, 2014). Collectively, these techniques provide students with direct experience in developing their leadership and followership skills; both of which are equally important in effective organizations.

Assignments are progressive during the course of the semester and start with small tasks, building to more complex and challenging work over the semester. This approach aligns with Tuckman's (1965) developmental stages of groups and teams. Teams start in the 'forming' stage with low trust, move on to 'storming' where intragroup conflict is heightened, progress to 'norming' where group norms and cohesiveness are developed, to finally 'performing' where group members are fully functional with interdependent roles and focused on achieving team goals. Understanding the phases of team development is critical for the instructor who will need to provide much more guidance and feedback to teams earlier in the semester versus later on when teams are fully performing. Additionally, it is recommended that the instructor start with smaller team assignments (such as chapter essay questions) and build to more complex projects (such as a team research proposal and paper).

Early evaluation and ongoing monitoring of progress toward effective team functioning is critical. Providing students with clear and timely feedback along with prompt grading is essential to maintain student engagement, motivation to perform, and the opportunity for students to plan for success with future assignments. Assignments are carefully designed to measure course, program, and university learning objectives. Using this approach allows the instructor the ability to evaluate each team's ongoing performance and monitor their needs for additional support. When a need for additional instruction or guidance is identified, or when a student communicates that she/he does not understand a particular part of an assignment or project requirement, increased communications for the whole class must be implemented promptly and comprehensively. The use of a "Question and Answer" forum is also beneficial in communicating clarifications to the entire class.

Resources supporting the research and development of course assignments include a listing of recommended resources available to students using the university's online library. Common resources, such as business journals and profession specific materials, assist students with learning about resources within their field of study. Helping students to move quickly to access needed resources and to acquire new information builds the confidence levels of teams and shifts the focus to accomplishing the assignment. The use of "FYI Leadership" forums wherein additional resources are posted throughout the semester builds the learning community as students are encouraged to post resources such as articles, blogs, skill-based survey instruments, etc. relating to global leadership and management theories and practice.

## **EVALUATION METHODS FOR ASSESSING TEAMWORK EFFECTIVENESS**

The use of assignment rubrics are incorporated into the course and provide instructors the ability to communicate grading criteria assessing all attributes of the assignment and distribution of total points. Criteria of the assignment aligns with learning outcomes and assists with evaluating performance, providing feedback, and teaching. Students benefit from the use of rubrics as the interpretation of assignment requirements across team members is minimized. Also, since the student has access to all assignment rubrics, they can review the guidelines prior to submitting assignments to ensure all the stated criteria for success has been met.

For the final course project, students are required to write a reflective paper where former beliefs are contrasted with new beliefs as a result of taking the course. Additionally, students cite the specific ways they are now practicing global leadership skills more effectively as a result of the class. Even though students can be apprehensive about working in teams at the beginning of the semester due to prior bad experiences, at the end of the semester, many students comment on their improved collaboration and teamwork skills:

**Comment by student one:** "The course was invaluable. Teamwork is key!!"

**Comment by student two:** "I like how the course has a collaborative team effort, and allows all the work to be delegated as you would see in the real work place."

**Comment by student three:** "Class enables good teamwork which allows the intense work load to be easy to handle; by having this collaboration I consider this class one of my favorites and beneficial in my Master's experience."

**Comment by student four:** "...teamwork (this was the best team I have ever worked with)."

Students are required to evaluate their peers at the end of each semester for both team performance (See Table 2) and leadership performance in teams (See Table 3) using assessment rubrics. Students' ratings of their team members are anonymous, not used in grading, and are electronically entered by the student in the Student Tracking Evaluation Portfolio System (STEPS) assessment process. This electronic database allows for statistical reports each semester where charts showing numbers of students with corresponding scores per item are relayed back to faculty who are responsible for making changes and improvements for scores that do not meet the required benchmarks. Additionally, longitudinal studies that compare results each semester over an extended time period (3 to 5 years) are also helpful for outcomes assessment where progress (or lack of improvements) are graphically displayed.

Much can be learned about online team dynamics from peer ratings. First, peer evaluations provide students with data driven information regarding their strengths and development areas as a team player and team leader. Second, there are comment sections in the rubrics for students to provide constructive criticism to their peers so that they more fully understand their strengths and weaknesses. Third, students seem to genuinely value the feedback provided by their peers which they take quite seriously. Instructors can also learn a great deal about their

effectiveness in promoting teamwork in their classes since it is often a failure on the instructor's part if student peer evaluations scores are low. These failures generally center on lack of ongoing communication, not regularly monitoring team progress, and a lack of feedback that is not timely or helpful.

In addition to peer evaluations, students also complete the mid-semester course evaluation (formative) and the more extensive end-of-term evaluation (summative). These evaluations include a 5 point Likert scale for evaluation of the course and instructor performance. Additionally, comment sections are provided where the student can write remarks related to specific sections of the evaluation. The assessment results provide the instructor with concrete evidence to continue using sound practices that result in high scores, or to make meaningful changes and improvements to the course (mid-semester, and/or after the semester). Collectively, these quality improvements can be shared with all faculty during best practices assessment sessions.

## CONCLUSION

In and of itself, online learning provides challenges to instructors. This can be further complicated since teamwork is a vital skill required for earning business degrees and, therefore, should be a critical part of the online learning experience. In order to be successful in building collaborative teams in an online class, the responsibility ultimately resides in the instructor's ability to understand the challenges of online learning. In addition, the instructor should consider the key theories and principles of adult learning, provide concise and timely feedback regarding the performance of team assignments, and intervene when needed. Finally, the instructor should use situational leadership skills to monitor the class environment, and should the need arise, quickly adjust and communicate the changes to the team and/or class promptly.

## REFERENCES

- Ascough, R. S. (2002). Designing for online distance education: Putting pedagogy before technology. *Teaching Theology and Religion*, 5(1), 17-29.
- Bower, B.L. (2001, July 1). Distance education: Facing the faculty challenge. *Online Journal of Distance Learning Administration*, 5(3).
- Czerkawski, B.C. (2014). Designing deeper learning experiences for online instruction. *Journal of Interactive Online Learning*, 13(2), 29-40.
- Hobson, C. J., Strupeck, D., Griffin, A., Szostek, J., & Rominger, A. S. (2014). Teaching MBA students teamwork and team leadership skills: An empirical evaluation of a classroom educational program. *American Journal of Business Education* 7(3), 191-212.
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2015). *The adult learning: The definitive classic in adult education and human resource development*. New York, NY: Routledge.
- Lawler, P. A. & King, K. P. (2000). *Planning for effective faculty development: Using adult learning strategies*. Malabar, FL: Krieger Publishing Company.
- Merriam, S. B. (2009). Adult learning theory for the twenty-first century. In Merriam, S. B. (Ed.), *Third update on adult learning theory: New directions for adult and continuing education*. (93-98). San Francisco, CA: Jossey-Bass.
- Missingham, D. & Matthews, R. (2014). A democratic and student-centered approach to facilitating teamwork learning among first-year engineering students: A learning and teaching case study. *European Journal of Engineering Education*. 39(4), 412-423.
- Muirhead, W. D. (2000). Online education in school [Electronic version]. *The International Journal of Educational Management*, 14(7), 315-324.
- Oakley, B., Relder, R. M., Brent, R., & Elhajj, I. (2004). Turning student groups into effective teams. *Journal of Student Centered Learning*, 2(1), 9-34.
- Palloff, R. M., & Pratt, K. (2003). *The virtual student*. (pp.17-28). San Francisco, CA: Jossey-Bass.
- Ramsden, P. (2013). *Learning to teach in higher education*. New York, NY: RoutledgeFalmer.
- Rico, R., Antino, M, Sánchez-Manzanares, M., & Lau, D. (2012). Bridging team faultlines by combining task role assignment. *Journal of Applied Psychology*, 97(2), 407-420.
- Rosie, A. (2002). Online pedagogies and the promotion of "deep learning". *Information Services & Use*, 20(2/3), 109-116.
- Schwartz, M. L., & Castelli, P. A. (2014). Motivating strategies leaders employ to increase follower effort. *The Journal of Values-Based Leadership*, 7(1), 71-88.
- Tuckman, B.W. (1965). Developmental Sequence in Small Groups. *Psychological Bulletin*, 63, pp. 384-99.
- Valentine, D. (2002, October 9). Distance learning: Promises, problems, and possibilities. *Online Journal of Distance Learning Administration*, 5(3). Retrieved on January 27, 2017, from <http://www.westga.edu/~distance/ojdl/fall53/valentine53.html>
- Volery, T. (2000). Critical success factors in online education. *The International Journal of Educational Management*, 14(5), 216-223.
- Yang, Y., & Cornelious, L. F. (2005). Preparing instructors for quality online instruction. *Online Journal of Distance Learning Administration*, 8(1), 1-16.
- Zheng, L., & Smaldino, S. (2003). Key instructional design elements for distance education. *The Quarterly Review of Distance Education*, 4(2), 153-166.

**Table 2: Peer Evaluation Rubric for Teamwork**

Objective	Trait	Deficient (1...2)	Competent (3...4)	Exemplary (5...6)	Score
<b>Graduates can demonstrate appropriate group techniques to participate in a team task that results in effective performance</b>	Group Techniques Attendance: Student comes to meetings	Student attends less than 60% of scheduled meetings or student is frequently late to meetings or leaves early	Student attends 60-80% of meetings unless otherwise excused and student is normally on time and stays for full length of meeting	Student attends more than 80% of meetings and student is on time for all meetings and stays for the full length of meeting	
	Group Techniques Preparation: Student is prepared for meetings	Student fails to do reading or research prior to meetings or student fails to complete specific assignments prior to scheduled meeting	Student completes required readings and research prior to meeting and student completes specific tasks or assignments	Student not only completes required readings and research, but does additional research or readings to enhance group objectives	
	Group Techniques Contribution: Student contributes ideas to meetings	Student rarely speaks or contributes positive ideas/suggestions during meetings	Student participates in group discussions and makes an effort to provide positive input	Student provides both ideas and suggestions that greatly enhance the team effort and stimulate others to contribute	
	Group Techniques Positive attitude/ Participation: Student works well with team members	Student does not communicate constructively or work with other team members	Student works with team members in order to complete basic and assigned task at hand	Student complements the work of team members, such that the work of the team exceeds the efforts of the individual team members	
	Group Techniques Accountability: Student offers to take responsibility for group tasks	Student rarely volunteers or accepts responsibility for group work	Student normally volunteers or accepts responsibility for group work	Student frequently volunteers to accept responsibility for group tasks, and always accepts responsibility when assigned tasks by other team members	

**Table 3: Peer Evaluation Rubric for Leadership in Teams**

Objective	Trait	Deficient (1...2)	Competent (3...4)	Exemplary (5...6)	Score
<b>Graduates can demonstrate effective leadership skills in a group project</b>	Motivation: Student motivates team members to contribute to the accomplishment of team goals	Student fails to motivate team members to contribute to the accomplishment of team goals	Student motivates team members to contribute to the accomplishment of team goals	Student motivates team members to contribute to the accomplishment of team goals and inspires team members to surpass expectations	
	Delegation: Student assigns tasks and responsibilities to other members	Student does the majority of the work or assigns all the work to others	Student assigns tasks among members fairly and expects members to fulfill them	Student bases assignments on skills of members and helps when members encounter difficulties	
	Conflict Resolution: Student helps to find solutions to interpersonal conflict between group members	Student ignores interpersonal conflict or contributes to the problem by a lack of objectivity or fairness	Student helps to resolve interpersonal conflicts in a reasonable way	Student uses mediation and consultation to help members see other points of view. Student uses initial conflict as a way of generating new thought or strategies	

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# Video Production to Enhance Multimedia Presentations Skills: An Undergraduate Business Project

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## ABSTRACT

In this article, we argue that multimedia video presentations are going to be a useful (almost necessary) tool for business professionals. The technology is readily available for anyone to make basic videos and thus it will become more commonly used. Current students, anticipating a long business career, will need to develop basic video production skills. To understand the video making thoughts and skills of current business students, we report survey data about the attitudes, aptitudes, and experiences of a sample of undergraduate business students. The results indicate that some students have strong video making experience, particularly from high school, while others have no video making skills or experience. Most believe they will need to be able to make videos for successful careers in business. Editing is the skill most students report as lacking. We also present a class-tested, video project that endeavors to help undergraduate business students develop video production skills while also developing content knowledge. The project requires students to individually research careers in accounting, and then produce a video as a group that is intended to persuade undergraduate students to consider a career in accounting. Rubrics are provided along with implementation guidelines. Overall, students successfully produced short video segments, and reported improvements in many areas of video production.

**Keywords:** business, accounting, education, presentation, video production, multimedia, oral presentation, collaborative learning, active-learning, careers in accounting, rubric

## INTRODUCTION

The general purpose of a professional business presentation is to convey information and influence the audience, in other words, to communicate and to persuade. Some means of communication are more effective than others. Multimedia presentations that include sound, narrative, and visuals are standard presentation tools that facilitate communicating complex topics to an audience within a set time period. Examples of traditional multimedia presentations include PowerPoint, Prezi, Keynote, or other presentation software; these tend to be used for live presentations and could include slides, graphics, videos, etc. Although these presentation tools can accomplish the communication needs, they can also be limiting. Live presentations by definition require the speaker and the audience to be simultaneously present. The quality of the presentation is determined by the actual performance of the speakers. The time necessary for the presentation is limited by the human capabilities of the presenter. Alternatively, multimedia video presentations, which are produced ahead of time, offer improvements to some of these problems.

The distinctions between traditional presentation methods and video methods are somewhat blurred because many presentation software tools allows recording and editing. Although a traditional presentation can be developed and practiced ahead of time, and even archived, the primary value of a video presentation is that the presenter can view and edit the video, to improve the quality of the presentation, before actual delivery. Editing allows for efficient effective presentation of the information. Editing also facilitate the use of expert witnesses who might not be available for the presentation. Likewise, even the presenter is not necessary, when the audience can view an archived video presentation on demand at their convenience. Video presentations incorporate multimedia experiences that can better inform and persuade an audience using facts, context, and entertainment.

Prior to recent technological developments, only professionals could create and publish videos, and thus only professionals were expected to produce videos. However, as the technological tools for video production have become more prevalent, so has the expectation of their use. Today almost everyone can take videos on their phone, edit these videos easily using standard computer software, and publish them for all to view. YouTube, the dominant platform for digital video archiving, has upended traditional media structures (Soukup, 2014). In just over a decade, YouTube uploads have grown to more than 400 hours per minute and the forecast is not slacking (Robertson, 2017).

The need for traditional PowerPoint-like presentations is waning, and like overhead projectors and acetates, may eventually become obsolete. The future of basic video production as a presentation tool has arrived and business professionals need to be equipped to use this valuable tool.

Professionals have long recognized that oral communication is an important competency for business students in the workplace (Maes et al., 1997). Surveys of accounting professionals indicate that oral communication is a core function for accounting practice (AICPA, 1999; Albrecht & Sack, 2000, Siegel, 1999). Marketing repeatedly has described presentation skills as an important hiring criteria for entry-level positions (John & Needel, 1989; Kelley & Gaedeke, 1990). Finance too recognizes the value of soft skills for business leaders (Kaigh et al., 2014). Effective presentations can open a whole world of opportunities for personal growth, professional influence, and career advancement (De Beer, 2007).

After being criticized by employers that students were poorly prepared to function in the workplace, and learning that employers highly valued communication skills, (Applebome, 1995), academia incorporated oral presentation skills into most undergraduate business programs (Campbell et al., 2001). However, the specific use of video presentations has been limited to particular kinds of classes, or has been used for recording oral presentation in online classes. Specialized courses are being developed to teach multimedia commercial production for advertising and public relations (Morris, 2012). Corbett et al. (2010) reported that students who made sales videos while in a marketing class benefited because the video making reinforced their understanding and use of the sales process. Kemp et al. (2013) showed that sales recruiters who viewed one-minute video resumes were more likely to contact that applicant than candidates who provided only a resume. In on-line corporate finance MBA classes (Holland, 2014) and undergraduate business information systems classes (Raven et al., 2010), video technology has been used to record traditional class presentations for later viewing and grading. These examples of video presentation activities are limited because either they focus on a specific segment of the business student population, or they do not fully embrace the power of video production for presentations.

The purpose of this article is to argue that preparing video presentations is an important skill for business professionals and to provide a sample project that requires students to prepare a short video presentation. Although the specific purpose of the assigned video is to inform undergraduate students about careers in accounting and to persuade them to consider majoring in accounting, this project can be easily adapted for use in any business class where informative or persuasive presentations are given. Moreover, the project can be used at any level of education. This project is intended to augment, not replace core business content and technical training.

## **BUSINESS STUDENT VIDEO PRODUCTION ATTITUDES, APTITUDES, AND EXPERIENCE**

To better understand the need for business students to develop video production skills, we surveyed current business students at our institution and inquired about their attitudes toward the value of being able to prepare videos, their desire to learn video production skills, the skills they already believe they possess, and their prior video making experience. The sample was drawn from a mid-to-large regional public institution in the Midwest. The characteristics of the students that attend this institution are 58% female, 89% full-time, 82% Caucasian, 35% low income, and 39% first generation college student. The college of business is representative of this population.

### **Sample specifics**

A convenience sample of 324 business students from 13 different sections of business classes was used. The specific classes surveyed included: Principles of Managerial Accounting, Managerial Finance, and three upper-division accounting classes (Cost, Intermediate I, and Systems). The Principles of Managerial Accounting and Managerial Finance are required core business classes that all business students take and most complete at our institution. Thus, these classes were likely to have a representative sample of business students. Three upper-level accounting classes were selected because the project was conducted in an accounting class and specific accounting student data was desired as well as the general business student population. All students in the 13 sections were offered the opportunity to take the survey, and 98% completed usable surveys.

As depicted in the Table 1, the sample was relatively balanced between male and females students. Half the sample were juniors in college, and the other fifty percent were split equally between sophomores and seniors. Of the 324 subjects, 153 reported accounting as a major, 50 of which were joint finance majors and another 21 were joint management majors. There were 41 subjects reporting a finance or economics major, 34 reporting a management major, 41 reporting a marketing major, and 65 reporting a non-business major.

**Table 1: Sample Characteristics**

Business class:	# of obs.	Male	Female	Year in college		
				So.	Jr.	Sr.
Principles of Managerial Accounting (core)	81	43%	57%	71%	23%	5%
Managerial Finance (core)	99	59%	41%	13%	61%	26%
Upper-division accounting classes	144	59%	41%	3%	55%	42%
All classes surveyed	324	55%	45%	23%	49%	28%

**Survey Results**

Students were asked about their perceptions of the following questions. The results are presented in Table 2.

- How useful will it be for you to be able to prepare video presentations?
- How much do you desire to learn how to prepare videos?
- What video production skills do you believe you have?
- What previous video making experience do you have?

Panel A in Table 2 suggests that in general, students believed that they would need basic video development skills to be successful in their work over the next ten years. Almost half the students thought that video production skills would be considerably useful within the first three years, and this rate grew to 65% who thought they would be a valuable presentation tool within ten years. When segmenting by major, accounting, finance, and economics majors believed video production skills in their first 3 years were less valuable (mean of 2.9) than the marketing, management, and other majors (mean of 3.6). These differences were not statistically significant at alpha equal 0.10 using standard t-test methodology. This evidence suggests that students believe video production skills are an important tool for professional success.

Panel B in Table 2 suggests that in general, students desire to learn how to prepare videos. Of the students sampled, 40% reported at least a moderate desire to learn video production skills, with the strongest desire to learn editing skills. Like the student attitudes toward the value of video production, accounting, finance, and economics majors were less interested in learning additional skills than marketing, management, and other majors and these differences were not statistically significant at alpha equal 0.10 using standard t-test methodology. Thus, students believe video production is an important skill to learn.

Panel C in Table 2 provides evidence that there is disparity in student ability to produce videos. Students believe they are more skilled at planning a video storybook and taking video clips than editing and polishing their presentation. About 65% agreed they could plan and film short video productions, but 38% to 56% reported they could not edit music, video clips, or voice-overs. This evidence suggests that students have some skills but are lacking in the editing ability, and this would be a good area for development.

Panel D in Table 2 provides evidence that many students have had some experience making videos. Only about 25% of students surveyed had never produced a video. Of those who have produced a video, most gained their experience during high school. Only 17% of the sample had made a video for a college class. While many students make videos for personal use, these videos can be of dubious quality. This evidence suggests that more video making experience is needed in college where the quality of the product can be monitored and developed.

Overall, students desire more video production skills and believe these skills will be important for their professional success. Editing is the skill identified as most lacking. This evidence suggests that video production projects could be beneficial for business student education.

**Table 2: Business Student Video Production Attitudes, Aptitudes and Experience<sup>+</sup>**

<i>Panel A: How useful will it be for you to be able to prepare video presentations?</i>								
Using the scale provided,* assess your attitude toward the value of video presentation skills:	Value of video presentation skills							Mean
	0	1	2	3	4	5	6	
in the first 3 years of working in business	4%	9%	15%	24%	26%	14%	7%	3.29
in the first 3-10 years of working in business	3%	7%	8%	18%	28%	25%	12%	3.83
need for basic video development skills	3%	5%	10%	17%	33%	20%	11%	3.75
need for professional video development skills	5%	9%	14%	22%	26%	17%	6%	3.31
*Assessment scale: 0=No value; 1=slightly useful; 2=somewhat useful; 3=moderately useful; 4=considerable useful; 5=extremely useful; 6=critical for success.								
<i>Panel B: How much do you desire to learn how to prepare videos?</i>								
Using the scale provided,** assess your desire to learn the following:	Desire to learn video production skills					Mean		
	1	2	3	4	5			
Overall desire to learn video production skills	11%	19%	30%	29%	12%	3.12		
Desire to learn how to plan a video	11%	26%	29%	23%	11%	2.98		
Desire to learn filming techniques	12%	21%	29%	25%	12%	3.04		
Desire to learn editing visual effects	9%	16%	25%	32%	18%	3.34		
Desire to learn editing sound effects	10%	18%	27%	28%	16%	3.22		
**Assessment scale: 1=no desire; 2=slight desire; 3=some desire; 4=moderate desire; 5=extremely desirable.								
<i>Panel C: What video production skills do you believe you have?</i>								
Using the scale provided,*** assess the validity of each statement:	Video production skills					Mean		
	1	2	3	4	5			
I can plan a short video (3-7 minutes)	6%	12%	19%	38%	25%	3.63		
I can film short video clips	7%	10%	18%	35%	30%	3.72		
I can edit video clips	19%	23%	25%	18%	16%	2.91		
I can add and edit music in videos	17%	21%	23%	23%	16%	2.98		
I can add and edit voice overs in videos	29%	28%	18%	15%	9%	2.47		
***Assessment scale: 1=strongly disagree; 2=somewhat disagree; 3=neither agree nor disagree; 4=somewhat agree; 5=strongly agree.								
<i>Panel D: What previous video making experience do you have?</i>								
Produced at least one video of the following length:	Video making experience							
	High school classes	College classes	Personal use					
1-2 minutes	26%	6%	19%					
3-5 minutes	47%	11%	26%					
6-10 minutes	20%	4%	9%					
Over 10 minutes	10%	2%	7%					
No videos produced	28%	83%	52%					
Note: Observation counted if student reported to have produced at least one video of this length.								
+All percentages based on the full sample of 324 observations.								

## THE VIDEO PROJECT

### Assignment

The purpose of this assignment is twofold: one, for students to learn about and communicate information about careers in accounting and two, for students to develop presentation abilities, specifically using video production skills. The specific fields of accounting explored are corporate financial reporting, external auditing, managerial accounting, internal auditing, and tax consulting. The required medium of communication is video presentation.

The project involves three stages: independent research, group video preparation, and wrap-up with evaluation and reflection activities. Initially, all students conduct independent research on the assigned area of the accounting profession. This is graded for content and feedback is provided. Once the research phase is completed, students unite into their groups to develop a 5-7 minute video that ultimately is intended to present an undergraduate student audience with information about the accounting profession, and to entice them to consider careers in accounting. Initially, one day of class time is devoted to having the students discuss and prepare storyboards for their videos. The instructor is present to answer questions about content, to offer suggestions about organization, and to clarify expectations about the specific video skills required. In the wrap-up phase, students watch each other's videos in class, and assess them using the grading rubric provided (see Appendix B). The experience culminates with each student writing a one to two page reflection on the process of video preparation, the video making skills developed, as well as what they learned about collaborative work. A copy of the assignment is presented in Appendix A.

### Learning Objectives

The assignment specifically addresses three types of learning objectives, content objectives, research objectives, and video production objectives.

Content objectives include:

- To understand and communicate the basics of a specific area of accounting
- To articulate what type of work these accountants do and who employs them
- To know the necessary or useful certifications and how to obtain these certifications
- To know how to achieve the education necessary to prepare for a career in this area of accounting.

Video production objectives include:

- To communicate information clearly to a specific audience
- To appropriately edit segments for proper transitions
- To demonstrate the ability to edit audio and voice narration
- To demonstrate the ability to film with appropriate background, lighting, and equipment
- To incorporate graphics, images, music, and special effects
- To demonstrate creativity that enhances the communication of the message
- To properly use the work of others through appropriate copyright clearances.

### Implementation Guidelines

This project has been assigned for three semesters in an undergraduate Principles of Managerial Accounting class at a mid-to-large size public university with a fifteen-week semester, 75-minute classes, and class sizes of twenty to forty students. The class typically consists of sophomore business students of which the male-female ratio is 50-50, 90% are traditional students, and 15% are accounting majors. The video making attitudes, aptitudes, and experiences of the students taking this course are similar to those reported in the previous section.

*Collaborative learning:* Students are assigned by the instructor to groups of four at the beginning of the semester and work on a variety of exercises and projects together. The groups are purposely heterogeneous to provide students with the experience of cooperating with individuals different from themselves. Research shows that heterogeneous groups produce a more effective learning environment than student self-selected groups as measured by individual academic performance (Smith and Spindleb, 2007). Throughout the semester, students are exposed to group management tools. For each project, they must select a leader, scribe, spokesperson, and member. These roles are switched throughout the semester so students can gain experience at multiple roles. Except on rare occasions, student groups are left alone to resolve internal conflicts. Although the process of collaboration is valuable, this project is conducted in groups primarily because group learning better improves student video production skills.

*Research component:* This assignment requires little prior academic learning. The content is learned through independent research. Students are asked to do independent research because, in general, their research skills are still at the developmental stages, and it is only when combining all the group's resources will they have enough content to adequately prepare the video. If students conduct the research in groups, they typically give the task to one person who in general does not provide sufficient information. All members of the group need to come to the group work having prepared the topic as well as they can. This makes for much better content and fewer frustrations in the video making stage.

In general, students find the research part of the assignment difficult. They are poorly prepared to struggle to find sufficient information about their topic. However, this stage in the assignment is critical to successful videos. Students benefit from being given a model of annotated references that provides examples with the level of detail needed. Three references from varying sources, such as professional organizations, journal articles, and news media, tend to be sufficient for students to understand the expectations of the research stage. This resource improves the quality of their research and reduces their frustration level. It is more valuable for sophomore students, who are still building research skills, then for upper-division or graduate students.

*Video production:* In this class, we purposely do not help the students learn video production skills. In the professional-world, they will encounter new technology and will need to be able to find the resources to learn how to master the technology. We do provide a list of resources that include some university personnel in the IT area who can assist them in video production. The equipment that students use varies considerably. Some use personal iPhone equipment and software; others use more professional filming and editing tools. The university offers some editing software for student use, and some have used this as well. To date, equipment availability has not been a problem. In general, the only intervention needed is to remind students to properly manage their time. To address this problem and to build project management skills, students are encouraged to develop a project task and timeline.

Over the past three semesters, students have been able to successfully complete the video production process. For examples, see <https://www.youtube.com/watch?v=asENkhX0AR4> (Carroll et al. 2017) and <https://youtu.be/LztRN2wSmrM> (Grannan et al., 2017). Although the videos met the basic requirements, they generally had easily identifiable flaws, which enhanced the learning process. Students observed the production weaknesses, developed a greater appreciation for high-quality videos, and learned how to avoid classic errors in the future. In an ideal world, the videos would have been revised after being reviewed. Because of the production deficiencies, we have not shared the videos outside the class.

*Rubric use and grading:* Rubrics are provided to students for the group video component (Appendix B). The use of rubric grading is widespread and has been shown to enhance student learning by providing concrete guidance of expectations (Reddy & Andrade, 2010). The rubrics used were developed from a variety of sources following the guidelines of Taggart et al. (1999) and Zimmaro (2001). The purpose of providing students with this rubric is to remind them of the important components to a good video presentation.

The specific project grade is based on 100 points, where the research segment is 30 points, the video segment is 50 points, the peer assessment of other videos is 10 points, and the reflection is 10 points. Video segment points are assigned as follows: base points are given for completing the assignment; for each of the assessed rubric attributes, points are either added or deducted based on the assessment. Excellent assessments receive +2 points; good assessments receive +1 point; fair assessments receive 0 points; and weak assessments receive -1 point lowering the score by 1 point. The base points for the video segment is 32 points with nine assessments, thus the scores can range from 23 points (46%) to 50 points (100%). The research is graded based on the quantity and quality of the content provided. The peer assessment and reflection are graded on effort as judged by the instructor.

*Metacognition:* After students complete the project, they are asked to write a one to two page reflection paper about what they learned from the project, how they would approach the problem differently, what they learned about group dynamics and project management, what went well and what did not. Often students are unfamiliar with metacognitive activities and must be guided into appropriate reflection. To develop student reflection skills, the instructor demonstrates the process using personal reflections about the process of writing research papers. Metacognition is critical to gaining a deeper understanding of the learning objectives.

## Outcome Assessment

After completing the project, students provided feedback by completing a questionnaire that asked about how the project helped them develop their video making skills. Panel A in Table 3 contains a summary of feedback from twenty-one students who completed the project this past semester. Overall, the project was favorably received and most students thought the project was a valuable learning experience, particularly in understanding the problems of making a video and the equipment necessary. In addition to individual student feedback of the project, assessment scores for the seventeen groups that prepared video presentations over the past three semesters are presented in Panel B of Table 3. The assessment results provide evidence of the strengths and weaknesses of the student's video production abilities. The significant weaknesses include: organization, transitions, visual appeal and special effects. Students were capable of appropriately following directions and citing sources. Given that the class was primarily sophomore students who should be building research and presentation skills, these assessments were within a reasonable range. Clearly, the students are not accomplished videographers implying a need for this project.

**Table 3: Student Outcomes**

<i>Panel A: Student perceptions of skills gained</i>						
	Disagree		Neutral		Agree	
	1	2	3	4	5	Mean+
The video-making project helped me develop:						
an understanding of the problems of making a video	0%	5%	14%	43%	38%	4.14
an understanding of the equipment necessary for videos	0%	10%	24%	43%	24%	3.81
the ability to develop a story-line for a short video	0%	14%	29%	24%	33%	3.76
the ability to shoot short video film clips	0%	10%	33%	38%	19%	3.67
the ability to edit video clips	0%	19%	29%	19%	33%	3.67
the ability add and edit music in videos	0%	14%	33%	24%	29%	3.67
the ability to add and edit voice overs in videos	0%	19%	24%	19%	38%	3.76
+Assessment scale: 1=strongly disagree; 2=somewhat disagree; 3=neither agree nor disagree; 4=somewhat agree; 5=strongly agree. Number of observations=21.						
<i>Panel B: Video presentation assessment (Rubric in Appendix B)</i>						
	Rubric Assessment				Mean++	% Weak or Fair
	Excellent	Good	Fair	Weak		
Content	71%	24%	6%	0%	3.65	6%
Organization	35%	41%	24%	0%	3.12	24%
Transitions	53%	24%	12%	12%	3.18	24%
Narration	47%	35%	12%	6%	3.24	18%
Visual appeal	47%	29%	18%	6%	3.18	24%
Special effects	35%	35%	24%	6%	3.00	29%
Creativity	71%	18%	12%	0%	3.59	12%
Professional	53%	35%	6%	6%	3.35	12%
Required	82%	12%	6%	0%	3.76	6%
++Assessment scale: 4=Excellent; 3=Good; 4=Fair; 1=Weak. Number of observations=17.						

## CONCLUSION

Video production, as a means to communicate information and persuade people, is a valuable presentation tool for business professionals. In addition to basic knowledge content and technical skills, students, to be appropriately prepared for the business world, need to understand basic video preparation techniques. This project is an example of one application of video presentation in business. Although the content is specific to accounting, this project can be adapted for any business class, graduate or undergraduate, in any major. There are many situations in business education where faculty can include video presentations as a means of teaching content and developing useful skills for future business leaders.

## REFERENCES

- Albrecht, W. S., & Sack, R. J. (2000). *Accounting education: Charting the course through a perilous future* (Vol. 16). Sarasota, FL: American Accounting Association.
- American Institute of Certified Public Accountants [AICPA]. (1999). AICPA Core Competency Framework for Entry into the Accounting Profession. New York: NY: AICPA. Available: <http://www.aicpa.org>.
- Applebome, P. (1995, February 20). Employers wary of school system. *New York Times*. Retrieved from <http://www.nytimes.com/1995/02/20/us/employers-wary-of-school-system.html>
- Campbell, K. S., Mothersbaugh, D. L., Brammer, C., & Taylor, T. (2001). Peer versus self-assessment of oral business presentation performance. *Business Communication Quarterly*, 64(3), 23-40.
- Carroll, D., Kenney, K., Mackie, M., & Sargent, L. (2017, April 19). *External Auditing GVSU*. [Video File]. Retrieved from <https://www.youtube.com/watch?v=asENkhX0AR4>.
- Corbett, J. J., Kezimb, B., & Stewart, J. (2010). Student perceptions of value added in an active learning experience: producing, reviewing and evaluating a sales team video presentation. *American Journal of Business Education*, 3(6), 11.
- De Beer, E. (2007). Polishing your presentation skills. *Public Management*, 89(10):33-32.
- Grannan, J., Jennings, H., Labovitz, J. & McMurty N. (2017, April 27). *Managerial Accounting*. [Video File]. Retrieved from <https://www.youtube.com/watch?v=LzrRN2wSmrM>.
- Holland, L. C. (2014). Student Online Presentations and Peer Evaluations in a Face-to-Face Case Class. *Journal of Financial Education*, 40(1/2), 45-67.
- John, J., & Needel, M. (1989). Entry-level marketing research recruits: What do recruiters need? *Journal of Marketing Education*, 11(1), 68-73.
- Kaigh, E., Driscoll, M., Tucker, E., & Lam, S. (2014). Preparing to lead: Finance professionals are essential in narrowing leadership gaps. *Corporate Finance Review*, 19(2), 5-12.
- Kelley, C. A., & Gaedeke, R. M. (1990). Student and employer evaluation of hiring criteria for entry-level marketing positions. *Journal of Marketing Education*, 12(3), 64-71.
- Kemp, K. J., Bobbitt, L. M., Beauchamp, M. B., & Peyton, E. A. (2013). Using one-minute video résumés as a screening tool for sales applicants. *Journal of Marketing Development and Competitiveness*, 7(1), 84-92.
- Maes, J.D., Weldy, T.G., & Icenogle, M.L. (1997). A managerial perspective: Oral communication competency is most important for business students. *Journal of Business Communication*, 34(67), 67-80.
- Morris, P. (2012). Teaching multimedia commercial production for advertising and publication relations. *Journal of Advertising Education*, 16(2), 47-58,66.
- Raven, A., Leeds, E. M., & Park, C. (2010). Digital video presentation and student performance: A task technology fit perspective. *International Journal of Information and Communication Technology Education*, 6(1), 17-29.
- Reddy, Y. M., & Andrade, H. (2010). A review of rubric use in higher education. *Assessment & Evaluation in Higher Education*, 35(4), 435-448.
- Robertson, M.R., (2015, November 13). 500 Hours of video uploaded to YouTube every minute [Forecast]. *Tubular Insights: Video Marketing Insights*. <http://tubularinsights.com/hours-minute-uploaded-youtube/>, Retrieved April 27, 2017.
- Sergeant, A.M.A., & MacDonald, P.A. (2017, April 28). *Video Presentations in Accounting*. [Video File]. Retrieved from <https://youtu.be/wpDuw5okD7c>.
- Siegel, G. (1999). Counting more, counting less: The new role of management accountants. *Strategic Finance*, 81(5), 20-22.
- Smith, J. L. and Spindler, R. M. (2007). The impact of group formation in a cooperative learning environment. *Journal of Accounting Education*. 25(4): 153-167.
- Soukup, P.A., (2014). Looking at, with, and through YouTube. *Communication Research Trends*, 33(3), 3-34.
- Taggart, G. L., Phifer, S. J., Nixon, J. A., & Wood, M. (Eds.). (1999). *Rubrics: A handbook for construction and use*. R&L Education.
- Zimmaro, D. M. (2001). Creating a Rubric for Evaluating Media Projects. [Online]: <http://marymac.pbworks.com/w/file/attach/45285274/utexas%20creatingrubrics%20for%20media%20projects.pdf>, Retrieved March 7, 2017.

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**Patrick A. MacDonald** is currently an undergraduate junior-level student at Grand Valley State University majoring in accounting. He participated in the video project as a student in his sophomore year.



## Appendix A: Video project assignment “Careers in Accounting”

This project is an exploration of careers in accounting. Students will research and prepare a video presentation about an area of accounting. The video is to be oriented toward educating undergraduate students about various fields of accounting, typical career paths, and necessary or useful certifications and degrees. The overall purpose of the video is to persuade undergraduate students to consider a career in the specific field of accounting.

### Areas of accounting assigned:

- \* Corporate financial reporting
- \* External auditing of financial statements
- \* Managerial accounting
- \* Internal auditing
- \* Tax accounting (consulting)

### Content to be included (but not limited to):

- \* Description of the area of accounting
- \* Kinds of work done by the accountant (early career and later career)
- \* Examples of employers
- \* Necessary or useful certifications and how to obtain these certifications
- \* Appropriate educational path to prepare for a career in this area of accounting.

### Project specifics:

1. Topic assignment (8<sup>th</sup> week of 15 week semester)
  - a. Groups formed early in the semester
  - b. Randomly, groups choose their topic of interest
2. Individual Research (due 10<sup>th</sup> week of 15 week semester)
  - a. Research your area of accounting to provide information to address each content area.
  - b. For each content question:
    - i. Record with proper citations (APA style references) the resources you used.
    - ii. Below each resource write notes about you what learned from this resource.
    - iii. These can be in paragraph form or in outline form with details.
  - c. Organize your content logically into a format that can be used as a storyboard.
  - d. Prepare a two-page summary of potential storyboard for your video.
  - e. Submit a 2-page storyboard summary, followed by research notes with citations.
3. In-class group work day (11<sup>th</sup> week of semester)
  - a. Students develop storyboard with instructor access.
4. Group video presentation (due 13<sup>th</sup> week of 15 week semester)
  - a. Video is limited to 5:00 to 7:00 minutes.
  - b. Video should fully communicate to the audience the content specified above.
  - c. Video skills required to be incorporated into the presentation:
    - i. Video filming taken specifically for project (watch lighting, backgrounds, ambient noise)
    - ii. Graphics or images appropriately used from other sources
    - iii. Music
    - iv. Voice editing over words that are presented on the screen
    - v. Everyone in the group must either appear in the video or be heard in the video
    - vi. Acceptable to use: free-use music, slides, free-use videos from other sources.
  - d. Hints suggested for preparing quality video presentation:
    - i. Keep it short-- less is more.
    - ii. Hook the audience in the beginning.
    - iii. Vary the visuals and use appropriate audio spacing.
    - iv. Review the grading rubric for expectations.
5. Peer review & student reflection A (due 14<sup>th</sup> week of 15 week semester)
  - a. In class, students watch and assess other group’s videos using the rubric (Appendix C).
  - b. Outside class, students write a one to two page reflection on what they learned through the process.

**Appendix B: Video presentation assessment rubric**

<b>Attribute</b>	<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Weak</b>
<b>Content</b>	Strong message that clearly and completely covers the topic in significant depth.	Clear message that communicates essential information.	Vague message that communicates some, but not all, essential information.	Unclear message that lacks essential information and relevant facts.
<b>Organization</b>	Logical progression of information with clear beginning, middle, and end.	Some logical jumps in progression of information with minor weaknesses in video structure.	Inconsistent presentation of information, weak beginning, middle and end.	Information presented in disorganized order.
<b>Transitions:</b> timing and frequency	Smooth transitions, with appropriate timing and no dead space.	Smooth transitions, with some dead space or ambient noise.	Uneven transitions, with distracting dead space or ambient noise.	Frequent jumpy transitions with distracting dead space or noise.
<b>Narration:</b> Audio and voice editing	Balanced, enthusiastic, clear, communication with proper voice projection and appropriate language.	Clear audio, which generally assists in communication, and includes only minor voice projects problems.	Inconsistent audio (too loud, too soft, garbled) with weak voice projection, overpowering background, and/or sloppy preparation.	Inconsistent audio that distracts from the message (eg, audio cut-offs, poor or garbled voice projection, reading of script, etc).
<b>Visual appeal:</b> lighting, background	Action easily seen because of the use of sufficient lighting (to eliminate shadows and glare) and appropriate backgrounds.	Most scenes are adequately presented with sufficient lighting and appropriate backgrounds.	Some scenes are too dark or too light to determine what is happening, or the background is distracting.	Most scenes are too dark or too light, or there is significantly distracting background visuals.
<b>Special effects:</b> graphics, images, music, etc.	Positively supports the message by contributing content and entertainment effectively and not excessively.	Most effects help support the message overall and are worthwhile.	Not all effects are helpful; some may be too common, poor quality, not relevant, or distracting.	Media effects do not enhance content and are distracting, missing, excessive or unrelated.
<b>Creativity</b>	Creativity selected enhances the message.	Creative elements used but do not enhance or distract from the message.	Creativity is lacking but does not distract; creative elements are present and may distract a couple of times.	No creativity is present, or inappropriate elements are used that interfere with the message.
<b>Professional:</b> vocabulary, grammar	Correct, appropriate professional tone, vocabulary and grammar used that enhances message.	Generally appropriate professional language used with 1-2 errors.	Generally adequate professional language used with 3-4 errors.	Inappropriate professional language with multiple errors.
<b>Required:</b> time length and/or copyright issues	Meets time length requirements; media was either created, or evidence is provided for their use.	Too short or too long, but close; Some copyright clearance missing.	Too short or too long, by a few minutes; use of copyrighted works is problematic.	Too short or too long by several minutes; infringement is obvious.

# Online Teaching Effectiveness with Instructor-made Video Tutorials: A Case of Using *Explain Everything*<sup>TM</sup>

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## ABSTRACT

With the increase in popularity of online education, how to effectively teach online classes has become increasingly researched. Educators have attempted to adopt technologies and social media applications to their courses in order to improve their teaching effectiveness (Williams & Jacobs, 2004; Duffy & Bruns, 2006; Blau et al., 2009). Among the various technologies and social media applications utilized, online video is the most common resource used (Moran et al., 2011). As such, this paper introduces a little-known video producing tool, *Explain Everything*<sup>TM</sup>, that can be used to make high quality video tutorials. For the purposes of this study, the tool was utilized in two fundamental online economics courses. The quantitative and qualitative analyses of the student evaluations reveal that the instructor-made video tutorials were effective teaching methods for the online course. Statistically, strong correlations were shown between student satisfaction and the instructor's teaching effectiveness.

**Keywords:** Teaching Effectiveness, Instructor-made Video Tutorials, Explain Everything, Course Evaluations

## INTRODUCTION

The popularity of online education has seen an explosive increase in the past decade. According to the 2015 Survey of Online Learning conducted by the Babson Survey Research Group, more than one in four students (28%) has taken at least one distance education course (a total of 5,828,826 students) in the United States, an increase from 1,602,970 students in 2002 (Lederman, 2013). The benefits of online education have been widely recognized by both students and higher education institutions. From the student perspective, online education is convenient as it offers location and time flexibility (Poole, 2000; Petrides, 2002; Schrum, 2002), enhances personal computing and internet skills, and enhances participation and social presence in the class (Bharuthram & Kies, 2012; Mbat, 2012). For many institutions, online education has become a part of their strategic plans (Santovec, 2003; LaForge et al., 2015), which enables them to reach new learners, increase convenience, and expand educational opportunities (Schrum, 2000; Rourke, 2001; Hill, 2002; Hofmann, 2002).

Although online education has become popular, the effectiveness of online teaching remains under consistent investigation by instructors and educators. Some researchers have attempted to find clues related to teaching effectiveness from student ratings, such as the effects of an instructor's personality (Centra & Gaubatz, 2000; Arbuckle & Williams, 2003); the effects of the course characteristics (Feldman, 1984; Marsh & Bailey, 1993); and the extent of teaching, social, and cognitive presence (Anderson et al., 2001; Gorsky & Blau, 2009). Although technological infrastructures used to teach in asynchronous classrooms will change over time, the effective delivery of content will remain dependent upon the utilization of the appropriate instructional design techniques (Richards, Dooley, & Lindner, 2004). Tricker et al. (2001) evaluated a variety of distance education courses and found that the students were attracted to online courses because of their flexibility. Although flexibility was the initial attraction, the students still expected high quality courses with assignments and course materials that were professionally meaningful. In addition, they wanted high quality feedback and good communication from their instructors. Student satisfaction within the online classroom is directly affected by the quantity and quality of their interactions with the instructor (Chickering & Ehrmann, 1996; Roblyer & Ekhaml, 2000; Valenta et al., 2001; Ausburn, 2004; Shea et al., 2004). A study conducted by Arbaugh (2001) of 25 online sections in a graduate program found that the "immediacy behaviors" of professors correlated with student satisfaction in the online environment, more so than student satisfaction with an instructor's mastery of technology.

Since the millennial generation is more adept at technologies and social media than previous generations, an increasing number of instructors have begun using social media (e.g., wikis, YouTube, Facebook, blogs) in their courses as effective teaching methods (Williams & Jacobs, 2004; Duffy & Bruns, 2006; Blau et al., 2009). According to Moran et al. (2011), "nearly two-thirds of all faculty have used social media during a class session, and 30% have posted content on these sites for students to view or read outside class. Over 40% of faculty have required students to read or view social media as part of a course assignment, and 20% have assigned students to comment on or post to social media sites." Mansor (2011) reported a positive experience in using a blog to teach a course on

Decision-Making Skills. He found blogs to be more interactive and user-friendly than traditional webpages. In addition, he could easily embed lecture slides, relevant articles, and students' tutorial answers in his blog. Besides blogs, a sizeable body of research has also studied the use of Facebook in courses (Downes, 2007; Stutzman, 2008). According to Barnes et al. (2007), Facebook is useful when attempting to teach the concepts of social networking and foster critical thinking as the instructor can have the students investigate the connections among their peers. Bosch (2009) revealed that using Facebook in web-based learning might improve communication efficiency because the students would be using a technology with which they are already familiar and might demystify the divide between student and teacher.

Among the various technologies and social media utilized, online video is the most common resource used (Moran et al., 2011). Current innovative technologies have enabled widespread use of video lectures (Copley, 2007) that may ease the disconnect between distance learners and their instructors as well as increase student retention. Various studies have found the effectiveness of online video lectures as an informing method in the asynchronous class (Gill & Bhatacherjee, 2007; Cohen, 2009; Gill & Bhatacherjee, 2009; Gill & Cohen, 2009). Brecht (2012) designed three scenarios and concluded that video lectures enhanced student learning, reduced dropout rates, and improved course grades.

Various video-producing technologies and tools (e.g., Adobe Captivate, Camtasia, ScreenFlow, Articulate Storyline, Educreations, Panopto) exist to help instructors produce high quality videos for asynchronous delivery. In her study, Brannagan (2012) explained how to use Adobe Captivate to provide step-by-step instructions related to the use of Excel functions, which is an effective way to facilitate rapid acquisition of finance competencies for online nursing graduate students. He et al. (2012) used the Camtasia software package to produce tutorial video clips for an online undergraduate analytical chemistry course. Based on the students' oral and written feedback, the online video tutorials were effective in improving the students' mastery of chemistry problem-solving. A few researchers have found that Panopto was also convenient and effective when making video clips for their online classes (Ianulardo, 2009; Dorff, 2016).

Building on the previous literature, this paper attempts to affirm the effectiveness of instructor-made video lectures to be used in online education. However, it introduces a different whiteboard application, *Explain Everything*<sup>TM</sup>, with which to make high quality video lectures. For the purpose of this study, this application was used for two fundamental online economics courses (i.e., ECON E103-Principles of Microeconomics and ECON E104-Principles of Macroeconomics). Subsequently, the quantitative and qualitative analyses of the instructor's teaching effectiveness in regard to the instructor-made video lectures were presented. The results of this paper indicate that this tool is easy-to-use and makes video production more convenient and enjoyable for the instructor, and students are benefited from the instructor-made video lectures in asynchronous classrooms.

## USING *Explain Everything*<sup>TM</sup> WHEN TEACHING ONLINE ECON E103 AND E104

### Video Production and Software Package

At my campus, ECON E103 and E104 are two, general education, elective courses that are required courses for the business major. The enrollment for these two courses is usually large, at least 60 students. Due to their quantitative and graphic orientations, these economics courses, like other quantitative subjects, are usually challenging to the students (Garfield & Ahlgren, 1988; Dani & Joan, 2004; Joshi & Marri, 2006). The asynchronous classroom setting deteriorates the challenging situation due to the fact that online students don't have the opportunity to listen to vivid lectures from their instructors as would students in the physical classroom. Under such circumstances, instructors are urged to produce instructional video tutorials to benefit the students learning in the online environment (He et al., 2012; Wen, 2016).

Thanks to technological advancements, an increasing number of instructors have begun recording instructional videos for their online classes. These instructional videos have been shown to be pivotal to the students' learning experiences, in particular to the average and lower-performing students in the class (Milkent & Roth, 1989; He et al., 2012). I found that these results were consistent in my courses as the average and lower-performing students struggled without the instructional videos. Now, I make short instructional videos, varying from five to 20 minutes, for each chapter in order to explain the challenging content and illustrate quantitative examples.

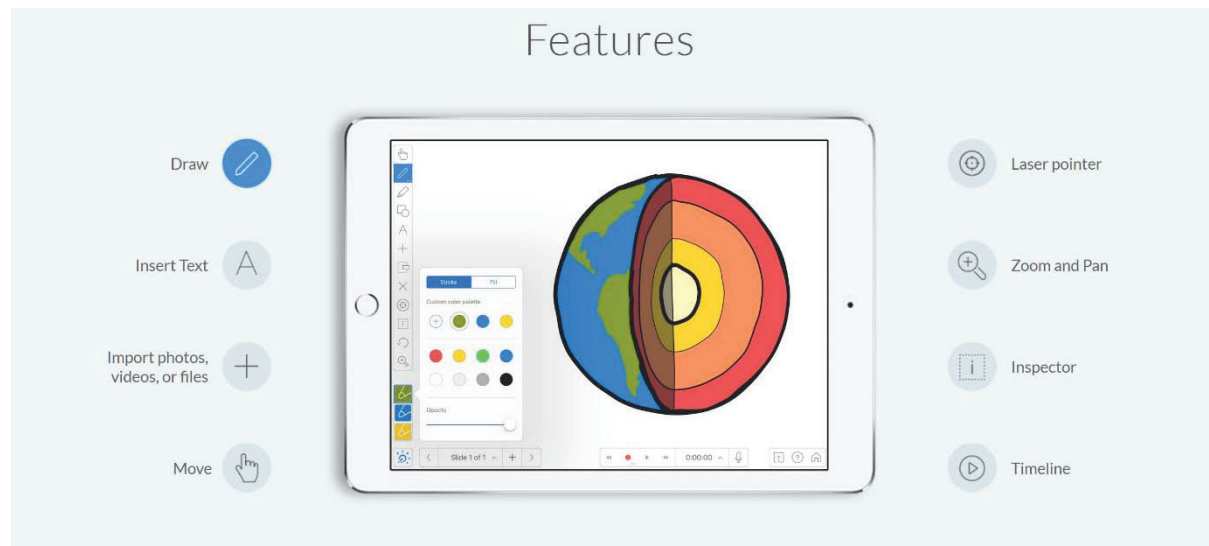
In the face-to-face classroom, I prefer to draw economic models and write notes on the board while lecturing. When thinking about instructor-made videos for online courses, I believe that it would be best to simply extend the

instructor's classroom and teaching style to the virtual world. Although multiple video-producing technologies have been studied in the literature (Dunbar, 2004; Hornik & Thornburg, 2010; Premuroso et al., 2010; Brannagan, 2012; Dorff, 2016; Porter & Tiaht, 2016), they have not fully matched my teaching style or meet my instructional demands. Thankfully, I was able to locate an Apple application, *Explain Everything*<sup>TM</sup>, which is an “easy-to-use design, screencasting, and interactive whiteboard tool with real-time collaboration that lets users animate, record, annotate, collaborate, and explore ideas, knowledge and understanding”(App description from iTunes App Store). The recording file can be easily converted to a MP4 file, which is compatible with my university's online teaching platform, *Canvas*.

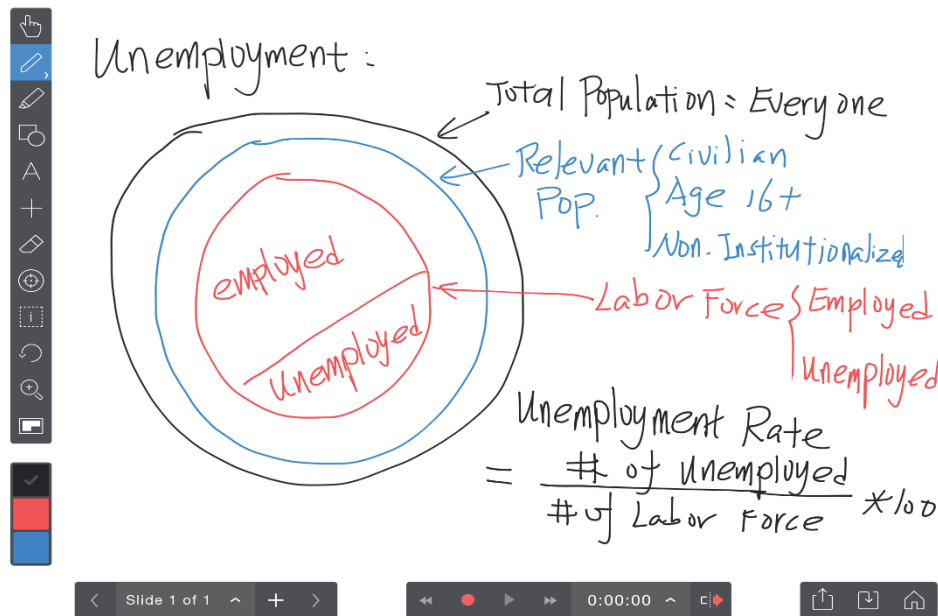
I produced all of the videos on an iPad. I believe that the act of writing on an iPad is as natural as writing on a standard whiteboard in a classroom. From the student's viewpoint, the learning outcomes of watching the video and listening to my lecture in front of the computer screen is the same as sitting in the classroom. I usually make one 5 to 20-minute video clip per topic; however, with this app's multiple-page function, I can cover different topics on different pages within one video clip.

This app offers various functions that make video-producing efficient and enjoyable. For example, I can select ink colors as well as ink widths while writing. It also provides me with the availability to import external files, such as PowerPoint slides, photos, videos and Word files, into the video and lecture and write on them.

**Figure 1: *Explain Everything*<sup>TM</sup> Interface from iTunes App Store**



**Figure 2: Screenshot of ECON E104 Lecture Notes in *Explain Everything*<sup>TM</sup>**



### Effectiveness of Instructor-made Video Tutorials in Teaching Online ECON E103 and E104

The effectiveness of the instructor-made video tutorials for student learning was clearly shown in the course evaluations. At my university, the semester-end course evaluation contains 18 objective rating questions on a 5-point Likert scale with a score of 5 indicating strong agreement with the statement. Nine of the 18 questions directly assessed the instructor's teaching effectiveness and the students' perceptions of the course (see Table 1). Table 1 displays the weighted average scores for these selected questions over the past ten semesters in which ECON E103 and E104 were taught online. The instructor-made video tutorials were first introduced to my classes in the spring semester of 2014. Prior to Spring 2014, there were not many resources available to assist student learning. Students were often struggled when doing weekly assignments and exams, which might directly cause low weighted average scores in many evaluated items in the spring and fall semesters of 2013. Since adopting *Explain Everything™* to make video tutorials in the spring semester of 2014, students felt they received more instructions and support from the instructor, and also felt more confident in doing weekly assignments and exams. As a result, higher student satisfaction contributed a significant increase in the course evaluation in the Spring 2014, and my course evaluations maintained at the high level thereafter. The evaluation scores for all of the nine questions are clearly shown above the school means (which are shown in parentheses) since the Fall 2014 when they are first available.

As an instructor, I feel that student satisfaction, which is measured by the last question (Item #9) "Would highly recommend this course to other students," as well as their perceptions of the course (Item #7) and instructor (Item #8), is highly correlated to the instructor's immediate teaching methods in the online learning environment. This conclusion has also been supported by past literature (Debourgh, 1999; Bolliger, 2004; Sargent et al., 2011).

**Table 1: The Weighted Average Scores for Selected Course Evaluation Items in Econ E103 and E104 Online Sections**

	SP13 (E103)	FA13 (E104)	SP14 (E103)	FA14 (E104)	SP15 (E103)	FA15 (E104)	SP16 (E103)	SP16 (E104)	SU16 (E104)	FA16 (E104)
1. Course contributed to my understanding of relevant business concepts	4.3	3.92	4.64	4.7/ (4.44)	4.76/ (4.44)	4.88/ (4.44)	4.8/ (4.4)	4.7/ (4.4)	4.5/ (4.4)	4.6/ (4.4)
2. Class materials such as the text, videos, and learning labs were useful	4.6	4	4.31	4.73/ (4.33)	4.71/ (4.33)	4.88/ (4.34)	4.7/ (4.3)	4.6/ (4.3)	4.5/ (4.3)	4.7/ (4.3)
3. Course was well structured and organized	4.7	4.62	4.67	4.8/ (4.38)	4.89/ (4.38)	4.88/ (4.39)	4.9/ (4.4)	4.7/ (4.4)	4.8/ (4.4)	4.7/ (4.4)
4. Teaching methods used helped me to learn well	4.2	3.85	4.51	4.69/ (4.23)	4.7/ (4.23)	4.88/ (4.25)	4.8/ (4.2)	4.5/ (4.2)	4.7/ (4.2)	4.6/ (4.2)
5. Instructor clearly communicated ideas and concepts	4.1	4.23	4.64	4.76/ (4.36)	4.71/ (4.36)	4.88/ (4.35)	4.8/ (4.4)	4.6/ (4.4)	4.7/ (4.4)	4.7/ (4.4)
6. My instructor was engaged in the subject matter and the instruction of the course	4.3	4.23	4.73	4.84/ (4.41)	4.84/ (4.41)	4.92/ (4.40)	4.9/ (4.4)	4.7/ (4.4)	4.8/ (4.4)	4.7/ (4.4)
7. Quality of the entire course was excellent	4.3	3.92	4.36	4.64/ (4.25)	4.71/ (4.25)	4.83/ (4.27)	4.8/ (4.3)	4.6/ (4.3)	4.6/ (4.3)	4.6/ (4.3)
8. Quality of my instructor was excellent	4.6	4	4.71	4.78/ (4.33)	4.77/ (4.33)	4.92/ (4.34)	4.9/ (4.3)	4.7/ (4.3)	4.8/ (4.3)	4.7/ (4.4)
9. Would highly recommend this course to other students	4.1	3.92	4.51	4.77/ (4.25)	4.84/ (4.25)	4.75/ (4.24)	4.8/ (4.2)	4.6/ (4.2)	4.6/ (4.2)	4.6/ (4.2)
Response Rate	15%	20%	65%	87%	65%	86%	74%	85%	65%	72%
Class Size	66	67	69	55	138	69	80	74	52	76

Table 2 shows the correlations among the selected evaluation items since the instructor-made video tutorials are available. Clearly, student satisfaction (item #9) is highly correlated with the overall quality of the course (item #7) and quality of the instructor (item #8) with 71.7% and 55.7%, respectively. To be more specific, all of the evaluation items (#1 to #6) that were related to the instructor’s teaching effectiveness were revealed as having a high correlation with student satisfaction (item #9): item #1 (“Course contributed to my understanding of relevant

business concepts,” 71.5%), item #2 (“Class materials, such as the text, videos, and learning labs, were useful,” 58.3%), item #3 (“Course was well-structured and organized,” 85.2%), item #4 (“Teaching methods used helped me to learn well,” 85.0%), item #5 (“Instructor clearly communicated ideas and concepts,” 61.6%), and item #6 (“My instructor was engaged in the subject matter and the instruction of the course,” 78.6%).

**Table 2: The Correlation of Selected Evaluation Items**

	#1	#2	#3	#4	#5	#6	#7	#8	#9
#1	1								
#2	0.826	1							
#3	0.608	0.434	1						
#4	0.559	0.593	0.860	1					
#5	0.629	0.642	0.763	0.921	1				
#6	0.653	0.556	0.938	0.944	0.878	1			
#7	0.864	0.724	0.839	0.863	0.882	0.872	1		
#8	0.605	0.495	0.833	0.951	0.923	0.934	0.890	1	
#9	0.715	0.583	0.852	0.850	0.616	0.786	0.717	0.557	1

Note: Selected Evaluation Items are

#1. Course contributed to my understanding of relevant business concepts. #2. Class materials such as the text, videos, and learning labs were useful. #3. Course was well structured and organized. #4. Teaching methods used helped me to learn well. #5. Instructor clearly communicated ideas and concepts. #6. My instructor was engaged in the subject matter and the instruction of the course. #7. Quality of the entire course was excellent. #8. Quality of my instructor was excellent. #9. Would highly recommend this course to other students.

In addition to the quantitative analysis, ample praise from the students exists in the course evaluations to emphasize the effectiveness of the instructor-made video tutorials as related to the students’ learning. Below are some excerpts of the open-end comments in the course evaluations.

*“The videos were useful when coming across a topic that was a little more complex in nature and the textbook did not elaborate or explain the subject matter in detail or in a way that the material could be easily understood.”*

*“The instructional videos were very helpful, and all of the suggested resources in addition to the text, were very relevant. They helped to support the topics covered in each section.”*

*“The videos were a huge help for me to understand the course and made the material of the book clear.”*

*“The videos you make are awesome!”*

*“The instructor posted tutorial videos on concepts in every chapter that I thought were very useful and helpful.”*

*“...once you started posting the videos my grades improved and my overall knowledge of each subject increased.”*

*“At the beginning of the semester I felt like I struggled a bit, but after you started posting the videos, I felt like it helped me a lot. I think that is a good idea to post those videos from the instructor so students can further excel in the course.”*

*“The instructor went the extra mile and took time to record weekly introductory videos. He took the time to record and post study videos with helped to supplement the e-Text, which was also very effective. This really helped me succeed and do well in the course.”*

## CONCLUSION

In the era of booming online education, improving teaching effectiveness is a long-term mission for online educators. Indisputably, many different approaches exist in regard to improving student satisfaction and teaching effectiveness in the online setting; however, this paper focuses on the approach of instructor-made video tutorials. Instead of using popular video-making tools, I introduced a little-known, but still convenient and user-friendly tool, *Explain Everything™*, to produce high quality video tutorials for two fundamental online economics courses. The



multiple and convenient functions of this tool make the video production much easier and more enjoyable for the instructor. In addition, the students appreciated the video tutorials as they helped place them in the face-to-face classroom setting.

## REFERENCES

- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1–17.
- Barnes, K., Marateo, R. C., & Ferris, S. P. (2007). Teaching and learning with the net generation. *Innovate: Journal of Online Education*, 3(4), 1.
- Bharuthram, S., & Kies, C. (2012). Introducing e-learning in a South African higher education institution: Challenges arising from an intervention and possible responses. *British Journal of Educational Technology*, 44(3), 410-420.
- Blau, I., Mor, N., & Neuthal, T. (2009). Open the windows of communication: Promoting interpersonal and group interactions using blogs in higher education. *Interdisciplinary Journal of E-Learning and Learning Objects*, 5, 233-246.
- Bolliger, D. U. (2004). Key factors for determining student satisfaction in online courses. *International Journal on E-learning*, 3(1), 61-67.
- Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *Communication: South African Journal for Communication Theory and Research*, 35(2), 185-200.
- Brannagan, K. B. (2012). Enhancing Online Finance Education for Non-Financial Managers. *Journal of Online Learning and Teaching*, 8(1), 79.
- Cohen, E. (2009). A philosophy of informing science. *Informing Science*, 12, 1-15.
- Copley, J. (2007). Audio and video podcasts of lectures for campus-based students: Production and evaluation of student use. *Innovations in Education and Teaching International*, 44(4), 387–399. doi:10.1080/14703290701602805.
- Dani, B. Z., & Joan, G. (2004). Statistical literacy, reasoning, and thinking: Goals, definitions, and challenges. In *The challenge of developing statistical literacy, reasoning and thinking* (pp. 3-15). Springer Netherlands.
- Debourgh, G. A. (1999). Technology Is the Tool, Teaching Is the Task: Student Satisfaction in Distance Learning.
- Dorff, P. G. (2016). Online Accounting Course Design: One Professor's Approach. *Business Education Innovation Journal*, 8(1).
- Downes, S. (2007). Places to go: Facebook. *Innovate: Journal of Online Education*, 4(1), 7.
- Duffy, P., & Bruns, A. (2006). The use of Blogs, Wikis and RSS in education: A conversation of possibilities. In Proceedings Online Learning and Teaching Conference 2006, 31-38, Brisbane.
- Dunbar, A. E. (2004). Genesis of an Online Course. *Issues in Accounting Education*, 19 (3), 321–343.
- Garfield, J., & Ahlgren, A. (1988). Difficulties in learning basic concepts in probability and statistics: Implications for research. *Journal for Research in Mathematics Education*, 44-63.
- Gill, T. G., & Bhattacharjee, A. (2007). The informing sciences at a crossroads: The role of the client. *Informing Science*, 10, 17-39.
- Gill, T. G., & Bhattacharjee, A. (2009). Whom are we informing? Issues and recommendations for MIS research from an informing science perspective. *MIS Quarterly*, 33(2), 217-235.
- Gill, T. G., & Cohen, E. (Eds.). (2009). *Foundations of informing science, 1999-2008*. Santa Rosa, CA: Informing Sciences Press.
- Gorsky, P., & Blau, I. (2009). Online teaching effectiveness: A tale of two instructors. *The International Review of Research in Open and Distributed Learning*, 10(3).
- He, Y., Swenson, S., & Lents, N. (2012). Online video tutorials increase learning of difficult concepts in an undergraduate analytical chemistry course. *Journal of Chemical Education*, 89(9), 1128-1132.
- Hill, J. R. (2002). Overcoming obstacles and creating connections: Community building in web-based learning environments. *Journal of Computing in Higher Education*, 14(1), 67-86.
- Hofmann, D.W. (2002). Internet-based distance learning in higher education. *Tech Directions*, 62(1), 28–32.
- Ianulardo, G. (2009). Using Panopto for Game Theory. Retrieved from [www.heacademy.ac.uk](http://www.heacademy.ac.uk) on 12/24/2016
- Joshi, P., & Marri, A. R. (2006). An Economics Methods Course?: Challenges of Teaching an Economics Education Methods Course for Secondary Social Studies Preservice Teachers. *The Social Studies*, 97(5), 197-202.
- Lederman, D. (2013). *Growth for Online Learning*. Retrieved from <https://www.insidehighered.com/news/2013/01/08/survey-finds-online-enrollments-slow-continue-grow>.
- LeForge, C., You, Y., Alexander, R., & Sabine, N. (2015). Online program development as a growth strategy across diverse academic programs. *International Journal of Instructional Technology and Distance Learning*, 12(8), 25-40.
- Mbati, L.A. (2012). Online learning for social constructivism: Creating a conducive environment. *Progressio*, 34(2), 99-119.
- Moran, M., Seaman, J., & Tinti-Kane, H. (2011). Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media. *Babson Survey Research Group*.
- Milkent, M. M., & Roth, W. M. (1989). Enhancing student achievement through computer-generated homework. *Journal of Research in Science Teaching*, 26(7), 567-573.
- Hornik, S., & Thornburg, S. (2010). Really engaging accounting: Second Life™ as a learning platform. *Issues in Accounting Education*, 25(3), 361-378.
- Petrides, L.A. (2002). Web-based technologies for distributed (or distance) learning: Creating learning-centered educational experiences in the higher education classroom. *International Journal of Instructional Media*, 29(1), 69–77.
- Premuroso, R. F., Tong, L., & Beed, T. K. (2011). Does using clickers in the classroom matter to student performance and satisfaction when taking the introductory financial accounting course?. *Issues in Accounting Education*, 26(4), 701-723.
- Poole, D.M. (2000). Student participation in a discussion-oriented online course: A case study. *Journal of Research on Computing in Education*, 33(2), 162–177.
- Porter, J., Tiaht, T. (2016). That's a Wrap: Evaluating Different Methods for Creating Video Lectures. *Business Education Innovation Journal*, 8 (1), 56–66.
- Rourke, J.R. (2001). Online learning: Fad or fate? *Principal Leadership*, 1(9), 8–14.
- Sargent, C. S., Borthick, A. F., & Lederberg, A. R. (2011). Improving retention for principles of accounting students: Ultra-short online tutorials for motivating effort and improving performance. *Issues in Accounting Education*, 26(4), 657-679.
- Schrum, L.M. (2000). Guarding the promise of online learning. *Education Digest*, 66(4), 43–47.
- Schrum, L. (2002). Oh, What wonders you will see: Distance education past, present, and future. *Learning and Leading with Technology*, 30(3), 6–9, 20–21.

- Tricker, T., Rangelcroft, M., Long, P., & Gilroy, P. (2001). Evaluating distance education courses: The student perception. *Assessment & Evaluation in Higher Education*, 26(2), 165-177.
- Stutzman, 2008. The vibrancy of online social space. In B. Rigby, Mobilizing generation 2.0: A practical guide to using web 2.0 technologies to recruit, engage & activate youth. New York, NY: Jossey-Bass.
- Wen, L., (2016). Integrate Video-Based Lectures into Online Intermediate Accounting II Course Learning. *Business Education Innovation Journal*, 8(2), 104-109.
- Williams, J. B. & Jacobs, J. (2004). Exploring the use of blogs as learning spaces in the higher education sector. *Australasian Journal of Educational Technology*, 20(2), 232-247.

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# The Quest for Impact: Increasing the Value and Visibility of Business Schools' Research

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## ABSTRACT

Continuous quality improvement in business and management education through *engagement, innovation, and impact* is the key focus of the newer 2013 accreditation standards of the Association to Advance Collegiate Schools of Business (AACSB). Specifically, the focus on impact, described generally as both the qualitative and quantitative measurement of the schools performance of their research, has created quite a buzz among schools of business. Each accredited or accreditation-candidate school must now demonstrate how their research is aligned with its mission and strategies; and also, the school must provide evidence that the research has *impacted* the value and visibility of the school among its various stakeholders including the classroom, school, community, and practice.

**Keywords:** AACSB, Impact, Accreditation, Research, Engagement, Innovation, Business Schools

## INTRODUCTION: THE HISTORY OF IMPACT

Academic quality has long been linked to faculty intellectual contributions. And, understanding the impact of these faculty intellectual contributions purport to help business schools focus on their mission while remaining vigilant in maintaining accreditation by the Association to Advance Collegiate Schools of Business (AACSB). In 2013, the AACSB implemented new accreditation standards for the more than 700 accredited schools of business around the world. These new standards include a particular focus on continuous quality improvement in business and management education through engagement, innovation, and impact.

Determining and measuring engagement and innovation with stakeholders may be more evident in the classroom, among students and faculty, and between relationships with the school of business. But how one determines the impact of the faculty members' research is much less direct therefore less evident. Most specifically, how do faculty intellectual contributions impact the classroom, school of business, community, industry, and government; and, how do you measure this impact? This "impact" measure is difficult to determine, both qualitatively and quantitatively. Thus, the quest has begun to define impact among member schools and those achieving accreditation.

To discuss where AACSB business schools "are", we need to back up a decade to discuss where we "were". In 2006, the AACSB created the Impact of Research Task Force to reexamine and evaluate the nature of and purpose for research in business schools and to recommend ways to increase the overall value and visibility of research in light of the schools' mission. Results of this study came from feedback from nearly 1,000 deans, directors, and professors and was published in the 2008 *Final Report of the AACSB International Impact of Research Task Force*. This study made seven recommendations and asserted it is vital for schools to assess the impact of the faculty members' research on actual practices in the business world. The recommendations (listed below) from the report and the AACSB have had a profound influence on the way business school research is conducted, measured, and shared:

- Recommendation #1: Extend and augment AACSB accreditation guidelines to require schools to demonstrate the impact of faculty intellectual contributions on targeted audiences.
- Recommendation #2: AACSB should encourage and support efforts to create incentives for greater diversity in institutional missions and faculty intellectual contributions
- Recommendation #3: AACSB should support, perhaps in conjunction with professional associations such as the Academy of Management, studies examining the linkage between scholarly inquiry and education in degree and non-degree programs.
- Recommendation #4: AACSB should develop an awards program to recognize and publicize high-impact research by faculty.

- Recommendation #5: AACSB should develop mechanisms to strengthen interactions between academics and practicing managers in the production of knowledge in areas of greatest interest.
- Recommendation #6: AACSB should study and make recommendations to the business and management journal community designed to highlight the impact of faculty research.
- Recommendation #7: AACSB should identify and disseminate information about the best practices for creating linkages between academic research and practice.” (AACSB, 2008).

Recommendation #1 encourages the AACSB to “Extend and augment AACSB accreditation guidelines to require schools to demonstrate the impact of faculty intellectual contributions on targeted audiences” (AACSB, 2008). The key word here, is to *demonstrate* how business school faculty’s research and intellectual contributions increase the value and visibility of each school. While Recommendation #1 suggests the AACSB examine the school’s portfolio of intellectual contributions based upon impact measures, it does not specify minimum requirements for the maintenance of individual academic qualifications. Faculty currency can be demonstrated through a breadth of scholarly activities many of which may not result in intellectual contributions (Guess, 2008).

To study demonstrating impact further, the AACSB coordinated an exploratory study following the 2008 report. The results of this three-year exploratory study drew from the experiences of ten business schools who volunteered to participate and provided insight for the AACSB’s 2012 publication, *Impact of Research: A Guide for Business Schools*. The study participants were to determine the overall feasibility of schools undertaking a more concerted effort to assess the impact of intellectual contributions, to assess the burden and costs to schools, and to begin exploring appropriate measures of impact. Essentially, the study sought the different schools’ experiences, collected their feedback and best practices, and offered a resource guidebook of sorts. The 2012 report can assist any business school seeking to better understand, assess, and document the connection between the research activities and the school’s mission, target objectives, and stakeholders (AACSB, 2012). As a result of these reports, changes were made to the accreditation guidelines in 2013 putting more focus on the impact and outcome of faculty investment in scholarship.

## IMPACT OF INTELLECTUAL CONTRIBUTIONS – THE 2013 STANDARDS

The AACSB has been an advocate for and has had a commitment to encouraging research in business schools since the 1960s. The fundamental purpose of AACSB accreditation is to encourage business schools to hold themselves accountable for improving business practice through impactful intellectual contributions; yet, the AACSB believes the nature of and expectations for research are changing. Following recommendations from the 2008 and 2012 reports, the AACSB approved new accreditation standards in 2013.

In the preamble to the 2013 standards, the AACSB suggests not only are business needs today much different from yesterday but also, the same factors impacting business are also changing higher education. And, in response to this ever changing environment, business schools must provide relevant knowledge and skills to the communities they serve. Therefore, in this context, accredited business schools are charged with producing intellectual contributions that make a positive impact on business theory, teaching, and practice (AACSB, 2013).

AACSB Standard 2 states, “The school produces high-quality intellectual contributions that are consistent with its mission, expected outcomes, and strategies and that impact the theory, practice, and teaching of business and management” (AACSB, 2013). The key words here are *consistent* and *impact*. A school must demonstrate its research is aligned and consistent with its mission, expected outcomes, and strategies; and, the school must also validate that the research has impact on its intended audiences. Standard 2, states that intellectual contributions are original works intended to advance the theory, practice, and/or teaching of business and management; and, the intellectual contributions may fall into the categories of basic, applied, and teaching research. All of these different types of intellectual contributions have impact and the validation of their outcomes may be reflected in a variety of ways (AACSB, 2013).

The AACSB accreditation standards define impact of as the advancement of theory, practice, and/or teaching of business and management through intellectual contributions (AACSB, 2013). Impact is concerned with the differences fostered by intellectual contributions—e.g., what has been changed, accomplished, or improved. In other words, impact is all about accountability and a school can demonstrate accountability to the standards by favorably answering these questions:

- Has the school’s research advanced business theory, practice, and education?
- Has the school’s research created more value and impact from activities that align with its mission?
- Are the school’s intellectual contributions aligned with its mission, expected outcomes, and strategies?
- How does the school document its portfolio of intellectual contributions and demonstrate how it measures the possible impacts on targeted audiences? (AACSB, 2013).

The 2013 standards focus more on the impact or outcomes from investments schools and faculty make in the area of scholarship and research. These standards specifically require schools to demonstrate how they align and assess the measurable impact of their research outputs with their missions. At the same time, schools must assess how their research increases the value of these intellectual contributions for students, practitioners, and society at large (AACSB, 2013).

The changes in the 2013 standards require schools to *demonstrate* the impact of their faculty scholarship on the various audiences important to them. Under previous accreditation standards, many schools developed strict interpretations and metrics, such as number of citations, number of publications in key journals, publications of books, publications of cases, etc., to rate academic scholarship. As a result, faculty have turned down offers to write books, conduct research for their community, or even make presentations important to their industry because such research would not count in their schools’ evaluation of research necessary to meet tenure and promotion decisions (Shinn, 2014). Many schools focused so much on meeting these strict quantitative goals they lost sight of the how their research affected their classrooms, students, schools, and practice. Specifically, many did not demonstrate the impact on these areas.

While it may be tempting to reduce the set of impact measures to a small number of metrics, most business schools will need to employ a range of both quantitative and qualitative measures to “make their case” or “tell their story” for their mission-oriented portfolio of intellectual contributions. They need ask themselves several key questions:

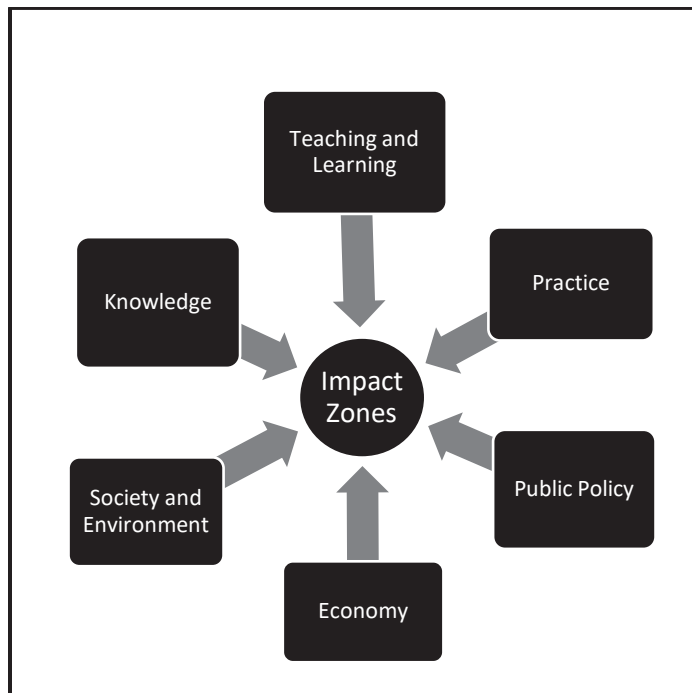
- How does the school support, measure, assess, and validate the outcomes of research?
- Does the school consider both the cumulative effect and yearly measures of impact?
- Is the research consistent with the schools’ stated missions?
- How are the research and intellectual contributions documented and reported?
- Does the research add intrinsic and/or financial value to the faculty, students, academia, education, the profession, and other stakeholders? (AACSB, 2012).

A definition of impact from Emerald Group Publishing (2012) considered several points that should be included for measuring impact. It said the assessment process should include any research that has an impact on teaching and learning; contributes to the body of knowledge; helps companies to be better managed; influences public bodies and policy makers; benefits society and/or the environment; and, contributes to economic development” (Emerald Group Publishing Inc., 2010). The Emerald Group goes on to discuss six impact zones (see Figure 1) where business schools and faculty will likely have impact:

- **“Knowledge:** Scholarship which contributes to the body of knowledge and generates further research. Assessed through citations, usage statistics, peer recognition, self-stated research conclusions.
- **Teaching and Learning:** Students and faculty are direct consumers of research. Assessed through clarity of conclusions to aid learning, provision of case studies and teaching examples, usage statistics, course adoption/curricula change.
- **Practice:** Business leaders, practitioners, and consultants in both private and public sector organizations are all affected by the outcomes of research. Assessed through university-business collaboration, consultancy application, implications for practice self-stated.
- **Public Policy:** State officials, politicians, decision makers in public bodies, institutions, and charities draw on research to shape their policies. Assessed through self-stated potential implications, subsequent policy revisions.
- **Society and Environment:** Includes impact on the environment, the ability to influence social responsibility in industry, business and public policy, and the incorporation of social and environmental values in research outputs. Assessed through informing social policy, industry adoption, implications for society self-stated.

- **Economy:** Research which contributes to organization-level or macro-level wealth creation and business advancement. Assessed through future economic savings, revenue increase, self-assessed business/economic impact” (Emerald Group Publishing Inc., 2010).

**Figure 1: Impact Zones (Adapted from Emerald Group, 2010)**



The Emerald Group clarifies these variables by adding that using only a single variable for assessment of impact would be like using a blunt instrument. Research is not and should not be designed to make an impact in all of the six zones. The relevancy of the six zones will likely vary for each school and vary by need, time, and place. And, each school should develop individual measures or weightings to the zones based on the significance of the research and the individual school’s mission (Emerald Group Publishing Inc., 2010).

### **ALIGN RESEARCH WITH MISSION, EXPECTED OUTCOMES, AND STRATEGIES**

The process of aligning intellectual contributions with the school’s mission, expected outcomes, and strategies will assist the faculty in considering the impact of their research effort in terms of its value to society. Each school of business must ensure the measures used to evaluate the faculty’s research performance are properly aligned with its strategic objectives. Doing so will require schools to take a serious look at existing performance criteria and may require evaluation measurements to be amended. Schools should consider providing incentives to encourage greater diversity in the types of research based upon its mission. Furthermore, the schools should set a specific goal of targeting research that adds impact, value, and visibility to the school’s stakeholders.

Schools should answer the following questions as they begin the quest for impact.

- Does the school’s research support its mission, expected outcomes, and strategies?
- What is the connection between the school’s research activities and its mission?
- What is the school’s expected outcomes (impact) with regard to research?
- What is the school’s desired outputs (impact)?
- What does the school expect to achieve from its research?
- Who “is” the school and what is it aiming to accomplish through its research? (AACSB, 2012).

## VALIDATION OF THE IMPACT OF INTELLECTUAL CONTRIBUTION OUTCOMES

As the old adage goes, “the proof is in the pudding.” The AACSB requires evidence of continuous quality improvement in management education through innovation, impact and engagement; therefore, business schools must design an implementation plan for assessing impact of intellectual contributions, show outcomes the schools are expecting from its research, and show the impact of those expectations. These expectations need to go beyond the static lists of outputs listing only the numbers of intellectual contributions and publications in top-tier journals. The measurements need to show how schools are accountable for the impact of their research by demonstrating their value and visibility to their stakeholders and how the school’s research has advanced business education, theory, and practice?

According to AACSB Standard 2, the validation of impact is an important part of the process. The standard serves to illustrate the depth and breadth of faculty participation in research. The validation process helps schools to think strategically about how research contributes to their mission; schools must be more strategic about their research investments and more explicit about assessing their impact on stakeholders (AACSB, 2013).

Validation of the impact of research may be reflected in various ways. Schools may provide any number of indicators documenting their impact and use indicators such as citation counts, external recognitions for research quality, case studies of research leading to the adoption of new teaching and learning practices, textbooks that are widely adopted, research-based learning projects with companies, publications in highly recognized peer-review journals, etc. More specifically, the school’s research should reflect some combination of recognition, application, originality, usefulness, significance, value, visibility, depth, duration, adoption, and citations? Documentation such as this provides a means for a school to make an assessment of how its research aligns with its mission and to draw conclusions about its impact on teaching and practice.

There are many ways and activities that allow faculty to demonstrate the impact of their research as indicated through this article. Our examples are not exhausted but do demonstrate the variety of output and outcome measures being discussed and used by schools of business. It is important to note that one list does not fit all. Each school is unique and is charged with the responsibility of demonstrating how its own research is aligned with its individual mission, expected outcomes, and strategies. Each school of business must document how it is making a difference and having impact.

## CONCLUSION

Each school of business must begin to define the evaluation of faculty performance and productivity in light of this emphasis on impact. In the past, focus has been primarily on high quality publications in top rated journals. As such, many faculty have been reluctant to engage in other diverse forms of scholarship. The 2013 AACSB standards are calling for business school research to be more diverse, more visible, and more accessible with more opportunities to demonstrate and publicize the value of its research (AACSB, 2013). These standards encourage schools to have positive and significant relationships with business and the broader community, according to their mission and vision. The nature of engagement, innovation, and impact is inherently dynamic and business schools need to approach it in this way (Vorley, 2016).

Although there is no clear path to a perfect solution as to how to make all of this happen, it does appear that the AACSB is moving in the right direction. Each school of business must become more strategic about its research and must tell its story to its stakeholders including the campus, business practice, and community. The general public is often unaware of the relevance of academic research in the real world; yet, research is important and an essential element in a school’s contribution in society. Schools spend significant resources to support and enhance faculty research. The renewed focus on impact calls for more documented communication between academics and practitioners. For business schools to conquer the impact challenge, they must foster engagement and maximize their impact by building on their mission, strengths, and strategic priorities and meet the needs of differing stakeholders. Impact is about pushing boundaries, identifying and inventing, creating and cultivating new opportunities by working with different stakeholders. Doing so requires that engagement, innovation, and impact must be given the same strategic consideration as research and teaching (Vorley, 2016). This “quest for impact” should lead to a stronger school identity where schools understand the outcome of their investments in research and their impact upon society.

## REFERENCES

- AACSB. (2008). Final Report of the AACSB International Impact of Research Task Force. Tampa, FL, USA: AACSB International.
- AACSB. (2012). Impact of Research: A Guide for Business Schools. Tampa, FL, USA: AACSB International.
- AACSB. (2013). Eligibility Procedures and Accreditation Standards for Business Accreditation. Tampa, FL, USA: AACSB International.
- Emerald Group Publishing, Inc. (2010). Impact of Research. Cambridge, MA, USA: Emerald Group Publishing, Inc.
- Guess, A. (2008, February 22). *Measuring 'Impact' of B-School Research*. Retrieved from Inside Higher Ed: <https://www.insidehighered.com/news/2008/02/22/impact>
- Shinn, S. (2014, September 1). *Measuring Faculty Impact*. Retrieved from BizEd: <http://www.bizedmagazine.com/archives/2014/5/features/measuring-faculty-impact>
- Vorley, T. (2016, July 26). *Business School Impact: Connecting With Communities*. Retrieved from AACSB Blog: <http://www.aacsb.edu/blog/2016/july/business-school-impact-connecting-with-communities>

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# Aligning Assurance of Learning Activities with the 2013 AACSB Standards

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## ABSTRACT

The Association to Advance Collegiate Schools of Business International (AACSB) revised and adopted its business accreditation standards in 2013. This paper focuses on one of the major revised components in the new standards: assurance of learning (AoL). It presents an AoL model implemented at the business school of a middle-sized public university in New Jersey in compliance with the new AACSB standards and discusses a number of implementation issues and lessons learned.

**Key words:** Assurance of learning; 2013 AACSB accreditation standards; Assessment

## INTRODUCTION

The Association to Advance Collegiate Schools of Business International (AACSB) revised and adopted its business accreditation standards in 2013 (the 2013 Standards). These new standards represent major revisions from the prior 2003 accreditation standards (the 2003 Standards). These changes necessitate that business schools, pursuing initial accreditation or re-accreditation, fully understand the differences between the two sets of standards so as to work more effectively towards compliance with the new standards, including the related documentation requirements.

This paper focuses on one of the major revised components in the 2013 Standards: assurance of learning (AoL). It presents a comprehensive three-stage AoL process implemented at the business school of a middle-sized public university in New Jersey to comply with the 2013 Standards for AACSB reaccreditation. It further discusses some implementation issues and lessons learned. AoL plays an important role in the AACSB accreditation process, and it may not be uncommon in the future that the reaccreditation of some business schools will be deferred for a “sixth year” for not assessing and documenting student learning achievements successfully (Spruell et al., 2009). The purpose of this paper is to share our experience in revising and implementing the AoL process and to help other concerned groups better appreciate the challenges and opportunities involved and enhance their ability to meet the AACSB AoL standards.

## A COMPARISON BETWEEN THE 2013 AND 2003 AOL-RELATED STANDARDS

A number of articles related to the 2013 Standards have appeared in the literature. These articles took a close look at major changes in the 2013 Standards, as compared to the 2003 Standards (Abdelsamad, et al., 2015), surveyed AACSB member deans’ perceptions towards the 2013 Standards (Miles, et al., 2015), and discussed the implications of the 2013 Standards for business faculty and deans (Miles, et al., 2014).

A general comparison between the 2013 and 2003 Standards is provided in Table 1 and a comparison of AoL-related standards is provided in Table 2 (AACSB, 2013a; AACSB 2003). As can be seen, the 2013 Standards consist of 4 sections with 15 standards. Section 3 of *Assurance of Learning* in the 2003 Standards with 7 standards (15-21) was mapped into Section 3 of *Learning and Teaching* in the 2013 Standards with 3 standards (8, 9, & 11). Thus, to align AoL activities with the 2013 accreditation standards, it is necessary to take a closer look at these 3 AoL-related standards.

The 2013 Standard 8 states that “*The school uses well-documented, systematic processes for determining and revising degree program learning goals; designing, delivering, and improving degree program curricula to achieve learning goals; and demonstrating that degree program learning goals have been met*” (AACSB, 2013a, p. 29). Three key components are program learning goals, curriculum management, and AoL systems. *Program learning goals* refer to the educational expectations for a degree program (e.g., undergraduate, master’s), i.e., what knowledge and skills students should develop in a program. These program learning goals are different from learning goals for majors within a degree and detailed learning goals/objectives for a course. They need to be mapped into the business curricula for implementation. *Curriculum management* refers to the ongoing process of developing, revising, and improving curricula for degree programs based on feedback from internal and external

stakeholders, revision of mission, changes in practice of business and management, AoL assessment results, etc. *AoL systems* refer to processes of producing a portfolio of evidence demonstrating student performance against learning goals.

The 2013 Standard 9 states that “*Curriculum content is appropriate to general expectations for the degree program type and learning goals*” (AACSB, 2013a, p. 31). The 2013 Standard 11 states that “*Degree program structure and design, including the normal time-to-degree, are appropriate to the level of the degree program and ensure achievement of high-quality learning outcomes. Programs resulting in the same degree credential are structured and designed to ensure equivalence*” (AACSB, 2013a, p. 34). These standards are similar to the 2003 Standards. “However, emphasis should be placed to their engagement, innovation, and impact as they pertain to those standards” (Abdelsamad, et. al., 2015).

**Table 1: A General Comparison between the 2013 and 2003 Standards**

The 2013 Standards (4 sections with 15 standards)	The 2003 Standards (3 sections with 21 standards)
1. Strategic management and innovation (Standards 1-3) 2. Participants—Students, faculty, & professional staff (Standards 4-7) 3. <b>Learning and teaching</b> (Standards 8-12) 4. Academic and professional engagement (Standards 13-15)	1. Strategic management (Standards 1-5) 2. Participants (Standards 6-14) 3. <b>Assurance of learning</b> (Standards 15-21)

**Table 2: A Comparison of AOL-Related Standards between the 2013 and 2003 Standards**

The 2013 Standards	The 2003 Standards	
Section 3: Learning and teaching (Standards 8 – 12)	Section 3: Assurance of learning (Standards 15-21)	
		Mapped into 2013 standards
8: Curricula management & AOL 9: Curriculum content 10: Student faculty interaction 11: Degree program educational level, structure, & equivalence 12: Teaching effectiveness	15: Management of curricula	8 & 9
	16: Undergraduate learning goals	8 & 9
	17: Undergraduate educational level	11
	18: Master’s level general management learning goals	8 & 9
	19: Specialized master’s degree learning goals	8 & 9
	20: Master’s educational level	11
	21: Doctoral learning goals	8 & 9

## AN AOL MODEL RESPONSIVE TO THE AACSB 2013 STANDARDS

Numerous articles related to AoL under the 2003 Standards can be found in the literature (Gibson, et al., 2013; Kelly, et al., 2010; Marshall, 2007; Miles, et al., 2004; Pringle & Michel, 2007; Stivers & Phillips, 2009; Zocco, 2011). Gilbreath et al. (2016) provided a comprehensive survey of helpful tools for managing the AoL process which include assessment plans, curriculum maps, schedule for assessment and artifact collection, faculty engagement maps, etc. Lightner and Lightner-Laws (2014) discussed how to develop a sustainable AoL framework using supply chain principles. Attaway et al. (2011) presented an approach to assess learning outcomes in an IS course (required business core) to comply with the AACSB AoL requirements.

This paper presents an AoL model implemented at the business school of a middle-sized public university in New Jersey in compliance with the 2013 Standards. The business school has 8 undergraduate degree programs with over 1300 students. It received the AACSB accreditation under the 2003 Standards and is currently in the process of applying for re-accreditation under the 2013 Standards. To comply with the new accreditation standards, the school revised its AoL process. The revised process is comprised of 3 major stages: (1) develop the AoL framework at the degree program level, (2) develop the assessment plan at the course level, and (3) implement the assessment plan and close the loop at both the course and degree program levels. This section discusses each of these stages in detail.

### **Stage 1: Develop the AoL framework at the degree program level**

This stage outlines the AoL framework at the degree program level. It consists of 3 steps: (1) develop program learning goals, (2) define learning objective(s) for each program learning goal, and (3) map program learning goals and objectives into the business curricula.

#### ***Step 1: Develop program learning goals***

Program learning goals state the general skills and knowledge expectations upon students' successful completion of the degree program. These learning goals should be based on the school's mission and their achievement must be demonstrated through the school's AoL activities.

The general skill areas listed in the 2013 Standards include: (1) communication (both written and oral), (2) ethical understanding and reasoning, (3) analytical thinking, (4) use of information technology, (5) interpersonal relations and teamwork, (6) diverse and multicultural working environments, (7) reflective thinking, and (8) application of knowledge. Among these, items 5 and 8 are new additions to the list, indicating the increasing importance of being “able to work effectively with others and in team environments” and being “able to translate knowledge of business and management into practice.”

The general business and management knowledge areas listed in the 2013 Standards include: (1) economic, political, regulatory, legal, technological, and social context of organizations in a global society; (2) social responsibility, including sustainability, and ethical behavior and approaches to management; (3) financial theories, analysis, reporting, and markets; (4) systems and processes in organizations, including planning and design, production/operations, supply chains, marketing, and distribution; (5) group and individual behaviors in organizations and society; (6) information technology and statistics/quantitative methods impacts on business practices to include data creation, data sharing, data analytics, data mining, data reporting, and storage between and across organizations including related ethical issues; and (7) other specific areas related to majors, concentrations, or emphases. Many of these items are major revisions from those in the 2003 Standards. These revisions, along with the new addition of social responsibility (item 2), represent the currency of knowledge.

AACSB expects 4 to 10 learning goals for each degree program (AACSB, 2013b). These learning goals should address some or part of the general skill and knowledge areas listed above.

#### ***Step 2: Define learning objective(s) for each program learning goal***

Program learning goals are broad and conceptual, thus are not suitable for assessment. Subsequently, one or more measurable learning objectives need to be developed for each program learning goal. For example, one of our learning goals states that our graduates will be able to “understand, analyze, and interpret quantitative data to make business decisions.” We then translated it into several operational program learning objectives, including “students will understand and apply decision-making tools to solve business problems” and “students will be able to synthesize and evaluate information to offer solutions that support decision making.” Notice that these learning objectives are stated at the program level and are different from detailed course learning objectives. A program learning objective maybe achieved and assessed at multiple business core courses. Together, Steps 1 and 2 produce the list of degree program learning goals, with the conceptual definitions from Step 1 and operational definitions from Step 2.

#### ***Step 3: Map program learning goals and objectives into the business curricula***

This step creates a course rubric for assessment at the degree program level. It specifies where or in which business core course(s) the contents related to each learning objective will be introduced and reinforced; in which business core course(s) a program learning objective will be assessed; and when the assessment data will be collected. Along with the first two steps, it leads to the AoL framework at the degree program level, as shown in Table 3.

**Table 3: AoL Framework at the Degree Program Level**

Degree program learning goals	Program Learning objectives	Course Rubric for Assessment		Learning-based course mapping	
		Where to assess	When & how often to assess	Where contents associated with learning objectives are being--	
				Introduced	Reinforced
Learning Goal 1	1a	Business core A	Every spring	A	B & C
	1b	Business core B	Every fall		B
	.....				
Learning Goal 2	2a	Business core C	Every spring	C	A
		Business core D	Every fall		D
	2b	Business core E	Every fall		E
	.....				
.....					

The table shows where and how often a program learning objective is being covered by the business curricula. For example, learning objective 1a is being introduced in core course A and being reinforced in core courses B and C. The table also shows the program assessment plan. For example, learning objective 1a will be assessed in core course A and the assessment data will be collected in every spring semester; the learning objective 2a will be assessed in the core courses C and D and the assessment data will be collected in the fall and spring semesters alternatively between these two courses. Notice that the assessment data do not need to be collected every semester, since it takes more than one semester to identify the weaknesses in learnings based on the assessment data, develop and implement action plans to close the loop, and then collect the assessment data in later cycle(s) to see the improvement.

A college-wide AoL committee will need to be established with faculty representation from each business core course. For the schools where most, if not all, of the business core courses are offered multiple sections each semester by multiple faculty members (full-time or part-time), the faculty representatives in the AoL committee may also serve as course coordinators for the subsequent implementation of the assessment plan at the course level.

All program learning goals need to be mapped into the business curricula. The AoL activities will be worthless if an adopted program learning goal is not addressed by at least one business core course (AACSB, 2013b). Further, it's not necessary that every single business core course needs to be listed in the program AoL course rubric; it depends on the adopted program learning goals and objectives.

### **Stage 2: Develop the assessment plan at the course level**

Following the degree program AoL framework outlined in Table 3, each involved business core course needs to develop its own course-based assessment plan to facilitate the implementation of the program assessment plan. This stage creates a course-based assessment rubric that details the assessment plan at the course level. It consists of 3 steps: (1) develop course-based learning criteria, (2) select assessment instrument(s), and (3) define performance levels and expected performance.

#### ***Step 1: Develop course-based learning criteria***

The concepts/topics related to a program learning objective need to be covered and assessed in at least one business core course. A program learning objective may be translated into several specific, measureable, and assessable course-based learning criteria. An example is provided in Table 4. The program learning objective 1a states that upon the completion of the program, student will be able to understand and apply decision making tools to solve business problems. This learning objective is mapped into 2 business core courses: Operations Management and Principle of Finance. Accordingly, the faculty members who teach Operations Management then worked as a team to develop several course-based learning criteria, including that students will be able to recognize which quantitative decision making tool(s) to use if presented a situation and that students will be able to derive solutions to decision making problems. The faculty members who teach Principle of Finance also worked together to developed their own course-based learning criteria.

**Table 4: An Example of Course-based Learning Criteria**

Degree Program Learning Goal	Program Learning Objective	Course-based Learning Criteria
1. Students will understand, analyze, and interpret quantitative data to make business decisions	1a. Students will understand and apply decision making tools to solve business problems.	(to be assessed in Operations Management)
		<i>Criterion 1:</i> Students will be able to recognize which quantitative decision making tool(s) to use if presented a situation.
		<i>Criterion 2:</i> Students will be able to derive solutions to decision making problems.
		.....
	(to be assessed in Principle of Finance)	
	<i>Criterion 1:</i> ...	
	<i>Criterion 2:</i> ...	
	.....	
1b. ...	.....	
		.....

**Step 2: Select assessment instrument(s)**

After defining course-based learning criteria, the corresponding assessment instrument(s) need to be selected by the faculty members who teach the same course. The literature has extensive studies about assessment tools and methods (Bamford et al., 2012; Gibson, 2011; Jayashree & Mitra, 2012; McConnell et al., 2008; Payne et al., 2008; Phelps & Spangler, 2013; Price & Randall, 2008; Weldy & Turnipseed, 2010; Zhu & McFarland, 2005). The discussion can also be found as how to utilize the assessment information for institutional decision making (Elford, 1996) and for curriculum development (Cherry & Dave, 1997; Drexler & Kleinsorge, 2000). Michlitsch and Sidle (2002) studied the frequency and effectiveness of using course-embedded assessment methods via a survey of business schools in the U.S. and found that tests were the most preferable assessment method.

AACSB accepts a variety of direct assessment approaches including course-embedded measures (e.g., tests, case study, course assignments, team projects, presentations, etc.) and stand-alone testing outside of normal classroom activities (e.g., a standardized test developed either externally for the school or internally by the school). Some indirect measures (e.g., alumni survey, graduating student surveys, employer surveys, etc.) may also be used as complement measures, but they are not acceptable substitutes for direct assessment of learning (AACSB, 2013b).

In the case that a course-embedded measure is selected as an assessment instrument, then this measure will need to be evaluated twice, once based on the instructor’s criteria for the course grade and once based on the course-based learning criterion for assessment. Garfalo et al. (2016) discussed how to tie course embedded signature (or key) assignments with a dual purpose rubric (assessment and grading).

We continue to experiment with the use of various assessment measures and instruments in the interest of evaluating their effectiveness as assessment tools and enhancing the effectiveness and efficiency of our assessment program.

**Step 3: Define performance levels and expected performance**

The performance levels for course-based learning criteria need to be defined before implementing the assessment. Three or more levels may be needed, e.g., “excellent”, “satisfactory”, and “unsatisfactory”. The definition of these levels are up to the faculty. For example, a score of 90 or above maybe defined as “excellent” and a score below 70 maybe defined as “unsatisfactory”. These performance levels will be utilized to organize the assessment results.

The expected student performance is a target learning accomplishment, or internal performance benchmark, decided by the involved faculty members. For example, it may be stated that at least 90% of the students will perform at or above the “satisfactory level”. The gap between actual and expected student performance indicates the weakness in leaning accomplishment and provides an opportunity for teaching and learning improvement.

The three steps at this stage lead to a detailed assessment plan at the course level. Table 5 shows an example of the assessment plan at the course level.

**Table 5: An Example of the Assessment Plan at the Course Level – AOL in Operations Management**

Program learning goal addressed -- Understand, analyze, and interpret quantitative data for decision making			
Program learning objective addressed -- Understand and apply decision making tools to solve business problems			
Assessment administration -- Every spring semester in all sections			
Data aggregation -- By a designated course coordinator			
Course-based Learning Criteria	Assessment Instruments	Performance Levels	Expected Performance
Students will be able to derive solution to decision making problems.	Course embedded test (multiple choice questions)	1. <i>Exemplary</i> ( $\geq 90\%$ correct answers) 2. <i>Satisfactory</i> (70%-89% correct answers) 3. <i>Unsatisfactory</i> ( $< 70\%$ correct answers)	$\geq 80\%$ of the students will perform at or above <i>Satisfactory</i>

While the performance target may vary by course-based learning criteria, it's important that the same definitions of the performance levels be utilized cross course sections.

All three steps at this stage require collaborative teamwork. Faculty members who teach the same business core course need to work together to develop the assessment plan and implement it accordingly and consistently cross course sections and instructors. A course coordinator plays an instrumental role at this stage.

The development of course-based learning criteria and selection of assessment instruments should be top-down, driven by program learning goals and objectives, not the other way around. After several assessment cycles, these course-based learning criteria may be changed, if their target performances have been well achieved through the implementation of the action plans.

### **Stage 3: Implement the Assessment Plan and Close the Loop**

This stage concludes the AoL process. It consists of 2 steps: (1) implement the assessment plan at the course level, (2) close the loop at both the course and degree program levels.

#### ***Step1: Implement the assessment plan at the course level***

All the faculty members who teach the same business core course need to use the same pre-selected assessment instrument to implement the program assessment plan (e.g., Spring or Fall semester). At the end of each assigned assessment semester, a designated course coordinator will collect the assessment data from all the sections, if more than one section is offered, combine the assessment results, identify the gaps between expected and actual student performances, and feedback the results to the faculty involved. It may be necessary that the course coordinator send an assessment reminder at the early semester to the faculty involved.

#### ***Step 2: Close the loop at both the course and degree program levels***

All faculty members who teach the same course will need to meet to analyze the assessment data. The weak area will be identified (e.g., which areas students performed poorly or below the expectations), and the action plans for reducing / eliminating these discrepancies and for teaching improvement will be developed accordingly. The actions are to be taken in the subsequent semester(s) to close the loop at the course level.

The summarized course-based assessment results, along with the action plan, will be submitted to the college-wide AoL committee. The committee will then aggregate the assessment results from all the business core courses involved, evaluate if the program learning goals and objectives are met, analyze what and where the main issues and concerns are, and develop, if necessary, an action plan for continuous curricula and program improvement. This last step of closing the loop at the degree program level is critical for AACSB accreditation/re-accreditation. It addresses the issue of what the school will do if its students have not learned what they are expected to learn. If this step fails, the entire AoL process and assessment system fails (AACSB, 2013b).

## **DISCUSSION**

While the importance of assurance of learning, formerly called learning outcome assessment, has been a longstanding expectation of AACSB, the 2013 Standards clearly and persuasively emphasize the obligation that business schools have to their various stakeholders, including business school graduates and the organizations for which they will be employed, to ensure that their graduates have the requisite knowledge and skills to successfully

join and contribute to contemporary business organizations. While curriculum development and instruction are obvious ways through which a business school prepares to meet and, ideally, exceed these stakeholder expectations regarding the preparation of business school graduates, it is only through assessment of learning that our effectiveness can be ascertained and areas in need of improvement can be identified and corresponding improvement plans can be developed and implemented.

The AoL model discussed in this paper presents a systematic approach to continuous improvement in student learning. In accordance with the expectations articulated in the 2013 Standards, it is mission-driven and program-focused. After articulating an appropriate mission, a business school is expected to develop and successfully deliver a curriculum based on program learning goals and objectives. The identified program learning goals and program learning objectives serve as a basis for assessment and provide the necessary understanding of teaching and learning effectiveness, as well as identifying gaps that need to be addressed through “closing the loop”.

The successful implementation of an AoL program requires a commitment from all organizational levels within a college or university. This begins with the top-down support from the college or university administration for the business school’s assessment program. The dean of the business school has an instrumental role in a successful assurance of learning program. An effective assessment system must be based on the overall program learning goals and objectives established collectively by the business school faculty, supported through the various academic departments and all of the faculty assigned to teach business core courses. An effective and efficient process involves a college committee to setup the AoL program framework, a departmental committee (composed of all faculty members teaching a given course) to develop a detailed and operational assessment plan at the course-level, and individual faculty members to participate and implement the assessment process and to close the loop.

The assurance of learning process discussed in this paper has been implemented and has further revealed the importance of this crucial area of responsibility and stewardship for contemporary business schools and their faculties. It should be noted that while the current process was certainly developed in response to the new AACSB standards and the interest of the business school and its various stakeholders in maintaining the prestigious AACSB accreditation, the model developed and implemented is responsive to the longstanding mission of this business school to teaching and learning and the passion of its faculty to prepare its graduates for successful business careers.

## REFERENCES

- AACSB (2003). Business Accreditation Standards. [www.aacsb.edu/accreditation/standards](http://www.aacsb.edu/accreditation/standards).
- AACSB (2013a). Business Accreditation Standards. [www.aacsb.edu/accreditation/standards](http://www.aacsb.edu/accreditation/standards).
- AACSB (2013b). AACSB Assurance of Learning Standards: An Interpretation. *AACSB White Paper*, No. 3.
- Abdelsamad, M., Farmer, B., McNeil, R., & Stevens, G. (2015). Major changes in AACSB standards (2003 compared to 2013). *Advanced Management Journal*, 80(3), 4-11.
- Attaway, A., Chandra, S., Dos Santos, B., Thatcher, M., & Wright, A. (2011). An approach to meeting AACSB assurance of learning standards in an IS core course. *Journal of Information Systems Education*, 22(4), 355-366.
- Bamford, D., Karjalainen, K., & Jenavs, E. (2012). An evaluation of problem-based assessment in teaching operations management. *International Journal of Operations & Production Management*, 32(12), 1493-1514.
- Cherry, R.L. Jr. and Dave, D. (1997). An application of outcomes assessment to measure effectiveness of graduate courses in the United States. *International Journal of Management*, 14(4), 646-653.
- Drexler, J.A. Jr. and Kleinsorge, I.K. (2000). Using total quality processes and learning outcome assessment to develop management curricula. *Journal of Management Education*, 24(2), 167-182.
- Elford, I. (1996). Utilization of student outcomes assessment information in institutional decision making. *The International Journal of Education Management*, 10(3), 36-49.
- Garfolo, B., Kelpsh, E., Phelps, Y., & Kelpsh, L. (2016). The use of course embedded signature assignments and rubrics in programmatic assessment. *Academy of Business Journal*, 1(1), 8-20.
- Gibson, J. (2011). Measuring course competencies in a school of business: The use of standardized curriculum and rubrics. *American Journal of Business Education*, 4(8), 1-6.
- Gibson, J., Greenwood, R., Mujtaba, B., Robbins, S., Teahen, J., & Tesone, D. (2013). Meeting the challenge of assurance: Perspective from four business schools. *American Journal of Management*, 13(2), 79-92.
- Gilbreath, B., Norman, S., Frew, E., Fowler, K., & Billington, P. (2016). Helpful tools for managing the assurance of learning process. *Business Education Innovation Journal*, 8(1), 111-122.
- Jayashree, P. & Mitra, S. (2012). Facilitating a deep approach to learning: An innovative case assessment technique. *Journal of Management & Organization*, 18(4), 555-572.
- Kelley, C., Tong, P., & Choi, B. (2010). A review of assessment of student learning programs at AACSB schools A dean’s perspective. *Journal of Education for Business*, 85, 299-306.
- Lightner, C. & Lightner-Laws, C. (2014). Developing a sustainable AoL framework using supply chain principles *International Journal of Management & Information Systems*, 18(1), 41-55.
- Marshall, L. (2007). Measuring assurance of learning at the degree program and academic major levels. *Journal of Education for Business*, November/December, 101-109.

- McConnell, C., Hoover, G., & Miller, G. (2008). Course embedded assessment and assurance of learning: Examples in business disciplines. *Academy of Educational Leadership Journal*, 12(3), 19-34.
- Michlitsch, J. & Sidle, M. (2002). Assessing student learning outcomes: A comparative study of techniques used in business disciplines. *Journal of Education for Business*, 77(3), 125-130.
- Miles, M., Franklin, G., Grimmer, M., & Heriot, K. (2015). An exploratory study of the perception of AACSB international's 2013 accreditation standards. *Journal of International Education in Business*, 8(1), 2-17.
- Miles, M., Franklin, G., Heriot, K., Hadley, L., & Hazeldine, M. (2014). AACSB international's 2013 accreditation standards –Speculative implications for faculty and deans. *Journal of International Education in Business*, 7(2), 86-107.
- Miles, M., Hazeldine, M., & Munilla, L., (2004). The 2003 AACSB accreditation standards and implications for business faculty: A short note. *Journal of Education for Business*, 80(1), 29-34.
- Payne, S., Flynn, J., & Whitfield, J. (2008). Capstone business course assessment: Exploring student readiness perspectives. *Journal of Education for Business*, January/February, 141-146.
- Phelps, A. & Spangler, W. (2013). Customized versus standardized exams for learning outcomes assessment in an undergraduate business program. *American Journal of Business Education*, 6(5), 521-530.
- Price, B. & Randall, C. (2008). Assessing learning outcomes in quantitative courses: Using embedded questions for direct assessment. *Journal of Education for Business*, May/June, 288-294.
- Pringle, C. & Michel, M. (2007). Assessment practices in AACSB-accredited business schools. *Journal of Education for Business*, 82(4), 202-211.
- Spruell, J., Hawkins, A., & Vicknair, D. (2009). Managing learning experiences in an AACSB environment: Beyond the classroom. *American Journal of Business Education*, 2(9), 75-81.
- Stivers, B. & Phillips, J. (2009). Assessment of student learning: A fast-track experience. *Journal of Education for Business*, May/June, 258-262.
- Weldy, T. & Turnipseed, D. (2010). Assessing and improving learning in business schools: Direct and indirect measures of learning. *Journal of Education for Business*, 85, 268-273.
- Zhu, F. & McFarland, D. (2005). Towards assurance of learning in business programs: Components and measurements. *The Journal of American Academy of Business, Cambridge*, 7(2), 69-72.
- Zocco, D. (2011). A recursive process model for AACSB assurance of learning. *Academy of Educational Leadership Journal*, 15(4), 67-91.

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# Engagement, Impact, and Innovation: Utilizing an Integrated Experience

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## ABSTRACT

The Integrated Experience (IE) is a hands-on, experiential learning opportunity that has become the signature program of a College of Business for implementing its mission of offering students real-world learning experiences. The IE is a 12-credit program that requires cohorts of students to concurrently take part in three core courses (Principles of Management, Principles of Marketing, Business Finance) and apply concepts they are learning in those core courses to a fourth course called the IE Practicum. In the IE Practicum, students develop and operate a business as a class. The contributions the IE makes in providing evidence of a curriculum that is continuously improving in terms of innovation, engagement, and impact are discussed.

**Keywords:** experiential learning, engagement, impact, innovation

## INTRODUCTION

The Association to Advance Collegiate Schools of Business (AACSB) introduced new standards for accreditation of its member schools in 2013 (AACSB, 2013). The revision of the accreditation standards was a response to challenges of creating value in an increasingly global, interactive, and evolving business world (Kosnik, Tingle, and Blanton, 2013). Under the newly revised standards, accreditation by AACSB requires, in part, that schools provide evidence of continuous improvement in three vital areas: 1) innovation, 2) impact, and 3) engagement. The three vital areas for improvement are described as follows:

- **Innovation:** A successful business education should find creative ways to produce value for students, employers, and the community. Rather than relying on traditional pedagogies, experimentation with new teaching methods is encouraged along with the recognition that failure should be accepted as an integral part of learning (Argyris, 2002).
- **Engagement:** Business education that is both scholarly and relevant for practice requires meaningful interactions among faculty, students, and business professionals. The traditional academic model where students learn theory in the safe classroom environment without real world experience no longer offers adequate preparation for decision making and competitive performance. Real-world, hands-on learning is a key component of a successful business education.
- **Impact:** A business education should be of high quality and make a difference through both scholarly education and impactful intellectual contributions. In addition to the traditional focus on providing business knowledge by teaching about theory, business programs are now expected to demonstrate how their programs and their students make a difference in business society.

The core idea behind the three vital areas is value creation on the part of business schools by incorporating relevant and real-world learning into student experiences. An experiential, hands-on pedagogy can deliver meaningful learning experiences for students and provide a curriculum that is innovative, engaging, and impactful. Past research on experiential learning is discussed below.

## PREVIOUS RESEARCH ON EXPERIENTIAL LEARNING

The proposition of experiential learning theory is that people learn best by acquiring new experiences and transforming those experiences into knowledge (Kayes, 2002). Research documents the advantages of active, hands-on learning that gives students the opportunity to directly put their knowledge to use (Armstrong & Mahmud, 2008; Dees & Hall, 2012; Devasagayam, Johns-Masten, & McCollum, 2012; Lester & Williams, 2010; Rosen & Rawski, 2011; Templeton, Updyke, & Bennett, 2012). Despite the vast literature supporting the benefits of active

learning, business schools are often criticized for not having enough active, practical learning experiences (Templeton et al., 2012). Eighty percent of employers who participated in a recent survey by the Association of American Colleges and Universities indicated they would like schools to provide more experiential learning opportunities that place emphasis on the ability of students to apply their knowledge to real-world settings (Hart, 2008). Further, the demand for college graduates with practical experience continues to grow as employers scale back their training programs (Green & Farazmand, 2012). Devasagayam et al. (2012) suggest that experiential exercises that demand rigorous engagement and involvement on the part of students are an invaluable pedagogical tool in achieving learning objectives related to decision making in a real-world environment.

Traditionally, case studies and simulations have been popular methods used by business schools for increasing the active involvement of students in learning. Although these methods are useful for applying business concepts and engaging students in critical thinking, they hold a certain level of abstraction (McCarthy & McCarthy, 2006). Also, the safety of the classroom environment and central directive role of the faculty member can decrease the active engagement of students and the reality of the experience. Internships are another frequently used method for active, real-world learning. It can be challenging, however, to create consistent academic value through internships.

Many of the limitations found with case studies, simulations, and internships can be overcome by implementing an Integrated Experience (IE) into the business school curriculum. The following section describes the IE employed in a school of business.

## **THE INTEGRATED EXPERIENCE (IE)**

The Integrated Experience (IE) has become a signature program in the College of Business at a Midwestern university for implementing the strategic mission of the College. The focus of the mission involves being a College of Business committed to offering real-world learning experiences. In pursuit of ways to best implement the mission, a team of College of Business professors traveled to Central Missouri University to confer with a faculty member who had created a curricular program of integrated learning. What evolved from this visit was a program referred to in this paper as the Integrated Experience (IE). The IE was piloted for three semesters before it was officially made part of the curriculum and launched as the Integrated Experience. Although the foundational structure has remained the same, over the course of eight semesters the program has evolved and grown into the largest and most popular of the College's portfolio of innovative and engaging student experiences.

### **The Current Program**

The IE is a 12 credit hour learning experience. The experience combines Business Finance, Principles of Management, Principles of Marketing, and an entrepreneurial practicum where student teams develop and operate a business. Taught by a 3 person faculty team, the purpose of the IE is to help students better understand the interdependence of the content areas studied as they apply to actual business experiences. The content coverage in the core courses is specifically sequenced to support students in organizing and managing their IE student run company. Students are able to make the conceptual connections across disciplines because they are continuously applying concepts from all three core courses to running the IE company.

### **Elements of the Integrated Experience**

1. IE students must enroll concurrently in specific sections of three core business courses (Principles of Management, Principles of Marketing, and Business Finance) as well as in the IE Practicum. The IE Practicum is an applied course that entails developing, launching, managing, and closing a business in one semester with the same cohort of students enrolled in all four of the IE courses. Students write and present a business plan as they seek financing for their start-up company from a bank that has a pre-arranged relationship with the College of Business for IE purposes. The business start-up experience creates a real-world context in which students can practice the concepts introduced in the core courses.
2. In the IE Practicum, students work as an employee of a 15 to 30 member company in which they apply concepts from the core business courses as they engage in running an IE company. The company has a leadership team, but all members provide feedback and vote on critical issues to ensure buy-in. That feedback occurs at both the company level and at the functional level to ensure decisions are reviewed throughout the organization.
3. IE students spend the first 7 weeks of the semester developing a business plan for a start-up company. Throughout the 7 weeks, assignments are given to guide students in developing a business plan. The appendix contains the list of what students must submit in the bank loan application. The business plan is then presented to officers from the pre-arranged bank to obtain the financing needed for implementing the business plan.

Every student in the company signs the loan contract and is responsible for an equal portion of the loan. The program is, however, designed to minimize the potential for loss through the scrutiny of company advisors, faculty, and the bank.

4. Once the IE loan is approved, students implement their business plan. The IE students have 7 weeks to do enough business in their companies to pay back their loan. All proceeds are then donated to a charity of the students' choice. Additionally, throughout the semester, students donate service hours to local charities on behalf of their IE business.
5. At the end of the semester, students create a portfolio that contains reflections on their experiences. These reflections enable students to better communicate what they have learned to potential employers.

The IE is a powerful learning experience that provides evidence of a continuously improving curriculum in terms of the AACSB (2013) vital areas: innovation, engagement, and impact. The College is currently preparing its documentation for AACSB reaccreditation, and the IE is a reoccurring theme across large sections of the documentation as it addresses much of the educational criteria. The next sections describe the contributions the IE makes to each of the vital areas.

## **VITAL AREA: INNOVATION**

Innovation can be described as finding creative ways to produce value for students, employers, and the community, and it is considered by AACSB to be a vital area for continuous improvement on the part of business schools (AACSB, 2013). A recent AACSB report (AACSB, 2010) discusses the importance of integrated thinking and an integrated curriculum in supporting innovation. The IE acts as a hub to bring multiple parties together and thus facilitates the integration and innovation relationship.

### **Integrating the Curriculum**

The IE coursework was designed as an integrated curriculum. Students take Finance, Management, and Marketing courses together as a cohort, and a faculty team coordinates topics so that students learn the knowledge they need to overcome challenges 'just in time'. This 'just in time' technique ensures the information is fresh when the students must apply it. For example, the SWOT analysis is taught in both Marketing and Management. Those faculty coordinate teaching SWOT concepts during the same week that the students must prepare a SWOT analysis in the practicum. Beyond arranging IE topics for 'just in time' learning, faculty often incorporate additional elements into their courses to help facilitate student learning. These added elements might include additional material addressing a specific issue facing the company. For instance, as students are preparing to submit their business plan to the bank, they learn about the lending process and how banks evaluate borrowers.

In addition to integrating an experiential component into the IE courses, the practicum is itself an integrated curriculum. Students need to combine learning from all areas of business to build a coherent business plan. This exercise requires selecting the products to sell, doing market research, developing financials, fashioning a selling plan, developing accountability systems, and all the other pieces essential for a successful business plan. Once the business plan is approved for a loan, students must deliver on their proposal. They must manage all the challenges that arise during the process like determining a sales strategy, creating a discounting policy, and dealing with delayed or faulty products. In the practicum, the students are empowered to find ways to meet the real world challenges they face. The students recognize that they are responsible for loan repayment, so they feel realistic pressure to achieve.

The IE curriculum also includes the integration of the community into the curriculum. The primary component of that community integration is working with a bank to provide funding for the business plans created by students. Officers from the bank help the students grow and prepare as entrepreneurs by taking time to teach students, from the bank's perspective, what it takes to be successful. This task is accomplished by meeting with the students for small group discussions and also by the questions asked of students during the student loan presentations. During presentations the bankers encourage students to think about the myriad challenges facing small businesses such as shipping, taxation, and liability.

A bank is a fundamental component of the IE, but students typically interact with other members of the business community as well. The program brings in an external consultant to work with the students on collaboration and periodically brings in industry executives to speak with the students. As part of the IE, students often actively seek to engage with the business community by negotiating with suppliers of their products, seeking customers, or

looking for business or government agencies with whom to partner. Further, the IE curriculum also includes a service learning component so students choose a charity to which they will provide volunteer time and surplus funds available after loan repayment.

### **Integrative Thinking**

Students are encouraged to integrate their thinking as part of the program. That integrative thinking is important because the business plan that the students are tasked with developing is a multidisciplinary document. Students must see beyond their own majors to how each piece interacts to form the whole. A Marketing student might work on the market research, but they will also engage in the discussion of the cash management plan, reorder decision, loan amount request, inventory management, and many other topics that might be deemed outside the purview of their area. Needing to consider a variety of different factors and viewpoints to make a decision strongly supports the development of integrative thinking.

## **VITAL AREA: ENGAGEMENT**

Engagement is considered by AACSB to be a second vital area for continuous improvement on the part of business schools. The AACSB specifically addresses the importance of active student engagement in learning (AACSB, 2013, p. 29). Student engagement is both broadly and deeply ingrained into the structure of the IE program. The integrated experience includes both student engagement within the university and engagement with external parties. The National Survey of Student Engagement (2015) uses four measures of student engagement tied to university-level activities: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The integrated experience touches on all four of those components of student engagement.

### **Academic Challenge**

The category of Academic Challenge is perhaps the most extensive and consists of multiple pieces. The first, higher order learning, considers to what degree students are engaging in analytical thinking. In the IE, students start with only a timetable for deliverables, such as an inventory plan, and a list of individuals who participate in each company. Students are expected to conceptualize a business plan from the ground up including products and the processes necessary to implement a completed business plan. Students take the concepts they are learning in the core courses and apply them to actual challenges in the practicum. The students not only learn about topics, like marketing research, but then need to use the tools they learn to conduct marketing research. This process is true across a wide range of topics including leadership, conflict resolution, and financial forecasting. Because of the limited timeframe, it is incumbent on the students to quickly assimilate the material and use it to form new ideas to progress toward their deliverables. Students must also evaluate information that they receive in order to appraise different perspectives put forth by their company members to make the best decision possible. That includes updating their perspective as new information arrives.

Another piece of academic challenge is reflective and integrative learning which is addressed in the curriculum by the integration and application of course material. As mentioned above, students learn material essential to the development of their business plan in the core courses associated with the IE. The expectation is that the students will apply that information in developing an integrated business plan. Students are also expected to recall and use material that was covered earlier in the semester when challenges arise.

Integral to learning is the discussion of different viewpoints on issues important to the company. The IE attracts students from all College of Business majors and from outside disciplines such as Computer Information Science. The wide range of backgrounds tends to lead to a wide range of viewpoints. As the business plan is a collective process, students have the opportunity to argue their viewpoints. Even more importantly, they have the opportunity to see and understand the perspectives of others. Learning about the viewpoints of others, considering them, and comparing them to their own views provides opportunities for students to expand their understanding of business. The process of considering alternate views extends to societal concerns as well. Part of the business plan requires the selection of a charitable organization so students are required to consider and discuss societal issues and what they can do to assist in the management of those issues.

### **Learning with Peers**

The IE is built around Learning with Peers since students collectively work on the same project throughout the semester. Interaction and collaboration are mandatory for students to even start the process of organizing a company. Students work with peers on making all the company-level decisions from who will be CEO, to the

company name, to what cash management policies to use. Students also work with peers at a team level. Companies typically break into functional teams to address individual pieces of the business plan. These teams then bring their work to the company as a whole for consideration. For instance, an inventory team will determine where inventory can be kept, policies governing inventories, and how to coordinate with the cash management team and the financial statement team. Students must learn to work closely with those in their team and coordinate and collaborate with those in other teams. One resource made available to the students is that of a Company Advisor. A student who finished the program the prior semester serves as an advisor to the current student company. Their role is to explain the process and, when asked, share what they have learned with current participants. This serves not only as a mechanism to transmit institutional knowledge but also provides a peer from whom those in the integrated experience can learn.

Consistent with the evidence that a cohort model is associated with common bonds, development and engagement (Martin, Goldwasser, & Galentino, 2016), students continue to exhibit a great deal of collaboration even in the portions of the program that are graded individually. It appears that the students in the IE study together more consistently than students in similar courses. Anecdotal evidence indicates that coordinated studying among IE students continues into future semesters. This continued relationship suggests that the peer connections created in the IE continue to provide engagement benefits to students well into the future. One item of note is that some students have expressed dissatisfaction with courses they have taken after they have finished the IE that did not utilize the same level of peer collaboration.

The IE brings together domestic students from many states and international students from many different countries. Students have a wide variety of origins, backgrounds, beliefs, and views. Therefore, companies made up of 15-30 students tend to exhibit a great deal of diversity. That diversity naturally leads to a broad range of viewpoints within the company. For a company to function, the students must talk through the different views on a range of issues. That process ensures all participants have the potential to engage with people from a race or ethnicity different than their own, and interact with those from different economic backgrounds and holding different religious and political beliefs.

### **Experiences with Faculty**

Interaction between students and faculty is another engagement activity (National Survey of Student Engagement, 2015). Having students engage with faculty is essential to the success of the IE. The first contact students have with the IE curriculum is during second-year advising where they hear about the opportunity from faculty. Once in the program, there are opportunities to share experiences with the faculty. Faculty in the IE program monitor the progress of the student run companies through direct inquiry and via the feedback of company advisors. This monitoring allows faculty to adapt course content to the needs of the students. The faculty also interact with the relevant teams in the company. For instance, the faculty teaching Finance often spend significant time with the students working on financial statements, inventory systems, and cash management. The time spent on interactions includes learning the students' progress and providing feedback.

The faculty also give feedback to members of the IE company as a whole. Each company conducts a preliminary presentation where faculty provide extensive feedback on the draft business plan. That feedback is designed to help the students see what needs to be done before presenting to the bank. Company advisors also closely collaborate with faculty to help guide the student companies. Faculty often provide those company advisors advice and insights on how to help the students work through challenges.

### **Campus Environment**

The college and university have been very supportive of the activities of the IE student companies. While the IE companies are not considered official student organizations since they are part of a course, the university has permitted them privileges such as tabling in the Student Union and scheduling rooms. These activities are typically reserved for recognized student organizations. The College of Business, which views the program as being high profile, also provides strong support for the IE. The college frequently provides the IE students opportunities for separate sessions with many of the prominent guests invited to campus. At times, there has been a need for IE faculty to balance the value to the students of meeting with a prominent guest with the need to protect student time and make progress as a company.

The IE is designed to encourage student interactions across a broad spectrum. Not only must they work with other students, often from very different backgrounds, but they also have the opportunity to interact with others on

campus. It is very common for the core selling market to be other students. This market leads to members of the company interacting with a great many students across campus. Students often sell to faculty or other campus offices as well. Campus interactions frequently extend beyond selling and may include, for example, work with the university lawyers on issues like copyrights, liability, and recourse on supplier issues. Further, if students choose to develop a branded product sufficiently close to that of the university, they work with the campus licensing office to get approval.

### **External Engagement**

In addition to extensive on campus student engagement, there are many opportunities for students to engage with off-campus parties as part of their learning. This type of engagement is consistent with the idea of cultivating a position at the intersection of academe and practice (AACSB, 2016, p. 15). Some of these opportunities, like working with a bank and providing support for a charity, are built into the IE while others are enabled by empowering the students to pursue their objectives. The development of the business plan dominates the first 7 weeks of the semester. Once completed, the plan is presented to the bank partner of the College. The bank either accepts the plan and agrees to a loan or provides the students with feedback on what needs to be changed before the loan is granted. Students continue to correspond with and report to the bank during the rest of the semester culminating in a check signing ceremony. At that point, sometimes with local media attention, the students pay back the loan and then, with the bank, do a public check presentation to the chosen charity. That charity is chosen by the students early in the process. The charity is one with a local or regional presence so that students can interact with their staff and coordinate volunteer efforts.

Other external connections are at the discretion of the students. A common external party is that of product suppliers. It is very common for business plans to be product-based, and therefore, students need to determine not only the product(s) they wish to sell but also the sourcing. There is on-campus sourcing available for some products, but it is common for students to consider external suppliers. Students learn the real world implications of how interactions with others impact you. As part of the business plan, the companies incorporate reorder scenarios. It becomes very apparent that a fast delivery from a supplier means that the students have more time to sell, are more likely to sell out of the product, are more likely to reorder the product, and can make more money. A slow delivery uses up their limited selling time and significantly reduces their revenue. Once they contact external suppliers, they have the opportunity to negotiate terms and expectations of both parties. The students experience good (and bad) service and learn to decide among suppliers offering different sets of terms. Once they commit to a supplier, they often have the opportunity to learn about the other challenges that arise from business to business transactions including shipping delays, products not meeting specifications, shipping damage, and defective products.

A common part of the selling strategy is to host events. Multiple companies have either hosted their own events or collaborated with existing events to help facilitate getting their product before customers. For instance, two companies chose athletically-oriented products and then put on a 5-K run to help sell the products. Other opportunities that the students have pursued include hosting a booth at a regional Chamber of Commerce event, negotiating shelf space at external retail outlets, discussing insurance necessary to cover inventory, and direct selling to external firms.

Students are also often active in advertising their products. Beyond the traditional flyers and tabling, students negotiate with multiple offices on campus to incorporate information about their company or products on campus screens. It is also common for them to develop connections via social media. Most companies use social media to advertise and direct customers to an online point of sales. Students develop a social media plan and consider issues like media sources to use, message to deliver, timing, shipping costs, and return policies. Some companies have also done interviews on a local radio station promoting their products.

### **Faculty Engagement**

Not only students are afforded engagement opportunities. Obviously, faculty benefit from greater engagement with students and the ability to provide deeper learning. Those faculty also have the opportunity to engage with other parties with whom they may not otherwise interact. Implementation of the IE necessitated faculty engaging in outreach prior to the beginning of the program. The first external contact pursued by faculty was to find a bank willing to attend loan presentations and provide loans to the student companies. This turned out to be a very easy 'sell'. The faculty were quickly able to get in touch with Vice-Presidents at multiple regional banks to pitch the IE.

Ultimately, the decision was influenced by the existence of an ongoing relation between a bank and the college. Engagement with the IE served to strengthen and deepen that relationship over time.

The faculty also engaged in university-level outreach. Meetings were set up to coordinate potential opportunities for students. For example, the intent was to allow students to have flexibility in choosing suppliers, but the faculty wanted to be able to recommend a reliable local supplier. Therefore, the faculty met with the director of the university printing service, learned about the printing office's ability to create custom logo products, and developed an understanding of their position on terms like product access and storage. Other meetings were designed to preempt potential challenges. For instance, the University has an external bookstore vendor so the faculty worked with university administrators to determine any locational limitations on student selling. The faculty also met with administrators from other offices like licensing, student activities, and facilities. The main thrust of most meetings was to share a general understanding of the IE and its positioning as a course. In turn, the faculty developed an understanding of the relevant university structures that would govern the student activities.

Faculty outreach continued after the IE was initiated. As the process continued, faculty addressed opportunities and concerns that would periodically arise. As an example, one semester the faculty was informed that a donor was willing to give a matching grant to a particular charity. The faculty ensured that the IE students learned about that opportunity and collectively decided that matching grants would count toward funds raised by the students. It is not uncommon for one or two such circumstances to occur each semester.

The IE has also served as a mechanism for outreach to stakeholders in the College of Business. It is high profile and has been used to show alumni that the College has been active in enhancing education. The curriculum has been the focus of articles in the College's annual publication two of the last four years. It was also mentioned in a third article concerning the Entrepreneurship and Innovation Minor that is built upon the IE.

## **VITAL AREA: IMPACT**

Impact is considered by AACSB to be a third vital area for continuous improvement on the part of business schools (AACSB, 2013). The IE has proven impactful not only for the students but also for other parties touched by the program. The integrated model of the IE supports the potential to make significant impact by enhancing student learning and development, student placement and success, and support for the community.

### **Impact on Education**

The IE incorporates items listed as high-impact educational practices in the National Survey of Student Engagement (2013). The most obvious is that the students participate in a formal program where they take two or more classes together. The IE has students participate in the integrated experience as a cohort so they jointly take four courses, including the applied practicum.

The IE Practicum also feeds into a second criterion which addresses applied experience. By its nature, the practicum is a hands-on application of relevant business knowledge and skills. Students experience situations and challenges that help prepare them for work in the business world. Feedback from students suggests that they engage in a broad spectrum of skill development during the process. Each student, in their functional team, has the opportunity to develop discipline-specific skills including leadership, financial statement preparation, and marketing techniques. It appears, however, that students also make significant progress in general skill development. The skills most frequently mentioned by students include communication, team building and collaboration, managing adversity, and being able to tie together what they are learning.

Involvement in the IE appears to have motivated many students to continue pursuing development in the areas of entrepreneurship and innovation. Since the inception of the IE, the college has added an Enactus team in addition to an Entrepreneurship Club. The Enactus team is working to implement a college store. The college also recently implemented an Entrepreneurship and Innovation Minor built upon the foundation of the IE. Students take what they have learned from the experience and expand upon it with subsequent material on innovation, creativity, and entrepreneurship. The student takeaways from the IE allow them, in many cases, to have first-hand experience with the concepts being covered in those advanced courses. That, in turn, enhances their ability to further develop entrepreneurship and innovation skills.

### **Impact on Placement**

The IE has been in place for eight semesters, but because it targets beginning juniors, there is still very limited hiring statistics for IE students. In speaking with many current graduates, however, faculty and staff have found a common theme in that the IE curriculum very frequently plays a significant role in the interview process of the IE student. The students' experiences in the program typically provide them with excellent examples for answering interview questions and engaging with the interviewers. Many students have indicated that discussion of their role in the IE was the dominant topic in interviews and contributed to their hiring. One former student wrote "I always talked about this at interviews...people are impressed that our College of Business is offering such a great opportunity for students to learn and explore the business world."

The Internship Coordinator for the College of Business reports that some companies treat participation in an integrated experience type of program as a 'plus' when evaluating resumes. This information is consistent with the level of business interest shown in having a representative speak in IE courses. Students have also taken advantage of the opportunity for internships targeted at those who have completed the IE. Each year, multiple students in the program obtain internships with an international firm that provides those students tours of their corporate innovation center as a recruiting tool. Other students have taken advantage of internship opportunities provided by the bank. One former student who did so now works as a Loan Analyst and attends the loan presentations along with the Market President.

### **Impact on the Community**

Service learning is another high-impact learning opportunity (NSSE, 2013), and the IE students have the opportunity to make an impact in the community via service learning. Each student commits to community service, and most IE companies have a team that is specifically tasked with coordinating volunteer activities. Further, students commit to donating the net proceeds from their IE company to a charity. Typically, that charity is also the focus of student volunteer activities, though the students also count service hours spent helping other charities. It is very common for companies to have target numbers for donations and service hours that they use as organizational motivation. Through the fall 2016 semester, student companies have together donated \$40,851.07 to 10 different charities. That amount includes garnering matching funds of \$4,038 from other parties. The students in those companies have also provided 3,610 service hours to those and many other charities

By implementing the IE program, the college provided an opportunity for others to engage with business students and faculty. The IE was the first corporate named program among the 37 institutions in the state college system. That came with a four-year grant which was subsequently renewed and expanded. The grant supported release time for a program director, scholarships for company advisors, marketing dollars, and funding for networking events and team-building activities. The funding also supported the Myers-Briggs Type Indicator assessment for all participating students along with a workshop by a professional consultant on the implications of the results for how people interact in a business setting. The curriculum opened the door to these impactful connections and the potential for many more.

The College of Business, the University, and the bank partner have all received significant favorable press from implementation of the IE curriculum. There have been multiple print articles in newspapers and a story by a regional television station. It has been the topic of many other press releases, articles in the College of Business publication, and multiple awards including an Excellence in Curriculum Award from the state college system. All of these have provided a positive impact on the organizations involved.

### **CONCLUSIONS**

From the time the IE was first piloted, every IE company has made significant contributions of money and time to their chosen charity. A recent example of an IE company is YouBetcha Trading Co. YouBetcha adopted a regional theme for their company and products and crafted a website with appropriate visuals. Their products included a phone wallet, sunglasses that had a built-in bottle opener, and a multi-tool specifically designed for the IE company by one of its members. YouBetcha's members dedicated their time and surplus funds to a community charity, the Backpack Food Program. Appendix 2 contains descriptions of two recent IE companies.

The IE aligns well with the three vital areas of continuous quality improvement listed by the AACSB (AACSB, 2013): engagement, innovation, and impact. The program provides students with a real world business experience, opportunities to develop their professional skills and abilities, and the ability to engage with others inside the



classroom, within the college, inside the university, with external businesses and the local and regional community as a whole. The program allows faculty to direct and guide while permitting students to feel empowered to take control of the process and responsibility for the outcome.

## REFERENCES

- AACSB International (2016). A Collective Vision for Business Education. Retrieved March 6, 2017 from <http://www.aacsb.edu/~media/managementeducation/docs/collective-vision-for-business-education.aspx?la=en>
- AACSB International (2010). Business Schools on an Innovation Mission. Report of the AACSB International Task Force of Business Schools and Innovation. Retrieved March 6, 2017 from <http://www.aacsb.edu/~media/AACSB/Publications/research-reports/business-schools-on-an-innovation-mission.aspx>
- AACSB International (Adopted April 8, 2013). Eligibility Procedures and Accreditation Standards for Business Accreditation. Retrieved March 3, 2017 from <http://www.aacsb.edu/accreditation/business/standards/2013/2013-business-standards.pdf>
- Argyris, C. (2002). Double-loop Learning, Teaching, and Research. *Academy of Management: Learning and Education*. V. 1, No. 2, 206-219.
- Armstrong, S.J. and Mahmud, A. (2008). Experiential Learning and the Acquisition of Managerial Tacit Knowledge. *Academy of Management Learning and Education*. V. 7, No. 2, 189-208.
- Dees, W. and Hall, T. (2012). Creating Experiential Learning Opportunities for Sport Management Students: The Case of Grand Slam Marketing. *Sport Management Education Journal*. No. 6, 71-80.
- Devasagayam, R., Johns-Masten, K., and McCollum, J. (2012). Linking Information Literacy, Experiential Learning, and Student Characteristics: Pedagogical Possibilities in Business Education. *Academy of Educational Leadership Journal*. V. 16, No. 4, 1-18.
- Green, R. D. and Farazmand, F. A. (2012). Experiential Learning: The Internship and Live-Case Study Relationship. *Business Education & Accreditation*, V. 4, No. 1, 13-23.
- Hart, P. D. (2008). How Should Colleges Assess and Improve Student Learning? Employers' Views on the Accountability Challenge. *Association of American Colleges and Universities Report*.
- Kayes, D. C. (2002). *Experiential Learning and its Critics: Preserving the Role of Experience in Management Education*. Dubuque, IA: Kendall/Hunt Publishing Company.
- Kosnik, R., Tingle, J., and Blanton, E. (2013). Transformational Learning in Business Education: The Pivotal Role of Experiential Learning Projects. *American Journal of Business Education*. V. 6, No. 6, 613-630.
- Lester, W. and Williams, V. (2010). Interactive Investor Education: An Exploratory Impact Study in Non-traditional Learning Environments. *Business Education Innovation Journal*. V. 2, No. 1, 44-52.
- Martin, K. A., & Goldwasser, M. M., & Galentino, R. (2016). Impact of cohort bonds on student satisfaction and engagement. *Current Issues in Education*, 19(3).
- McCarthy, P. R. and McCarthy, H. M. (2006). When Case Studies Are Not Enough: Integrating Experiential Learning into Business Curricula. *Journal of Education for Business*, March/April, 201-204.
- National Survey of Student Engagement (July 23, 2015). Engagement Indicators and High-Impact Practices. Retrieved March 6<sup>th</sup> from [http://nsse.indiana.edu/pdf/EIs\\_and\\_HIPs\\_2015.pdf](http://nsse.indiana.edu/pdf/EIs_and_HIPs_2015.pdf)
- National Survey of Student Engagement (May 2013). Promoting High-Impact Practices: Maximizing Educational Gains. Retrieved March 6<sup>th</sup> from [http://nsse.indiana.edu/pdf/HIP\\_brief\\_final.pdf](http://nsse.indiana.edu/pdf/HIP_brief_final.pdf)
- Rosen, P. and Rawski, G. (2011). An Experiential Production Exercise with LEGO Cars. *Business Education Innovation Journal*. V. 3, No. 1, 27-32.
- Templeton, W., Updyke, K., and Bennett, R. B. (2012). Internships and the Assessment of Student Learning. *Business Education & Accreditation*, V. 4, No. 2, 27-38.

## APPENDIX 1: PROGRAM REPORTING REQUIREMENTS

The following needs to be submitted to the bank 3 days prior to your loan presentation.

- Business Plan/ Executive Summary including, but not limited to:
  - Financial projections, broken down weekly (each week is similar to 1 month if running a calendar year business)
    - Balance sheet, and income statement (at a minimum)
    - Be sure to stress test income statement figures to show that you considered factors such as sales reduced 10%, expenses increased 10%, etc.
    - What is your “breakeven”?
  - Financing needs
  - Product mix
  - Marketing plan (advertising)
  - Target market
  - Planned sales approach
  - Listing of officers of the company, including role of each
  - Listing of team members (be detailed—if you have a “finance team”, “marketing team”, etc., please list out members and each department’s function within your company)
  - Note any competitive advantages you feel you have in the marketplace.
  - Internal controls your company has

The bank requires financial reporting on a weekly basis. Please submit your weekly financial results to the Bank Market President by the end of the day Tuesday of the following week, reporting prior week activity. This report needs to encompass the following, at a minimum:

- Financial Statements (balance sheet and income statement) showing weekly results, and “Year to date” results. Your year to date results simply means cumulative results for the semester.
  - These should include budget to actual comparisons
- Inventory reports. Indicate current inventory levels, orders you have placed for additional inventory, and reconciliation of the changes from week to week.
- Any other reports you feel necessary to send

## APPENDIX 2: EXAMPLES OF IE COMPANIES

Details about two IE companies are provided below:

### **Kato Supply Co. - Fall 2016**

**Service/Product:** t-shirt, koozie, kato flag, silipint cups

**Loan Amount:** \$3,216

**Gross Sales:** \$5,354

**Donation to Chosen Charity:** \$2,136 to MN Chapter of MADD

**Service Hours:** 414

### **YouBetCha Trading Co. - Spring 2017**

**Product:** multi-tool, sunglasses, phone wallets

**Loan Amount:** \$3,500

**Gross Sales:** \$7708.50

**Donation to Chosen Charity:** \$3,628.22 to Back Pack Food Program - Mankato

**Total Service Hours:** 225 hours

# Building Students' International Perspective Using Business Startups

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## ABSTRACT

Examples in the business classroom often use large, established companies that students readily recognize. To be recognized by most students, firms likely have already grown to a significant size. Further, when explaining how environmental factors affect businesses, these large firms tend to be somewhat insulated because of their resource stocks and diversification. Therefore, the visible effects of location on business may be more evident in smaller businesses and entrepreneurs than in large businesses. In this article, we describe four databases that are useful for comparing physical conditions, approaches to business, and opinions about business across countries of the world. We present three exercises in which students utilize these data sources. These include a statistical analysis, a country analysis, and a company analysis. The data and the exercises facilitate a focus on start-ups and small businesses and the factors they face in different countries.

**Keywords:** Entrepreneurship, Small Business, International Business, Undergraduate Research, Classroom Exercises

## INTRODUCTION

Studies of entrepreneurship have increased dramatically in the last decade, and this attention has not been limited to domestic markets. Most international business courses and textbooks now cover the topic of global entrepreneurship. However, the examples for which students in the U.S. classroom are likely to have a ready frame of reference tend to be large, established firms. Surveys indicate that, even among millennials, traditional media continue to be among the most influential advertising channels (Marketing Charts, 2015). Costly traditional media such as television will expose students to large firms having the resources and reach to benefit from these outlets (All Business, 2017). Among the largest businesses, roughly one-fourth of the firms in the Fortune Global 500 are U.S. firms (Fortune, 2016). International business classes often examine large multinational corporations (MNCs) that operate in many countries, but even these can be homogenous. For example, large multinationals with headquarters outside the U.S. have often entered the U.S. by acquiring U.S. subsidiaries, or they have established operations in the U.S. which are similar to other U.S. firms. In these examples, the businesses have typically matured and have been operating internationally for considerable lengths of time. For effective study of nascent entrepreneurship from a global perspective, strong and relevant examples can help to engage students with the topic.

This paper presents data sources and analytical exercises that can be used to help students see more clearly the differences in the effects of location on business across countries. The data are available online for free. The exercises focus on country-level factors related to starting businesses, such as the available infrastructure and the personal opinions regarding entrepreneurship. Students are able to retrieve data and identify and investigate small businesses for themselves.

The businesses of entrepreneurs can provide effective teaching examples of several relevant topics. One such topic is that of environmental factors. Examples of small firms are effective and appropriate because such firms have not grown in size or expanded internationally. Therefore, they are subject to the full force of local environmental factors. While large firms can insulate themselves by relying on resource stocks and diversification, small firms cannot. Consequently, smaller businesses and entrepreneurs are more likely to experience the effects of locational factors on their businesses. Academic research typically follows the European Union definition of small and medium-sized businesses (SMEs) as those having up to 250 employees.

Another relevant topic for international business is the environmental context. Researchers have noted that entrepreneurship is influenced by the interaction between the individual and the situation (Shane and Venkataraman, 2000). Both internal and external factors affect entrepreneurs' interest in and ability to start businesses (Abe, Troilo and Batsaikhan, 2015; Obasan, 2012). Elements of the situation, or context, and traits of individuals can vary

depending on the country a firm operates in. In terms of the context, students are sometimes familiar with comparisons of culture discussed in books such as *Kiss, Bow, or Shake Hands* (Morrison and Conaway, 2006) or *Cultural Intelligence* (Peterson, 2004). However, as we expand our analysis from “doing business” to “starting a business”, the relevance of other elements becomes apparent. Specifically, an element of the context that can vary greatly across countries is infrastructure.

There are several types of infrastructure. Physical infrastructure is meaningful to business start-ups. Porter’s diamond model of national competitiveness (1990) provides a foundation for the importance of physical conditions and supporting systems in building strong businesses. For students who would benefit from a general understanding of the expansiveness and pervasiveness of physical infrastructure, books such as *Infrastructure: A Guide to the Industrial Landscape* (Hayes, 2014) explain how the electric grid, the water system, grain elevators, highways and bridges, and shipping and rail infrastructures function as building blocks of the economy. Additionally, the World Factbook (CIA, 2017) provides country profiles that offer insight into the condition and reliability of physical infrastructure such as miles of paved highway and airport runways.

Capital infrastructure is also an important contextual consideration. De Soto (2000) postulated that capitalism flourishes where the financial infrastructure enables firms to raise capital by pledging assets, such as real estate or equipment. The U.S., for example, has a thorough and mature system for registering ownership of assets and presenting those assets as collateral for loans. Students with a capitalist perspective may not readily recognize differences in the power of the entrepreneur to raise capital and may overlook the capital infrastructure of countries when analyzing a firm’s expansion into these countries.

While conditions of the situation and availability of resources facilitate entrepreneurship, it is the strategy that individuals design and execute with those resources that determines the course of a business (Sen, 2000). Research investigating traits of entrepreneurs has noted cognitive or mindset characteristics. For example, entrepreneurs may have an internal locus of control or a tolerance for ambiguity. Even the study of corporate entrepreneurship considers attitudes and mindset using measures such as “top managers of my firm have a strong proclivity for high-risk projects” and “top managers of my firm believe that bold, wide-ranging acts are necessary to achieve the firm’s objectives” (Covin and Slevin, 1989). Illustrating how the nexus of situation and individual relate to the start of businesses, consider that entrepreneurship is risky. In the U.S., the system of bankruptcy facilitates recovery from failed businesses. The entrepreneur’s willingness to assume risk coupled with the legal system that allows for recovery from failure will encourage the effort to start and sustain the small businesses that are a vital part of the U.S. economy.

Shane and Venkataraman (2000) define the study of entrepreneurship as the examination of “how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited”. The “how” involves under what conditions. The “by whom” involves characteristics and behaviors of individuals. “Effect” recognizes the outcome. We propose analytical exercises that permit the investigation of these elements. Young and small businesses offer a fruitful context for students to research business. In the following sections, we present data sources and suggestions for analyses that build on those sources to give students a rich view of international business and entrepreneurship by investigating the intersection of these topics.

## DATA SOURCES

In this section, we describe four databases for comparing contextual (physical conditions and infrastructure) and individual (personal characteristics and opinions about business) factors across countries of the world. These sources are available online for free. Then, in the subsequent section, we describe three assignments that can be built around these data sources.

**Global Entrepreneurship Monitor:** The Global Entrepreneurship Monitor (GEM; [www.gemconsortium.org](http://www.gemconsortium.org)) is an international data collection effort for the study of entrepreneurship (GEM Consortium, 2017). One useful segment of the GEM data is the Adult Population Survey which measures the characteristics of individuals starting businesses, the social attitudes the individuals face from other people when starting a business, and contextual factors that influence entrepreneurship. Variables representing characteristics of individuals include fear of failure and entrepreneurial intentions. Social variables include the status afforded to entrepreneurs (low to high), and prestige associated with a career in entrepreneurship (low to high). Finally, contextual variables include total early-stage entrepreneurial activity. In sum, these variables highlight key differences between small businesses in western

countries and small business in other areas of the world. For example, students may find it interesting that entrepreneurship is not admired in all countries.

GEM also offers country-specific data of factors affecting the ease of starting a business in its National Expert Survey. Country-specific variables include financing for entrepreneurs, government support and policies, entrepreneurial training and education in school, and physical and services infrastructure.

**Ease of Doing Business:** The World Bank computes an index reflecting the Ease of Doing Business ([www.doingbusiness.org](http://www.doingbusiness.org)). This index captures key issues of small business management such as the burden of regulations and the extent of property rights protection. In addition to the index ranking, available reports include measures of the underlying variables affecting ease of doing business in areas such as access to electricity, securing credit, registering property, and resolving insolvency.

**Human Development Index:** The United Nations (UN) offers access to data measuring human development, available through the United Nations Development Programme, ([hdr.undp.org](http://hdr.undp.org); [hdr.undp.org/en/data](http://hdr.undp.org/en/data)) (United Nations, 2015). The Human Development Index (HDI) includes measures of both individual-level and contextual factors that have many ties to starting and sustaining small businesses. For example, the years of schooling for females is an individual-level indicator of the skills possessed by females to build a business. Students might also use this measure as an indicator of the country's attitudes towards opportunities for women. Additionally, measures of resources, such as the proportion of the population living on degraded land or the natural resource depletion, can indicate whether potential entrepreneurs might be hindered by a resource-poor environment that can require them to turn their attention to basics of living rather than building a business.

This data set also includes important ties between work at the individual level and development at the national level. Economies are driven by the growth in jobs that provide livelihoods for citizens. Dr. Selim Jahan (2016), director of the UN Development Programme, noted that “work is the defining issue of our time, with implications for every country.” He highlights the importance of the global focus on sustainable work that does not put people at risk. Here, entrepreneurship can begin as work that, over time, generates skill-building jobs as the small business is sustained and grows. Critical to this growth is the development of infrastructure and systems for supporting the business entity. When entrepreneurship opportunities or innovation incentives are limited, a country's development may be limited (Sen, 2000). The variables in the human development data provide opportunities to examine relationships between the development of individuals, the development of business, and the development of nations.

**Corruption Perceptions Index:** Transparency International has developed a reputation for tracking ethical issues with its Corruption Perceptions Index (CPI; [www.transparency.org](http://www.transparency.org)). The index includes evaluations of countries in terms of trustworthiness and reliability of public institutions (e.g., police and judiciary), expectations of bribery/extortion in exchanges, and the likelihood of misappropriation of funds by public officials for private enrichment (Transparency International, 2016). It is worth noting that high scores on the index indicate low corruption. As such, this scale is often reverse coded in regression models. In addition to the numerical index, Transparency International provides the National Integrity System (NIS) assessments by country ([www.transparency.org/whatwedo/nis/](http://www.transparency.org/whatwedo/nis/)). These reports cover countries' systems for governing and controlling corruption through institutions such as branches of government, law enforcement, media, and political parties, and the electoral system.

Corruption affects the ease of doing business, the process of getting into business, and access to markets. However, it is interesting to note that businesses can be participants in or beneficiaries of corrupt practices. Class discussion might consider how collusion between businesses and public officials can misdirect public funds to private wealth, exacerbating wealth inequality as funds are rerouted to a fortunate few. Large businesses may work to restrict new entrants or start-ups, because they would increase the competition for these resources.

## ANALYSES

The above datasets can be used for a variety of analyses. Here, we present suggestions for exercises at three levels. First, students might work on analyzing the datasets, taking a macro view of the variables across all countries. Second, a narrower focus could be taken with an analysis of a specific country. Lastly, students might identify a small business and explore what issues it faces in its home country.

**Analysis of the Data:** The data offer the opportunity for students to conduct statistical analyses in which they identify relationships among variables. Linear regression is a straight-forward analysis, but can be effective in giving students experience with hypothesizing relationships, selecting variables, and interpreting results. Methodologies such as cluster analysis or ANOVA can also prove effective with these data. Students might use panel data across several years for more complex studies or could test curvilinear relationships or interaction terms in their regression models. Table 1 lists variables in the datasets. The following paragraphs suggest some ways to use those variables.

*Dependent variables:* There are numerous possibilities for dependent variables in the analyses. Business courses may be interested in a dependent variable that measures financial success of the nation, gross domestic product (GDP). This can be found in the World Bank's HDI data and is also available in the CIA World Factbook (CIA, 2017). An alternative dependent variable is the well-being of a nation's citizens, as measured by the Human Development Index (HDI). Sen (2000) proposed that development is so significant as to be indicative of and an enabler of freedom. Factors that support the initiation and growth of businesses can contribute to the development of a national economy and to the individuals in that nation. Therefore, a broad view of human development can yield an interesting analysis. A third suggestion for a dependent variable in the regression analysis that takes a more direct focus on business is the ease of doing business, as measured by the Ease of Doing Business index described above. Alternatively, a study might focus on attitudes toward business by using a variable such as "entrepreneurship as a good career choice" or "entrepreneurial intentions" from the GEM data.

*Independent variables:* As can be seen in Table 1, the variables cover various levels of analysis and offer insight into individuals, into business processes, and into macro economy and policy conditions. Individual-level measures include perceptions of the market, perceptions of entrepreneurship, and perceptions of self (e.g., fear of failure). Business processes can be examined broadly, such as with the ease of doing business index, or more specifically, such as with access to credit and registering property. Country economy-level variables can provide insight into both challenges for and opportunities for business. For example, a low number of physicians may indicate that health of the labor pool may be problematic, or it could be viewed as an opportunity for entrepreneurs to develop healthcare delivery services.

*Control variables:* There are numerous variables that would be useful as controls in a regression. For example, size of the country in terms of population or in terms of land area can be an indicator of resources such as widely available labor. The literacy rate of the county can indicate labor or customer skill level. Indicators of health or security, such as life expectancy or crime rates, can control for an environment in which people can turn their energy and attention to creating or running a business.

*Research questions:* The available variables support a wide-ranging set of research questions and hypotheses. For example, an analysis could consider whether an individual's entrepreneurial intentions (dependent variable) are associated with business infrastructure factors (such as getting credit, taxes, and enforcing contracts) or with physical infrastructure factors (such as the electrification rate, natural resources, and internet users). Or, students might be interested in whether the ease of doing businesses (dependent variable) is related to corruption or with broad policy issues such as education and the energy supply. Interesting insight might come from an analysis of whether individuals' perceived opportunities (dependent variable) are associated primarily with financing issues (financing for entrepreneurs, getting credit, domestic credit) or with market factors (internal market openness, trade, and income inequality). Students' imaginations can yield many other interesting hypotheses.

*Interpreting findings:* In interpreting the results of an analysis of this data, it should be noted that a regression will not measure causal relationships between variables. An analysis can demonstrate that certain factors are correlated with individuals' intentions to start a business, for example, but cannot predict which countries will definitely see entrepreneurial activity. From the analysis, students can identify factors or trends that are associated with entrepreneurship. The discussion can then center on why and how certain factors would encourage or discourage entrepreneurship. Entrepreneurs tend to be creative in finding business solutions to problems. To what extent do challenges that exist in society actually present opportunities for entrepreneurship?

**Table 1: Examples of Variables from Databases**

<b>Datasets and Example Variables</b>	
<b>Global Entrepreneurship Monitor (GEM): Adult Population Survey (APS)</b> of entrepreneurial behavior and attitudes ( <a href="http://www.gemconsortium.org/data/key-aps">www.gemconsortium.org/data/key-aps</a> )	
<ul style="list-style-type: none"> <li>• Perceived opportunities</li> <li>• Perceived capabilities</li> <li>• Fear of failure</li> <li>• Entrepreneurial intentions</li> </ul>	<ul style="list-style-type: none"> <li>• Motivational index</li> <li>• High job creation expectation</li> <li>• High status to successful entrepreneurs</li> <li>• Entrepreneurship as a good career choice</li> </ul>
<b>Global Entrepreneurship Monitor (GEM): National Expert Survey (NES)</b> of entrepreneurial ecosystem ( <a href="http://www.gemconsortium.org/data/key-nes">www.gemconsortium.org/data/key-nes</a> )	
<ul style="list-style-type: none"> <li>• Financing for entrepreneurs</li> <li>• Government support and policies</li> <li>• Taxes and bureaucracy</li> <li>• R&amp;D transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Basic school entrepreneurial education and training</li> <li>• Commercial and professional infrastructure</li> <li>• Internal market openness</li> <li>• Physical and services infrastructure</li> </ul>
<b>Ease of Doing Business, a World Bank dataset</b> ( <a href="http://www.doingbusiness.org/data">www.doingbusiness.org/data</a> )	
<ul style="list-style-type: none"> <li>• Ease of Doing Business index</li> <li>• Starting a business (number of procedures to start a business, time to start a business)</li> <li>• Dealing with construction permits (number of procedures, number of days)</li> <li>• Getting electricity (number of procedures, number of days, cost)</li> <li>• Registering property (number of procedures, cost to register [% of property value])</li> <li>• Trading across borders (number of documents to export/import, number of days to export/import)</li> <li>• Enforcing contracts (time [days], cost [percent of claim])</li> <li>• Resolving insolvency (recovery rate [cents on dollar], cost percent of estate)]</li> </ul>	
<b>UN Human Development Index and components</b> ( <a href="http://hdr.undp.org/en/data">hdr.undp.org/en/data</a> )	
<ul style="list-style-type: none"> <li>• Human Development Index</li> <li>• Life expectancy at birth</li> <li>• Expected years of schooling</li> <li>• Mean years of schooling</li> <li>• Income inequality</li> <li>• Gender development index</li> <li>• Gender inequality index</li> <li>• Labor force participation (female; male)</li> <li>• Population with at least some secondary education (female; male)</li> <li>• Population in multidimensional poverty</li> <li>• Population living below poverty line</li> <li>• Physicians per 10,000 people</li> <li>• Literacy rate</li> <li>• Education quality</li> <li>• Taxes on income, profit, capital gains</li> </ul>	<ul style="list-style-type: none"> <li>• Gross domestic product (GDP); GDP per capita</li> <li>• Research and development (R&amp;D) expenditure</li> <li>• Domestic credit provided by financial sector</li> <li>• Consumer price index</li> <li>• Domestic food price level</li> <li>• Primary energy supply (fossil fuels; renewable sources)</li> <li>• Electrification rate (% of population)</li> <li>• Natural resources (depletion; forest area; fresh water)</li> <li>• Population living on degraded land</li> <li>• Employment to population ratio</li> <li>• Employment in agriculture; in services</li> <li>• Trade (exports and imports)</li> <li>• Internet users</li> <li>• Mobile phone subscriptions</li> <li>• Work that is a risk to human development</li> <li>• Occupational injuries</li> </ul>
<b>Corruption Perceptions</b> ( <a href="http://www.transparency.org/news/feature/corruption_perceptions_index_2016#table">www.transparency.org/news/feature/corruption_perceptions_index_2016#table</a> )	
<ul style="list-style-type: none"> <li>• Corruption Perceptions Index</li> </ul>	

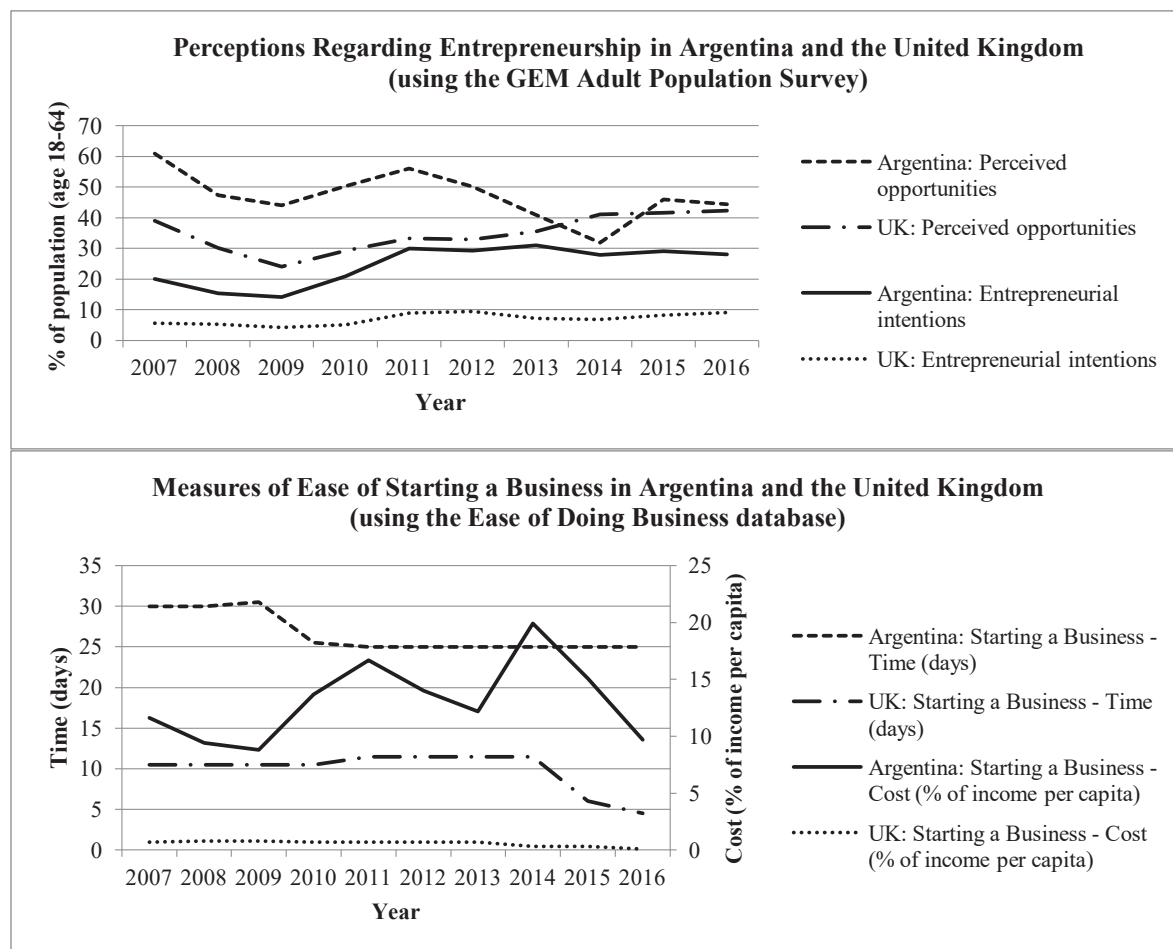
**Analysis of Countries:** The data sources mentioned above also facilitate country-level analyses. Students can undertake detailed analyses of one country or a comparison of two (or more) countries. Most sources described above report data annually, enabling students to prepare tables or graphs that display changes in variables over time. For example, a nation’s attitudes toward entrepreneurship as a career choice (GEM dataset) or access to education

(Human Development dataset) might have changed over time. Students can consider whether changes in these variables represent improvements or deterioration in the conditions facilitating business start-ups. Comparisons between countries on the same continent, on different continents, of vastly different size, or with different economic systems can reveal both similarities and differences.

Other analyses can also prove beneficial. The analysis of country trends over time can be coupled with a search for news about major happenings in the country during the same period. Political, legal, economic, or environmental issues such as a change in the political party in power, an economic boom, or a natural disaster can add context to the business and attitudinal trends. Information can be found in the popular press and national media. Additionally, research articles may be obtained from academic sources such as Google Scholar.

An example of a simple analysis is provided in Figure 1. The figure presents two charts in which variables are compared for Argentina and the United Kingdom across the ten-year period 2007 – 2016. In the top panel, data are drawn from the Global Entrepreneurship Monitor (GEM) Adult Population Survey database. The Perceived Opportunities indicates the percentage of adults who see good opportunities for starting businesses where they live, while Entrepreneurial Intentions measures the percent who intend to start a business (but have not yet begun). The data indicate that, over time, the perception of opportunities has become similar in Argentina and the United Kingdom, yet entrepreneurial intentions have risen in Argentina while remaining lower in the United Kingdom. The chart in the bottom panel draws data from the Ease of Doing Business database. Comparing the two graphs, it is interesting to note that the time and relative cost of starting a business are higher in Argentina, but the reported Entrepreneurial Intentions are higher. Such findings might be augmented with information about the economies, politics, or technological infrastructure of the countries, for example. An investigation of the types of businesses being started could reveal shifts over the years in the nature of the opportunities that are available.

**Figure 1: Example of Analysis Comparing Two Countries**





The topic of financing presents an opportunity to consider its sources and scale for business startups. Regardless of location around the world, banks are typically not a primary source of financing for entrepreneurs. Even in developed countries, banks require significant guarantees, such as those provided by the Small Business Association in the U.S., to offset the risk associated with new or small businesses. Therefore, venture capitalists and angel investors provide large amounts of startup capital. They often focus on a geographic region, since the investors have knowledge of and contacts in a region or wish to support economic development of a region. Table 2 shows some examples of investment and consulting services that have a geographic focus. A recent and increasing source of capital is crowdfunding. For example, NIU (2017), a company selling scooters, sold nearly \$11 million of its scooters in fifteen days in 2015. This was the largest crowdfunding presale in China’s history and one of the top ten crowdfunded campaigns of all time globally.

Not all countries have a well-developed, private, for-profit market for providing capital (DeSoto, 2000). In some countries, the government works to provide business capital, while in others, the role of non-government organizations (NGOs) is significant, particularly for micro-financing directed at entrepreneurship to alleviate poverty. Organizations such as Care ([www.care-international.org](http://www.care-international.org)) and Heifer International ([www.heifer.org](http://www.heifer.org)) provide micro-loans for the smallest of businesses through, for example, Care’s Village Savings and Loan Associations. The importance of financing to the start and sustainability of business makes it a topic of considerable research. For example, Abe, Troilo and Batsaikhan (2015) wrote about financing small and medium enterprises in Asia and the Pacific. Imhanlahimi and Idolor (2010) investigated micro-financing in Nigeria. Thus, students may find articles about financing in the specific country they have chosen to research. The role and effectiveness of the private sector, government, and NGOs in facilitating business can highlight differences that small businesses and entrepreneurs face but that large multinational firms likely do not experience.

**Table 2: Examples of Investment and Consulting Sources with Geographic Focus**

Company and Location	Description	Website
Kaszek Ventures; Latin America	Venture capital firm working with technology-based companies whose initial focus is Latin America. Supplies capital and expertise in managing the business.	<a href="http://www.kaszek.com">www.kaszek.com</a>
Curitiba Angels; Brazil	Angel investors who support entrepreneurs who contribute do the country’s economic development	<a href="http://curitibaangels.com.br">curitibaangels.com.br</a>
Start-Up Chile	Incubator and accelerator that gives selected up-and-coming startups \$40,000 in non-equity funding and a six-month residency in Santiago	<a href="http://startupchile.org">startupchile.org</a>
Start-Up Nation Central; Israel	Independent, nonprofit that connects companies and countries to the people in Israel with the innovations that can solve their problems	<a href="http://finder.startupnationcentral.org/startups">finder.startupnationcentral.org/startups</a>

**Analysis of a Business:** A third exercise narrows the focus to investigating a single business. Internet searches can be effective at identifying small businesses in a specific country. Table 3 lists examples of startups and SMEs, and the following paragraphs explain how students might conduct their own search to find examples. Simple searches can lead to credible published lists or to articles. For example, a search for “fastest growing small businesses in India” provided an *Economic Times* (2011) article listing 20 companies. A search for “small businesses in Germany” found a *New York Times* article entitled “German Small Businesses Reflect Country’s Strength” in which several businesses were identified and owners interviewed (Ewing, 2012).

In most cases, the search results will be dominated by existing small businesses rather than entrepreneurial startups. But the search could also look for “entrepreneurs in Country X”. *Fast Company* magazine (2015; 2016; 2017) publishes a list of the world’s most innovative companies, which includes both large and small businesses within and outside the U.S. The 2015 list, for example, identified the Chinese start-up Apricot Forest in the healthcare field. The 2017 list is sorted by sector, with the sectors including global home regions such as Africa, China, India, Israel, and Latin America. Other searches, such as “fastest growing companies” or “most creative start-ups,” may include small businesses from a variety of countries.

One limitation of these searches is that developing economies may be under-represented, but that limitation has potential for class discussion about variables covered in the databases. For example, differences exist around the world in individuals’ access to capital markets or the ways businesses communicate with customers. Websites may be important for some industries in some countries but not in others.

Once students have identified names of some businesses in the country of their choice, additional Internet searches can reveal firm websites. At this point, language may present a barrier but, more importantly, an opportunity. Students in an English speaking classroom may be surprised to find that in many non-English speaking countries even small businesses often make their websites available in more than one language. For those firm websites published in foreign languages, web browsers may be able to provide a usable translation. Students might also contact professors or students who have a working knowledge of the language in which the business’ website is published. In some cases, students within the class may be fluent in the language and can assist in translation.

Because the exercises described in this article were designed in our U.S. classroom, our students seek sites they can read in English, and they find such sites a variety of ways. For example, Swaraj Industries in India ([www.swarajindustries.com](http://www.swarajindustries.com)), identified from the *Economic Times* (2011) article mentioned above, presents its website in English. Google Chrome provided a serviceable translation of the website for the Chinese company Apricot Forest ([www.xingshulin.com](http://www.xingshulin.com)) mentioned above. The German company Christian Bollin Armaturenfabrik, a manufacturer of valves that was identified in the *New York Times* (Ewing, 2012) article mentioned above, makes its website available in German and English (<http://www.bollin.de/index.php/en.html>).

Once students find a website they can read, they should review the site in light of the information available from the databases above. This includes information about the entrepreneurs as individuals, society’s view of entrepreneurship, and the business environment. Students can then discuss the difficulties or advantages that a business might have faced getting started and growing in its home country. Other potentially available information on a firm’s website that can add to the conversation includes policy or procedures statements on topics (e.g., ethics, the environment, or human resources) that are specific to the business’ home country. Additionally, the age of the business and its geographic scope (domestic or international) might add to the discussion. Researchers of international entrepreneurship (Oviatt and McDougall, 2005) have noted that many startups begin doing business across national borders early in their operations. Students may be surprised to note how many small businesses are involved extensively in doing business internationally. By reviewing sections of the website such as About Us, Who We Are, What We Do, Contact Us, or the available jobs for which the company is hiring, information about international operations becomes apparent, such as dual headquarters, separate R&D and operations facilities, suppliers from other countries, customers around the world, or plans to expand into new geographic markets. Students can explore questions such as whether the size of the SMEs home market, other conditions of its home market, or the SMEs industry affect its choice to operate only domestically or internationally. The websites for startups may also indicate the source of funding. Finally, students might find a local frame of reference by comparing to a small business from the same industry in the students’ home country.

## CONCLUSION

Helping students develop a multi-country perspective is challenging within the confines of the classroom and the time constraints of a course. The analyses presented in this article provide a framework for identifying and discussing international differences in business. The exercises include data sourcing and statistical analyses, which can be useful for instructors who encourage undergraduate research. The insight into country differences can be an effective contribution to study abroad trips. Both business-level and context-level differences can be explored with data that facilitate comparisons between a variety of countries. These exercises demonstrate the relationship between business and its environment. Students can explore the cycle in which attitudes, context, and infrastructure support

business and, then, business provides private development as well as tax revenue for public development to further enhance the systems and societal attitudes that support business.

**Table 3: Examples of Startups and Small Businesses from Internet Search**

Company	Headquarters	Description	Website
<b>Africa</b>			
MFS Africa	Port Louis, Mauritius	The largest mobile money gateway on the African continent, connecting 120 million mobile wallets through its platform; 45 employees	mfsafrica.com/
IROKO Partners	Lagos, Nigeria	Streaming Nigerian films online; the Netflix of Africa and Nollywood movies	iroko.ng/
<b>China</b>			
Light Chaser Animation Studios	Beijing, China	Goal to create world-class animated films with a Chinese cultural touch; founded 2013	zhuiguang.com/?lang=en
NIU	Shanghai and Beijing, China	A smart scooter vehicle that is green and cool	niu.com/en
<b>India</b>			
WaterQuest Hydroresources Management	Ahmedabad, Gujarat, India	Locates underground rivers more than 1,000 feet deep (key water supplies in areas of drought or with contaminated or sparse groundwater)	skyquestt.com/waterquest/
Paytm	Noida, New Delhi, India	India's largest mobile payments and commerce platform; founded 2010	paytm.com
<b>Israel</b>			
Argus Cyber Security	Tel Aviv, Israel	Technology protects vehicles from hackers taking control of a car that someone else is driving; founded in 2013; offices in Tel Aviv, Michigan, Silicon Valley, Stuttgart, Tokyo; 56 employees	argus-sec.com
Early Sense	Ramat Gan, Israel	Sensor-based patient-monitoring system placed under the mattress to track sleep, motion, and respiratory conditions and send alerts to nurses' stations	earlysense.com
Colu	Tel Aviv, Israel	Designing technology to facilitate exchange of digital cash directly in local currency	colu.com
<b>Latin America</b>			
Contabilizei	Curitiba, Brazil	Launched in 2012; An online accounting firm providing services for micro and small businesses	contabilizei.com.br
Descomplica	Brazil	Online education	descomplica.com.br

Source: Companies identified through *Fast Company* list of World's Most Innovative Companies sorted by sector for 2017, 2016, 2015

## REFERENCES

- Abe, M., Troilo, M., and Batsaikhan, O. (2015). Financing small and medium enterprises in Asia and the Pacific. *Journal of Entrepreneurship and Public Policy*, 4(1), 2-32.
- All Business. (2017). *Television Advertising Pros and Cons*. Retrieved May 18, 2017 from <https://www.allbusiness.com/television-advertising-pros-and-cons-2592-1.html>
- Central Intelligence Agency of the United States (CIA). (2017). The World Factbook. Retrieved March 14, 2017. Available at <https://www.cia.gov/library/publications/the-world-factbook>.
- Covin, J.G., and Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75-87.
- De Soto, H. (2000). *The Mystery of Capital*. New York: Basic Books (Perseus).
- Economic Times ET Bureau. (2011). Fastest growing small companies that could be future giants. *Economic Times*, Nov. 7, 2011, retrieved March 14, 2017. Available at <http://economictimes.indiatimes.com/magazines/investors-guide/fastest-growing-small-companies-that-could-be-future-giants/articleshow/10531665.cms>
- Ewing, J. 2012. German small businesses reflect country's strength. *The New York Times*, print edition, August 14, 2012, B1. Retrieved March 1, 2017 from <http://www.nytimes.com/2012/08/14/business/global/german-small-businesses-reflect-countrys-strength.html>.
- Fast Company*. (2015). The most innovative companies of 2015. Retrieved March 10, 2017 from <https://www.fastcompany.com/most-innovative-companies/2015>
- Fast Company*. (2016). The most innovative companies of 2016 by sector. Retrieved March 10, 2017 from <https://www.fastcompany.com/most-innovative-companies/2016/sectors>.
- Fast Company*. (2017). The most innovative companies of 2017. Retrieved March 14, 2017 from <https://www.fastcompany.com/most-innovative-companies/2017>.
- Fortune*. (2016). *The Fortune 2016 Global 500*. Retrieved May 18, 2017 from <http://fortune.com/global500/list/>
- Global Entrepreneurship Monitor (GEM) Consortium. (2017). GEM Adult Population Survey and National Expert Survey. Retrieved March 12, 2017. Available from <http://www.gemconsortium.org/data>.
- Hayes, B. (2014). *Infrastructure: A Guide to the Industrial Landscape*. New York: W.W. Norton & Company.
- Imhanlahimi, J.E., and Idolor, E.J. (2010). Poverty alleviation through micro financing in Nigeria: Prospects and challenges. *Journal of Financial Management & Analysis*, 23(1), 66-82.
- Jahan, S. (2016). Oral interview of Dr. Selim Jahan, Director of Poverty Practice and United Nations Development Programme (UNDP) posted online by CommonwealthSec on SoundCloud January 28, 2016. Retrieved March 12, 2017. Available at <https://soundcloud.com/commonwealthsec/dr-selim-jahan-director-of-poverty-practice-and-united-nations-development-programme-undp>
- Marketing Charts*. (2015, June 2). Which advertising channels have the biggest purchase influence on millennials? Retrieved May 18, 2017 from <http://www.marketingcharts.com/online/which-advertising-channels-have-the-biggest-purchase-influence-on-millennials-55082/>
- Morrison, T., and Conaway, W.A. (2006). *Kiss, Bow, or Shake Hands*. 2<sup>nd</sup> edition. Avon, MA: F+W Media.
- NIU. (2017). Crowdfunding success. Retrieved March 14, 2017. Available at [www.niu.com/en/team](http://www.niu.com/en/team).
- Obasan, K.A. (2014) The impact of business environment on the survival of small scale businesses in Nigeria. *International Journal of Management and Business Research*, 4(3), 165-170.
- Oviatt, B.M., and McDougall, P.P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory & Practice*, 29(5), 537-553.
- Peterson, B. (2004). *Cultural Intelligence: A Guide to Working with People from Other Cultures*. Yarmouth, ME: Intercultural Press.
- Porter, M.E. (1990). The competitive advantage of nations. *Harvard Business Review*, 68(2), 73-93.
- Sen, A. (2000). *Development as Freedom*. New York: Random House
- Shane, S. and Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Transparency International. (2016). Corruption Perceptions Index 2016. Retrieved March 13, 2017 from [http://www.transparency.org/news/feature/corruption\\_perceptions\\_index\\_2016#table](http://www.transparency.org/news/feature/corruption_perceptions_index_2016#table).
- United Nations Development Programme. (2015). Human Development Index & 2015 Human Development Report. Retrieved March 9, 2017 from <http://hdr.undp.org/en/content/human-development-index-hdi>

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# **We Believe in “Hire” Education: Establishing an Experiential Professional Pathway Program**

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## **ABSTRACT**

There is a difference between being properly prepared for professional life and being proactive in choosing a suitable professional pathway. Although business schools are capable of providing an excellent education, some, if not many students engage in the learning process without asking where it will lead them. This paper describes a systematic process to bridge the gap between college and professional life through a professional pathway program. In order to make such a program effective, students must be involved in the process of proactively assessing their future. Although experiential learning is important throughout a student’s business education, supplementing an experiential professional pathway approach with robust future career reflection can play a critical role in setting the stage for the effective pursuit of a particular profession.

**Keywords:** Profession, career strategy, experiential learning, curriculum, course design, online programs

## **BACKGROUND**

In conversations with senior business majors about to graduate, both faculty and business school administrators discovered that an unspecified number of students did not have a post-graduation plan. Further investigation revealed at least three relevant concerns. First, some graduating students had no particular future profession or even industry in mind. Second, the school of business had no systematic process in place to engage students in a consequential conversation about their future. In turn, there was no process to ensure students were pursuing the curriculum best suited to their future, regardless of whether they had a plan established years before graduation. Finally, there was no way to differentiate students with a plan from those who needed the assistance of a deliberate and proactive professional pathway process. The subject university is not an exception. It has become essential to develop student skills in both disciplinary areas and career planning (Bear, 2016; Bridgstock, 2005; King, 2004). The focus of this effort is on career planning.

In response to the identified concerns, the school of business sought to establish a program to achieve the following objectives.

1. Ensure that every business student is engaged in a career planning process either before completing their sophomore year or, in the case of transfer or change of major students, upon arrival and enrollment in the business school.
2. Lead students toward the particular profession of their choosing.
3. Engage each student with a representative from their prospective position.
4. Systematically assess progress along a career pathway and success in attaining a particular position that was pursued.
5. Provide a robust source of information for career decision making.
6. Provide the option to learn about functional areas in business before making a career pathway decision.

## **CHALLENGES**

Because of limited resources the addition of any new program poses challenges for a small to medium size business school. This challenge is magnified when the goal is to reach each of the enrolled students. In the current case, 650 students had to be serviced by 16 faculty and four staff members. With a ratio of 32 to one, accompanied by 4/4 faculty teaching loads, a highly engaged mentor/career advising process is not feasible. It is also the case that 16 faculty would not have the diversity of career advice needed by the potential options open to 650 students. With the appropriate process, students can be administratively tracked as individuals, but they must be addressed en masse to achieve accurate and adequate dissemination of career information.

## CAREER INFORMATION

As previously stated, the career possibilities for 650 students cannot be addressed by 20 full-time faculty and staff. In fact, career pathways are nearly unlimited, so even a very large staff at a very large university would be challenged to provide accurate and adequate information on all the possibilities for their students. The initial discussion of our approach was to systematize the process according to industries, organizations, and people within particular organizations in order to create a funnel-like method leading students toward a particular target. But even this tactic would not provide the particulars of a viable industry or organization of interest. Further, having the students choose a particular industry without considering their personal passions, talents, or skill set is problematic and could result in a trial-and-error process for at least some students. With 650 students there would be no way to ensure that the process was not simply random or capricious decision-making by the student.

The University Career Center is also an option to consider; however, as well as having an even larger student-to-staff ratio, the adequacy and accuracy of the information available is even further removed from the business school's perspective on career pathways in business. Optimally, the business school could require a Business 101 course to be taken by every business major. The feasibility of this option depends upon business faculty staffing and curriculum flexibility. At least in the near term, the number of faculty in this case would not allow the capacity to provide a course to all 650 students. An even greater challenge is getting university-wide approval to add another required course to the curriculum.

A further complicating factor is students who enter the business program at different times during their academic careers. At least some of students come into the program with significant employment experience, if not very well established experience in a particular career path. If Business 101 enrollment is mandatory and the curriculum is too heavily focused upon the career pathway discussion, students with career-relevant employment experience will not benefit. Furthermore, if a transfer student has completed some core business courses elsewhere, a Business 101 course that is focused upon the fundamentals of business will be repetitive and unnecessary. Finally, the business school faculty will want to ensure a degree of rigor in any Business 101 course to avoid simply providing a career counseling experience. In short, as a supplement to a professional pathways program, a Business 101 course must strike an appropriate balance of fundamental business concepts and career counseling in the context of those concepts.

Business faculty members searched for alternatives in order to address the following challenges: (a) limited resources, (b) the unlikely possibility of adding adequate career-counseling information on our own, and (c) the near-term improbability of a mandatory Business 101 course. While engaging Bloomberg representatives at multiple conferences, business faculty discovered that Bloomberg was in the process of developing a career readiness course. The Bloomberg approach provided an attractive alternative to limited, if not non-existent in-house resources. It can be completed by students online with no curriculum development investment by the school of business. Bloomberg also projects providing assessment data. The program includes four modules, and the current cost is \$99 per module.

The finalized title for Bloomberg's initiative is *Exploring Your Potential* (EYP), which has become a joint effort by the University of Central Florida, Your Success Now, Bloomberg Businessweek and Peregrine Academic Services (see: <http://eyp.ysn.com>). It is oriented toward helping the student determine which professional path to choose, how that path represents what the student really likes to do, and what is necessary to pursue and achieve the culmination of that pathway. The program is advertised as a career planning experience. Students watch videos, view presentations, and engage in exercises. The process is designed to clarify ambiguity regarding one's career future. Some of the EYP program is based upon the book *Secrets of the Young and Successful* by Jennifer Kushhell and Scott M. Kaufman (2003). Their book received critical acclaim as a *New York Times* bestseller.

EYP is comprised of four courses. In course one, students learn to discover the options they have. They consider their skills and experience, and the things they like to do in order to determine what they can achieve. The second course focuses upon student talents to uncover as many career opportunities as possible. The third effort is about marketing oneself to prospective employers. The final course promotes plan execution.

As stated on the EYP website (see: <http://exploringyourpotential.com>), the learning outcomes of EYP are as follow:

1. Develop a clear sense of self and career orientation.
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2. Acquire the necessary skills to explore, investigate, and take action personally and professionally.
3. Take definitive steps and actions to construct strategic packaging and personal branding to leverage the student's experiences and abilities while maximizing career opportunities.
4. Design practical steps and actions to achieve career goals.
5. Increase personal and professional expectations to exceed career potential.

EYP can stand alone or be used in a business class. Business 101 can leverage the EYP experience. The curriculum is flexible, yet systematically comprised of four one-credit courses. Students can complete all of the components in a one-term intensive process or across various terms, to include distribution over the entire program of study. Finally, schools can supplement the process with additional activities aligned with their particular academic program objectives. For example, in this case the school of business accounting club is an essential activity for those pursuing careers in accounting.

## ADMINISTRATIVE TRACKING

While the EYP achieves the objective of providing a robust source of information for career decision making, accounting for every business student requires appropriate administration. The system must also periodically assess the student's degree of progress, as well as the success in attaining a particular position.

The professional advising staff recommended that advising folders be used as the best way to maintain student records of career pathway progression. The folder accompanies each student to their advising appointment, so any career progression documentation can be made during advising. Despite the efficiency of this process, it is important that the career pathway discussion be able to be completed during the advisor's available time. Students are expected to have reflected upon their career pathway considerations as the result of their EYP progress. Thus, the role of the advisor is to ensure that students declare their choices in writing before leaving their curriculum advising session. Of course, the students are told that their decision is flexible and they are not committed to that course of action should they decide to change it. A member of the professional advising staff developed the Professional Pathway Program (PPP) form illustrated in Figure 1.

Figure 1. Professional Pathway Program Form

<b>Professional Pathway Program</b>					
<p><b>Name:</b> _____</p> <p><b>Objective:</b> To establish a career direction.</p> <p><b>Process:</b> In coordination with their academic advisor, students will designate a career pathway by systematically narrowing their focus toward a particular professional position.</p> <p>List one (or more) industry, organization, or contact options according to class-year. Choices can be made in advance of class-year. Changes can be made anytime.</p>	<p style="text-align: center;"><b>INDUSTRIES</b></p> <p>Examples of major industries listed in the <i>Greater Aiken Chamber of Commerce Business Directory</i>. Also go to the Chamber website for links showing greater detail and particular organizations in each industry that reside in the Greater Aiken area: <a href="http://web.aikenchamber.net/search">http://web.aikenchamber.net/search</a></p> <ul style="list-style-type: none"> <li>• Advertising &amp; Media</li> <li>• Agriculture Fishing &amp; Forestry</li> <li>• Arts, Culture &amp; Entertainment</li> <li>• Automotive, Aviation &amp; Marine</li> <li>• Business &amp; Professional Services</li> <li>• Communications</li> <li>• Computers, IT &amp; Technology</li> <li>• Employment &amp; Staffing</li> <li>• Family, Community &amp; Non-Profit</li> <li>• Finance &amp; Insurance</li> <li>• Government &amp; Education</li> <li>• Health Care</li> <li>• Home &amp; Garden</li> <li>• Industrial &amp; Manufacturing</li> <li>• Lodging, Travel &amp; Tourism</li> <li>• Personal Services &amp; Care</li> <li>• Pets &amp; Veterinary</li> <li>• Public Utilities &amp; Environment</li> <li>• Real Estate &amp; Construction</li> <li>• Religious Organizations</li> <li>• Restaurants, Food &amp; Beverages</li> <li>• Shopping &amp; Specialty Retail</li> <li>• Sports &amp; Recreation</li> </ul> <p>For an exhaustive list of U.S. industries see the Bureau of Labor Statistics North American Industry Classification System (NAICS) showing supersector, sector, and industry levels at: <a href="http://www.bls.gov/iag/">http://www.bls.gov/iag/</a></p>				
<p><b>Sophomore Year:</b> An industry(s) I would like to work in is . . . (see industry examples on the reverse)</p>					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">1 _____</td> <td style="width: 33%; text-align: center;">2 _____</td> <td style="width: 33%; text-align: center;">3 _____</td> <td style="width: 10%; text-align: center; vertical-align: top;"> <b>Initial/Date</b>            Student: _____            SOBA: _____         </td> </tr> </table>	1 _____	2 _____	3 _____	<b>Initial/Date</b> Student: _____ SOBA: _____	
1 _____	2 _____	3 _____	<b>Initial/Date</b> Student: _____ SOBA: _____		
<p><b>Junior Year:</b> An organization(s) in the above industry I would like to work for is . . .</p>					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">1 _____</td> <td style="width: 33%; text-align: center;">2 _____</td> <td style="width: 33%; text-align: center;">3 _____</td> <td style="width: 10%; text-align: center; vertical-align: top;"> <b>Initial/Date</b>            Student: _____            SOBA: _____         </td> </tr> </table>	1 _____	2 _____	3 _____	<b>Initial/Date</b> Student: _____ SOBA: _____	
1 _____	2 _____	3 _____	<b>Initial/Date</b> Student: _____ SOBA: _____		
<p><b>Senior Year:</b> A person(s) I can speak with in the above organization who knows about the kind of position I would like to have is . . .</p>					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">1 _____</td> <td style="width: 33%; text-align: center;">2 _____</td> <td style="width: 33%; text-align: center;">3 _____</td> <td style="width: 10%; text-align: center; vertical-align: top;"> <b>Initial/Date</b>            Student: _____            SOBA: _____         </td> </tr> </table>	1 _____	2 _____	3 _____	<b>Initial/Date</b> Student: _____ SOBA: _____	
1 _____	2 _____	3 _____	<b>Initial/Date</b> Student: _____ SOBA: _____		

The PPP form is designed to have the undecided student list one or more industries that they might like to work in during their career. Students are expected to make this decision at some point during their sophomore year, which ensures that they are advised into the relevant business concentration and taking the most relevant coursework. This is a critical juncture since the junior year which follows includes upper level courses in various areas of specialization. Based upon their academic progression to date, students will have a varying understanding of industry structures and classifications. This is one of the areas that can be covered in a Business 101 course, which would serve to supplement the PPP. But if Business 101 is optional, then the exposure to industry classifications schemes is not assured.

To address the issue of industry selection, the backside of the PPP form contains a list of industries (see Figure 1). The industries listed on this form are provided by the local Chamber of Commerce, which may or may not contain all of the relevant options for a university student. It was used in this case to illustrate most of the local options. Students are also directed to the Bureau of Labor Statistics in order to get a complete picture of the industrial classification scheme. In the event that a student is already committed to a particular industry, the advisor is encouraged to ask whether the student has considered a particular organization in that industry. So, the student need not wait until his or her junior year to identify an organization; however, before completing their junior year, students are expected to identify a particular organization.

Organization identification is a critical component of the PPP process. When students begin their senior year they will have a final advising appointment to plan for their last semester. During the last advising appointment, the advisor will discuss options for identifying a particular person in their organization of choice. The school of business will use its network of alumni and local business persons in order to help the student identify an appropriate person. Optimally, the point of contact should be someone holding the type of position that the student aspires to in beginning their career after graduation. The objective is to ensure the student learns how to pursue that position or one similar. The relationship between the student and the point of contact is not expected to be a time-consuming or involved mentoring process. It is simply a fact-finding connection to ensure that the student is taking the appropriate steps toward employment after graduation. Since the business school will process numerous graduating seniors, there is no screening to ensure a fit between the student and the contact person in the hope of developing a long-term relationship. If such a relationship developed to the benefit of the student, this would be a positive, but unintended outcome of the PPP. Initiating mentor-protégé relationships is beyond the scope of the PPP.

Various means can be used to ensure that the PPP forms are being completed. The professional staff in charge of advising can ensure the form is complete when it is returned after the advising appointment. Faculty members are asked to notify the Dean or other relevant administrators when a student needs help identifying a point of contact in their organization of interest. The school of business will assume responsibility for providing a name and contact information. Prior to graduation the advising staff will contact graduating seniors to determine if they have obtained a position. They will also determine if the position was one that the student had identified through the PPP. Regardless of whether a student has attained a position, staff members request and record updated contact information relevant to the student's post-graduation status. The employment attainment data is used to assess the effectiveness of the PPP.

## **BUSINESS 101 AND ITS RELATIONSHIP TO THE PPP**

In order to establish one curricular element of the career planning process, a business faculty member developed and taught the school's first Business 101 course. Unlike traditional Business 101 offerings, this course curriculum extended beyond a survey of fundamental business concepts. The course was created to do the following: (a) offer a general elective to give undecided students a survey of business, (b) retain declared business students who have not yet taken upper-level business courses, (c) teach basic communication skills, including etiquette that are necessary to succeed in the business school and beyond, (d) assess software skills and recommend developmental activities, as needed, (e) promote the requirements necessary for acceptance into the Business School Professional Program, and (f) formally introduce students to the PPP.

In addition to career planning, both Business 101 and the PPP should help improve retention rates in the school of business. While Business 101 serves to peak interest in the study of business, it is still an optional course. In contrast, the PPP will require all students to periodically and systematically assess their future in the context of business. The effort to be more deliberate in understanding where one is going will ensure that one's pathway is a



factor when making curriculum and course decisions. The relevance of one's curriculum to one's future should impact retention, as well as post-graduation success.

Business 101 enhances the PPP experience by giving students the context within which their professional pathway decisions are made. As discussed earlier, if a student does not know what an industry is or what the industrial classification scheme is about, then it will be difficult for him or her to understand the relevance of industry choice. Business 101 teaches the fundamentals and functional areas of business, so students learn about roles they can fill within business organizations. Without business 101, it could be more challenging for students to determine what they would do in an organization. While some of these choices might be obvious to those of us whose positions have been related to business for a long time, we must recall that the motivation behind offering the PPP is that some seniors stated they would not begin to look for work until after graduation. In addition, others indicated that they did not know where they would look for work.

### **The first offering of Business 101**

In the following three sections the assigned faculty member recounts her experience in first-person with the school's inaugural offering Business 101. Thirty-one students enrolled in the course, which is a significant number for an elective in this context. Because this was the first offering of the course, there were no prerequisites and it was open to any student. The student population was diverse in gender, academic status, age, and employment status.

The course was divided into eight modules in order to coordinate diverse activities and topics into a cohesive framework. The topics of each module were:

1. Overview and Skill Building: Careers, Jobs, and Portfolios
2. Looking at the Business Environment
3. Skills Building: Presentations
4. Managing a business and Employees
5. Skills Building: Business Communications, Business Etiquette
6. Principles of Marketing, Accounting & Finance
7. Professional Pathways Presentations
8. Course Close Out

A business fundamentals course text (Solomon, Poatsy, & Martin, 2014) was used and supplemented with Karia's (2015) work on designing effective presentation slides. The course activities included exploring various career websites housed at the university Career Services Center web portal, reviewing the Bureau of Labor Statistics Career Outlook site, building a basic resume and cover letter, and exploring the ideas of personal branding and career portfolio building. In order to help students write the cover letter, they explored different job sites for positions in which students might be interested in making an application. Later, they wrote a mock-up letter to the job's hiring manager and then followed that up with discussing how to prepare for interviews and the role of a career portfolio during the interview process.

Another activity was exploring the Ted-Worthy presentation skills. Students discussed the book and built a five-minute presentation limited to one image and no, or very little text on the slide. The group presentations were delivered on "Speed Presentation Day" with the expectation that students would tell a story about any topic they chose in less than five minutes. The goal of the presentation activity was to help build student efficacy in using images as cues to reduce reading from slides.

The course covered business in general, as well as the particulars of management, marketing, finance, accounting, and information technology. The goal of the lessons was to entice toward, rather than deter students from various business topics. So, the lessons were designed to generate a positive and appealing experience in the classroom. For example, students engaged in group discussions about the requirements to establish a small business. They also discussed ethics and social responsibility, reviewed supply and demand, and created and discussed personal budgets so that students would link any college debt repayment requirements to their career aspirations.

### **Interesting moments and course outcomes**

During the economics chapter, I used a chocolate demonstration to illustrate supply and demand. The presentation needed more polish, but in the end, when passing out the chocolate, an upper division student commented that he finally understood supply and demand. Another interesting comment concerned interview etiquette when a student

stated that he thought thank you notes were required only after being hired, as opposed to after any interview. The point where I was most concerned though, was when I discovered that graduating or near-graduating students remained unclear about their post-graduation goals. So, I am glad we covered some of the job search activities, but once again this revelation validated the need for a required PPP.

Students were asked to write four or five short module reflections. The goal was to elicit feedback during the course and not solely afterward, in the event that a course correction was needed. The reflections indicated that many of the topics were new and interesting to lower division students, while also being a good refresher for upper division students.

### **Future directions for Business 101**

Future directions for discussion include expansion of the personal experiences of my involvement in the course and how those relate to the value of student engagement on teachers. There appears to be little or no literature about how students impact and influence teachers. Some faith-based or other servant leadership writings can shed light on the value of being of service to others in this context. Additionally, I would include and more closely examine student comments from the reflection papers.

In closing, Ralph Waldo Emerson suggests that “The purpose of life is not to be happy. It is to be useful, to be honorable, to be compassionate, to have it make some difference that you have lived and lived well.” This perspective can be a valuable guide to teaching because it reminds me that helping to make a difference in the lives of students is important. For me, I find that students keep me in touch with young values and ideas, forcing me to see the world through their younger lenses.

### **CONCLUSION**

The professional pathway program can be viewed by some students as a relatively mundane process because they might not understand why they are doing it. It might also be viewed by faculty as unnecessary because the necessity of making career decisions should be obvious to students. Despite that, the evidence suggests that at least some students are on a path with no end in mind. Thus the PPP is an essential process.

The PPP can be implemented as described because it does not encroach significantly upon pre-existing curriculum, student schedules, or faculty workload. Since the EYP portion is a web-based process, nothing must be added to the current University curriculum. Students can work through the process at their own pace. Faculty are tasked only with confirming the completion of a form in the student’s advising file. If the faculty are willing and able to devote more time to the career considerations of a student, they can do so at their discretion.

The PPP can be administered with minimal resources to achieve the goal of ensuring every student is included. It also promotes a process to confirm the post-graduation employment status of each student. Finally, it assesses the effectiveness of the program according to student placement in a targeted profession.

If there is an ambiguous component of the process, it concerns in the role of Business 101; however, the introduction to business can serve to energize the PPP process. Studying the fundamentals of business will place the career pathway concept into its appropriate context. Students will be better able to make the connection between having particular skill sets and performing well in particular business functions. Students will be able to assess their skill sets and gravitate toward their strengths, as well as their desires in pursuing a particular profession. The foundation for that pursuit will be the appropriate business concentration and coursework aligning with their capabilities and future desires.

While the EYP will assist students greatly in assessing their potential as it relates to roles in the business world, Business 101 will enhance the PPP experience by providing some business knowledge context prior to starting upper-level coursework. Since much of the upper-level coursework is not completed until the senior year, this PPP process is essential. In some, if not many cases the senior year is too late to choose an appropriate career path relative to either preparation or preference. It is cliché to invoke the chicken and egg argument, but it aptly describes the nature of the problem. Only Business 101 offers a fundamental overview of business at a time when students need to begin making decisions about their future career. Ideally, all students would enroll in Business 101 and complete the PPP. In the absence of adequate resources, the PPP accompanied by EYP provides a sensible solution.

The faculty member concluded the discussion of her Business 101 experience by emphasizing the importance of making a difference in the lives of students. The general goal of any program, and in this case the PPP, is that it be consequential. The PPP is actually a very simple approach to address what should actually be a very simple problem. While it is obvious that a student should be pursuing education in the context of future life activities, that conclusion is not obvious to all students. As educators, we not only see the big picture view, but we also see it in hindsight. Young, inexperienced students with less education do not have that luxury. As AACSB accreditation standards promote engagement, innovation, and impact, it is incumbent upon educators to ensure that we are making a difference. Higher education in business has now transitioned from the simple imparting of knowledge to the application of that knowledge. Directing students through a professional pathway program aligns their talents, skills, and knowledge with a position where they can apply that talent, skill, and knowledge. It is no longer sufficient for us to provide higher education, we have reached the point where we must provide “hire” education.

## REFERENCES

- Bear, S.E. (2016). A New Career Strategies Course for Undergraduate Business Students. *Business Education Innovation Journal*. V. 8, No. 2, pp 79-84.
- Bridgstock, R. (2009). The Graduate Attributes We've Overlooked: Enhancing Graduate Employability through Career Management Skills. *Higher Education Research & Development*. V. 28, No. 1, pp 31-34.
- Karia, A. (2015). *How to Design Ted-worthy Presentation Slides: Presentation Design Principles from the Best Ted Talks*. CreateSpace Independent Publishing.
- King, Z. (2004). Career Self-management: Its Nature, Causes and Consequences. *Journal of Vocational Behavior*. V. 65, No. 1, pp112-133.
- Kushell, J., & Kaufman, S.M. (2003). *Secrets of the Young & Successful: How to Get Everything You Want Without Waiting a Lifetime*. New York: Fireside.
- Solomon, M. R., Poatsy, M., & Martin, K. (2014). *Better Business* (4 ed.). Boston, MA: Pearson Education.

# Experiential Learning In Digital Marketing: A Library Social Media Takeover

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## ABSTRACT

While most academic libraries engage in some form of social media communication, questions have been raised as to the effectiveness of social media in building library community and the appropriateness of adding social media communication to the wide array of job duties librarians take on each day. In the spring of 2016 Saint Peter's University Libraries allowed a student team from a Digital and Social Media Marketing class to conduct a "social media takeover" of the library *Facebook* account and to kickstart a library *Instagram* presence. This successful project led to the establishment of a social media plan for the library and the creation of a new work study position focused on digital marketing and social media outreach. This case study will describe the experience of transitioning from librarian-run to student-run social media at a small urban university library, as well as examine the effect of this experiential class component on attainment of student learning outcomes in a digital marketing class.

**Keywords:** experiential learning, digital marketing, social media, student-run social media, marketing projects

## INTRODUCTION

Social media platforms--notably *Facebook*, *Twitter*, and *Instagram*--are now utilized by most public and academic libraries as part of their marketing efforts. A 2010 study of 100 academic libraries in the USA found that 89 libraries had a presence on Facebook and 85 libraries were using *Twitter* (Mahmood & Richardson, 2011). Because undergraduate students are crucial stakeholders for academic libraries and heavy users of social media, it makes sense for libraries to adopt these technologies in their efforts to engage undergraduate students (Palmer 2014). College and university libraries often cite social media as part of their toolkit for student outreach, attempting to "reach students where they are" in a rapidly changing, competitive online environment. As job duties expand, librarians are including social media skills and experience on their resumes and CVs, and professional organizations like the Association of College and Research Libraries (ACRL) offer workshops on effective social media marketing.

Despite the popularity of social media, it has not been universally adopted or lauded by the academic library community. Some librarians have questioned the effectiveness of library social media in engaging students online, evidenced by social media pages that function more like events calendars with typically low student interaction. Other publications have suggested that librarians and library staff, often diminishing in numbers in the last decade, do not have enough working hours to devote to expanding social media efforts. A recent survey published in the *Canadian Journal of Information and Library Sciences* revealed that out of 247 libraries responding, 194 had implemented at least one social media application, most commonly Facebook. However, when survey respondents were asked about factors that influence whether or not their organizations implement a new social media application, "lack of staff resources" was selected as the major influence. The same survey revealed that although librarians and archivists felt they fulfilled a "business necessity" by using social media, far fewer reported successful participatory factors amongst their users. Thus their findings indicated "a large gap between the vision of social media usage by cultural heritage institutions, as reflected in the literature, and the reality of actual implementation" (Liew, Chern & Li, 2015).

This professional literature on libraries and social media begs several questions. First, how can social media be managed more effectively to forge interaction with students and build community? And secondly, how can libraries, particularly academic libraries, expand their social media footprint without over-burdening librarians or other professional staff?

In addition, as Kim, Sin and Yoo-Lee (2014) point out, while Information Literacy specialists and researchers often point out the negative implications of social media use by college students, the literature does not fully explore the

positive contributions and opportunities that social media platforms offer. From facilitating interactive and collaborative knowledge production and sharing to providing a voice to legitimate news outlets, sources and individuals that are overlooked by mainstream media, these digital and social media platforms can be powerful and transformative tools. Collaborative projects such as the one described in this paper, is one method of maximizing information sharing and consumption in an accessible format, while developing key career skills in business student interns engaged in the project. Employers consistently cite the need for more development of soft skills, like communication, leadership and creativity as well as the need for applied learning and skill development in collegiate marketing education (Chong, Lee & Benza, 2015). This project addresses this need, forcing students out of their comfort zone of an objective assessment or project, and instead putting them in the role of a real employee or consultant.

### **Librarian-led social media @ the O'Toole Library**

Much like the respondents to Liew's survey, lack of staff resources at Saint Peter's University slowed our adoption of *Instagram* and *Twitter*. Despite joining *Facebook* in 2012 and making over 500 "friends," we found most interaction with the Library *Facebook* stemmed from a core group of faculty and alumni who could only be described as existing "fans of the library." Although the main goals of creating a library presence on Facebook were: 1) outreach to undergraduate students, and 2) building a new audience for library services and events, it seemed that neither was being achieved. As our *Facebook* "status updates" generally received low engagement, often from the same 4-5 individuals, the motivation to devote time to the project subsided. Meanwhile, as Saint Peter's University Libraries lost 40% of our professional library staff since 2010 to layoffs or attrition, the five remaining librarians were struggling to keep up with greater demands for reference, instruction, and collection development, not to mention growing responsibilities developing online information literacy instruction, as we worked to support the university's segue into online and hybrid course offerings and later fully online graduate programs. While we knew that many of our students had abandoned *Facebook* in favor of other social media, like *Instagram*, *Snapchat*, and *Twitter*, we were not ready to devote staff time to learning these applications and posting regularly. At least not yet.

### **Handing it over: BA 327 #socialmediamarketing**

In the Spring of 2016 the opportunity arose to experiment with student-led, student-centered library social media through collaboration between the O'Toole Library and the Business Department. As a university that embraces experiential and service learning as well as community-engaged projects and reflection, Saint Peter's faculty often identify real-world opportunities for students to apply knowledge and learn new skills by solving an organizational problem or taking on a consulting project. In business programs in particular, this is emphasized, since industry leaders and employers often cite a lack of entry-level skills in new college graduates, which has been linked to a perceived separation of theory and practice in pedagogical approaches (Sashi, 2014). This library social media project infuses a practical exercise with an unstructured problem and measurable outcomes, thus helping to bridge that documented gap and allow students to tangibly apply theory to practice.

As a possible final project for a business elective BA 327 - Digital and Social Media Marketing, students had as one of their options: "Create a social media campaign plan for your company and implement that plan. The campaign should span at least two social media platforms and you should run the campaign for at least two weeks." The business professor suggested that one group might select the O'Toole Library, instead of a company, for their campaign. Upon invitation, a librarian visited their class and spoke about social media and libraries, discussing our challenges with *Facebook* and presenting some examples of successful library social media efforts, such as those of the New York Public Library and William H. Hannon Library at Loyola Marymount University.

After a few weeks we were happy to learn that two students had chosen the O'Toole Library for their Digital and Social Media Marketing Final Project. We quickly began e-mail communication with students, relaying our goals for a student-centered social media approach, including:

1. Increased online interaction with undergrads;
2. Reduction of "library anxiety" or a sense of not belonging in an academic setting; and
3. Building library community.

The student social media team dove into the project with great enthusiasm. A meeting was arranged to introduce the students to librarians and library staff members who might help generate posts. At this meeting students were also informed about upcoming trends in social media relating to libraries and archives, such as #preservationweek a hashtag created by the American Library Association to help promote cultural institutions and draw attention to historical preservation efforts for one week each year during the month of April . After meeting with the librarians, the students had an *Instagram* account started within a few days. In addition to starting the library's *Instagram* presence, they connected posts with *Twitter* and *Facebook*, when appropriate, tracked analytics, and created a social media plan, with recommendations for the library accounts post-May.

## **PASSING THE TORCH: LOL**

Librarians and administration at Saint Peter's University viewed the BA 327 Library Social Media Takeover as a success. The business student team was effective in gaining a significant *Instagram* following quickly, particularly among Saint Peter's students active in clubs and organizations--and this *Instagram* has clearly generated more interaction with undergraduates than the library account had ever seen on *Facebook*. However, the question remained whether librarians were prepared to devote time to following and developing the social media plan laid forth by the students and, moreover, whether the librarians were even well-suited for maintaining the colloquial, laid-back tone of our new *Instagram*. Instead of taking on this responsibility themselves, the decision was made to create a special work study position with primary responsibility for social media, while the two librarians who started the initiative could supplement or edit whenever they saw fit.

Although the O'Toole Library had seen reductions in our support staff and librarian positions over the years, the library retained a healthy number of work study students, many of whom stayed in their position throughout their educational career at St. Peter's. The new work study position, Library Outreach Liaison (LOL), [Appendix A] was created to reflect the importance of social media in communicating our message of information literacy and library services directly to the students. We secured a higher pay grade for the LOL and established with the Circulation Coordinator and Work Study Manager that this student would be exempt from shelf-reading and shelving tasks in order to work on social media, marketing and outreach. The student we selected was a graduate student in the education program who had worked at the library throughout her undergraduate years. She possesses not only a high level of familiarity with library services and personnel but is a prolific and successful Instagrammer off campus, promoting her virtuosic makeup skills. Upon naming our new Library Outreach Liaison and sharing with her both our expectations for the campaign and the student-generated social media plan, we turned our *Instagram*, *Facebook*, and *Twitter* back over to student control.

## **TAKEAWAYS**

Since fully embracing student-run social media, our *Instagram* presence has continued to flourish. We see examples of genuine interactions with students and building of our library community. We are encouraged. The LOL has utilized social media to highlight rare books and archival photos beyond any previous efforts by librarians. She has utilized the online graphic design application *Canva* to design unique announcements and memes. Some of these designs have been resized for digital signage, to give them additional exposure within the physical library. Our student LOL has provided a consistent variety of posts and engagement has grown, with posts between September and December gaining an average of 8 likes, vs. an average of 40 for the month of April, when business students were managing the account. Our LOL has been an open communicator, in regular contact with the librarian managing the social media project who provided input and occasional edits. In addition, this student had tangible experience and accomplishments to add to her resume and career portfolio.

One regret we had in our transition to student-run social media was not providing our student Library Outreach Liaison (LOL) with a descriptive style manual from the start. Although our LOL was consistent and professional in her content and tone, she occasionally neglected to include punctuation, such as apostrophes, within words or to conform to general rules about capitalization. Librarians overseeing the project naturally found these errors hard to look past. However, formally editing each of her posts seemed to nullify the time-saving aspect of our student-run social media experiment. Instead of confronting the student about each typo or error, we started building a document that lists frequently used proper nouns (O'Toole Library, Saint Peter's University, etc.), as well as conventions specific to our social media, like frequently utilized hashtags.

Our Social Media Plan and Style Manual now provides students with guidelines and recommendations for online communication along with preferred conventions of grammar, spelling, and punctuation. Since creating the manual we have seen a marked reduction in errors and a general improvement in the quality of posts. Our plan is to evaluate this social media program after one year and edit the manual, as needed. Furthermore we may also consider the value of creating an additional work study student LOL position, perhaps with a stronger focus on archives and expanding our *Twitter* presence.

## ASSESSMENT AND CONCLUSION

The students who took on the library social media project accomplished several milestones in terms of creating a social media following for the library, increasing engagement by a significant percentage and learning how to conceptualize social media posts and assess metrics. These students added these skills and accomplishments on their resumes, demonstrating tangible experience in digital marketing that would not have been possible through a more traditional class assessment.

In conclusion, we have found that transitioning to student-run social media can hold significant benefits for small academic libraries, by forging collaborative relationships with academic departments, improving the quality and frequency of social media posts, increasing student engagement with the library, and alleviating job strains on professional librarians. In addition, this type of experiential assignment is likely to increase attainment of student learning outcomes for the course, build a greater sense of satisfaction for students, whose work is having a measurable impact, and enhance skill development and problem-solving ability that can be documented on students' resumes and in career portfolios.

## REFERENCES

- Chern Li, L., Wellington, S., Oliver, G., & Perkins, R. (2015). Social Media in Libraries and Archives: Applied with Caution. *Canadian Journal Of Information & Library Sciences*, 39(3/4), 377-396.
- Chong, J., Lee, S.K. Lee, and Benza, R. (2015). Teaching Innovation Skills: Application of Design Thinking in a Graduate Marketing Course. *Business Education Innovation Journal*, Vol. 7(1) 43-50.
- Kim, K. S., Sin, S. C. J., & Yoo-Lee, E. Y. (2014). Undergraduates' Use of Social Media as Information Sources. *College & Research Libraries*, 75(4), 442-457.
- Mahmood, Khalid, & Richardson, John V., Jr. (2011). Adoption of Web 2.0 in US academic libraries: a survey of ARL library websites. *Program*, 45(4), 365-375.
- Palmer, Stuart. (2014). Characterizing university library use of social media: a case study of Twitter and Facebook from Australia, *Journal of Academic Librarianship*, 40(6), 611-619.
- Sashi, C. M. (2014). A Social Media Experiential Learning Project to Engage Students and Enhance Learning in Retailing. *Journal of Marketing Management*, 2(3-4), 15-26.

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## Appendix A

### Library Workstudy: Outreach Liaisons (2)

The Library Outreach Liaisons support the mission and goals of the O'Toole Library by promoting student access to library resources and services and fostering the information-literacy skills of their fellow students.

#### Duties and responsibilities:

- Designing and distributing fliers, signage, handouts, and internet graphics promoting library resources, services, and events
- Creating online videos and tutorials promoting library services and research skills
- Crafting at least two social media posts per week featuring new library resources, archival photographs, research tips, and library events
- Representing the O'Toole Library at open houses, orientation programs, and other events
- Serving as student representatives at Library Advisory Group meetings
- Communicating new library resources and services to fellow workstudy students

#### Qualifications:

- At least one year experience as a Library Work Study student
- Demonstrated written and verbal communication skills
- Proficiency with with social media, marketing, and graphic design tools, such as YouTube, Instagram, Facebook, Twitter, Canva, PowToon, or Camtasia Studio
  - GPA
- Professional interest in marketing, educational technology, communications, or related fields

Preference will be given to students who have completed BA-327 Digital & Social Media Marketing or CU-350 Public Relations



# The Blocks Exercise: Interactive Teaching Strategy for Introducing the ‘Climate of Performance’ in a Management Course

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## ABSTRACT

This paper discusses an exercise that serves as a fun but thought-provoking introduction or follow-up to the study of traditional motivation models in management courses at the undergraduate, graduate and executive education level. The main lesson from the exercise is that the organizational climate may impact performance as much as internal factors that are typically stressed in traditional motivation models. In the exercise, two groups of four students each perform a task consisting of individually making a single stack of children’s alphabet blocks in one minute. The exercise shows how a manager can influence expectations and performance in a workgroup. The results of the exercise, completed hundreds of times in the U.S. and in Asia, has always ended with the same outcome. The first group of students establishes an average goal of 10-12 blocks in their individual stacks. The second group, working with the same number of blocks and same time constraints establish an average goal of 18-20 blocks. The exercise focuses on helping to understand why this happens. This activity, along with information that follows address elements in the ‘Climate of Performance’ that fall outside traditional motivational models. The exercise results in substantial student engagement. It requires very few resources. The exercise and discussions that follow can be completed in a 50-minute class session.

**Keywords:** Interactive learning, teaching with games, climate of performance, expectations, feedback, delegation.

## INTRODUCTION

One of the more common topics covered in many management courses or seminars is motivation. Most management texts will cover a half dozen or more motivation models ranging from Maslow’s Hierarchy of Needs, Expectancy Theory, Goal Setting Theory, McClelland’s Learned Needs Theory, Behavior Modification, and beyond. Each of these tend to focus on the individual rather than the environment. Few discussions of motivation address the importance of the ‘work climate’ on performance. In the book “How to Grow People into Self-Starters”, Thomas K. Connellan (Connellan, 1972) introduces the concept of “Climate of Performance” and the impact this climate has on the motivation and achievement of individuals. Connellan uses the term ‘self-starters’ to describe highly motivated achievers. In his book, he shares some intriguing statistics that grew out of his research. He found that a disproportionate share of high achieving self-starters are the first born or only child in a family. Depending upon the year, these children make up between 33 and 38% of the population yet they are overrepresented in various studies of high achievers. Connellan shares some examples from his research and follows with the important point that there are factors other than birth order that account for these statistics. These other factors form the basis of the ‘Climate of Performance’ and in turn help explain why first born or only children are frequently overrepresented as achievers.

- A ten-year study of 1,503 superior ninth-grade students from Wisconsin showed that 49% of them were firstborn.
- Of the twenty-three astronauts (at the time of his book), twenty-one were firstborn; the twenty-second had an older sister who died at an early age, and an age gap of thirteen years separated the twenty-third from his next eldest sibling.
- Fifty-five percent of high creative scientists (Ph.D. and a patent rate of more than one per year) at a major chemical firm were firstborn, but only 14% of those who were low creative (a Ph.D. and a patent rate of zero per year) were firstborn.
- Tests of nursery school, kindergarten, and day-care children showed that firstborns scored, on the average, 3.5% higher in creativity than did later-born children.
- A study in England in 1874 showed that firstborns were overrepresented among fellows of the Royal Society.
- A study of 2,274 military personnel showed firstborns overrepresented in high-ranking positions.
- Eighty percent of a group of air-force “military achiever” pilots (top gun pilots) are firstborns.

- A random sample of members of two-child families who entered Columbia University over a twenty-year period showed that, depending upon the year, 52% to 66% of them were firstborns.
- Sixty-four percent of the people from two-child families who were listed in *Who's Who* are firstborns.

From his research, Connellan identifies three elements that make up the 'Climate of Performance' that has resulted in overrepresentation of first-born or only children as achievers. In his book, he goes on to point out these same three elements can create a much more motivational environment within an organization. Importantly, he also points out that when these elements exist, anyone, regardless of birth order, can grow into an achieving self-starter. It is important to stress that while Connellan spends a good bit of time on the impact of birth order on achievement, he stresses the point that it is not birth-order that ultimately impacts performance, it is the environment that is unintentionally created that actually impacts performance. The 'Blocks Exercise' is a useful way to point out the importance of creating the right kind of climate and to help identify the elements that make up a solid 'Climate of Performance'.

## THE CLIMATE OF PERFORMANCE

Connellan's original research involved first-born children. He found three factors explaining their overrepresentation as achievers:

1. *There are higher expectations for the firstborns.* They are the ones who are going to be the all-star quarterback, the president of the senior class, or the captain of the cheerleading squad. In whatever direction expectations lie, they tend to be higher for the firstborn.
2. *Firstborns are given more responsibility at an earlier age.* If, for example, children are sent to the movies, the firstborn is given money to buy tickets and popcorn.
3. *They receive more feedback and more attention is paid to what they're doing.* They get more attention from friends, neighbors, and relatives than the rest of the children. Parents even tend to take more pictures of the firstborn. (Connellan; p.7)

Connellan then extended his research to look at later born children who were also high achievers. He also studied high achieving adults in organizations who were not first-born. Not surprisingly, he found the same three elements were available to these individuals. The important conclusion to be drawn is that it is not birth order that determines our level of motivation or achievement. Rather, it is being in an environment (The Climate of Performance) where three factors are consistently applied:

- (1) Positive Expectations
- (2) Regular Attention and Feedback
- (3) Early Responsibility

An instructor or a manager can have a positive impact on each of these elements. As Connellan's research pointed out, even an individual can create the positive climate for themselves by believing in themselves and setting high standards, by creating feedback mechanisms and/or seeking feedback, and by volunteering to be responsible for various assignments that will allow them to grow.

## POSITIVE EXPECTATIONS

The literature on the power of positive expectations dates back to Greek and Jewish mythology. Expectations can become a self-fulfilling prophecy, as it did in the Greek myth of Pygmalion, a sculptor who fell in love with a statue he had carved. In Jewish mythology, there is the 'golem' effect, which suggests that negative expectations can result in lower performance. (Rosenthal, 2003) Aside from mythology, there have been a number of studies on the impact of expectations on performance in educational as well as organizational settings. One of the early investigations in education was the Rosenthal-Jacobson study. (Rosenthal, 2003) This study showed that when teachers were led to believe that a group of randomly selected students had outstanding promise, over time the student's performance did actually improve. The teacher's expectations were unintentionally projected to the students and/or the teachers gave these students more time, attention and encouragement. In an organizational setting, a two-month field study of 70 newcomers, 70 team leaders and 102 teammates in high-tech project teams found that newcomer general self-efficacy and experience predicted expectations and that expectations did impact newcomer role performance. (Chen, 2003)

## ATTENTION AND FEEDBACK

The literature on the importance of feedback is both extensive and almost entirely positive. In sales, Moore found that when correctly given, feedback helps improve job performance while promoting professional and personal growth in employees. (Moore, 1970) She goes on to say that providing feedback can improve employee morale and reduce confusion regarding expectations and current performance. In the popular book, The One Minute Manager, Lewis Blanchard and Spencer Johnson identify three important actions. One was to “catch your employees doing something right” and then to provide them with a ‘One Minute Praising’. This is a simple way to stress the importance of providing positive and specific feedback in a timely manner. The last important point in the book addresses the importance of providing reprimands or negative feedback when an employee willfully fails to do what was required. (Blanchard, 2012) It is interesting to note that in the newly updated edition of the book, The New One Minute Manager, the three concepts (One Minute Goal Setting; One Minute Praising; and One Minute Reprimands) are the same, except “One Minute Reprimands” has been changed to “One Minute Redirects”, a more positive form of negative feedback. Susan Wyse (Wyse, 2017) points out that common sense and research support the importance of feedback. She identifies five reasons feedback is important:

1. Feedback is always there or available.
2. Feedback is effective listening.
3. Feedback can motivate.
4. Feedback can improve performance.
5. Feedback is a tool for continued learning.

Research conducted by the U.S. Office of Personnel Management also supports the importance of feedback. In one publication, the office identifies three important elements needed when providing feedback. (Feedback is critical to improving performance, 2017)

1. Specificity
2. Timeliness
3. Manner

## DELEGATION

Like feedback, the benefits of proper delegation are well recognized. There is little or no literature that discounts the importance of delegation. There is a substantial amount of literature, however, on when to delegate, and on the proper techniques of delegation. Most discussions of delegation identify the benefits to the delegator. These include better use of their time, and increasing their value by allowing the delegator to achieve more. Most discussions of delegation recognize a number of benefits to the recipient employee. These include an opportunity to develop new skills and experiences, to build self-esteem, and to enjoy and benefit from job enhancement. In a team environment, delegation allows for more efficiency, more flexibility, encourages teamwork, helps balance workloads, aids in communication and may help retain high performing team members. (Burns, 2006)

Much of the literature on delegation focuses on the proper techniques for delegation. Topics typically covered include identifying some of the reasons managers do not delegate well, focus on when the manager should delegate, and on the specifics of how to delegate properly (Heller, 2008). In a classic article in the Harvard Business Review entitled “Management Time: Who’s Got the Monkey?” the focus was on how to recognize and prevent reverse delegation. The article includes excellent advice on the proper way to manage the delegation process. (Wass, 2015)

## THE BLOCKS EXERCISE

When introducing the topic of motivation in a management class, it useful to begin by introducing the concept of the importance of creating a positive ‘Climate of Performance’. It is equally useful to conduct the exercise and the discussion of the ‘Climate of Performance’ following the study of the more traditional motivation models. Each approach has worked successfully. Before introducing the three elements in the ‘Climate of Performance’, however, it useful to conduct an exercise that will demonstrate to students how powerful expectations are and how a manager (or in this case the instructor) can impact our expectations. The exercise begins by asking for eight volunteers. Students are told that we are going to do an exercise in “goal setting”. The eight students are divided into two groups of four students each. One of the groups is asked to wait in the hall while the first group completes the exercise so that their goals are not impacted by the performance of the first group.

Once the group of volunteers is divided and one group is ushered into the hall, the remaining group receives the following instructions:

1. This is an exercise in goal setting. You will be working as individuals, not as a team.
2. You will stack these children's alphabet blocks in a single stack, using only one hand.
3. You will have one minute to complete your task.
4. At the end of one minute the blocks have to remain standing long enough to be counted.
5. In one minute, you should be able to get about 10 blocks in your stack.
6. Points are awarded in this manner: Assume you set a goal of 10 and you actually have 12 in your stack. You will receive 10 points for all up to your goal and five bonus points for each block above your goal. You would have 110 points in this example. Assuming you set a goal of 10 and you only have eight in your stack, you will still receive 10 points for each, so a total of 80 points. The numbers are written on the board and then erased. Students are provided with a blank slip of paper.
7. Do not worry about points but on the slip of paper provided, just write down the number of blocks you are going to attempt to have in your stack. This is your goal. You do not have to write your name of the slip of paper.

The individual slips of paper (goals) are collected and given to a seated student who is asked to remember these are the goals for the first group. At this point, students gather around the instructor's desk at the front of the classroom. The blocks have been distributed on the surface of the desk. The students are given the signal to begin. They are told when 30 seconds remain. They are then given the stop command at the end of the minute and asked to count their blocks. The first group of students are then seated and the second group of students are asked to return from the hall.

The instructions given the second group are identical to those given to the first group except for items number five and six. For item five, the group is told that in one minute, they should be able to get about 20 blocks in their stack. For item six, the instructions are as follows: Points are awarded in this manner: Assume you set a goal of 20 and you actually have 22 in your stack. You will receive 10 points for all up to your goal and five bonus points for each block above your goal. You would have 220 points in this example. Assuming you set a goal of 20 and you only have 18 in your stack, you will still receive 10 points for each, so a total of 180 points. The numbers are written on the board and then erased. The students write their goal on a slip of paper, these are collected by the instructor and given to another seated student who is asked to hold these and remember that they are the goals for group two.

Once the second group completes the exercise they are seated and the instructor is given the four slips of paper representing the individual goals established by the first group. The goals are written on the board, totaled and an average is derived. Then the goals set by the second group of students are listed on the board, totaled and an average derived. The average goals established by the first group of students are almost always between 10 and 12. The average goals established by the second group of students are almost always between 18 and 20. The only difference between the two groups is the 'climate' of expectations that were established by the instructor while giving the instructions and examples of how points would be calculated.

## **TEACHING POINTS / LESSONS / DISCUSSION**

- There are dozens of well-known and respected motivation models. These generally focus on elements within the individual. They do not generally address the external 'climate' of the organization. This exercise can be followed by a review of traditional motivation models or it can be conducted at the conclusion of a review of traditional models. Each approach has worked successfully.
- The main goal of the 'Blocks Exercise' is to introduce the concept of the 'Climate of Performance' and to show how the external environment can influence one's goals, achievement and motivation.
- The elements in the 'Climate of Performance' include: Positive Expectations; Attention and Feedback; and Delegated Early Responsibility.
- Those in authority (parent, teacher, facilitator, manager, coach, etc.) play a crucial role in helping create a positive 'Climate of Performance'.
- Unfortunately, authority figures can also create a negative 'Climate of Performance' by projecting negative expectations, providing little or no appropriate feedback, and by failing to delegate early responsibility.

- Absent a strong authority figure, an individual can create for him/herself a positive ‘Climate of Performance’ by having positive expectations, by regularly seeking or creating feedback, and by volunteering for and being willing to assume responsibility.
- Birth order appears to be significant but it **does not** matter. Environmental or climate factors do matter.
- Student goals are influenced by the suggested performance expectations of the instructor.
- To some degree, student performance in the exercise is influenced by the goals they establish. It is not uncommon to observe students stop stacking when they achieve their goal, others continue.
- Financially – there is no cost to having and projecting positive expectations.
- Financially – there is no cost to providing attention and feedback.
- Financially – there is no cost to delegating early responsibility.
- Thus, some of the most important factors under the influence of authority figures have no financial cost.
- The costs associated with creating a positive ‘Climate of Performance’ are in the time and effort needed from the authority figure.
- Classroom discussion typically includes the observation that were we to conduct the same exercise a second time, the influence of the instructor on the goals established would be greatly diminished. The goals would be influenced more by past experience with the exercise and by the knowledge of what the first group of students were able to complete. This allows for a final lesson. The authority figure (teacher, coach, manager, parent) will have the greatest impact on expectations very early. Following this, we tend to be influenced more by our past experience and by our peers. Our greatest influence will occur early, so as a manager, take advantage of creating ‘new’ opportunities to influence the employee’s expectations in a positive way. Proper delegation can provide the manager with these opportunities.
- Once expectations are established, the authority figure must provide specific and timely feedback and look for chances to delegate new growth opportunities.

## CONCLUSIONS

This exercise has been conducted over one hundred times and using the same instructions, the exercise has ended with the same results every time regardless of location or group composition. The average goal established by the first group ranges from 10 to 12. The goal established by the second group ranges from 18 to 20. In every instance, they have the same resources, they are doing the same task, and they have the same amount of time. The only difference is that the instructor has influenced their expectations regarding what they should be able to accomplish. At this point, the ‘Climate of Performance’ can be introduced and the point can be emphasized that the first element, the power of positive expectations is real, and that this has been proven in a small way via the ‘blocks exercise’. The information on birth order, which is usually interesting to students, is used to discuss how attention and feedback is impacted, and how early responsibility is important. These elements make up the important ‘Climate of Performance’.

It is the observation of instructors conducting this exercise, that the three elements that make up the ‘Climate of Performance’ are not related to gender, age, education level, or cultural background. In fact, the exercise has been conducted in over one dozen MBA courses delivered in Taiwan and mainland China. The results have been identical to results at the undergraduate, graduate and executive education level in the U.S.

One additional lesson was learned from this exercise quite by accident and sharing the results can lead to a deeper discussion of goal setting, rewards and motivation. One time the instructions were modified slightly. Once a goal was established, the students were told they would receive 10 points for each block. Once the goal was met they would receive five bonus points for each block above their goal. But if they did not reach their goal, there would be a five point penalty for each block below their goal. With this scenario, there was very little difference between the two groups of students and in both cases, the goals were established at an extremely low level, in the range of 5 to 6 for both groups. It becomes clear that if managers create an environment where they punish their employees for not meeting goals, this will create a very negative climate and will result in much lower goals and motivation.

The authors of these ‘teaching notes’ would like to invite our colleagues to try this exercise. Students tend to enjoy the activity, to become engaged and learn to appreciate how important creating a positive climate is to performance.

## REFERENCES

- Bellah, M. (n.d.). The Expectation Effect: How Our Expectations Can Bring Out the Best in Others. Retrieved April 05, 2017, from <http://www.bestyears.com/expectations.html>
- Blanchard, K. H., & Johnson, S. (2012). *The one minute manager*. London: HarperCollins.
- Burns, R. (2006). *Making delegation happen: a simple and effective guide to implementing successful delegation*. Australia: Allen & Unwin.
- Byham, W. C., & Cox, J. (1998). *Zapp! the lightning of empowerment: how to improve quality, productivity, and employee satisfaction*. New York: Fawcett Columbine.
- Chen, G., & Klimoski, R. J. (2003). The Impact Of Expectations On Newcomer Performance In Teams As Mediated By Work Characteristics, Social Exchanges, And Empowerment. *Academy of Management Journal*, 46(5), 591-607. doi:10.2307/30040651
- Connellan, Thomas K. (1972). *How to Grow People into Self-Starters*. Ann Arbor: The Achievement Institute, Inc.
- Eikenberry, K. (n.d.). Setting Clearer Performance Expectations - Expert Advice. Retrieved April 05, 2017, from <http://performance-appraisals.org/experts/clearerexpectations.htm>
- Feedback is Critical to Improving Performance. (n.d.). Retrieved April 05, 2017, from <http://www.opm.gov/policy-data-oversight/performance-management/performance-management-cycle/monitoring/feedback-is-critical-to-improving-performance/>
- Heller, R., & Kindersley, D. (1998). *How to delegate*. London.
- Maddux, R. B. (1998). *Delegating for results*. Menlo Park, CA: Crisp.
- Moore, K. (1970, January 01). The Importance, Benefits and Fundamentals of Providing Feedback in Sales. Retrieved April 05, 2017, from [http://www.eyesonsales.com/content/article/the\\_importance\\_benefits\\_and\\_fundamentals\\_of\\_providing\\_feedback\\_in\\_sales](http://www.eyesonsales.com/content/article/the_importance_benefits_and_fundamentals_of_providing_feedback_in_sales)
- Roebuck, C. (1998). *Self-development for success: effective delegation: the essential guide to thinking and working smarter*. New York: AMACOM.
- Rosenthal, R., & Jacobson, L. (2003). *Pygmalion in the classroom: teacher expectation and pupil's intellectual development*. Carmarthen: Crown House.
- Spiegel, A. (2012, September 17). Teachers' Expectations Can Influence How Students Perform. Retrieved April 05, 2017, from <http://www.npr.org/sections/health-shots/2012/09/18/161159263/teachers-expectations-can-influence-how-students-perform>
- Successful Delegation: Using the Power of Other People's Help. (n.d.). Retrieved April 05, 2017, from [http://www.mindtools.com/pages/article/newLDR\\_98.htm](http://www.mindtools.com/pages/article/newLDR_98.htm)
- Why Should You Delegate. (n.d.). Retrieved April 05, 2017, from <https://projects.ncsu.edu/project/parkprgrd/PSTrainingModules/delegating/delsec3.htm>
- Wyse, S. E. (2017, January 26). 5 Reasons Why Feedback is Important. Retrieved April 05, 2017, from <http://www.snapsurveys.com/blog/5-reasons-feedback-important>
- Wass, W. O., McCarthy, T. S., Ghoshal, H. B., & Mankins, M. C. (2015, July 16). Management Time: Who's Got the Monkey? Retrieved April 05, 2017, from <https://hbr.org/1999/11/management-time-whos-got-the-monkey>

# Building a Better Jigsaw Puzzle: Using a Corporate Partnership as the “Missing Piece” in the Introduction to Business Course

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## ABSTRACT

For decades, the Introduction to Business/Management course has been a central, introductory component of most business education undergraduate programs; yet this course continues to be problematic for both students and faculty. This paper describes an innovative approach developed for this course. Our challenges were threefold: to better integrate course concept areas, strengthen the pedagogical foundation of the course, and more effectively link content and delivery. The key piece in our course design, the piece that helps address the various challenges, is a partnership that we developed with a locally headquartered corporation. The partnership model has helped us achieve the course educational goals and support the central role the course plays in the curriculum.

**Keywords:** Introduction to Management, Introduction to Business, Emerging Adult, Corporate Partnership

## INTRODUCTION

This paper describes an innovative framework for the Introduction to Business/Management course, which has been well received by students and faculty. We describe the major features of the course, with special attention given to the role of our corporate partnership, a relatively unique and critical component that has proven, at our large, urban university, to be the key missing piece in addressing many of the traditional introductory course’s challenges.

The Introduction to Business course our faculty had been teaching, doggedly and to most observers, unenthusiastically, was organized like an unassembled jigsaw puzzle, with each piece dedicated to one of the functional areas of business. Students received these functional pieces “out of the box,” with no superstructure or scaffolding to help them integrate the various pieces. They often struggled to integrate the various parts, so they did not readily develop a view of the big picture, not could they appreciate the overall meaning of the course. These results troubled the faculty because this introductory required course is fundamental to the student’s study of any business discipline and is likely to have one of the largest student enrollments in the university. Consequently, it has the potential to impact a significant number of students, shaping how the student thinks about the academic study of business, his or her management career, the choice of a major within business, as well as critical areas such as ethics and values (Amann, Pirson, Dierksmeier and Von Kimakowitz, 2011; Wright and Gilmore, 2012).

Despite the critical importance of the course, it was often avoided by senior and tenure track faculty as an assignment with little professional reward (Dyck, 2017). At the authors’ university, the course has been staffed almost exclusively by adjunct faculty. Until recently, with a call for papers by Christopher and Laasch for the *Journal of Management*, and several articles by educators sharing their experiences in revamping the introductory course (Mancuso, Chlup and McWhorter, 2010; Pavlovich, Collins and Jones, 2009), little attention has been directed at its pedagogy, design, and delivery. We find this growing attention focused on the introductory business course encouraging. Our paper’s goal is to add to this evolving literature and to contribute to our colleagues understanding of this course.

One of the significant issues with this course has been that course design and desired educational outcomes were not aligned. We have learned that such alignment is an easily invoked ideal that is often hard to enact and, our experience suggests, rarely pursued in an intentional way. In *Rethinking Undergraduate Business Education*, Colby, Ehrlich, Sullivan, Dolle and Shulman (2011) argue that, in the educational arena, learning outcomes must be matched with appropriate pedagogies: “...choices faculty make about *how* to teach are at least as important to student learning as *what* is taught” (p. 88). Our redesign work included rethinking the intellectual and pedagogical foundations of the course.

## Historical Background

The freshman business class had for years followed a model based on a series of modules that addressed the functional disciplines of business. Professors from each business discipline would deliver a summary of their academic area. The topics (management, marketing, accounting, supply chain management, organizational development, finance, international business) remained “separate and distinct with no complementary strategy or incentive to put Humpty Dumpty back together again” (Shulman, forward, Colby et al., 2011). The model excited neither faculty nor students and ignored the opportunity to reinforce student interest in business and to generate excitement that might inform a choice of major. Further, it was ineffective in teaching students the targeted course goals. In our revision, we sought ways to address the cross-functional nature of modern management and possibly model it in our course. The course needed to create student engagement and satisfy the educational objectives discussed below.

## A Pedagogical Model for the Introductory Management Course

In planning the freshmen course re-design, we drew on the work of researchers who looked at the “emerging adult,” and the particular ways emerging adults learn in the current environment. Much of this research started with the work of Malcolm Knowles and his collaborators who developed a stream of adult learning, andragogy, theory (from the Greek, “leading the man”) (Knowles, 1968; Knowles, Holton and Swanson, 2011; Forrest and Peterson, 2006). A number of educators have elaborated on the andragogy model (Dachner and Polin, 2016), which focuses on the basic assumptions underlying the learning behavior of adults. The following four andragogy principles were incorporated into the current course revision.

1. *Emerging adults prefer problem-focused learning or knowledge that is applicable in the present time.*
2. *Emerging adults are capable and seek out opportunities for self-directed learning.*
3. *Emerging adults have a strong readiness to learn if the content seems to be relevant to their lives.*
4. *Emerging adults need to understand what they will learn and why.*

In addition, we wanted to address issues raised by the Carnegie Foundation Study (Colby et.al, 2011), which critiqued undergraduate business education as narrow, failing to challenge students to question assumptions, and failing to motivate creative thinking. The Carnegie Foundation Study held that, in order for students to make sense of the world and their place in it, four central dimensions needed to be evident in the curriculum: analytical thinking, reflective exploration, multiple framing, and practical reasoning (Colby et al., 2011).

Our commitment to andragogy as an approach and to the inclusion of the intellectual skills recommended by the Carnegie Foundation Study evolved during our discussion of possible models for the course. We are a university with a strong commitment to experiential education and to cooperative education, so the habit of looking outside our institution for solutions was part of our organizational culture.

## BENEFITS OF A CORPORATE PARTNER

The key course innovation was to build a partnership with a local corporation that would provide a reality touchstone beyond the classroom. This partnership introduced what might be seen as an experiential education aspect to our course. The corporate partner participated throughout the semester to provide students a context for the concepts they were learning and a forum in which they could address application of these concepts in a real business context. The specific activities developed with our corporate partner included:

- Analysis of a company through the lens of the annual report
- Observational store visits
- Consulting assignment for the design of a possible new venture for the corporate partner
- Participation in an executive speaker series with top management members of the corporate partner.

Each of these areas is described below, along with a review of their impact on two important student skills, teamwork and presentation skills.

## Referencing the Annual Report

In the introductory course, students encounter their first experience of looking at business from the inside out via a review of the corporate annual report. Rather than regarding the company from a consumer’s perspective, they now must now put themselves inside the mindset of a corporate employee who is responsible for satisfying multiple constituents in a highly competitive marketplace. In order to make this mental transition, students must have a clear understanding of the major functional business areas (e.g., accounting, finance, HR, marketing, supply chain management) and an appreciation of how these dimensions interrelate.



Rather than read about each business function as an independent topic in a text, students begin their exploration of the essential business dimensions by digging deeply into the workings of the corporate partner, guided by faculty-led sessions. This is the beginning of analytical learning, defined as “the key condition that must be met for a course or program to be considered academic in nature” (Colby et al., 2011, p.61) and corresponds to mastering the technical aspects of any educational area. Reading the annual report is a novel activity for most students, and they are intrigued to see how a company talks to its stakeholders and how that conversation relies on information from different business disciplines. For example, human relations issues are expressed in the company’s statements about its commitment to employees, vendors and the larger community; financial information is reported in the 10-K; discussion of global distribution networks highlights supply chain logistics.

Throughout the term, as we explore functional areas in more depth, students refer back to information in the annual report to make analytical comparisons with other retailers. For example:

- When exploring the topic of finance, they use the company’s data to calculate financial ratios and then contrast those results with numbers calculated for a major competitor, in order to make conclusions about which company has performed better. Instead of studying formulas in a vacuum, students (even those who may be dealing with math anxiety) learn to appreciate the value of numbers in telling a specific story about a business.
- When discussing human resources, students look at how the corporate partner describes its social responsibility initiatives and compare that to what other retailers report, debating issues around the depth and the authenticity of the printed messages. They may also see how the words stack up against on-line ratings found on Glass Door, or the Forbes and Fortune magazine ratings of “Best Places to Work.”

### **Store Visits**

According to Kuh (2008), learning occurs most effectively when concepts are experienced through realistic situations rather than in the abstract. As such, we assign students to teams and ask them to apply their knowledge of business functions and then develop business plans for new ventures that could support or enhance some aspect of the corporate partner’s retail model.

As a first step in generating ideas, student teams visit the partner’s stores in order to get a sense of the merchandise offered, the layout, pricing, and so on. The objective here is to build on what students have learned in the annual report, to show how a business translates its mission into a physical space, and to provide students with an opportunity to think through innovative ways to create value for the organization.

While the store excursions are independent activities, we give student teams creative and open-ended questions to consider during their fieldwork. For example:

*Imagine you are the CEO or one of the top corporate executives from HR, Marketing, or Information Technology. Given what you see and experience at the store, what might you be worried about? What seems to be working well? Could it be improved? What would make the store a favorite shopping destination for you?*

### **New Venture Development**

Student teams are engaged in a semester-long assignment to develop a business plan for a new venture to benefit the corporate partner. Due to our large freshman enrollment [600+], we do not have the resources to seed actual start-up projects, which would be the ideal. These business plans are presented to the class, and the best of them have been showcased in a pitch-a-thon event held at the end of the semester.

Students have developed both high tech and low-tech ideas for their ventures: flash mob campus marketing, dressing room improvements, introduction of a personal shopper service, flash on-line sale sites, store apps that alert shoppers to new merchandise, subscription boxes for men’s dress shirts, mobile merchandise trucks, in-store coffee shops, and recycling initiatives.

Each proposal has to be supported by a value proposition that identifies how both customers and the corporate partner would benefit.

- a) Teams must justify that there is a need for their proposal, an unmet customer need that it would satisfy. (e.g., a mobile merchandising truck proposal would need quantifiable evidence that students lack the time to shop and would be interested in having clothes available for purchase on campus). These primary data are gathered through surveys conducted by each team once they have read articles on effective survey methodology. The team develops the questionnaires, which are distributed through Facebook, Google Forms, Qualtrics and Survey Monkey.

- b) Teams use secondary data from the U.S. Census site or other databases to show the potential of their idea (e.g., college enrollments will rise by 15% through 2022, indicating continued growth opportunities for on-campus mobile merchandising; students spend \$80 million annually on clothes, signifying a lucrative target market).

Today, when many business people skip the plan and go straight to the market with a product or service a business plan may seem like a relic of a by-gone era. It's true that, as Abrams noted (Zimmerman, 2014), "You may not need a business plan if you're six Stanford engineers in Silicon Valley who have an app that's got a million followers, because you're going to be acquired so you can be hired." But if you're starting a small restaurant or a graphic design business, "you really want to plan. It doesn't have to be a big document, but you get to make your mistakes on paper, rather than in real life." Completing a business plan gives students a rich understanding of the complexity of issues that businesses face (e.g., analyzing target markets, identifying competitors, anticipating threats to supply chains). Students have to validate their ideas, often in the face of unavailable or contradictory data. They learn to appreciate the energy and tenacity that is required to shepherd their idea from inception to fruition and to defend their decisions. The project prepares students to expand their knowledge and skills "to engage with complex problems, formulate judgments and to take actions in situations that often involve considerable uncertainty," which is the basis of teaching for practical reasoning. (Colby et al., 2011, p.82).

Students recognize the value of the business plan, as some of their comments drawn from course evaluations suggest.

- *This course helped open my eyes to the world of business. Prior to this course my idea of business was limited by what my father had told me about work. However, with that narrow view, I missed everything that happens behind the scenes, seeing all the parts that connect to make the business gears mesh.*
- *One thing that most surprised me was the depth of the business plan. Growing up watching Shark Tank, I thought what these entrepreneurs were doing was easy. In hindsight, I now understand how much effort was behind their business ideas. If you haven't done the work, you can't answer investor questions, and when you can't answer the questions, you go home without getting the deal done.*
- *The great part of the course was the time and effort spent on successfully developing the longest and by far the most challenging project I have ever come across in all my academic years. It was only possible because we completed it piece by piece throughout the semester.*
- *...having our final project focused on something related to (the corporate partner) makes it more realistic because we are making a product to fit an existing successful company.*

The value of the business plan goes beyond having the finished product in hand. A byproduct of the assignment lies in having students realize that university-level business study is complex, and it draws on a wide range of disciplines. As well, we faculty recognize that this complex assignment can set the tone for the student's approach to learning, and we want to encourage entering students to be proactive and independent learners. This is a typical student reaction:

- *I value the (business plan) project for foreshadowing how my future classes will work in the business school. If all my classes entail this level of commitment, I know I will have to put in much more time and energy than I did in high school.*

### **Team Work Skills**

An emphasis on teams or groups in this course is persuasive. The new venture assignment for our corporate partner requires flexibility and resilience beyond what a single student could muster. When students discover aspects of a plan that are less doable than first imagined, the team can offer support and approach the problem from different points of view. Using teams is also a way to increase the concept of multiple framing, "a mode of thought that enables one to perceive and deal with fundamental inconsistency and contradiction" (Colby et al., 2011, p.60). Much like the tale of the blind men and the elephant, students may initially see their proposed business through a distorted lens, one often associated with their intended majors. Such an approach not only distorts an accurate picture of business but limits the opportunity to "work intellectually with fundamentally different, sometimes mutually incompatible, analytical perspectives" (Colby et. al, 2011, p.60).

Since teamwork is crucial to success in the course, we invest time in creating equitable learning teams. In the work world, group composition may be pre-determined by virtue of who holds a given position. However, in the classroom, we are committed to exercising procedural justice by trying to distribute both talent and diversity among the teams. Thus, we assign students across groups based on demographic factors (gender, English fluency,

international background, intended major, as well as self-reported skill levels in Excel and Power Point). In addition, we take into account other relevant courses in which students are enrolled (e.g. accounting) as well as variables such as observed participation rates in class.

Requiring freshmen to mesh with “untested” group members from diverse backgrounds requires patience, trust and respect that can arise only over many weeks of interaction. Based on student responses, the teams have provided a powerful learning experience that highlights the value of multiple perspectives.

- *The lessons that I learned that took me by surprise were those based around human interaction and collaboration. Without the collision of different mindsets, it is impossible to transition from “garage to global.” Had I been required to work alone on this project, it might have been less confrontational but I would have failed miserably.*
- *(International student): I have never worked with people of different cultures, as back home, we would work with individuals with similar race and ethnic background. Starting off was tough but I learned many things about my partners. In the end, I know I can handle the way Americans work.*
- *By getting assigned random partners for the project, I learned what it was like to work with really different people in order to make an idea come to life. It took time but the ends justified the means.*
- *I hadn't had very many opportunities to work on a project of this caliber in high school and, if I did, I chose to work on it alone. This project gave me a chance to experiment and learn more about how I work with others. Midway through the project I felt as if our team was finally running like a well-oiled machine.*

As Surowiecki observes, “Small groups make everyone work harder, think smarter and reach better conclusions than they would have on their own” (2004, p.176). Other research suggests that ventures launched by teams are more likely to become sustainable businesses than those launched by individuals. One study found that over 83% of companies that achieved sales of \$5 million were started by teams (Zacharakis, Spinelli and Timmons, 2011, p.119).

### **Presentation Skills**

Students develop their ideas with awareness that they will be pitching their business plans to the corporate partner as a likely first investor. Student groups present their proposed venture several times over the term. Each performance builds on its predecessor in depth and development, culminating in a final graded presentation. This part of the course design contributes to reflective exploration, namely learning to interpret text material by presenting an analysis of its significance in public (Colby et. al, 2011). Students are demonstrating their understanding of how to incorporate functional aspects of business effectively into their own business ventures and, simultaneously, practicing one of the “major business lessons of 2014,” namely the art of telling a compelling story (Cospers, 2014). According to the Harvard Business Review, “Data can persuade people, but it doesn’t inspire them to act; to do that, you need to wrap your vision in a story that fires the imagination and stirs the soul” (Monarth, 2014).

Students receive feedback from faculty and peers immediately after each presentation and, in addition, they record and review their own performance, critiquing both style as well as content. If groups see that their audience is disinterested or continually asks for clarification, they need to reconsider how to deliver their message more effectively. Since the presentations are cumulative, if groups have not addressed issues raised in previous sessions, the classroom audience will ask them to explain why. And if groups have revised their plan based on new information, they must present the rationale behind their changes.

### **Executive Speakers**

The final activity of the corporate partner relationship in the introductory business course is the speaker series. Over the course of the term, five of our partner’s top-level executives speak to the freshmen class in special evenings sessions about their area of expertise and answer questions from the audience. This is an opportunity for students to see, first-hand, the daily life of a corporate manager, the problems they address, the pace of their work, and, most importantly, how their roles rely heavily on other functions within the business. Students often engage the executive in an extended dialog about the job, its responsibilities, the ways the functions collaborate, the impact of the specific specialty on career development. Again, these responsive comments below are solicited from student evaluations.

- *I was surprised to hear from the financial speakers how they have to work with every single other department within the company. By literally showing the sheer amount of communication that is necessary for even just the financial department to function, I was truly able to understand how everything has to fit together to ensure that a company is successful.*

- *Working with a (CP) changed my perspective on business. Before the class, I had thought that business was mainly having one leader bark orders at their subordinates in a meeting at the beginning of the day and then everybody goes off separately to complete their tasks. Now I understand that in order to complete a project (especially a large scale project such as those that are common within businesses), constant communication is necessary between many different people not only within one department but also interdepartmentally.*

A less obvious but valuable additional benefit of the speaker series is that students have an opportunity to recognize the culture of a company as it becomes visible through the words and actions of its employees. Students comment frequently on the similarities between value statements made by the speakers from different disciplines, thus validating that all departments are part of a unified entity.

## CONCLUSION

Our major challenge in revamping the course was to make sure that students not only understand the functional areas of business (i.e., the basic puzzle pieces) but also, more importantly, recognize how the various disciplines interconnect to create an integrated system. Students are now introduced to the fundamental course material through a concentrated focus on our corporate partner's business model. Exploring one company in depth through both its annual report and a coordinated speaker series where company executives highlight the synergy between departments, allows students to appreciate the kind of connections that flow across functional units. This knowledge is enhanced when students are asked to build and defend their own unique business venture for possible implementation by the corporate partner.

Our second challenge in the redesign was to make a conscious effort to introduce recognized educational dimensions into the pedagogy. Colby et. al (2011) remind us that few students come to college with well-developed capacities in any of the four dimensions of liberal learning. An introductory business course that offers opportunities to build these skills is thus ideal. In the current course, students are tasked with mastering the technical aspects of the introductory business curriculum [analytical thinking] and exposed to different perspectives through extensive time in team discussions [multiple framing]. Through the development of an original business plan, they are engaged with complex problems that involve uncertainty [practical reasoning] and, finally, through multiple presentations, they must publically demonstrate their understanding of material [reflective exploration].

The final challenge in our course redevelopment process was to link content and delivery. According to Colby et al. (2011), teachers should be focused on a simple principle: "*teach students what you want them to know and be able to do*" (p.89). For freshmen faculty, this statement has implications beyond knowledge and intellectual skills. We often feel a unique obligation to set the tone for the "college experience" by delivering an introductory class that is rigorous but also exciting and rewarding in ways that makes freshman enthusiastic about their choice of major. One way to achieve this result is to acknowledge students as emergent adults who should be actively involved in the learning process. In keeping with this philosophy, the course offers many activities that satisfy four of the tenets of andragogy:

1. *Emerging adults need to understand what they will learn and why*  
Focusing on one corporation helps students recognize the "whole" of business. They are learning how a business operates and developing a business mindset that will set the stage for future courses.
2. *Emerging adults are capable and seek out opportunities for self-directed learning*  
We give minimal guidance to students regarding start-up ventures that might be attractive to the corporate partner. It is their responsibility to develop and sell their idea. They create their own surveys, research their own suppliers, set HR policies, etc.
3. *Emerging adults prefer problem focused learning or knowledge that is applicable in the present time.*  
Students are analyzing a current Fortune 100 company, whose stores they can visit on multiple occasions. They are also being exposed to practical skills [e.g., effective presentations] that will be highly valuable in all their classes, and future job settings.
4. *Emerging adults have a strong readiness to learn if the content seems to be relevant to their lives.*  
Since students have matriculated into the business school, they are likely committed to the content and we build on that attraction by giving them opportunities to pursue business plans that appeal to the interests of their own demographic cohort.

## CAVEATS IN CLOSING

The Introduction to Business course this paper describes has been well received by faculty and our academic colleagues. However, there are some cautionary aspects that should be noted.

1. The association with our corporate partner has practical advantages that may not be easily replicated. Retail is a business sector with which students interact daily. Their clothes, coffees, watches, computers, phones, and textbooks are all part of the retail economy. Potential partners from other business sectors may be less “real” to a student population and may not offer the benefit of physical store visitation, which adds depth and richness to the learning experience.
2. The administrative oversight for such a course, with many sections and staffed mostly by adjuncts, is significant. Since freshmen are particularly sensitive to equity issues across the sections and for continuity, we have developed a standardized syllabus with uniform guidelines and required assignments. While there is some leeway for professors to substitute material, the core of the course is consistent. We are fortunate to have instructors who are committed to our corporate partner model. They consider themselves a teaching team and meet every two weeks to address logistical issues (e.g., store visit schedules) as well as to share their suggestions on supplemental activities that may enhance learning. This level of involvement might not exist at other institutions where adjunct faculty may be in flux.

## REFERENCES

- Amann, W., Pirson, M., Dierksmeier, C, and Von Kimakowitz, E. (2011). *Business schools under fire: Humanistic management education as the way forward*. New York: Palgrave, MacMillan.
- Christopher and Laasch: Retrieved from: <https://www.linkedin.com/pulse/journal-management-education-jme-special-issue-call-new-christopher>.
- Colby, A., Ehrlich, T., Sullivan, W.M., Dolle, J.R., and Shulman, L.S. (2011). *Rethinking Undergraduate Business Education: Liberal Learning for the Profession*. The Carnegie Foundation for the Advancement of Teaching. New York: Jossey-Bass.
- Cosper, A. (2014). Why 2014 was the year of the story. *Entrepreneur*. November 18, 2014. Retrieved from: <https://www.entrepreneur.com/article/239142>
- Dachner, A. and Polin, B. (2016). A Systematic Approach to Educating the Emerging Adult Learner in Undergraduate Management Courses. *Journal of Management Education*. 40(2), 121-151.
- Dyke, B. (February 13, 2017). Reflecting on 25 Years of Teaching, Researching, and Textbook Writing for Introduction to Management: An Essay with Some Lessons Learned, *Journal of Management Education*. 1-18. DOI: <https://doi.org/10.1177/1052562917693381>
- Forrest III, S., and Peterson, T. (2006). It's called andragogy. *Academy Of Management Learning & Education*, 5(1), 113-122. doi:10.5465/AMLE.2006.20388390
- Knowles, M. S. (1968). Andragogy, not pedagogy. *Adult Leadership*, 16(10), 350–352, 386.
- Knowles, M.S., Holton, E.F. and Swanson, R.A. (2011). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (7<sup>th</sup> ed.). Amsterdam; Boston: Elsevier, Butterworth-Heinemann.
- Kuh, G.D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Mancuso, D. S., Chlup, D. T., and McWhorter, R. R. (2010). A study of adult learning in a virtual environment. *Advances in Developing Human Resources*, 12(6), 681-699.
- Monarth, H. (2014). The Irresistible Power of Storytelling as a Strategic Business Tool. *Harvard Business Review Digital Articles*, 2-5.
- Pavlovich, K., Collins, E., and Jones, G. (2009). Developing students’ skills in reflective practice: Design and assessment. *Journal of Management Education*, 33, 37-58.
- Surowiecki, J. (2004). *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations*. New York: Doubleday.
- Wright, A.L. and Gilmore, A. (2012). Threshold concepts and conceptions: Student learning in introductory management courses. *Journal of Management Education*. 36: 614–635.
- Zacharakis, A., Spinelli, S., and Timmons, J.A. (2011). *Business plans that work: a guide for small business*. New York: McGraw-Hill.
- Zimmerman, E. (2014). Retrieved from: [https://www.nytimes.com/2014/12/04/business/smallbusiness/business-plans-for-start-ups.html?\\_r=0](https://www.nytimes.com/2014/12/04/business/smallbusiness/business-plans-for-start-ups.html?_r=0).

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# **An Integrative Case Study of Market Models for Principles of Economics' Courses: Connecting the Student to the Business World**

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## **ABSTRACT**

Integrating case studies within a principles of economics course can be challenging due to the size of a class, mode of delivery, and instructor's styles. This article focuses on the generic concept of market models, covered in the majority of principles courses in economics. It provides the instructor with a simple, effective case study to implement in their course to help elucidate student learning outcomes, promote engagement, and improve critical thinking skills within the field of economics. This exercise also encourages students to secure a mentor and research the field of study they are interested in, which adds greatly to any program's end goals.

**Keywords:** market models, economic education, integrative study, ball python snake, microeconomics, mentor

## **INTRODUCTION**

Principles of Economics is often viewed as highly technical and theoretical for many students yet they still need Economics 101 (Boudreaux, 2017). Thus, the ability for a professor to tie information to a relevant and unique case study is highly influential in the classroom (McDonald, 2004). This case study is applicable to not only principles of microeconomics' courses at the collegiate level but also to a high school curriculum as well. The layout and structure of the assignment enforces the learning objective of the 4 main market models. In addition, it reinforces critical thinking skills, oral and written communication, assists students in career choices and preparation, and has the potential to allow a student to create a mentor/mentee relationship.

In 2012, Forbes stated, out of the 6 classes recommended which, "will make any college graduate employable" economics is listed (Connerly, 2012). This course is listed due to its social science roots and its applicability to everyday issues. The basic concepts covered in a principles of economics course provide students with a wealth of information applicable to everyday life and business-decisions. Therefore, a case that incorporates the various characteristics of the main market models in addition to a student's desirable career choice and/or major is influential and worth the time commitment. "Economic literacy is crucial because it is a measure of whether people understand the forces that significantly affect the quality of their lives," (Stern, 1998). Perhaps, a student is not that swayed by formulas and graphical analyses in an economics course; however, connecting it to the quality of their life and the current job market equals a stellar course assignment.

## **MARKET MODEL EXERCISE**

The four main market models consist of: perfect competition, monopolistic competition, oligopoly, and monopoly. Each student is assigned to pick a professional to interview, which can take place in-person, via e-mail, or phone. It is designed to be administered for online students as well as a face-to-face class. Students are encouraged to align the professional they choose to interview with a career area they have an interest in pursuing. For example, if someone is interested in being a veterinary technician, they would aim to identify someone in that field to interview. Part of the assignment is to also research, using the Bureau of Labor Statistics Occupational Handbook (BLS, 2016) to identify the following: educational requirements, experience, pay, future outlook, and skill sets. This will equip the student with knowledge prior to scheduling an interview.

The interview consists of 8 questions and is designed to take less than 30 minutes. The student may record the interviewees' responses (with permission), solicit them via email, or in-person. However, while the interview time is not intensive the student should expect to spend at least 2-4 hours on background research, polishing the responses, and preparing a professional end product. The following questions are the primary focus of the assignment as they mirror the characteristics identified in the majority of chapters covering economic market models. The student may elaborate or add to as he/she deems necessary.

- Question 1: What are the key forces shaping the nature of competition and the opportunities for profit in your industry?
- Question 2: What, if anything, do firms do to insulate themselves from competitive forces?
- Question 3: Is your product homogenous or heterogeneous? Explain.
- Question 4: Is geography a factor in the determination of this market? Explain.
- Question 5: Are there many competitors or is your industry dominated by a small number of large firms?
- Question 6: Is the demand for your product elastic or inelastic?
- Question 7: What type of control does your firm exert over prices?
- Question 8: Is your industry government regulated? Explain.

### **Appropriate Classes**

This case is assigned in a principles of microeconomics course taught at the sophomore level in college within an online classroom setting. However, the scope of the learning objectives yields its effectiveness to high-school economics courses at the advanced level as well. It can be utilized for classes taught face-to-face, hybrid, or in the online format. The discussion application would differ based on the mode of delivery. The size of principles courses in economics can vary significantly, thus making this project somewhat of a logistical challenge. With a large size class, the professor can assign this case to a group of 4-5 students. With extremely large lecture classes (300-500 students), this case study may be reserved for a higher level microeconomics course.

### **Learning Objectives**

1. Students will identify the characteristics of the 4 main market models.
2. Students will enforce their knowledge of market models by interviewing a professional within one of these key areas.
3. Students will gain knowledge regarding career selection and job outlook forecasts.

### **Implementation and Preparation**

Students must identify a professional within the industry of investigation. They must use networking skills, work experience, and research methods to assess the appropriate interviewee. The student must make contact either by e-mail, telephone, or in-person to schedule this consultation. They are expected to maintain a professional demeanor at all times and formally disclose the interview is for a class project. Should the interviewee wish to remain anonymous one can genericize the write-up. A professor may also wish to provide a sample non-disclosure statement, should the interviewee request that item.

### **Discussion**

The orientation of the discussions will vary based on the mode of delivery of the course. For an online course, this could take place in the discussion forum. Students are encouraged to create Prezi presentations, voice over Power Point slides, or YouTube videos to aid in their oral and written communication skill sets. Within the discussion forum, students are required to make at least 2 proactive comments to another student's written case study. Within a face-to-face lecture, students can orally present their findings to help hone in on their presentation skills. The author currently ran a trial on this case study during the fall 2016 term where it accounted for 20% of the final course grade in the form of a written research paper, which was turned in on an individual basis. This tactic yielded the best results thus far based on heightened incentives for each student. However, when this approach is followed the other students do not receive the benefit of reading their classmates' responses. The author chose to highlight the best research case studies within the discussion area to allow students exposure to a sample of stellar research. This exercise impacts all students in the course, since principles of microeconomics is part of our core curriculum the diversity of the students enrolled is high. Therefore, their career selection is varied. This encourages students who remain "undecided" about their major and career options to take a closer examination. This exercise has been delivered in both formats and yields positive results. This is a very malleable assignment and allows the professor to use his/her discretion based on class size, demographics, and mode of delivery on the best way to formally have students deliver the end product.

## EXAMPLE CASE STUDY: THE BALL PYTHON MARKET

*Ms. Leslie Cerjan (Microeconomics Student) wishes to thank Mr. Christopher Pilgrim owner of PilgrimCasa Reptiles, [cdpilgrim@gmail.com](mailto:cdpilgrim@gmail.com) for his assistance in this class project. You can visit: [www.facebook.com/PilgrimCasaReptiles](http://www.facebook.com/PilgrimCasaReptiles) for more information.*<sup>1</sup>

### *1. What are the key forces shaping the nature of competition and the opportunities for profit in your industry?*

Although the ball python has been a part of the domestic pet trade since the early 1990s, they were not popular due to a misunderstanding on the part of keepers that ball pythons are difficult to maintain. What many keepers did not realize was this difficulty was a result of a poor transition from freedom to captivity. There has been a steady growth in popularity since the late 1990s, though, as captive-bred ball pythons have proven to be dramatically easier to care for in captivity. Initially, the opportunities for profit in the ball python breeding trade were tightly controlled domestically by the exotic animal importers with exclusive access to the shipments of wild-caught specimens. Anything that was considered unique or “out of the ordinary” was essentially subject to their right as the first line owners to the most desirable picks. Many of these animals were sold at what seemed like ridiculous prices (some over \$250k) to well-funded breeders, who were in turn conducting private research to determine the genetic inheritance of these aberrant traits. The remaining normal-type snakes were sold to distributors at wholesale prices, who in turn sold them to their pet shop clients. As these breeders began to determine the genetic qualities of the animals they were working with, they typically proved over several generations whether a genetic trait was recessive, dominant, or incomplete dominant. In the early 2000s, the “big” breeders began to conduct limited sales of the aberrant offspring to other would-be breeders. Many of the firms were able to recoup their initial investments, along with earning substantial profits. For a short while (about 2 or 3 years), these big breeders virtually maintained a monopoly, as they were the sole source of supply for their mutation.

The rules of supply and demand are unchanged in this example; however, this shift towards producing visually appealing colors and patterns on ball pythons coincided with an internet boom, partially born from a growth in online social media (although, initially, the buzz was contained to subject-specific internet forums). As the information began to be shared via the internet, the demand for these unique morphs grew rapidly, but the production rate was still very limited. This kept the price points for these snakes extremely high for longer periods of time than what today’s market will bear. Many people became attracted to the hobby/industry of breeding ball pythons solely for the perceived profits to be made, but were unaware of all the factors (specifically – fixed and variable costs such as the overhead capital, time/effort, and business acumen) required to successfully generate revenue from the endeavor. This caused a large number of people to sell animals with a “yard sale” mentality where they sold animals well below (sometimes 50% or even 25%) the current [unregulated] market rate in order to get rid of them quickly. This created downward pressure on many breeders’ price strategies and had a large influence on the handling of future breeding projects and their release.

### *2. What, if anything, do firms do to insulate themselves from competitive forces?*

Initially, there was no perceived need for insulation, because the demand greatly exceeded supply. However, as information became more readily available and understood, breeders began to change the way they approached the sale of “new-project” animals to other breeders. The first of these methods was control through contractual agreements, in which the originating breeder agreed to sell a project animal to another breeder, on an exclusive offspring agreement. This allowed new blood to come into the project without diluting the originator’s control over the project price point. While effective in theory, stolen animals and allegedly-stolen stock quickly undermined the effectiveness of this control method.

Furthermore, Mr. Pilgrim uses another insulation method which he unofficially refers to as “strategic export,” (Pilgrim, 2017). This method is still in use, and involves the export of young or fledgling projects to keepers and sellers in other parts of the world, specifically to areas with different dynamics in the economy. Due to the cost and

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<sup>1</sup> The author wishes to express sincere gratitude to Mr. Chris Pilgrim, owner of PilgrimCasa Reptiles for his insight into this case study. He added a unique twist to the study of market models.



level of difficulty involved in the regulation regarding the import and export of live animals, the “little guy” (small firms) do not have unlimited resources for these new projects that are exclusively sold overseas. In addition, the breeders using ‘strategic export’ methods tend to select areas of the world where a large-scale breeding program is impossible or costly because of geographic restraints. Rather than creating future competition locally, these breeders are satisfying a remote end user’s unique pet desire, with a popular or high-demand item, still at a premium price. This method has remained effective for at least the last 10 years, especially as demand has increased for companion animals with low maintenance requirements in an increasingly urban world, (Pilgrim, 2017).

Although ball pythons are easily and readily available, Mr. Pilgrim’s focus at PilgrimCasa Reptiles specifically connects to a recessive mutation called Axanthic. The word Axanthic literally means, “lacking yellow”, and these ball pythons are born with a silver tint to them. There have been multiple lines of Axanthic identified within the species, which have been identified as incompatible with one another. This makes it important for breeders to distinguish the precise Axanthic line they work with when selling the offspring they produce. In this sense, although PilgrimCasa Reptiles is breeding the VPI Axanthic line, there are other breeders producing animals which exhibit the same qualities, but if bred with another line, would not replicate the silver tint. In addition, ball pythons do not have the sole market on genetic morph variety, nor on suitability for pet owners. Cornsnakes, kingsnakes, reticulated pythons, Burmese pythons, and many different boa species have various assortments of color and pattern mutations.

### *3. Is the product homogenous or heterogeneous? Explain.*

Aside from a very few examples, ball pythons were considered homogenous, with a very standard, “wild-type” appearance until the early 1990s. When Bob Clark (<http://www.bobclark.com/>) identified and subsequently proved amelanism (albino) as a genetic trait in ball pythons, the heterogeneous streak in the ball python market was partially revealed. As it became apparent that there were genetic varieties beyond the albino, breeders could choose based on looks and budget, or a combination of those factors. In the early 2000s, a New England-based reptile breeder named Kevin McCurley (<https://www.facebook.com/NewEnglandReptileDistributors>) conducted an interesting pairing. He bred one variant of a ball python called Pastel, with another variant, called Spider, (McCurley, 2017). He wasn’t sure what would result, but he assumed he would have a distribution of 50% normal/wild-type, 25% Spider, and 25% Pastel. Instead, he made a discovery that changed the entire industry. As expected, he produced normal/wild-type, Spider, Pastel. The surprise was that he produced a snake that had BOTH the Pastel AND the Spider traits! This animal exhibited the spiderweb color and pattern characteristics of the Spider morph, combined with the bright yellows of a Pastel. Mr. McCurley called the combination a Bumblebee, because the bright yellow and solid black coloration somewhat resembles the coloring of a Bumblebee (McCurley).

Breeders around the world were amazed when he shared the discovery, and Kevin McCurley became a nearly-overnight celebrity. He, and other breeders, began trying other crosses to see how the resulting offspring would be affected. At the time that Mr. McCurley attempted the pairing, there were approximately 100 known genetic mutations of ball pythons being bred in captivity. As of this writing, because of the number of possible crosses, there are thousands of combinations in existence, and several thousand that have yet to be produced. The impact on the market because of this discovery was immediate and widespread. Prices skyrocketed, as breeders sought to bring in at least one of every known morph for their breeding program in order to try to make new combination from known mutations. Prices eventually equalized after the release of 7- and 8-gene combinations which devalued the single gene animals to the status of other captive-bred normal/wild types. However, recent trends among breeders have swung towards ensuring quality, selective breeding are planned to allow mutations to complement one another.

### *4. Is geography a factor in determination of this market? Explain.*

Because of the technology available, keeping ball pythons in captivity can be accomplished within the developed world with ease. However, in underdeveloped regions, geography would directly affect the ability of these animals to survive or thrive. In addition, although these animals are kept as pets in the U.S., they serve as a food and leather sources in other parts of the world. Geography plays a role domestically in the price structure, simply based on the local cost of living and the typical rules of supply and demand.

*5. Are there many competitors or is your industry dominated by a small number of large firms?*

At the beginning, there were a few large firms that dominated the industry. Today, those breeders are typically referred to as pioneers of the hobby, because their work brought more mainstream appeal through aesthetics to a largely underground industry. While some are still active in the industry, others exited and have moved to other ventures. Because this industry is young, there is still much to be determined. Nonetheless, the success or failure of the small-scale breeder typically hinges on a few key decisions they make early in their breeding endeavor.

*6. Is the demand elastic or inelastic?*

The demand has been and remains elastic, with much of the fluctuation in demand being between different mutations or combinations as they are accomplished and advertised. Because these animals are a food and leather resource in other nations, there is a long-term usefulness for retired breeders with no value in the pet or breeding trade, especially for the firms which export to those areas.

*7. What type of control does your firm exert over prices?*

As the sole proprietor, Mr. Pilgrim has 100% control over his pricing strategy. In any project worked by a large number of breeders, Mr. Pilgrim has very little influence over the market prices. However, there are projects that he currently has exclusive ownership of, in the short-term or long-term. If he has short-term exclusivity, it's because he was the first to make the combination from known, existing projects that are actively being worked by other breeders. He explained, "Because I am the first to have the combination, I can set my prices wherever I like. Because I value my work and investment into these projects, I use a higher-end pricing strategy on these animals, if I list them for sale at all. There have been animals I have taken to a trade show that were really only present for display and not for sale; but because I expect that there will be at least one query, I tag these animals with a \$6,000 or higher price tag." His intent initially was to prevent frivolous inquiries; however, it had the unintended side effect of helping to establish a higher perceived value for other breeders in the same project.

*8. Is this industry government regulated? Explain.*

Yes - the industry is government regulated, although currently, it is not done so heavily. As the industry has become more mainstream, regulations have been imposed, but to this point, many of those regulations are a reaction to irresponsible or unethical actions. Regulatory policies could affect Mr. Pilgrim's output decisions if he were to consider expansion from his current annual production of live animals, although none is planned at this time.

## **CONCLUSION**

The content of this specific case study will intrigue both professor and student alike. While students may not struggle with the characteristics of the four main market models, they do have issues with critical thinking, oratory and written skills, as well as career selection(s). This experience provides a unique way to identify and address market models. The discussions that can ensue are insightful to all involved in the course. The usage of modern technology enables all students to be creative and highly engaged as well. The ability for the professor to alter or cater this assignment to his/her teaching methodologies is very simple. This case allows students to increase their knowledge of economics in addition to gaining a better understanding of the professional arena they desire to enter into upon graduation.

## REFERENCES

- Boudreaux, D. (2017). Yes, Students Still Need Econ 101. Retrieved March 1, 2017, from: The James G Martin Center for Academic Renewal, <https://www.jamesgmartin.center/2017/02/yes-students-still-need-econ-101/>.
- Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, 2016-17 Edition. Retrieved March 1, 2017, from: <https://www.bls.gov/oooh/>.
- Clark, B. (2011). King of the Pythons. *Reptile Care*, 3 (2), 1-4.
- Conerly, B. (2012). The Six Classes That Will Make Any College Grad Employable. *Forbes*. Retrieved March 2, 2017, from: <https://www.forbes.com/sites/billconerly/2012/08/21/how-to-make-a-college-graduate-employable/#2c80bc6c17e0>.
- McCurley, K. (2017). New England Reptile. Retrieved March 1, 2017, from: <http://www.newenglandreptiles.com/>.
- Pilgrim, C. (2017). PilgrimCasa Reptiles. Retrieved March 1, 2017. <http://pilgrimcasareptiles.blogspot.com/>
- Pilgrim, C. (2017, March 5). Personal Phone Interview.
- Stern, G. (1998). Economic Literacy Survey, Federal Reserve Bank of Minneapolis. *The Region*, 12.

## Appendix A - Grading Rubric

Score Levels	Content	Mechanics and Formatting	Organization	Presentation
4	Is well thought out and supports the assignment Reflects application of critical thinking Output is highly related to the topic Documentation of the business professional, highly influential. Is accurate	No spelling, grammatical, or punctuation errors High-level use of vocabulary and word choice Followed case guidelines	Information is clearly focused in an organized and thoughtful manner Information is constructed in a logical pattern to support the case study.	Multimedia is used to clarify and illustrate the main points Format enhances the content Presentation captures audience attention Presentation is organized and well laid out
3	Is well thought out and supports the solution Has application of critical thinking that is apparent Output is related to the topic Documentation of the business professional, influential Is accurate	Few (1 to 3) spelling, grammatical, or punctuation errors Good use of vocabulary and word choice Missing 1 key component to case	Information supports the case study.	Multimedia is used to illustrate the main points Format is appropriate for the content Presentation captures audience attention Presentation is well organized
2	Supports the solution Has application of critical thinking that is apparent Has no clear goal Documentation of the business professional is unclear Has some factual errors or inconsistencies	Minimal (3 to 5) spelling, grammatical, or punctuation errors Low-level use of vocabulary and word choice Missing 2-4 components to case	Project has a focus but might stray from it at times Information appears to have a pattern, but the pattern is not consistently carried out in the case study. Information loosely supports the case.	Multimedia loosely illustrates the main points Format does not suit the content Presentation does not capture audience attention Presentation is loosely organized
1	Provides inconsistent information for solution Has no apparent application of critical thinking Has no clear goal No clear interface with business professional Has significant factual errors, misconceptions, or misinterpretations	More than 5 spelling, grammatical, or punctuation errors Poor use of vocabulary and word choice Missing more than half of case components.	Content is unfocused and haphazard Information does not support the case study. Information has no apparent pattern	Presentation appears sloppy and/or unfinished Multimedia is overused or underused Format does not enhance content Presentation has no clear organization

# Teaching Graduate Students to Write Persuasively for Business Decision Making: A Workshop Approach

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## ABSTRACT

Although writing skills are vital to a successful career in business, graduate students receive little instruction on how to develop such skills. In a pilot study, we designed and conducted a writing workshop, teaching graduate students to persuasively communicate business decisions. The one and half a day workshop focused on three topics: “thesis writing”, “how to structure and develop a persuasive essay”, and “language mechanics”, along with homework, in-class writing assignments, and prompt feedback. Professional writing techniques were also introduced, which helped students learn how to compose a multi-paragraph persuasive essay in a timed context. Students’ response towards the workshop was extremely positive.

**Keywords:** decision making, persuasive essay, writing workshop, business education

## INTRODUCTION

Effective writing skills are central in both business education and students’ future professional assignments. Graduates with excellent writing skills provide more value to their employers and project a more professional image than those with poor writing skills. Writing is regarded as a core competence of a well-trained business graduate (Everson, 2014; Parent et al, 2011; Skapinker, 2013; Wright & Larsen, 2016). Nevertheless, our students do not write as well as we think they should (CBI/Pearson, 2016; Finch et al., 2013; Kellogg & Raulerson, 2007). Employers continue to complain that both undergraduates and MBA students fall behind their expectations of writing skills (Arum and Roksa, 2011; Everson, 2014; Lentz, 2013; Lin et al, 2010). Whereas considerable research and efforts have been made to address undergraduate writing deficiencies, the literature on graduate business students’ writing is sparse (Barrett, 2002; Mitchell et al, 2013), which may be due to the assumption that students entering the MBA or other business graduate programs already have substantial classroom instruction in English composition.

According to Penrose (2007), however, some graduate students may have acceptable English composition training; but are barely ready to work in an English-only and writing-intensive business environment. May et al. (2012) find that many graduate students’ English composition skills are simply rusty, and that other students come from undergraduate disciplines with no emphasis on business-style writing. As a result, “effectively organizing sentences and paragraphs” and “writing clearly and precisely” are identified as areas where fresh graduates need the most improvement (Jones, 2011, p.259). Among the many and varied reasons explaining the lack of writing proficiency, the most obvious one is that students receive a limited amount of instruction in English composition and they do not write very much if at all (Glen, 2011; Smit, 2010).

In this study, we designed and conducted a writing workshop with an objective to teach graduate students to persuasively communicate their business decisions. The ability to write persuasively is essential for managers, as it facilitates collaboration, consensus reaching, and decision making. Nevertheless, our students find it challenging to persuasively convey business decisions based on evidence. Both authors teach MBA level classes that require case analyses involving decision making, such as whether or not to extend the current product line, which distribution strategy to adopt, and which customer segment should the company target (e.g., Deighton et al., 2006). More often than not, students are uncertain about how to approach the analyses. Some of them turn in “bullet points” which look like PowerPoint slides. When asked to submit an “essay”, many students ramble on about details or numbers in the assigned cases without making clear inferences or providing convincing rationale for their decisions.

A Wall Street Journal article by Middleton (2011) echoes our observation: employers frequently complain that the writing of employees with MBAs is not on point and does not keep the audience’s needs in mind. Besides the qualitative observations, we noticed some quantitative evidence suggesting a similar writing predicament. We teach on a campus where students need to pass a Writing Skills Test (WST) as part of the degree requirement. The WST consists of authoring a persuasive essay that requires students to think and write critically, as they need to do in

communicating a business decision. Unfortunately, the pass rate for business graduate students is dismal, less than 50 percent, as there is no instruction or training for the students to prepare them for the writing skills test.

Therefore, the necessity and importance of instructions on how to persuasively communicate a decision cannot be overstated, which motivated us to design and conduct the writing workshop. Specifically, we taught students practical techniques to structure and develop a multi-paragraph persuasive essay. In what follows, we discuss the various components of the writing workshop, as well as of its effectiveness among a group of graduate students who attended our workshop. It is clear in the assessment results that by the end of the workshop, students developed an enhanced understanding of how to develop a thesis statement and structure a multi-paragraph persuasive essay, along with some practical writing tips.

## THE WRITING WORKSHOP

The workshop was one and half days long, scheduled on two Fridays with a week interval. In general, we completed the bulk of the instruction on the first Friday and gave students homework due the following Monday. On the second Friday morning, we provided detailed constructive feedback to students on their homework and gave them a timed, in-class writing assignment. Comments on the in-class assignment were sent to students via Blackboard afterwards. During the workshop, we employed a variety of writing instruction practices that have been widely adopted, such as paired collaborative writing, student inquiry activity for writing, and providing models of good writing (Graham, 2010). By the end of the workshop, we expected that students would be able to complete an 800-word, seven-paragraph persuasive essay in 90 minutes on WST topics involving business decisions (Table 1).

**Table 1: Sample Topics**

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**Prompt 1:** Some people argue that advertising educates consumers and promotes product benefits, while others argue that advertisements can be deceptive and unethical. Should the claims made by advertisements be regulated? Make sure you support your position with reasons, explanations, and examples.

**Prompt 2:** Some people believe that auto insurance companies have the right to charge young male drivers higher insurance rates because they have a higher incidence of getting into accidents and filing claims. Other people believe this to be a form of age and gender discrimination. Should insurance companies be allowed to charge higher rates to young men? Make sure you support your position with reasons, explanations, and examples.

**Prompt 3:** In the business world some managers encourage individual competition among employees, while others promote collaboration and teamwork. Which do you think is a more effective strategy? Make sure you support your position with reasons, explanations, and examples.

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### Day 1 (Lecture, 5.5 hours)

We began the day by collecting pre-workshop assessment measures, including specimens of diagnostic thesis writing and a questionnaire for assessing students' perceptions of their writing ability and habits. The following lecture was organized around three topics, "thesis writing" (1.5 hours), "how to structure and develop a persuasive essay" (3 hours), and "language mechanics" (1 hour).

Each lecture segment was followed by writing practice followed by in-class group review. Based on our past teaching experience, we found that students are oftentimes not absolutely sure about their decision making. When this happens, students tend to find a middle ground in the thesis writing, not explicitly expressing their views on the decision (e.g., to expand or NOT to expand the product line, targeting the connoisseur or "newly rich" customer segment). Such practice, however, results in undue confusion for the readers and should be avoided. After reading thesis statement samples written by their peers earlier, students are more susceptible to the advice on "making your view explicit and supporting it with three reasons." To help students write under time pressure, we recommended they use the *argumentative thesis statement* (i.e. making a claim about a topic and justifying the claim with specific evidence), as opposed to the analytical or explanatory thesis statements. Further, instead of constructing a traditional 3-part thesis sentence, students were urged to develop three stand-alone sentences for two reasons: 1) stand-alone sentences are easier to construct, especially for those who do not have good command of the English language; and 2) students can also use the stand-alone sentences as topic sentences for subsequent paragraph development.

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Second, the area where students needed most help is how to structure and develop a persuasive essay. Before the workshop, many students believed that an essay of two or three paragraphs will suffice and did not seem to appreciate that a multi-paragraph structure can enhance flow of the writer’s ideas and inform readers what to expect in different parts of the essay. With audience awareness in mind, a key business writing consideration, we recommended the following seven-paragraph structure: paragraph 1 explicitly states the thesis statement (with three reasons); paragraph 2 and 3 elaborate on reason 1 (the strongest reason); paragraph 4 and 5 elaborate on reason 2 and 3, respectively; paragraph 6 provides a counterargument; and paragraph 7 concludes the essay. In addition, we offered students hands-on sentence-by-sentence coaching on how to develop the paragraphs (Table 2).

**Table 2: Structure and Development of a 7-Paragraph Persuasive Essay**

<b>Main Structure</b>	<b>Sentence by Sentence Coaching</b>
Paragraph 1 Introduction (thesis)	Sentence 1- describes the problem/focal subject Sentence 2- states author’s position with counter view Sentence 3- states author’s “three-part” thesis Sentence 4- re-iterates author’s position
Paragraphs 2 to 5 (Reasons 1-3 in the thesis)	Sentence 1- states topic sentence Sentence 2, 3- provide specific example with description Sentence 4,5 - explains why the example supports the position
Paragraph 6 Counter argument	Sentence 1- goes back and restates from the prompt Sentence 2- gives one reason to support the counter view Sentence 3- finds a flaw in the counter view reason Sentence 4- provides a specific example to describe why the counter view reason is wrong
Paragraph 7 Conclusion	Sentence 1, 2 - summarizes the thesis (claim) Sentence 3- presents any solution for consideration Sentence 4- encourages the audience to think about their own opinions on the topic (optional).

Among all the paragraphs, the counter argument was the most challenging to teach. Students usually have misconceptions about the counter argument process, as was evidenced in a paired writing assignment which we gave during the workshop. They are well aware that any business decision has its pros and cons and therefore could easily come up with possible arguments against the thesis or some aspect of the reasoning. However, they learned that the counter argument process does not stop there. As a tip, we reminded students to return to their thesis and reason about the proposed counterargument by refuting it or suggesting that it is relatively less important. The counter argument process requires writers to anticipate doubts and pre-empt objections from a skeptical reader, making the decision making more convincing.

Finally, we discussed major grammar and language use mistakes spotted in previous students’ case analyses, namely, misuse of articles, lack of punctuation, excessive capitalization, use of symbols or numbers in formal writing (e.g., use “&” for “and”, and “4” for “for”), and subject- verb inconsistency. During the discussion, we also introduced the “20-word” rule regarding sentence length: when having more than 20 words in a single sentence, novice writers begin to lose control of their writing. The longer the sentence, the greater loss of control. Students were advised to keep their single sentences within a 20-word limit when possible. The classical book by Strunk and White (2000), *The Elements of Style*, was assigned for further reading. Before they were dismissed, we gave students homework: a thesis statement and a seven-paragraph essay due in three days.

**Day 2 (Feedback and Timed Essay Writing, 2.5 hours)**

While only half a day long, the second Friday session was critical to the success of the workshop. Students not only received detailed comments and feedback on their homework, they also had an opportunity to immediately use the feedback to improve their writing. We commented on students’ homework by providing them a rubric that highlights six important aspects of persuasive essay writing (Table 3). If a student receives 19 points or higher (out of 24) according to the rubric, she or he passes the writing task. A 90-minute essay and post-workshop survey were administered to students afterwards.

**Table 3: Rubric for Evaluating a Persuasive Essay**

<b>Statement of purpose, thesis or controlling idea</b>	<b>Points: 4</b> Demonstrates clear understanding of purpose of communication. Clearly develops thesis. Adheres to topic.	<b>Points: 3</b> Demonstrates an adequate understanding of purpose. Generally develops thesis.	<b>Points: 2</b> Demonstrates inconsistent or superficial understanding of purpose. Shows minimal development of thesis.	<b>Point: 1</b> Lacks an understanding of purpose. May have inadequate or missing thesis.
<b>Audience awareness</b>	<b>Points: 4</b> Demonstrates clear understanding of audience.	<b>Points: 3</b> Demonstrates an adequate understanding of audience.	<b>Points: 2</b> Demonstrates inconsistent or superficial understanding of audience.	<b>Point: 1</b> Lacks an understanding of audience.
<b>Organization, cohesion, and clarity</b>	<b>Points: 4</b> Uses clear structure and a range of transitions, and is easy to follow.	<b>Points: 3</b> Has adequate structure with some transitions, and is generally easy to follow.	<b>Points: 2</b> Has minimal structure and few transitions, and is somewhat difficult to follow.	<b>Point: 1</b> Lacks structure and transitions, and is difficult to follow.
<b>Presentation of supporting ideas</b>	<b>Points: 4</b> Presents ideas and evidence that clearly support purpose, thesis, or controlling idea.	<b>Points: 3</b> Presents ideas and evidence that generally support purpose, thesis, or controlling idea.	<b>Points: 2</b> Presents ideas and evidence that minimally support purpose, thesis, or controlling idea.	<b>Point: 1</b> Does not present ideas or evidence that support purpose, thesis, or controlling idea.
<b>Language usage, sentence structure</b>	<b>Points: 4</b> Uses a variety of sophisticated and varied sentence structures. Demonstrates appropriate language choices.	<b>Points: 3</b> Uses somewhat varied sentence structures. Generally demonstrates appropriate language choices.	<b>Points: 2</b> Uses little variation in sentence structure. Generally demonstrates appropriate language choices.	<b>Point: 1</b> Lacks variation of sentence structure. Uses language that is consistently hard to follow.
<b>Mechanics: grammar, punctuation, and spelling</b>	<b>Points: 4</b> Shows correct use of grammar, spelling, and punctuation.	<b>Points: 3</b> Shows mostly correct use of grammar, spelling, and punctuation. May have occasional errors in grammar that don't disturb meaning.	<b>Points: 2</b> May have grammar, spelling, and punctuation errors that are distracting and occasionally interfere with meaning.	<b>Point: 1</b> Contains grammar, spelling, and punctuation errors that are highly distracting and often interfere with meaning.

## ASSESSMENT RESULTS

We successfully implemented the workshop in the winter and spring 2016 quarters. In total, 30 graduate students attended the first day workshop and 14 of them completed the homework and second day workshop. The 14 students (57% female) consisted of 10 MBA students and 4 graduate students specializing in business analytics and accountancy. We used a combination of assessment tools including diagnostic thesis writing, homework, and pre- and post-workshop surveys; and the results generated some interesting findings. First, only 36% (5 out of 14) students could develop a thesis statement properly before the workshop (inter-coder reliability .93), while that number doubled after the workshop (71%, 10 out of 14; inter-coder reliability 1.00). Second, results of the pre- and post-workshop surveys suggested that students' perceptions of their writing ability and habits changed little as a result of the workshop, with a few exceptions (measured by 7-point scales, 1= "not at all" and 7= "certainly can do"; summarized in Table 4, items 7 to 9 are exceptions). The discrepancies may be explained by the fact that during the workshop, we emphasized the difference between opinion and evidence-based writing and constantly reminded students to be more professional with their writing tasks.

**Table 4 Pre- and Post- Workshop Survey Results**

Survey Items	Pre Mean	Post Mean
1. I can write a coherent essay.	5.29	5.36
2. I know a variety of information organization patterns to use in essay writing.	4.79	4.86
3. I can write a paragraph that has a clear topic sentence.	5.00	5.07
4. I create a main point outline before I write.	5.50	5.36
5. I prepare a complete draft before making revisions.	4.71	4.64
6. I browse through my drafts to check the progress of my writing	5.21	5.29
7. I can differentiate between opinion and evidence-based writing.	4.50	5.14
8. I can write a well-organized and sequenced paper with effective introduction, body, and conclusion.	5.29	4.86
9. I reread my work several times to find errors in my writing.	5.36	4.86

Finally, students' evaluation of the workshop is overwhelmingly positive: they found the workshop extremely helpful ( $\bar{x}_{\text{helpfulness}} = 5$ ; 5-point scale, 1= "not helpful at all" and 5= "very helpful"). Specifically, the workshop helped them "understand how to structure a 7-paragraph persuasive essay", and gain hands-on experience in "developing a thesis statement", "developing body paragraphs based on topic sentences", and "writing counterargument" ( $\bar{x}_s = 4.86$ ; 5-point Likert scales, 1= "strongly disagree" and 5= "strongly agree"). Responses to the qualitative questions were consistent with the quantitative findings. For instance, "it is a pity that such a great effort does not have adequate advertisement among needy students", "the professors are so enthusiastic to teach us the writing skills we ignored before. The examples are well organized; instruction is clear; the teaching material is in very good order", "very helpful techniques", and "I thoroughly enjoyed the workshop". After the workshop, some students took the WST and passed. They emailed us the positive news along with comments such as "I can 100% endorse that, if I had not attended the workshop, I would not have cleared the test in the first go", and "I want to thank you immensely for the great training that you provided in the workshop and believe that it should be made MANDATORY".

## CONCLUSION

Although persuasive writing skills are vital to a successful career in business, graduate students receive limited training on the development of such skills. We designed and conducted a writing workshop, teaching graduate students to persuasively communicate their decisions/ideas. Special emphasis was placed on "thesis writing", "how to structure and develop a persuasive essay", and "language mechanics". Equally important to the workshop success were the plan of student homework, in-class writing assignments, and punctual and detailed feedback on the homework and assignments. Among 14 students who attended both required sessions, 4 students took the WST exam right after the workshop, with 3 earning "clear competency" pass and 1 earning a "developing competency". Although our sample size is too small to draw any generalizable conclusions, unsolicited qualitative feedback from students were extremely positive, many urging the college administration to launch future workshops on a larger scale. Greater promotional efforts and increased administrative support are needed to build and develop a sustainable writing workshop program.



## REFERENCES

- Arum, R., & Roksa, J. (2011). Are undergraduates actually learning anything? *Chronicle of Higher Education*, V. 57, No. 21, A0-A31.
- Barrett, D. (2002). Achieving results in MBA communication. *Business Communication Quarterly*, V. 63, No. 3, pp 93-98.
- CBI/Pearson (2016) *The Right Combination: Education And Skills Survey 2016*. London: Confederation of British Industry and London: Pearson.
- Deighton, J. A., Pitt, L., Dessain, V. M., Beyersdorfer, D., & Sjoman, A. (October 2006). "Marketing Chateau Margaux." Harvard Business School Case #9-507-033. (Revised August 2007.)
- Everson, K. (2014). Shrinking the Business School Skill Gap. *Chief Learning Officer*, V. 13, No. 9, pp 18-46.
- Finch, D.J., Hamilton, L. K., Baldwin, R., & Zehner, M. (2013). An exploratory study of factors affecting undergraduate employability. *Education & Training*, V. 55, No. 7, pp 681-704.
- Glenn, D. (2011, January 18). Writing assignments are scarce for students in 2 majors at Texas colleges. *The Chronicle of Higher Education*, Accessed January 5, 2017 at: <http://chronicle.com.proxylib.csueastbay.edu/article/Writing-Assignments-Are-Scarce/125984/>
- Graham, S. (2010). Teaching Writing. P. Hogan (Ed.) *Cambridge Encyclopedia of Language Sciences* (pp. 848-851). Cambridge University Press, Cambridge, UK.
- Jones, C. G. (2011). Written and computer-mediated accounting communication skills: An employer perspective. *Business Communication Quarterly*. V. 74, No. 3, pp 247-271.
- Kellogg, R. T. & Raulerson, B. A. (2007). Improving the writing skills of college students. *Psychonomic Bulletin & Review*. V.14, No. 2, pp 237-242.
- Lentz, P. (2013). MBA students' workplace writing: Implications for business writing pedagogy and workplace practice. *Business Communication Quarterly*. V. 76, No. 4, pp 474-490.
- Lin, P., Grace, D., Krishnan, S., & Gilsdorf, J. (2010). Failure to communicate. *CPA Journal*, V. 80, No. 1, pp 63-65.
- May, G. L., Thompson, M. A., & Hebblethwaite, J. (2012). A process for assessing and improving business writing at the MBA level. *Business Communication Quarterly*, V. 75, No. 3, pp 252-270.
- Middleton, D. (2011, March 3). Students struggle for words: Business schools put more emphasis on writing amid employer complaints. *The Wall Street Journal*.
- Mitchell, G. W., Pritchett, C. C., & Skinner, L. B. (2013). The Importance of the Integration of Soft Skills into the Curriculum as Identified by MBA Students. *Academy Of Business Research Journal*, V. 2, pp 287-103.
- Parent, J. D., Nielsen-Dube, K., Stowe, K. F., Schwartz, L. A., Sendall, P., & Cain, K. S. (2011). Successful Writing Skill Acquisition within the Business Curriculum. *Journal of the Academy of Business Education*, V. 12, Spring, pp 1256-73.
- Penrose, J. M. (2007). Responding to the Unique Expectations and Needs of Graduate Students who are Nonnative Speakers of English. *Business Communication Quarterly*, V. 70, No. 1, pp 47-50.
- Skapinker M. (2013, June 26) Does it matter if students can't write? *Financial Times*.
- Smit, D. (2010). Strategies to improve student writing. IDEA Paper #48. Retrieved from [http://ideaedu.org/wp-content/uploads/2014/11/IDEA\\_Paper\\_48.pdf](http://ideaedu.org/wp-content/uploads/2014/11/IDEA_Paper_48.pdf)
- Strunk, W. & White, E. B. (2000). *The Elements of Style* (4<sup>th</sup> edition). Upper Saddle River, NJ: Pearson Education.
- Wright, N.D., & Larsen, V. (2016). Improving marketing students' writing skills using a one-page paper. *Marketing Education Review*. V. 26, No. 1, pp 25-32.

# Teaching $R^2$ in Regression

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## ABSTRACT

In regression the coefficient of determination,  $R^2$ , measures how well a regression line fits a set of data. How does  $R^2$  do this? Exactly what does  $R^2$  measure? It is taught that  $R^2$  is the percent of explained variance. These are nice words but what do they really mean? The measure  $R^2$  is perhaps the most confusing topic in regression and is confusing to students. This paper suggests ways to teach what the coefficient of determination and its components and interpretations are about.

**Keywords:** regression, coefficient of determination,  $R^2$ , RMSE, percent of explained variance.

## INTRODUCTION

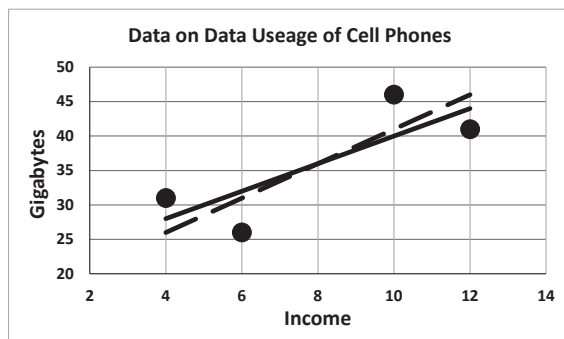
The measure  $R^2$ , the coefficient of determination, tells us how well a regression line fits a set of pairs of data. How does  $R^2$  do this? Exactly what do the components of  $R^2$  measure anyway and how does this relate to the fit of a line? Anyone with even just a little more than an introduction to regression also knows that  $R^2$  is the percent of explained variance. Exactly what does percent of explained variance mean? While many people use this phrase, there is much confusion about what it is really about. Unfortunately students will likely be confused about all of this when they are taught regression. This paper uses some strategically defined data sets and the visual representations of scatter diagrams to present ideas for the teaching of  $R^2$  and the percent of explained variance.

## WHERE THE REGRESSION LINE COMES FROM AND ABOUT $R^2$

The interpretation of the measure  $R^2$  as percent of explained variance comes from the theoretical formula:  $Var(Y) = Var(E(Y|X)) + E(Var(Y|X))$  with  $R^2 = Var(E(Y|X))/Var(Y)$ , (Bickel and Doksum, 1977, 36). One must carefully define what all these symbols represent, such as  $E(Y|X)$  denoting the regression equation and  $Var(Y|X)$  being how far a typical data point tends to be from  $E(Y|X)$ . Of course using this formula in an introductory statistics class will get you nothing but hate. This formula is far above introductory statistics but can be understood and taught at an elementary level in a simple regression model. We now present methods to explain and teach these concepts.

To put all of this in context it will be necessary to review the subject of regression. For example, a cell phone company will want to predict the data requirements of its customers and will probably use regression to make the predictions. Suppose a hypothetical data set is  $(X,Y) = (4,31) (6,26) (10,46) (12,41)$  where  $X$  is family household income (in tens of thousands of dollars) and  $Y$  is the yearly number of gigabytes of cell phone data used by the household. Figure 1 has the data scatter diagram along with two potential prediction lines (out of infinitely many possible prediction lines), a dashed line:  $Y = 16 + 2.5X$ , and a black line:  $Y = 20 + 2X$ .

**Figure 1: Data and Potential Prediction Lines**



The points in the data set do not fall on a line so that any line that is used to predict with will have some prediction error. Since you will ultimately use only one line to predict with a criteria to distinguish between lines is necessary.

That criteria is the Root Mean Square Prediction Error (*RMSE*). The *RMSE* calculation for both lines is given below in Table 1. In the calculation ‘*n*’ is the number of pairs of data (four here), ‘ $\hat{Y}$ ’ stands for predicted *Y*, and the symbol ‘*SSE*’ stands for Sum of Squared Errors.

**Table 1: Root Mean Square Error Calculations**

RMSE Calculations for the **Dashed Line**:

	Actual <i>Y</i>	Predicted <i>Y</i>	Prediction Error	Squared Error
<i>X</i>	<i>Y</i>	$\hat{Y} = 16 + 2.5X$	$Y - \hat{Y}$	$(Y - \hat{Y})^2$
4	31	26	5	25
6	26	31	-5	25
10	46	41	5	25
12	41	46	-5	25
			Sum=0	Sum= <i>SSE</i> = 100

$$RMSE(DashedLine) = \sqrt{\frac{SSE(DashedLine)}{n}} = \sqrt{\frac{100}{4}} = 5,$$

RMSE Calculations for the **Black Line**:

	Actual <i>Y</i>	Predicted <i>Y</i>	Prediction Error	Squared Error
<i>X</i>	<i>Y</i>	$\hat{Y} = 20 + 2X$	$Y - \hat{Y}$	$(Y - \hat{Y})^2$
4	31	28	3	9
6	26	32	-6	36
10	46	40	6	36
12	41	44	-3	9
			Sum=0	Sum= <i>SSE</i> = 90

$$RMSE(BlackLine) = \sqrt{\frac{SSE(BlackLine)}{n}} = \sqrt{\frac{90}{4}} \approx 4.7434.$$

In regression the *RMSE* measures a typical prediction error. This is evident from the calculation of the *RMSE* for the dashed line. For the dashed line the prediction error is 5 (ignoring the minus signs) for each pair of points and so a typical prediction error is obviously 5 and the *RMSE* is therefore 5. The *RMSE* of 4.74 for the black line is between the actual errors, which are either 3 or 6. The *RMSE* of 4.74 for black line is smaller than the *RMSE* of 5 for the dashed line showing that the black line has smaller prediction errors and is the better line for predicting *Y* from *X*. The regression line (by definition) is that line that has the smallest *RMSE* out of all possible lines and for this data set the black line is the regression line. To summarize, the first measure of fit in regression *RMSE* has two purposes. The first purpose is as a criteria for finding the best fitting line and the second purpose of *RMSE* is to tell you what a typical prediction error is for that best line.

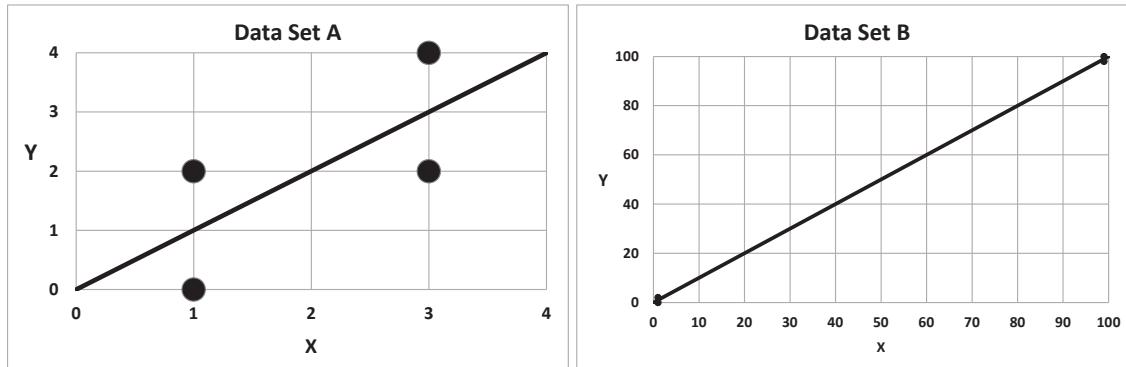
Calculus (the part for minimizing functions) is used to find the equation of the regression line by finding the line that minimizes the *RMSE*. If we write the equation of a line as:  $Y = a + bX$ , then as one learns in statistics, calculus proves that the equation for the regression line has slope:  $b = r \frac{SD(Y)}{SD(X)}$  and intercept:  $a = \bar{Y} - b\bar{X}$ , where *r* is the correlation and the *SD*’s can be either the sample *SD*’s or population *SD*’s (as long as one is consistent between the top and bottom in the formula for *b*). For the data set in Table 1, it is easy to check that  $r = .8$ ,  $\bar{X} = 8$ ,  $\bar{Y} = 36$ , and the sample *SD*’s,  $S_X$  and  $S_Y$ , are  $S_X = \sqrt{\frac{SSX}{n-1}} = \sqrt{\frac{(4-8)^2+(6-8)^2+(10-8)^2+(12-8)^2}{4-1}} = \sqrt{40/3}$  and  $S_Y = \sqrt{\frac{SSY}{n-1}} = \sqrt{\frac{(31-36)^2+(26-36)^2+(46-36)^2+(44-36)^2}{4-1}} = \sqrt{250/3}$ , so that  $b = .8 \frac{\sqrt{250/3}}{\sqrt{40/3}} = 2$ , and  $a = 36 - 2(8) = 20$ . This gives the regression line as:  $Y = 20 + 2X$ , which is the black line above.

To look at the next aspect of fitting equations to data, consider another prediction problem. Suppose that we are predicting yearly incomes of people in the United States and the *RMSE* is \$200,000. (For example, if we predict that every single person in the US makes exactly \$300,000 per year, this would give an *RMSE* of at least \$200,000.) However this would be a terrible prediction since we could do much better by just predicting that everyone makes the (available) average US income. On the other hand if we were predicting Bill Gates’ yearly income and the *RMSE* were \$200,000 this would be an excellent prediction, given Bill Gates’ place on the upper end of the income scale. Both situations have the same *RMSE*, yet in one case the predictions are terrible and in the other case the prediction is excellent. This tells us that we need something else besides *RMSE* when talking about fitting equations to data. That something else is called  $R^2$ .

Before getting to the exact definition, to see what  $R^2$  is about consider the following two data sets: Data Set A is  $(X, Y) = (1,0) (1,2) (3,2) (3,4)$ , and Data Set B is  $(X, Y) = (1,0) (1,2) (99,98) (99,100)$ . After calculation, it is seen that for Data Set A:  $r = \frac{\sqrt{2}}{2} \approx .707107$ ,  $\bar{X} = 2$ ,  $\bar{Y} = 2$ ,  $S_X = \sqrt{4/3}$ ,  $SSY = \sum(Y - \bar{Y})^2 = 8$ , and  $S_Y = \sqrt{8/3}$ ,

giving regression equation coefficients:  $b = \frac{\sqrt{2}\sqrt{8/3}}{2\sqrt{4/3}} = 1$  and  $a = 2 - (1)2 = 0$ . Therefore for Data Set A the regression equation is:  $Y = 0 + 1X$ . After calculation, it is seen that for Data Set B:  $r = \frac{\sqrt{9604}}{\sqrt{9608}} \approx .999792$ ,  $\bar{X} = 50$ ,  $\bar{Y} = 50$ ,  $S_x = \sqrt{9604/3}$ ,  $SSY = \sum(Y - \bar{Y})^2 = 9608$ , and  $S_Y = \sqrt{9608/3}$ , giving regression equation coefficients:  $b = \frac{\sqrt{9604}\sqrt{9608/3}}{\sqrt{9608}\sqrt{9604/3}} = 1$  and  $a = 50 - (1)50 = 0$ , and also giving a regression equation for Data Set B of:  $Y = 0 + 1X$ . Both data sets have the same regression equation. A graph of both data sets with their regression lines are in Figure 2. Note that Data Set A and Data Set B are on different scales. This will ultimately illustrate what  $R^2$  is about.

**Figure 2: Two Data Sets with the Same Regression Equation but Different Fits**



The *RMSE* for both data sets is computed in Table 2.

**Table 2: *RMSE* Calculations for Data Set A and Data Set B**

Data Set A					Data Set B				
$X$	$Y$	$\hat{Y} = 0 + 1X$	$Y - \hat{Y}$	$(Y - \hat{Y})^2$	$X$	$Y$	$\hat{Y} = 0 + 1X$	$Y - \hat{Y}$	$(Y - \hat{Y})^2$
1	0	1	-1	1	1	0	1	-1	1
1	2	1	1	1	1	2	1	1	1
2	1	2	-1	1	99	98	99	-1	1
2	3	2	1	1	99	100	99	1	1
				Sum=0					Sum=0
				$SSE = 4$					$SSE = 4$
$RMSE(DataSetA) = \sqrt{\frac{SSE(DataSetA)}{n}} = \sqrt{\frac{4}{4}} = 1,$					$RMSE(DataSetB) = \sqrt{\frac{SSE(DataSetB)}{n}} = \sqrt{\frac{4}{4}} = 1.$				

The prediction error,  $Y - \hat{Y}$ , is 1 for every pair of data in both data sets.

Both data sets have the same regression line and the same *RMSE*. If you are using *RMSE* as a measure of fit then the line  $Y = 0 + 1X$  fits both data sets equally well. However when looking at Figure 2, it appears that the line fits Data Set B better (points look closer to the line). The fact that Data Set B is fit better is also evident in the correlations, since the correlation between  $X$  and  $Y$  for Data Set B is approximately .9998, while the correlation between  $X$  and  $Y$  for Data Set A is approximately .7071. So *RMSE* cannot distinguish between the two data sets. This is where the second measure of fit  $R^2$  comes into play,  $R^2$  can tell the difference in fit in these two data sets. Before defining  $R^2$  exactly, let's look closer at why the line fits Data Set B better. In Data Set B the distance of the points to the line (measured by the  $RMSE = 1$ ) is small compared to the spread in the  $Y$ -values (the range of the  $Y$ 's is 0 to 100, and from previous the  $SD$  of the  $Y$ 's is  $S_Y = \sqrt{9608/3} \approx 56.6$ ). While in Data Set A the distance of the points to the line (measured by the  $RMSE = 1$ ) is similar to the spread in the  $Y$ -values (the range of the  $Y$ 's is 0 to 3, and the  $SD$  of the  $Y$ 's is  $S_Y = \sqrt{8/3} \approx 1.6$ ). In Data Set B we are comparing an error of 1 to a  $Y$ -range of 100 (or error 1 to  $SD(Y) = 56.6$ ), while in Data Set A we are comparing an error of 1 to a  $Y$ -range of 3 (or error 1 to  $SD(Y) = 1.6$ ). This is why the line fits Data Set B better. What  $R^2$  does is to measure the extent to which this happens. Since the standard deviation is the more common way to measure spread (compared to the range as a

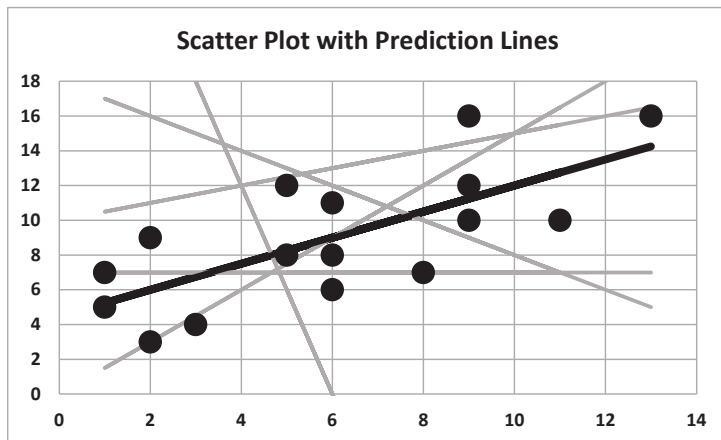
measure of spread),  $R^2$  will be defined by in some way comparing the  $RMSE$  to  $SD(Y)$ . Since  $RMSE = \sqrt{SSE/n}$ , this gives that  $SSE$  is also a measure of the distance of the points to the line (just on a different scale). For example, if  $SSE$  is small then  $RMSE$  will be small and vice versa. Since the sample standard deviation is  $SD(Y) = \sqrt{SSY/(n-1)}$ , this shows that  $SSY$  is also a measure of the spread in the  $Y$ 's (just on a different scale). This is in the sense that if  $SSY$  is large then  $SD(Y)$  will be large also and vice versa. Finally  $R^2$  is defined as

**Equation 1:** 
$$R^2 = 1 - \frac{SSE}{SSY} \quad \text{or} \quad R^2 = \left(1 - \frac{SSE}{SSY}\right) \times 100\%.$$

If a line fits the data well then the prediction error, as measured by  $SSE$ , will be much smaller than the spread in the  $Y$ 's, as measured by  $SSY$ , and  $R^2$  will be close to 1 (or 100%). For Data Set A:  $SSE = 4$ ,  $SSY = 8$ , and  $R^2 = 1 - 4/8 = .5$ , while for Data Set B:  $SSE = 4$ , but  $SSY = 9608$ , and  $R^2 = 1 - 4/9608 = .999584$ . Thus  $R^2$  can distinguish between Data Set A and Data Set B while  $RMSE$  cannot. In this sense  $R^2$  can be called the coefficient of determination.

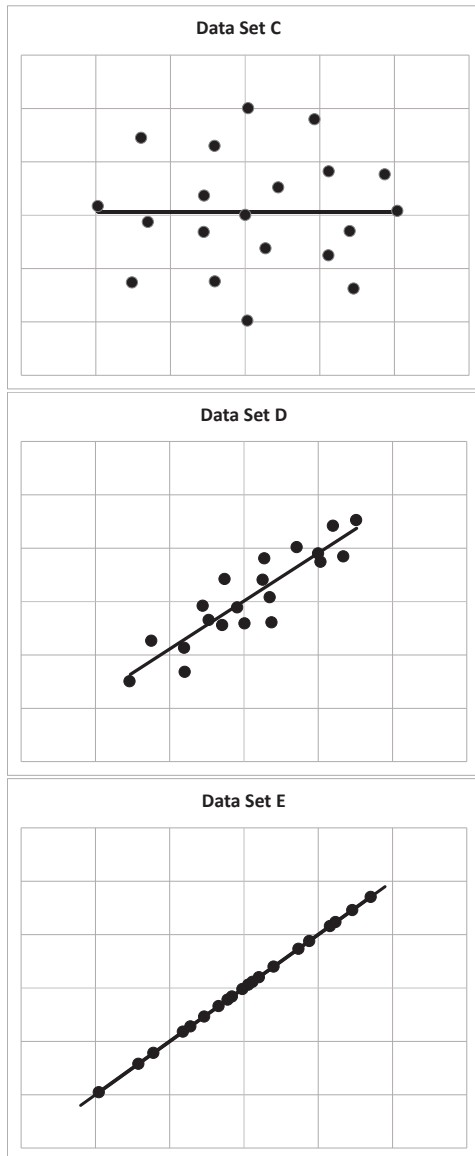
The two measures of fit in regression,  $RMSE$  and  $R^2$ , can be characterized in the following way. There are infinitely many lines that could be fit to a set of data and  $RMSE$  chooses the best one (the regression line) out of that infinite set of lines. This is illustrated in the Figure 3 below.  $RMSE$  then measures and tells you what a typical prediction error is for that best line, the regression line. Once you have the best line,  $R^2$  tells if that best line fits or not. This is illustrated in Figure 4 below, where  $R^2$  distinguishes between three different scatter diagrams. Figure 3 and Figure 4 demonstrate the difference between  $RMSE$  and  $R^2$ . Sometimes even the best line does not do very well, which  $R^2$  will show.

**Figure 3: The Purpose of RMSE**



$RMSE$  picks out the best line for predicting  $Y$  from  $X$ . The regression line (in black) is the best prediction line. The  $RMSE$  of the regression line, when calculated here, is about 2.5 units. A typical data point is about 2.5 units directly above or directly below the black line. Some points are more than this and some are less.

**Figure 4: Data Sets with Different  $R^2$  Values**



*RMSE* says the regression line (in black) is the best line for predicting  $Y$  from  $X$ . However since this data is basically a ball and balls do not look like lines, no line (including the regression line) fits very well.

Here  $R^2 = 0$

*RMSE* says the regression line (in black) is best here. The regression line fits fairly well.

Here  $R^2 = .5$ , when calculated.

*RMSE* says the regression line (in black) is best here also. Here the regression line fits perfectly, there is no prediction error.

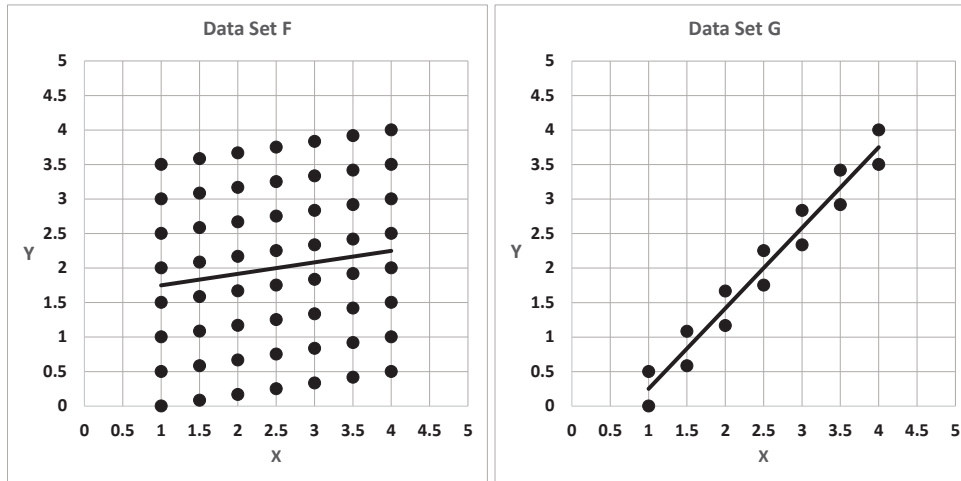
Here  $R^2 = 1$ .

*RMSE* is a relative measure of fit while  $R^2$  is a more absolute measure of fit. In a data set if someone tells you that  $R^2 = .5$ , then you know that the data looks something like Data Set D. If someone tells you that the  $RMSE = 108$  and you do not have other any information, then you don't have any idea what the data looks like (except that it could not look like Data Set E, which has  $RMSE = 0$ ). In a relative sense we know that we want  $RMSE$  to be small and  $R^2$  to be high. You would need other information to tell if 108 is an acceptable prediction error or not. In one situation 108 might be good and in another situation it might be terrible. The measure  $R^2$  utilizes that other information. For a data set the  $RMSE$  can be anything between zero and infinity but with smaller better and zero best. However  $R^2$  has an absolute scale of 0 to 1. In  $R^2$  the absolute best is 1 and the absolute worst is 0. If Data Sets C, D, and E in Figure 4 were all on the same scale (range of  $X$ 's and  $Y$ 's the same, which you cannot tell since the axis are not labeled) then the  $RMSE$  could distinguish between them and would tell us that the regression line fits E best then D then C. However, ultimately  $R^2$  is a more important measure of fit since it is comparable across all data sets whether they have the same  $X$  and  $Y$  range or not. [That doesn't mean  $RMSE$  is not important since it tells you a typical prediction error. With knowledge of only the  $RMSE$ , you could still decide if that size of prediction error is acceptable.]

## PERCENT OF EXPLAINED VARIANCE

The term “percent of explained variance” in regression is short for the “percent of explained variance of  $Y$  which is explained by the variability in the regression equation”. Now what does that second phrase mean? The meaning is illustrated by Data Set F and Data Set G in Figure 5 and explained thereafter. The black line in both pictures is their respective regression lines.

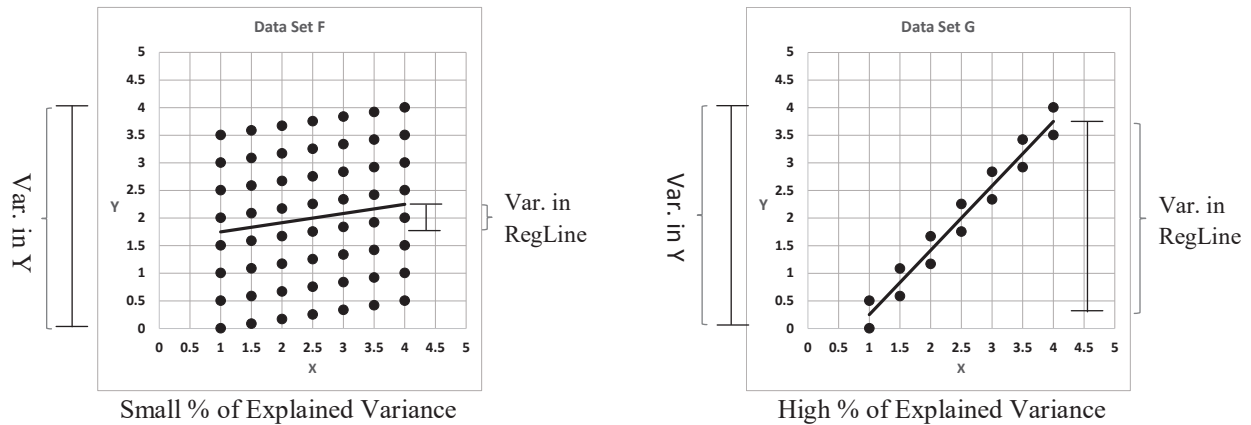
**Figure 5: A Graph of the Regression Line for Two Different Data Sets**



In Figure 5 you can see that Data Set F has a relatively low but positive correlation, while Data Set G has a relatively high and positive correlation. Since the slope of the regression line is:  $b = r SD(Y)/SD(X)$ , where  $r$  is the correlation, if you don't worry too much about the  $SD$ 's then  $b$  for Data Set F will be small but positive while  $b$  for Data Set G will be high and positive. This tells you that the regression line for Data Set F is relatively flat, while the regression line for Data Set G will be relatively steep. This is evident in Figure 5.

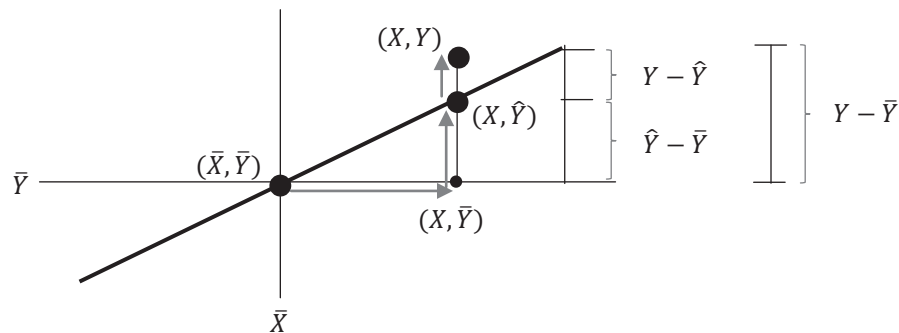
The percent of explained variance compares the variability in the  $Y$ -values to the variability in the regression line. For the moment we will use the range (top to bottom) as a measure of variability. In both data sets the lowest  $Y$ -value is  $Y = 0$ , at the point  $(X, Y) = (1, 0)$ , and the highest  $Y$ -value is at  $Y = 4$  at the point  $(4, 4)$ . Both data sets then have  $Y$ -ranges of 4 or said another way a  $Y$ -variability of 4. For the range of the regression line for Data Set F, the lowest part of the regression line has  $Y = 1.75$  at the point  $(X, Y) = (1, 1.75)$  and the highest point on the regression line has  $Y = 2.25$  at the point  $(4, 2.25)$ , giving a regression line range of  $.5 = 2.25 - 1.75$ . This regression line range will be called the RegLine-variability. For Data Set F we are comparing a RegLine-variability of 0.5 to a  $Y$ -variability of 4.0. Since 0.5 is quite a bit smaller than 4.0, we say that the regression line for Data Set F has a low percent of explained variance. For Data Set G the lowest part of the regression line has  $Y = .25$  at the point  $(1, .25)$  and the highest point on the regression line has  $Y = 3.75$  at the point  $(4, 3.75)$ , giving a regression line range of  $3.5 = 3.75 - .25$ . For Data Set G we are comparing a RegLine-variability of 3.5 to a  $Y$ -variability of 4.0, which are almost the same. We say that the regression line for Data Set G has a high percent of explained variance. The comparative ranges or distances are illustrated in Figure 6, showing what percent of explained variance is about.

**Figure 6: Illustrating Percent of Explained Variance**



There is a second qualitative and quantitative way to think about the percent of explained variance. Think about how can you go from the point  $(\bar{X}, \bar{Y})$  to a data pair  $(X, Y)$ . This is accomplished as follows. Starting from  $(\bar{X}, \bar{Y})$  go along horizontal to the point  $(X, \bar{Y})$ , then go vertical to the regression line to the point  $(X, \hat{Y})$ , and then go from the point  $(X, \hat{Y})$  to the point  $(X, Y)$ , as illustrated in Figure 7.

**Figure 7: An Alternative Interpretation of Percent of Explained Variance**



On the journey from  $(\bar{X}, \bar{Y})$  to  $(X, Y)$ , in general the longer the distance  $\hat{Y} - \bar{Y}$  compared to the distance  $Y - \hat{Y}$  the higher the percent of explained variance. This is evident in Figure 6 where when moving along the regression line you move a greater vertical distance up or down for Data Set G than for Data Set F, while moving off the regression line to the points requires a smaller distance traveled for Data Set G compared to Data Set F. [The point  $(X, \hat{Y})$  is on the regression line since you get  $\hat{Y}$  by plugging in  $X$  into the regression equation. The point  $(\bar{X}, \bar{Y})$  is also on the regression line since  $a = \bar{Y} - b\bar{X}$ , the regression equation  $Y = a + bX$  can be rewritten as  $Y = \bar{Y} - b\bar{X} + bX$ . When plugging in  $\bar{X}$  for  $X$  into the equation, the predicted  $Y$  is  $\bar{Y}$ .]

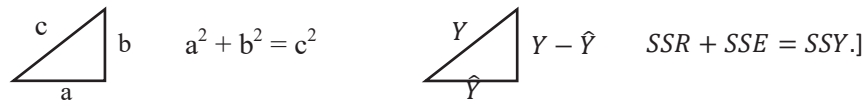
Figure 6 showed variability using ranges since they are easy to see on a scatter diagram. The actual percent of explained variance is not defined in terms of ranges, but instead defined with the more commonly used measures of spread such as standard deviations and variances, which are not easy to see on pictures. [We will need to remember that  $Var = SD^2$ .] For the actual quantitative definition of percent of explained variance, start with  $Y$  and then rewrite  $Y$  as  $Y = \hat{Y} + (Y - \hat{Y})$ . Next subtract  $\bar{Y}$  from both sides to get:  $Y - \bar{Y} = \hat{Y} - \bar{Y} + (Y - \hat{Y})$  or  $(Y - \bar{Y}) = (\hat{Y} - \bar{Y}) + (Y - \hat{Y})$ . After that perform the calculations in Table 3 (done on the cell phone data since it has fewer numbers). For the percent of explained variance we will quantitatively compare the spread in the regression line to the spread in the  $Y$ 's.



**Table 3: Showing  $SSY = SSR + SSE$**

$X$	$Y$	$\hat{Y} = 20 + 2X$	$Y - \bar{Y}$	$(Y - \bar{Y})^2$	$\hat{Y} - \bar{Y}$	$(\hat{Y} - \bar{Y})^2$	$Y - \hat{Y}$	$(Y - \hat{Y})^2$
4	31	28	-5	25	-8	64	3	9
6	26	32	-10	100	-4	16	-6	36
10	46	40	10	100	4	16	6	36
12	<u>41</u>	44	5	<u>25</u>	<u>8</u>	<u>64</u>	-3	<u>9</u>
	$\bar{Y} = 36$			Sum= $SSY=250$ $= \sum(Y - \bar{Y})^2$		Sum= $SSR=SS\hat{Y}=160$ $= \sum(\hat{Y} - \bar{Y})^2$		Sum= $SSE=90$ $= \sum(Y - \hat{Y})^2$

As learned in introductory statistics and shown previously in the paper, the sum  $SSY$  is used to calculate  $SD(Y)$ . The symbol ‘ $SSR$ ’ stands for “sum of squares regression”, with the name coming from the fact the predicted  $Y$ , the  $\hat{Y}$ ’s, in  $SSR$  come from the regression line. In Table 3 you can see that in this case  $SSY = SSR + SSE$ . It turns out that in the theory of regression it can be proved that this happens for every data set as long as there is an intercept term in the regression equation and the  $\hat{Y}$  come from the regression equation (as opposed to predictions from some other line). [This relationship is in fact related to the Pythagorean Theorem, which says that if two legs of a triangle are perpendicular then  $a^2 + b^2 = c^2$ . If you consider the  $\hat{Y}$ -values as a vector and the  $(Y - \hat{Y})$ -values as a vector, the theory of regression shows that  $\hat{Y}$  and  $Y - \hat{Y}$  are perpendicular vectors. So



This relationship will give an alternate formula for  $R^2$ , compared to Equation 1. You get that by dividing everything in the relationship by  $SSY$ , which gives  $SSY/SSY = SSR/SSY + SSE/SSY$  or  $1 - SSE/SSY = SSR/SSY$ . Since the definition of  $R^2$  is  $R^2 = 1 - SSE/SSY$ , the above relationship now gives  $R^2 = SSR/SSY = SS\hat{Y}/SSY$ . From this version of  $R^2$  we get the interpretation “percent of explained variance” in the following way. One must first be specific about how to calculate variance. Remember that  $SD(Y) = \sqrt{SSY/(n - 1)}$ , so that  $Variance(Y) = Var(Y) = SD(Y)^2 = SSY/(n - 1)$ . In other words you get  $Var(Y)$  by taking the  $Y$ ’s, subtracting their average, squaring them, adding the squares, and then dividing by  $n - 1$ . You would do the same thing to the  $\hat{Y}$ ’s to get  $Var(\hat{Y})$ . It is necessary to first find the average of the  $\hat{Y}$ ’s. If predicting with a line so that  $\hat{Y}_i = a + bX_i$ , for constants  $a$  and  $b$ , then averaging over all predicted values leads to  $\bar{\hat{Y}} = a + b\bar{X}$ . If as is the case for the regression line,  $a = \bar{Y} - b\bar{X}$ , then  $\bar{\hat{Y}} = (\bar{Y} - b\bar{X}) + b\bar{X} = \bar{Y}$ . [For the Black Line, in Table 1:

$\bar{\hat{Y}} = (28 + 32 + 40 + 44)/4 = 36 = \bar{Y}$ .] So in  $SSR = SS\hat{Y}$  you are taking the  $\hat{Y}$ ’s, subtracting their average, squaring them, adding the squares, and then dividing by  $n - 1$ . You must then get  $Var(\hat{Y})$ . Therefore

$$R^2 = \frac{SSR}{SSY} = \frac{SS\hat{Y}}{SSY} = \frac{SS\hat{Y}/(n - 1)}{SSY/(n - 1)} = \frac{Var(\hat{Y})}{Var(Y)}$$

$Var(Y)$  is a representative of the variability of  $Y$ , and since  $\hat{Y}$  comes from the regression equation  $Var(\hat{Y})$  represents the variability in the regression equation. The above ratio is where the meaning of  $R^2$  as the percent of explained variance comes from (a percent is a part divided by the whole times 100%). [Note: some books use  $SST$ , “sum of squares total” for  $SSY$ .] For the cell phone data:  $R^2 = SSR/SSY = 160/250 = .64$ .

The multiple correlation  $R$  is defined as  $R = \sqrt{R^2}$ . In the case, where there is only one predictor  $X$ , it can be proved that  $R = r$ , where  $r = Corr(Y, X)$ . Thus  $R$  can be interpreted as a correlation. For the cell phone data:  $r = .8$  and  $R = \sqrt{.64} = .8$ . [When there is one predictor then  $R^2 = r^2$  also]. There is also a second interpretation of  $R$ . From Table 3,  $(Y, \hat{Y}) = (31,28) (26,32) (46,40) (41,44)$  and if you correlate these two sets of numbers it can be proved that  $R = Corr(Y, \hat{Y})$  also. [For the cell phone data:  $Corr(Y, \hat{Y}) = .8$ .] The closer the predictions  $\hat{Y}$  are to the actual  $Y$ ’s, the higher the  $Corr(Y, \hat{Y})$  will be, and the higher  $R$  and  $R^2$  will be.

## CONCLUSION

The measure  $R^2$ , the coefficient of determination, is the ultimate measure of whether a regression equation fits a data set. Therefore  $R^2$  is quoted all the time. However despite its constant use there is a lot of mystery about what it really means. That results in a lot of difficulty in the teaching of  $R^2$ . This paper illustrates how one might teach what the components of  $R^2$  are about and therefore lets students understand how  $R^2$  measures whether a regression equation fits or not. Next the coefficient of determination has an interpretation as the percent of explained variance. This phrase is also confusing and the paper suggests ways of looking at explained variance so that it can be understood by students. Finally the multiple correlation,  $R$ , is discussed, completing the teaching of fit in regression.

## REFERENCES

Bickel, P. and Doksum, K. (1977). *Mathematical Statistics*. San Francisco: Holden Day.

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# SCICAP Credit Union: A Theft of \$2.7 Million over 37 Years

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## ABSTRACT

SCICAP Credit Union failed as a result of an embezzlement scheme by a long-term employee that went undetected over a period of 37 years. Through this case, the student is exposed to the concept of internal controls, and also will discuss how internal controls can be established and maintained within a financial institution setting.

The student will reflect on the responsibility of the Board of Directors and Supervisory Committee for the well being of a financial institution, as well as issues that may be faced if one were in a supervisory role of an organization and suspicious of an active fraud. This case allows students to understand and apply internal control concepts at several levels of Bloom's Taxonomy within the setting of one case.

**Keywords:** Fraud examination, internal controls, auditors, case study

## BACKGROUND

The SCICAP Credit Union was a small credit union based in Chariaton, Iowa (USA). The credit union was chartered in 1968 and established to serve the banking needs of various municipal employees within the rural area of Iowa. The small Credit Union had 828 members and \$2 million in assets.

Ten years after its inception, management made an employee hire that would eventually lead to its demise. From the time Linda Lee Clark was hired in 1978 to the time she was terminated in 2015, she managed to embezzle over \$2.4 million dollars. The total amount embezzled was more than what the credit union had in assets at any given point in time.

Mrs. Clark managed to embezzle the credit union assets right under the wings of employees, the CEO, the Supervisory Committee and Board of Directors. For thirty-seven years Mrs. Clark was able to maintain two separate sets of books on the credit union data processing system. Mrs. Clark was the only credit union employee with access to the system, and if others requested access, including the CEO, she refused to grant it. If management suggested that Mrs. Clark take a vacation, she declined and never missed a day of work throughout her thirty-seven year tenure as an employee.

Of the two databases Mrs. Clark maintained on the system, one database maintained all deposit and loan balances members would expect to see upon review of monthly statements. The second database contained altered financial information that was used to provide required financial reports to regulators and call reports. The balances in the altered database were adjusted by amounts that were removed from customer accounts. Mrs. Clark was able to re direct deposits from account holders to accounts of her children, as well as her personal account. Mrs. Clark was diverting approximately \$60,000 per year from customer deposit accounts to her own accounts as well as her children.

As Mrs. Clark had full control of database systems, statements provided to customers were overstated to reflect what the balance should show. If a transaction caused an account to have insufficient funds due to a lower actual balance, Mrs. Clark was able to cover the balance without the customer ever becoming aware of the insufficient fund balance.

Credit union employees, the board of directors, or supervisory committee never uncovered the fraud and had no idea that there was any fraud at any point in time. The only reason that the fraud became known was because Mrs. Clark decided to report it due to her age and fear of dying in prison in the event she ever was caught. Upon surrender to authorities, Mrs. Clark pled guilty to embezzlement and is subject to up to 30 years in prison.

After the fraud was reported, the NCUA (National Credit Union Association) who is the United States Federal credit union regulator took over operation of the credit union. The NCUA closed the credit union down and transferred deposits and assets to another credit union in the area. The NCUA, who is also an insurer of accounts in the event a credit union goes insolvent, also restored customer account balances to what they should have been.

## **Who is Responsible for this Crime Not Being Discovered?**

A credit union provides many of the same services as a traditional bank, but is owned by account holders (known as members) where stockholders own banks. One additional significant difference between credit unions and banks is that credit unions are tax-exempt as they are considered a not-for-profit institution. Each depositor within a credit union owns one share of ownership and has one equal vote on official matters. Credit unions are established to represent a specific group of people, such as employees of a specific organization or geographic region. Governance of a credit union is maintained through a board of directors and supervisory committee. Board members and supervisory committee members are account holders within the credit union who are nominated and voted to their positions by the general membership based on the one vote per member model.

### *Role of the Board of Directors*

Members of a credit union board of directors serve on a volunteer basis. The board of directors has final governing authority over all credit union matters. In a vast majority of credit unions the board will hire a CEO who manages day-to-day operations. The CEO reports to the board on a regular basis, at least monthly, but the board has final say on all operational decisions. Even as volunteers, when one serves as a member of the board of directors they have a fiduciary responsibility to all members of the credit union. Fiduciary responsibility means that the board member is legally charged to always act in the best interest of credit union members, even if the decision that is in the best of interest of general membership is not in the best interest of the individual board member. Due to the responsibility bestowed, board members should have a financial background and proper experience to understand the management of a financial institution. Based on the limited scope of membership many credit unions have, a board of directors with financial background is not always possible. Many credit unions are governed by board members who have limited experience and gain experience on the job, or through training sessions managed by the NCUA.

A typical expectation is that board members have full access to all financial information and full access to all other information that would be used within the day-to-day operating decisions. A qualified member of the board of directors should have the knowledge and skill to understand the operations and performance of the credit union with no need to question the CEO, employees or other members of the board.

### *Role of the Supervisory Committee*

The board of directors is required to work with the supervisory committee in the management and oversight of the organization. Another name for the supervisory committee is the audit committee. Many will define the supervisory committee as the ‘watchdog’ of the credit union. Supervisory committee members should be independent of the board, though many supervisory committees may have one member who also serves on the board to assure open communication between the two groups.

The primary role of the supervisory committee is to on an annual basis complete a supervisory audit and present audit results to the board of directors. At a minimum of once every two years the supervisory committee must perform a verification of account balances.

The primary responsibility of the supervisory committee is to provide assurance that the board of directors is safeguarding the credit unions assets and that management is within compliance of policies and procedures of the credit union. Results of the supervisory committee audit are to be reported to the credit union membership at the required annual membership meeting, which is open to all account holders. A major part of the aforementioned responsibilities of the supervisory committee is to review internal controls, investigate all member complaints and provide recommendations to the board of directors for safeguards and policy changes to reflect the best interest of members. Like membership on the board of directors, this is also a volunteer position. Larger credit union supervisory committees often enlist the help of outside accounting firms to conduct the required annual audit and assist in matters. Smaller credit unions, such as SCICAP often conduct all procedures by the supervisory committee members using protocols provided by NCUA without the help of professional accounting firms. Supervisory committee members also have a fiduciary responsibility to membership in the same manner as the board of directors.

## QUESTIONS

### Part I

1. The supervisory committee of a credit union has a responsibility of establishing and setting internal controls for the credit union. Define what an internal control is and provide examples of policies and procedures organizations can utilize as internal controls.
2. In the specific instance of SCICAP Credit Union, being a small credit union with few employees, what are some specific internal controls that you would recommend to the board of directors and management to protect the integrity of member account balances?
3. Imagine that you are a member of the credit union supervisory committee, and you are aware that Mrs. Clark has exclusive access to the credit union reporting databases. You communicate the concerns to the board of directors, as well as the CEO and see no action taken to resolve the situation. A common response that a CEO and board may provide in a case such as this is “Mrs. Clark has been here for years, and does a great job, so we have nothing to be concerned with.” What recourse do you have to resolve the concern?

### Part II

To answer questions to part II, please visit the website of the National Credit Union Association (NCUA) at <http://ncua.gov>.

1. Visit the ‘small credit union’ learning center. Based on the material presented within this website, what should the supervisory committee have done that may have helped detect this fraud, or prevent it from ever occurring? Please cite specific areas from the website within your answer.
2. Looking at the governing structure of a credit union, specifically the CEO, board of directors and supervisory committee, could any of these individuals be found negligent and held responsible for losses incurred by the embezzlement? Explain and provide support from the NCUA website.
3. Imagine that you are an accountant for an accounting firm that specializes in small credit unions. You have been asked by another credit union to conduct a supervisory committee annual audit. The reason this prospective Credit Union is seeking your services is in response to the failure of SCICAP Credit Union. Prepare a letter to the Supervisory Committee of the credit union discussing specific procedures and internal controls you would suggest a credit union utilize to prevent a fraud such as SCICAP from occurring.

## IMPLEMENTATION GUIDANCE

### Learning Objectives

The learning objectives of this case are as follows:

- To develop a basic understanding of how a financial institution operates. Specifically to explain management structure and responsibility for protecting the integrity of assets, and related policies.
- To review the definition of internal controls, as well as identify common internal controls that one would find within a variety of organizations.
- To develop or reinforce analytical skills and require that internal control concepts be applied to management decisions of a business entity.
- To develop or reinforce necessary communication skills required of a business professional.

### Presentation Notes

This is a simple case that can be utilized to develop internal control background initially in the introductory accounting course, or for an auditing course to more in depth reinforce the workings of internal controls. The learning objectives reflect students in both areas of study.

### Ability to Alter The Case to Classroom Needs

The requirements of this case have been split into two separate blocks based on requirements and expectations specific to the instructor and course. Part I of the case questions are designed to test the lowest levels of Bloom’s Taxonomy to ‘understand and explain’ internal controls. Part II of the case questions are designed to demonstrate understanding at higher levels through the ‘apply, analyze and create’ functions of Blooms Taxonomy. These higher levels are demonstrated through the student ability to utilize the National Credit Union Association (NCUA) website to make recommendations, draw conclusions, and create a document to communicate findings in a professional manner as expected of a professional accountant. The communication of findings in a client letter is an important skill for the development of a professional accountant as reported by Lafrancols (1992).

The questions in Part II are intended to introduce and develop the higher level critical thinking skills required on professional examinations such as the 2017 American Institute of Certified Public Accountants (AICPA) Uniform CPA exam (AICPA 2016), and to develop skills that are argued to be a common disconnect between accounting education and the profession (Jackling and DeLange 2009; Yu and Churyk 2013). This case can also serve as an effective measure to teach a crucial accounting concept consistent with Ashbaugh and Johnstone (2000). Based on the background of the specific course taught, instructors may select to assign parts I or II independently of each other.

### **Use as Written Assignment or Discussion Case**

For this case to be successful as a written assignment, prior to coverage of this case, it is suggested that the instructor:

- Briefly review principles of internal control. Assigned reading from an appropriate course textbook is encouraged. Students need to understand basic principles of internal control. This is assessed in Part I of the case.
- Have the student imagine that s/he is a member of the supervisory committee of this credit union that should have detected this theft. The case provides a description of the role the board of directors and supervisory committee play in credit union management to assist in this role-play.
- Discuss the theft, how regulators inspect a financial institution, how they would be provided information, and the source of this information.
- Assure that students understand how credit unions such as SCICAP operate in a manner very similar to banks, and how frauds can be common within these settings.

This case was not tested as a discussion case, but it could be utilized as one. As a discussion case, instructors may wish to have students prepare by reading the case first and answering one or all of the questions in Part I. In class, the instructor could have students present their answers to part I, and as a class utilize the NCUA website to answer question 1 of part II together, and allow students to share opinions and thoughts on Question two. The client letter requirement can be a concluding assignment where students would reflect on their learning as they prepare the letter.

### **Timing**

As a written assignment, this case will require approximately twenty minutes to introduce the case and provide background on the fraud. Students reported that it took them approximately 3 hours to read the case, and complete all questions, including the client letter in Part II.

As a discussion case, it is expected to require approximately an hour of advance preparation by the student. The student will need to read the case, and also review and develop a familiarity of the NCUA website where analysis will generate answers to questions in Part II. An instructor should be able to spend approximately one hour in class discussing the case.

### **Classroom Validation**

The case was tested during an introductory accounting course, which blended financial and managerial accounting coverage at two private institutions in the United States. The case was tested as a written assignment, which is preferred by the author as opposed to a discussion case. Table 1 presents a summary of results based on the rubric utilized. Anonymous feedback was received from students within the courses through a likert scale rating responses from 1 to 5. 1 = strongly disagree and 5 = strongly agree. Results of student perceptions from the case are presented in table 2.

**Table 1: Summary Grading Rubric**  
N = 28

Task	Potential Points	Student Average
Clear definition of internal controls	10	9
Provides examples of policies and procedures organizations can utilize	15	13
Provides adequate recommendations to the board of directors	15	13
Can provide an opinion on recourse that a member of the supervisory committee would have in the event concerns are not adequately addressed by management	15	14
Can cite specific areas from the NCUA website discussing supervisory committee responsibility	15	12
Provides discussion (with support) on the possible negligence of the board and supervisory committee	15	11
Can communicate advice to potential client clearly in a client letter.	15	12
Total	100	84/100

**Table 2: Summary of Student Survey Responses**  
N = 28

Survey Question	Mean Response
This case improved my understanding of internal controls	4
This case improved my understanding of the importance specific internal controls have within a financial institution.	4.6
This case helped me reinforce my written communication skills.	3.2
I found this case interesting	4.1
This case was a positive learning experience	4
I would like to see more cases such as this in future classes	4

A significant portion of the students did perform well on the case, and also found the learning experience beneficial, and interesting. The impressions of the students are consistent with performance per the grading rubric. In one of the courses tested, end of course teaching evaluations contained the following comments:

*“Great case, taught the importance of internal controls”*

*“Case made me think how careful management has to be to trust any employee. Wow. Learned a lot from the case.”*

No negative comments from the students were reported.

The area of the weakest perceived learning was improvement of communication skills, but with the mean above 3 this still is a positive measure of learning. Instructors may wish to provide additional discussion on professional communication as part of the case assignment prior to assignment of the case. During the testing of the case, there was little discussion on how to write a professional letter. Students were provided a template of a professional letter with little instruction. It is also important to note that the class sections where this case was tested did have a higher than average percentage of non-traditional students. These students often have more professional experience than traditional students and may not need the additional experience in communication as required by traditional students, and see less value to the need of client letter preparation as part of the assignment requirement.

## TEACHING NOTES

The purpose of this case is to 1) teach internal controls; and 2) apply internal control practices in a comprehensive case, so that the student can easily connect concepts to application, and see all levels of Bloom's Taxonomy in a comprehensive manner. In the first question asked, the student was required to demonstrate a basic understanding of what an internal control is, as well as provide general examples of internal controls, but not a specific application to the case. It is important that the student can first state what an internal control is and secondly produce examples that common internal controls within an organization are, while referencing the following categories:

- Clear statement of responsibilities
- Maintain and protect adequate records
- Have adequate insurance
- Separation of duties
- Utilize technology
- Have employee functions independently reviewed

After students can define and provide general examples of internal controls, students in the second question should based on prior responses present an opinion on controls that could be utilized. There is not one correct answer to this question, but specific examples should be based on the need for an increased separation of duties; that the former employee should never have had exclusive access to the system. Also, that the president of the credit union (or employee designee) should be routinely reviewing the work performed. It is very common within credit unions for a designee to review transactions, system access and to report any suspicious transactions conducted by employees to the supervisory committee. In small credit unions in which there is not an internal auditor working for the organization, a member of the supervisory committee may have access to the system and the ability to directly review employee activity. Having a mandatory vacation policy would have also required another individual to perform the task of the employee and uncover the second deposit database.

The third question brings in the question of ethics, and the responsibility of an individual to report actions. At the introductory level, students who have familiarity with Sarbanes-Oxley, specifically in the USA may assume that the act applies in this instance. As a non-public entity there is no Sarbanes-Oxley mandate. As the case does state that the supervisory committee has a fiduciary duty to members, there is a legal and ethical obligation to report concerns to appropriate officials outside the credit union, but this should only occur if the board and management have not been responsive initially. Based on the facts of this case the board or supervisory committee had no knowledge or suspicion of the theft. Whether or not they should have had knowledge is for later discussion. If one has knowledge or suspicion and cannot obtain support to investigate further from other supervisory committee members, the board or management, there is a responsibility to report concerns to the NCUA who regulate the behavior of the credit union. If a board member or supervisory committee member is aware of wrongdoing and reports it, the individual can be absolved from violating fiduciary duty. If one is aware of wrongdoing and does not report it, there can be significant penalties assessed to the individual.

Part II of the case requires the student to take the content from Part I, and specifically apply it to SCICAP Credit Union using NCUA regulations as to responsibility to implement adequate internal controls.

The first question requires the student to utilize the NCUA website as well as guide to develop an understanding of responsibilities the Board, Supervisory Committee and management have for the situation. The first question provides a basis to address the second question relative to liability these parties may face, and negligence. Suggested analysis could include:

Under chapter 3 of the Supervisory Committee Guide, section 3.02 states that it is a requirement to review audit findings and ensure management take the necessary corrective action. As in the previous question, if one has a concern, one must document it and then make sure the action taken by management "must be adequate to correct the findings." Section 3.05 also states that one should "use the examination report as a resource to help with identifying and improving any weaknesses . . . audit report(s) should also document material deficiencies in polices." Lastly in this chapter, if one believes that that an action or lack of action may affect the credit union, one "should exercise authority to take action (suspend a board member or executive office by calling a vote) or contact the examiner, the NCUA regional office, or state supervisory authority.



In chapter 4, the guide lists several additional procedures that the supervisory committee should consider shown below. Some of these could have been implemented in the case study and possibly prevented the fraud.

- Conduct surprise cash counts
- Reconcile or verify the accuracy of the credit union's bank reconciliation for three concurrent months
- Review employee accounts for preferential treatment or unusual activity. This procedure might have led to findings on Mrs. Clark's accounts and her family's accounts.
- Review internal control reports.
- Ensure that all employees take at least one week of continuous vacation. Mrs. Clark did not take any vacation in 37 years. This should have been a red flag.

Section 4.15 also states that supervisory committee members have "access to all of the credit union's records, without exception." As Mrs. Clark denied this access, this should have been a red flag.

Under section 7.07 the guide lists several items that should be the focus of supervisory committee members when reviewing internal controls. Some "flags" which may have drawn the committee's attention in the case of the SCICAP Credit Union include:

- One or two people do the work due to limited staff size.
- Lack of board approved policies.
- Lack of segregation of duties (no dual controls).
- Lack of mandatory vacation policy for all employees.
- Failure to maintain adequate audit trails.
- Record keeping problems.

Appendix 8A lists a very specific checklist for internal control of cash in bank. A few from this list, which would apply to the case study include:

- Are bank deposits prepared by an official or employee who does not serve as a teller? This is to test for proper segregation of duties. Mrs. Clark performed both so this should have been a red flag.
- Are all check signers authorized by the board of directors? This determines if internal controls prevent check signers from also posting transactions to the general ledger. This was not the case with Mrs. Clark.
- Do persons not directly involved in handling cash or the accounting records consistently on a monthly basis prepare bank reconciliations promptly? Again proper segregation of duties was not the case for Mrs. Clark – another red flag.
- Does the supervisory committee, internal auditor, or other management employee periodically review bank account reconciliations? This is recommended to strengthen internal controls. This was not happening in the case of the SCICAP Credit Union.

If procedures as outlined were followed, it is hard to believe that management, the board or supervisory committee could have not been aware of any wrongdoing.

The second question requires the student to utilize the analysis from the previous question and make a determination if there was negligence based on the information provided. Though there is subjectivity as to a correct answer, it is reasonable to argue that the board of directors, CEO, and supervisory committee could all be found negligent and held responsible for losses incurred by the embezzlement. These positions are a serious matter. The overall success of the credit union is dependent on these positions. People in these roles understand and fully accept their fiduciary responsibilities to the credit union members and they must maintain the members' best interest at all times. Part of this role is to catch and prevent fraud. In section 3.08 of the guidebook, NCUA states the "inability to fulfill the duties of your office can only bring harm to the credit union and its members . . . under certain circumstances (bad faith, negligence, dishonesty, etc.) NCUA can impose sanctions against management and penalties against the credit union." Both the *Truth in Lending Act* and the *Equal Credit Opportunity Act* contain a liability provision to protect members against noncompliance by the credit union management. Based on the magnitude of Mrs. Clark's behavior, it can be easily argued that the management team did not adequately complete their duties.

The third question serves the purpose of development and reinforcement of communication skills. For undergraduate students utilizing the case, this may be a first experience at development of a client letter, while a

graduate student might be more experienced in professional communication and find this portion of the case less value added. The instructor should provide samples of how a client letter is formatted prior to the assignment, so that the student has guidance. There is not one specific letter as a correct answer, but evaluation should look at style of communication, and ability to communicate findings as reported within previous questions. Sample letters that were submitted by students during the testing of the case are located in Appendix A.

## REFERENCES

- AICPA (2016). Practice analysis final report: Maintaining the Relevance of the Uniform CPA Exam.
- Ashbaugh, H. and Johnstone, K. M. (2000). Developing students' technical knowledge and professional skills: A sequence of short cases in intermediate financial accounting. *Issues in Accounting Education*, 15(1): 67-88.
- Jackling, B. and De Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education: An International Journal*, 18(4-5): 369-385.
- LaFrancois, H. A. (1992). The marketing of an accounting graduate: Characteristics most desired by CPA firms. *Journal of Education for Business*, 67(4): 206-209.
- Yu, S. C. and Churyk, N. T. (2013). Are students ready for their future accounting careers? Insights from observed perception gaps among employers, interns, and alumni. *Global Perspectives on Accounting Education*, 10(1).

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## APPENDIX A: SAMPLE CLIENT LETTERS

These sample letters are as submitted by the student, and there have been no changes or proofreading conducted by the author of this case.

### Sample Letter 1:

To Whom It May Concern,

A supervisory committee serves an even greater function in smaller credit unions because there is limited ability to effectively implement internal controls. This is because there are fewer staff members to perform the functions, which results in less segregation of job responsibility. Basically, at a small credit union, the supervisory committee functions to help compensate for these limited controls. A thorough and exhaustive review should be completed on the credit unions internal control of cash in particular. A complete checklist for this is included in the Supervisory Committee Guide for Federal Credit Unions. Overall the supervisory committee should be on the lookout for the following items:

- One or two people do the work due to limited staff size
- Lack of board approved policies
- Lack of segregation of duties (no dual control for key area such as cash)
- Strong control of an area by a single employee
- Lack of mandatory vacation policy
- Failure to maintain adequate audit trails
- Record keeping problems (statements are not reconciled)

Some specific examples from the checklists which help with guidance include:

- 1) Are bank deposits prepared by an official or employee who does not serve as a teller? This checks for segregation of duties – bank deposit preparation would be separate from teller functions.
- 2) Are all check signers authorized by the board of directors? Determine whether internal controls prevent check signers from also posting transactions to the general ledger.
- 3) Do persons not directly involved in handling cash or the accounting records prepare bank reconciliations promptly each month? Recommended for proper segregation of duties.
- 4) Does the supervisory committee, internal auditor, or other management employee periodically review bank account reconciliations? Recommend at least quarterly review to strengthen internal controls.

In a small credit union where one person performs several jobs it is critical that quarterly the auditor is present during the process, verifies the reasonableness of the process, and checks /tests the log of backups and data reconciliations. These extra steps help when the segregation of duties is not feasible.

In addition to the steps mentioned above, the Supervisory Committee Guide for Federal Credit Unions recommends these additional procedures to assure proper internal control:

- Reconcile or verify the accuracy of the credit union's bank reconciliation for three concurrent months.
- Review all employee and family member accounts for unusual activity.
- Review internal control reports (override reports).
- Ensure that all employees take at least one week of continuous vacation.
- Assure complete access to all credit union records without exception.

In summary, there are several internal controls available for credit unions; however, the supervisory committee becomes even more crucial when dealing with a smaller credit union. The specific procedures and internal control checks listed above are recommended as a guide. A thorough plan, procedure, and checklist should be completed following the recommendations in the Supervisory Committee Guide for Federal Credit Unions.

**Sample Letter 2:**

To: ABC Credit Union Supervisory Committee  
Subject: Re: Supervisory Committee Annual Audit  
Dear Supervisory Committee members,

Thank you for your hiring me to perform your annual audit. I have reviewed your initial request and the reason for wanting the audit, and I agree that the issues at SCICAP Credit Union are perplexing. It is understandable that, as responsible committee members, you would want to audit your system and verify you are taking all of the necessary steps to prevent similar fraud and ensure the proper operation of your accounting system.

Below is a list of suggested areas that you can review in the NCUA's "Supervisory Committee Guide for Federal Credit Unions". If you need a copy of this document, you can download it from the NCUA's website at the following web address: <https://www.ncua.gov/Legal/GuidesEtc/GuidesManuals/supcomm.pdf>

The guide has all of information you would need for being successful, but I would draw your attention to the following areas, as they relate to the SCICAP CU situation:

- Chapter 2 – Explains what the supervisory committee is
- Chapter 4
  - Section 4.06 – Specific to internal controls
  - Section 4.15 – What records can be accessed by the committee
  - Section 4.17 – What to do if a problem is found
- Chapter 22
  - Sections 22.08, 22.09, 22.10 – specific to detecting fraud, and how to deal with it

Some of the things you can do immediately to mitigate fraud would be as follows:

- Eliminate Single Points of Contact – no one person should have control over any specific area
- Establish Random Audits – audits can be done on non-regular intervals, and unannounced.
- Aggressive or Unusual Employee Behavior- employees not willing to share information or provide access to client information on demand
- Denial of access to records – this is where SCICAP was negligent. They were refused access to records by a single point of contact employee, and didn't think to question it. No employee has the right to refuse a supervisory committee member, CEO, or board member access to any record in the credit union. If an employee is denying access, this should be a red flag

I think this will help you get started and also prepare you for what we will expect to go over during our audit. The key thing to remember is that, as a Supervisory Committee member, you have absolute authority over access to any record in the credit union, and you should not be afraid, or feel bad about asking for them. You have a fiduciary responsibility to audit the credit union, and a right to have your requests filled.

Thank you for your time and attention, and for your business. We look forward to working with you soon.  
Best Regards,

# Unleashing Disruptive Leadership – Teaching Carpe Diem!

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## ABSTRACT

Today's managers and leaders face an unpredictable business future, stiff competition, a culturally and generationally varied workforce, a constant need for change as well a need for a different way to manage change, and a volatile customer base. They need to lead differently and courageously. Disruptive strategy calls for disruptive leadership. Faculty and facilitators who teach business topics in colleges, universities, and executive programs are responsible to address this new concept of disruptive leadership. Learn more about the leadership competencies required to face digitalization, global markets, rapid innovation, a "VUCA" world (Volatility, Uncertainty, Complexity, and Ambiguity, 2008), and how to practice emotional intelligence.

**Keywords:** Disruption, innovation, disruptive leadership, leadership, VUCA, volatility, uncertainty, complexity, ambiguity, competencies, globalization, emotional leadership, digitalization, change management, business transformation.

## INTRODUCTION

A term that has emerged to describe strategy in current times is "disruptive." On the corporate front, here is a call for leaders who can upset or disturb the state of an organization in order to cause aggressive innovation, change, and transformation to survive or grow. And with increasing national and global tensions in governments and the environment, the notion of leadership during unsettling times gives rise to leadership OF disruption. In either case, leaders cannot be successful following a standard formula of behaviors proffered in the past.

Disruptive strategy challenges traditional leadership competencies. Disruptive leadership calls for leaders who envision boldly, think innovatively, and listen intensely to the needs of customers and employees. In some markets, leaders have to look to emerging needs that have not yet been defined or embraced and take risks to advance.

Does it sound like nonsense or a trend? Those who seek predictability and consistency might think so. The powerful implication is that leaders must develop and strengthen innovative and intuitive competencies in order to support a disruptive strategy and lead through turbulent times that may describe the world for years to come. Some of the most traditional companies and industries are changing expectations for its leaders. The new Chairman of the Board of Danish shipping magnate Mærsk, Jim Snabe, a contemporary leader when it comes to leadership, shared his insights a recent interview. He noted that Mærsk is known by its values for being old fashioned. The motto in Mærsk is "do the right thing right and thoroughly." He came from SAP and is Chairman of the Board of Siemens. Mr. Snabe claims that the condition of operating a business today calls for agility, innovation, intuition, belief and trust in your employees through delegation, involvement of others in decisions, and courage to make hard decisions.

### What is the new "disruptive" style of leadership?

Markets, technology, production, workforce have always changed. That is not new. What is new? It is *harder for leaders to predict or anticipate* the next step or initiative, coupled with the *rapid acceleration* of the time for innovation and change to take place in markets and the organization. Pressure to constantly innovate products and processes and to disrupt cause continual cycles of transformation and is a dramatic change for many organizations in process, technology, workforce, and operations. Experience and history does not offer solutions to the complex and new twists that arise in business. Solutions are often discovered by preparing leaders across the organization to be adept, innovative, and intuitive. And, in turn, they can enable employees, customers, and suppliers to become a part of a powerful system of innovation and change that results from disruptive leadership.

### Why is the future so unpredictable and even harder to understand?

Four factors influence the challenge: market, technology, strategy and workforce.

1. Rapid expansion of new global markets and player: Asia, Africa, Central and South America are new populations of customers who are fast movers because of the next two factors.

2. Development of new and rapidly evolving technologies (digitalization, social media, artificial intelligence, drones, self-driving vehicles, robots, etc.): there is intense competition to gain access to markets and customers. The middle class in these areas has become more aware and educated that, in turn, increases demand for services and products. If existing industries cannot deliver, entrepreneurial producers will emerge in these regions.
3. The pace of change: expansion of markets and digital evolution cause the redirection of strategy for organizations. Leadership's ability to constantly examine the strategic direction and adjust according to conditions requires courage and creativity. Companies in many industries already have adopted disruptive strategies that create the path for rapid change in organization, products, processes, markets, or technologies. As far back as the late 1980's and the internet revolution, companies like Digital Equipment Corporation (Schein, 2003) which at one time employed over 100,000 employees hesitated to embrace the desk top computer and the importance of software. In a very short time, the corporation melted into oblivion. The pace of change is now magnitudes faster.
4. The changing expectations and capabilities of workers and consumers: changes in education level, needs, and expectations force businesses to adapt strategies quickly. Social media-driven communications expose both workers and consumers to ideas and options that quickly generate mass demand for change. The span across multiple generations of workers and consumers also requires varied responses from businesses. Mobility, flexibility, fast-cycle development, challenging tasks, balance between work and private life are factors that that workers expect in different ways to satisfy needs of up to six different generations in the workforce: Generation Z newcomers (born 1996 and later), Millennials and Generation Y (born 1977-1995), Generation X (born 1965-76), Baby Boomers (born 1946-64), and in some cases Traditionalists (born 1945 and before).

#### **What are attributes of disruptive leadership?**

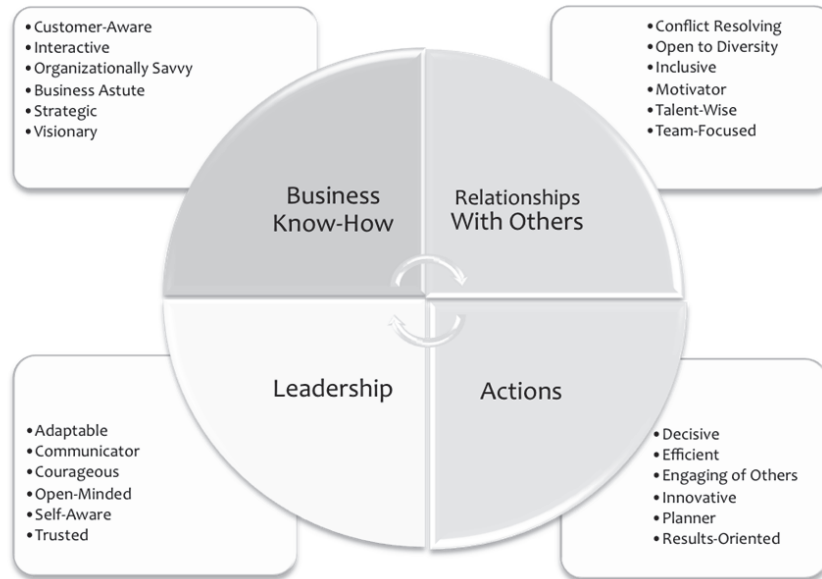
To envision the disruptive leadership style, consider these models. The basic four components of leadership are fundamental, explained as follows:

1. A leader brings past-acquired skills and knowledge in their backpack, essentially their *expertise*. Depending on the level and function, the desired *business know-how* may vary.
2. The *actions* taken by leaders are the driving force for progress. Most leaders take actions based upon the business conditions and often are shaped by the knowledge and experiences they have collected throughout their career. The action can be to defer or delegate to others or to apply their expertise such as leading implementation of lean manufacturing, using an enterprise-wide system, or market expansion based upon product / process knowledge. Decision-making styles can emerge as inclusive or commanding, maintaining or expanding, or other practices which have an impact on the organization's future.
3. *Leadership* is how you bring your personal traits and values to life. Leaders are thought leaders who are strategic and communicate prolifically to all stakeholders in an organization's success. The style is often the result of character, experience, industry, self-awareness, and developed competences.
4. The role of a leader presumes that he/she leads *people* – employees, other leaders, and partners. Their interactions, or *relationship with others*, are representative of the goals and values of the company. Leaders influence both internal and external people such as customers or clients, shareholders and the public to produce and acquire the products and services that enable success.

#### **THE COMPETENCY GAUGE™**

We have developed a gauge for leadership consisting of 24 competencies and a development plan. The Competency Gauge™ allows for variability by company needs and can be used at all leadership levels. There is a facilitated process to build a competency footprint that reflects the business strategy and informs leaders how best to expand their innovative and intuitive competencies. In concert with a strong change management approach, the adopted attitude is Carpe Diem. Carpe Diem [LATIN] “Seize the Day”: trust in intuition; learn how to target intuition towards innovative opportunities; and lead continuity through disruptive innovation; an aphorism found in the Roman writer Horace's Odes.

**Figure 1: The Competency Gauge™**



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**How do leaders work in concert across roles to exert disruption?**

This model demonstrates how competencies translate into the roles and responsibilities that leaders have across the different levels of the organization:

**Table 1: Roles and Responsibilities**

**Responsibilities in the Face of Disruption**

How do leaders work in concert across roles to instigate disruption?  
 This model demonstrates how competencies translate into the roles and responsibilities that leaders have for disruption across the different levels of the organization:

Leadership level	1 - Team leader Manage operations, manage team, and develop employees	2 - Director/VP Provide structure and goals to implement strategy and lead Team Leaders	3 - Top Mgt. (C-level) Formulate / adjust strategy and lead Leaders
Strategy creation - thinking; applying business know-how to disrupt	-	-	<b>P</b>
Strategy formulation – determining what actions can be taken to disrupt	-	<b>S</b>	<b>P</b>
Strategy implementation – leadership skilled at leading disruption	-	<b>P</b>	<b>P</b>
Relationships with others – competence to lead change and motivate stakeholders to accept new ideas	<b>P</b>	<b>S</b>	<b>S</b>

P = Primary responsibility; s = Secondary responsibility; - = no significant responsibility

Waves Partners™ Roles & Responsibilities ©2017

**What kinds of expectations are there for disruptive leadership at the different levels?**

**Team Leaders (level 1):** at this level, the most important function is to understand the structure and goals for the company and to motivate, delegate, and inspire employees to perform accordingly by change management.

How can team leaders undertake disruptive actions?

- The workforce consists of five generations from teens (Z) to traditionalists over 70 years-old. They have very different expectations about the tasks they prefer to perform and how they are motivated to do so. The interactions they seek from the leader in performing the task can vary greatly. The team leader has an opportunity to view the structure, tasks, and roles of team members in creative ways that maximize worker performance.
- The workforce has diverse cultural norms and ethnic backgrounds that often make it difficult to conform to a particular way of doing things. If team leaders develop the capabilities to be open-minded and culturally aware, adapting to such variety can enhance creativity.
- Digitalization increases the opportunities that team leaders have to effectively use new technology to disrupt processes. The challenge for team leaders is to embrace technology without demotivating employees and increasing dissatisfaction among employees.

**Directors / Vice Presidents (level 2)** lead *implementation* of the strategy. Leaders at this level are those who must translate a new or adjusted strategy into a structure and process that correlates with their functions. When reality is more unpredictable and changes faster or diversely, this level of leadership has to adapt quickly and implement changes in a trustworthy way. These leaders must be able to understand and execute the new strategy as well as communicate clearly why changes are needed and motivate others to respond.

What are disruptive opportunities for the senior level of leaders?

- They must be experts in implementation and be able to translate strategy quickly into operating plans.
- A high level of trustworthiness and personal integrity is critical to execute changes that result from strategic disruption. Because of this level of leadership's position between the strategy-makers at the top and the hands-on producers, they are the conduit for change and must have dual competencies for influencing up and down. As a result, they might have to react neutrally toward new ideas as well as take risks and have the courage to disrupt standard ways of operating.
- The middle ground they hold requires that they listen 'downwards' and 'upwards' and have courage to say either yes or no in either direction. Directors and vice presidents can also lead in the state of disruption through collaboration and ideation that transcends all levels.
- The actions taken by this level require an analytical process. They balance constructive critique from all angles and decide independently how to act based upon the credibility of the critic. These leaders often act on intuition as well as parameters set by data and facts.
- Because of their place in the organization, these senior leaders are well positioned to adjudicate innovations that disrupt current practices effectively.

**Top Leadership – C-suite (level 3)** designs and formulates strategy. Leaders at this level are often constituted as group management across all the business functions. Their roles include the responsibility to oversee the business as the ultimate leadership. They are in a continual search for new partners, opportunities, markets, and business models that actualize the strategy of the organization. These leaders assume ultimate accountability to the governing board for the organization and shareholders at all levels – customers, employees, partners, investors, and the community.

In what way do top leaders embrace opportunities to disrupt?

- The most accountable leaders can develop their competencies to be business- and innovation-agile. The ability to look beyond past and current success formulas, seek new paths and products, welcome the possibilities beyond what is familiar, and prepare stakeholders for changes are actions that can propel an organization forward.
- While leaders sometimes can become mired in decisions that generate today's performance, it is incumbent on them to be curious about the future and perhaps the unknown. Imagery often portrays the senior-most leaders on the top of a mountain that is intended to give them the vantage point to view far ahead on the horizon. Metaphorically, that peak may include the abilities to see, imagine, hear others, intuit and eventually translate into the future for the organization.
- A good top-level leader is also an excellent communicator who articulates the future and enlists the support of the functional experts to build a strategy to move forward.
- Given the need to go beyond organizational comfort-zones with innovation, a successful disruptive leader knows how to be courageous enough to confront risks associated with uncertain changes and destinations.
- Senior leaders are the outward-facing members of the organization. They are the bridge to the future and to all who benefit or lose because of the organization's existence. These leaders not only create the values, they model the values, behaviors, and transactions that define the business. In the face of disruption, the top



leaders have to be cognizant of either maintain values in the face of change or redefining and adopting behaviors that can accelerate business performance in the new direction. The most successful executives are those who are truly passionate about the purpose of the business and can motivate others to join them.

### **What competencies prepare leaders for unpredictability?**

When we set out to drive in a vehicle to a pre-determined destination, there are rules of the road to minimize unpredictability. Signage, speed limits, operating techniques, regulations, and courtesies help most drivers anticipate actions. On occasion, uncertain weather conditions, erratic drivers, or other incidents distract us from what we expect. Leaders of businesses are more like the earlier explorer undertaking an unmarked route with no idea of what lies ahead. Decisions are made in the moment with both analytics and intuition determining the path forward.

Leadership competencies that arise as critical to the exploratory path forward include trust – of you and you of others, flexibility – change in the moment, agility – conditioning to adapt quickly, communications – thinking fast on your feet, courage – transparency and thoughtful judgment when confronting the unknown, as well as self-awareness – knowing your own strengths and limits, and openness - to new ideas and learning. While these competencies are considered a prerequisite for leaders to become role models and motivate people during times of innovation and change, they are also among the most difficult to develop and measure. In a period with a lower level of predictability, leaders can seek to develop and master the following competencies.

#### *In relation to workforce*

1. Involvement: inclusion of input and competence of others in decisions
2. Emotional Intelligence: consideration of culture and emotional impact on others
3. Talent capture: recruitment of creative and resilient employees
4. Change management: guidance for successful adoption of changes by employees

#### *In relation to organizing work*

1. Creativity: development of systems to encourage creativity in all functions
2. Systems: design for efficient ways of organizing work
3. Digitalization: implementation of digital processes and models
4. Change management: instillation of a mindset that change is a constant occurrence

#### *In relation to strategy*

1. Agility: cultivation of mood, psyche, and tools to shift strategy fast
2. Intuition: trust of intuition and as well as facts and data
3. Assimilation: capture and analysis of input from sources to certain direction
4. Change management: inclusion of time and change management practices in the strategy

## **PREPARING FOR DISRUPTION**

Things are changing fast - incredibly fast. What was impossible yesterday is possible now. Markets, which were of no interest yesterday, are valuable now. The waves of commerce once flowed west to east. Now, with changes in China and Asian countries, the waves of commerce also travel east to west. Citizens in cities with millions of people in the west are able to buy ‘whatever’ they need or want. The United States, once a central supplier, is in a transition with a new, less global political administration. In Africa, the potential for business is growing south of the Sahara where the middle class of people is growing with a better-educated population. In cities with millions in China, the demand for goods and services continues to rise. If the western industries cannot deliver innovatively, customers – in-need in Asian countries will lose no time entrepreneurially doing it by themselves.

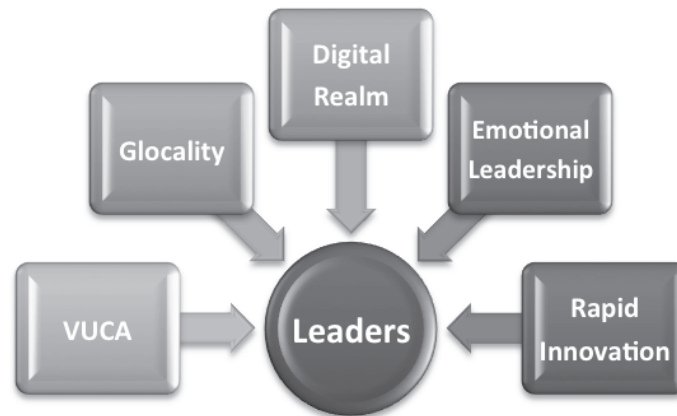
### **Change Management, change management - again.**

What is constant across all levels of responsibility and aspects of the strategy, the one consistent competency is “change management.” Change management starts with each individual leader – the ability to adapt to new circumstances quickly and act as a role model. The need to transform continues beyond the individual into the organization that calls for a systematic way for change to be managed in all functions in the organization and to be adopted by others. Without change management, disruption will be chaos rather than opportunity.

The underlying causes of disruption are the leadership levers for managing change. The described currents summed

up include these five areas of focus that rely on the competencies identified above: be prepared for VUCA, envision business on the dual scale of global and local impact, grasp the digital realm and its impact on the specific business, cultivate the capability for emotional leadership, and create strategy imbedded in a work environment that encourages rapid innovation.

**Figure 2: Major Challenges Facing Corporate Leaders in 2017**



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### CARPE DIEM!

The Waves Partners have been teaching students who seek to be leaders and managers in industries around the globe for decades. The evolution towards the leader for the mid-21st century needs an array of capabilities including business savvy, creativity, innovation, change, collaboration, self-awareness, emotional intelligence, and inclusion of multi-cultural and multi-generational workers, customers, and stakeholders. Keen awareness of opportunities, competition, and all other facets of business are reflected in the Latin charge: Carpe Diem! Seize the day and the opportunities and needs for the future!

According to research by consulting firm KPMG, businesses that aren't thinking about transformation are all but irrelevant. Business transformation can mean everything from a major shift in IT systems to a large-scale innovative construction project or changes to business models and product designs. - Forbes Insights (November 2014)''

### REFERENCES

Volatility, uncertainty, complexity and ambiguity. (2008, last modified June 7, 2017) in *Wikipedia*. Retrieved June 15, 2017 from [https://en.wikipedia.org/wiki/Volatility,\\_uncertainty,\\_complexity\\_and\\_ambiguity](https://en.wikipedia.org/wiki/Volatility,_uncertainty,_complexity_and_ambiguity)

Baculard, Laurent-Pierre (January 2, 2017). To Lead a Digital Transformation, CEOs Must Prioritize (2017). Harvard Business Review – digital edition: <https://hbr.org/2017/01/to-lead-a-digital-transformation-ceos-must-prioritize>

Charan, Ram; Drotter, S.; and Noel, J. The Leadership Pipeline, (2001 with ongoing updates) (2015 Danish Version), Jossey-Bass.

Collins, Jim, & Hansen, Morten T (2011). Great By Choice: Uncertainty, Chaos, And Luck – Why Some Thrive Despite Them All.

Dahlström, Peter; Desmet, Driek; & Singer, Marc (FEBRUARY 2017). The seven decisions that matter in a digital transformation: A CEO's guide to reinvention. McKinsey & Company Digital McKinsey: <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/the-seven-decisions-that-matter-in-a-digital-transformation>

FMI (2012). Redefining Leadership: Strategic Thinking in Today's VUCA World (2012): <https://www.fminet.com/special-reports/redefining-leadership-strategic-thinking-in-todays-vuca-world/>

Gratton, Linda (May 2011), The Shift: The Future of Work is Already Here, Collins Press

Hein, Tune & Honoré (2016). Disrupt eller dø! (English translation of title: Disrupt or Die!), Peoples Press: <http://www.peoplespress.dk/produkt/disrupt-eller-doe!.html>

Lau, Humphrey (2016). Slå den røde dronning (Danish) (English translation of title: How to Win Over the red Queen): <http://www.cbs.dk/cbs-event-da/127/business-in-china-how-to-win-the-red-queen-0>

Mærsk Report (28 March 2017) and news interviews: <http://www.maersk.com/en/people/2017/03/excellent-opportunities-in-a-new-era>: <https://www.ft.com/content/605a392c-eed6-11e6-930f-061b01e23655>

Schein, Edgar H. (2003). DEC Is Dead, Long Live DEC: The Lasting Legacy of Digital Equipment Corporation. Berrett-Koehler Publishers, San Francisco, CA, USA

# Counterrevolutionaries in the Financial Services Industry: Teaching Disruption – A Case Study of RoboAdvisors and Incumbent Responses

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## ABSTRACT

This paper addresses our teaching of strategies for incumbents to follow in response to disruption. We discuss Fintech and, specifically, Robo-Advisors, and how incumbent financial services companies have and will likely continue to respond to Robo-Advisors and other Fintech-driven innovations.

While the use of Robo-Advisors has disrupted the wealth management and financial services industries, we question whether legacy institutions (aka incumbents) may suffer ill results if they are late coming to the table or if they take the wrong directions. We consider possible strategies, including those discussed in Richard A. D’Aveni’s paper in the *Harvard Business Review*, that incumbents may follow in response to Robo-Advisors and, more broadly, Fintech companies, and how we teach this material in our courses.

**Keywords:** Strategy, disruption, Fintech, Robo-Advisors, legacy banks, wealth management, asset management, money management, passive investment, personal financial management, D’Aveni

## INTRODUCTION

One of the popular topics in strategy courses as well as courses in innovation and finance is disruption. Our students are well aware of how companies like Uber and Airbnb have disrupted their industries. Indeed, many of us are likely often approached by students interested in starting companies that will in their words and the popular vernacular, “disrupt” incumbents in an industry.

Similarly, as part of our teaching and research, we consider and work with our students regarding how incumbents respond to disruption. The recent growth and evolution of Fintech companies, particularly companies offering financial advising services, known as Robo-Advisors, has provided us an excellent opportunity to introduce students to trends in the financial services industries, and, just as importantly, strategies covering how incumbents can respond to disruption.

The paper is divided into two sections. First, we discuss the wealth management industry with a specific emphasis on Robo-Advisors. We follow this discussion in the second section with a review of some of the strategies that incumbents can use to respond to disruption from Robo-Advisors. Our work in this section draws extensively from the work by Richard A. D’Aveni titled “The Empire Strikes Back: Counterrevolutionary Strategies for Industry Leaders,”<sup>1</sup> which we often use in our courses to provide a framework for students to use in their analyses. Depending on the course and the backgrounds of the students we typically either have a discussion with the D’Aveni paper as a foundation or assign students to do further research into Robo-Advisors and then address strategies, drawing from our course readings and related materials, for incumbents to follow to combat these disruptors.

### Wealth Management: A Brief History

Like many industries, the financial services industry has evolved over time, adopting technology to increase efficiency and profitability. One early example of mass-market financial technology that was widely adopted, the ATM or automated teller machine, supplanted the services of some human bank tellers. Wealth management, also known as asset management or money management, a facet of the financial services industry that has existed for decades in the U.S. and burgeoned in the 1970s, is also experiencing disruption today, led in huge measure by Internet technology.

Similar to the disruption in retail banking services caused by the ATM personal financial management is being impacted by Robo-Advisors and technology-driven innovations in personal finance technology. Today, the universe

of companies, services, technologies, and financial institutions within the personal finance and wealth management spheres is almost as vast and varied as the customers that it serves. It comprises companies that enable customers to monitor their bank accounts, their credit card accounts, and their assets; Internet-based investment advisories; and incumbent banking and investment institutions that have added technology services to their financial and wealth management offerings. Personal wealth management, thus, is a prime industry to study in regard to disruption and strategies for incumbents. In this paper we will focus primarily on Robo-Advisors and responses by incumbents to this disruption in wealth management and related services.

### **What is A Robo-Advisor?**

So, what's a Robo-Advisor? Is this a Rosie from the Jetson's cartoon program or a sophisticated Roomba vacuum cleaner now focused on finance? Will we soon be able to use Alexa, the artificially intelligence assistant with Amazon's Echo, to help us manage our finances? Well, no, but sort-of and maybe.

Robo-Advisors provide investing advice, wealth management services, sometimes in addition to data aggregation. These Fintech companies provide investment advice and trading services that are automated using algorithms and artificial intelligence. Other Fintech companies provide data aggregation services as well as traditional investment management expertise.

These algorithms are embedded software code that act simply as a set of formulas or rules to guide the process of suggesting and ranking investments. Using algorithms with the inputs from the client, Robo-Advisors suggest financial products and actions.<sup>ii</sup> Robo-Advisors help individuals make investing decisions based on data collected from the investor, such as financial goals and risk tolerance, to create and execute a goal-based investment plan. These Robo-Advisors can also perform important add-on services such as portfolio diversification, rebalancing, and tax optimization. Most Robo-Advisors presently suggest diversified investments, particularly exchange-traded funds (ETFs).

Robo-Advisors arrived on scene around 2008 following the breakdowns in the financial markets when traditional banks and brokerages were suffering. These technology companies took advantage of the low barriers to entry inherent in Internet-based companies as well as low confidence and trust in traditional financial institutions that made way for customers to trust technology over banks. The Robo-Advisors launched their technologies to offer personal financial management to the vast majority of the population that fell below the net worth threshold required by many banking and brokerage institutions that made it worth offering human-driven wealth management services. Many of the incumbent institutions were too focused on survival and responding to regulatory changes that they couldn't respond to the Robo-Advisors even if they wanted to make the effort. Additionally, until relatively recently many of the incumbents viewed Robo-Advisors as being exclusively for customers that were not worth the effort to seek, due to smaller-sized portfolios.

As the number and type of Robo-Advisors have grown and changed, various business models have emerged. There are the online-driven, pure-play Robo-Advisors, such as technology start-ups and early entrants like Betterment and Wealthfront that provide customers with the ability to view, manage, and invest from one digital platform. These sites enable clients to go through a self-guided questionnaire querying their preferences for risk and objectives; as well as collecting demographic information like age, income, household, and assets.

Other Robo-Advisors focus on related wealth management issues, for example, tracking spending and savings. NextCapital, for example, provides portfolio tracking, advice, and suggested investments for companies' 401(k) plans.<sup>iii</sup> The company's services enable clients to see all their investments on one dashboard and also links to their 401(k) accounts. NextCapital is now expanding to offer advisory services as a white label product for other investment advisories to manage client accounts and investments.<sup>iv</sup>

Although there are differences among the Robo-Advisors a consistent trait is that these companies are driven by automation and technology. As compared with incumbent wealth management firms and, more broadly, legacy financial institutions, Robo-Advisors automate services that are traditionally labor intensive including, for example, diversification, portfolio rebalancing, and tax loss harvesting, in addition to investment advisory. Most of the pure-play Robo-Advisors use passive investments (*i.e.*, ETFs or index funds). Customers save money, get faster and more reliable service whenever they want, and access their portfolios through multiple channels, particularly mobile.

## Robo-Advisor Services

The services and products offered by most of the leading Robo-Advisors are not much different from many incumbents. Robo-Advisors, however, keep it simpler by offering a digital space to collect and aggregate someone's total financial picture as well as use a digital process to on-board clients and walk customers them through a series of questions about their stage of life, goals, risk tolerance and any other data points pertinent to offering investment suggestions. The digital adviser then presents its recommended investment portfolio based on all the client input it has received and offers the client the option to purchase the investments. This process is transparent and client-driven.

The client ultimately knows what they are buying and how much it's going to cost them. Incumbents have not traditionally been as transparent, particularly in regard to ease-of-access, transaction costs and fees.

Once a client's portfolio had been purchased and is active Robo-Advisors concentrate on providing a one-stop, single-screen digital destination for clients to monitor their investments at any time they wish and on any device. Clients can, thus, easily track their investment activities on multiple devices, particularly their phones.

In fact, clients are not only able to monitor investments and accounts, but also modify their goals, risk tolerances and any other profile data points as necessary.<sup>v</sup> Automated for clients is account rebalancing and tax-loss harvesting, important practices not typically done by amateur, online investors. As we teach in finance, rebalancing helps clients' portfolios maintain the ratios of investment types – *i.e.*, equities, bonds, international, domestic, risk levels, etc. – by harvesting gains from higher growth areas and investing them in other areas of the portfolio to maintain the desired investment ratios in the portfolio.

Tax-loss harvesting is also an investment strategy implemented by Robo-Advisors. For the typical customer of a Robo-Advisor, the important attribute is that the rebalancing and tax-loss harvesting are automatic and systematic, removing any doubts or emotional decision-making by the investor, and instead maintaining the original investment strategy.

Finally, Robo-Advisors offer investment reporting so that clients can keep track of how their investments are doing and whether or not they are meeting expectations and goals. For example, Charles Schwab, an incumbent that has responded to the threat of Robo-Advisors, encourages annual portfolio review for clients of its automated Intelligent Advisory division.<sup>vi</sup> Having an annual performance review is an ideal opportunity use by Robo-Advisors to engage and build the relationship with clients.

As noted above, two of the early Robo-Advisor leaders are Betterment and Wealthfront, both seek to help those outside the purview of traditional wealth management firms.<sup>vii</sup> Most Robo-Advisors, like Betterment and Wealthfront, generate revenue by charging customers a small percentage – ranging from 0.12 to 0.94 percent -- of their holdings as an annual management fee. For a slightly larger percentage, some companies offer limited exchanges with a human advisor.

## Venture Capital Investments in Robo-Advisors

Many venture capital firms have recognized the disruptions in the wealth management business and have, accordingly, invested in Robo-Advisors and other types of Fintech. Betterment and Wealthfront, for example, have raised more than \$100 million in venture funding since their founding. Numerous additional start-ups in the personal financial space have come to market, each with its own perceived competitive advantage. In Q1 of 2016, (the latest publicly-available data at the time of our research), the sector received \$114 million in venture investment; in 2015 Robo-Advisors received \$192 million in venture funding and \$312 million in 2014.<sup>viii</sup>

## Revenue Models for Robo-Advisors

Automated investment services have adopted various different revenue models. As low-cost services targeted toward entry-level or first-time investors, usually between the ages 25 and 45, the revenue models are similar to a traditional investment management service, but at a much lower rate. For example, a traditional wealth management firm will charge 1-2 percent of investments under management with a \$50,000 minimum investment.

Automation and simplicity have also allowed Robo-Advisors to show incumbents how operating costs can be slashed in this traditionally labor and human-intensive sector. Traditionally human activities like new client onboarding, portfolio rebalancing, and risk adjusting has been largely automated, cutting costs and enabling Robo-Advisors to charge a fraction of what a human advisor charges.

Through the use of technology and automation, thus lower costs, Robo-Advisors have opened up the option of wealth management and investing to a much larger pool of clients, a previously underserved population of investors seeking advice and assistance in wealth building and money management. Financial advisors were traditionally only accessible to people with sizable assets to invest and manage. Many Robo-Advisors have no or very low minimums for very similar services and respectable returns. For example, the large majority of Wealthfront's clients have less than \$100,000 invested with the company.

Just as importantly, though, many consumers, particularly millennials, are specifically choosing Robo-Advisors, even though their personal portfolios are sufficient to meet the minimums among many of the incumbent firms. Indeed, many people think that the future will be bright for Robo-Advisors as these Fintech companies disrupt the wealth management industry and, more broadly, incumbent financial institutions. Betterment, for example, reported having 118,000 customers and assets under management (AUM) of \$7 billion in 2016;<sup>ix</sup> it reported \$10 million in revenue in 2015. Wealthfront reportedly has about \$1.5 billion in AUM (assets under management).<sup>xi</sup> One independent analyst firm, *Business Insider Intelligence* forecasts that Robo-Advisors will manage \$8 trillion in assets globally by 2020.<sup>xii</sup>

### Strategies for Incumbents In Response to Robo-Advisors

Given the predications for Robo-Advisors and the “facts on the ground” with respect to the already established and growing Robo-Advisor firms, the incumbents in wealth management and, more broadly, legacy institutions face a strategic challenge, *i.e.*, what to do?

We pose this question to our students and ask them to consider the materials covered in our strategy courses and specifically Richard A. D'Aveni's article “The Empire Strikes Back: Counterrevolutionary Strategies for Industry Leaders.” This article, published in the *Harvard Business Review* nearly fifteen years ago, is still quite relevant for managers and remains useful as a framework for student learning and practice.

We add to D'Aveni's work our own research and analytical frameworks that we want our students to learn and apply. One of these strategies, “wait and do nothing” is particularly valid in regard to Robo-Advisors. More specifically, we have our students investigate the marketplace data as well as external factors like regulatory changes, so that they recognize that most industries are not like taxicabs that have been disrupted by Uber and Lyft. We stress to our students that they see beyond the Fintech “hype cycle” and go deeper into the data, including macroeconomic factors and regulatory policies from federal and state agencies.

Another strategic issue we ask to students to investigate in regard to learning about disruption is resources of the respective players - Robo-Advisors and incumbents. Unlike razor blades where Dollar Shave Club has disrupted Gillette's business model by leveraging existing sources and combinatorial innovation, other industries are different and aren't has easily disrupted. Here the data provides an important learning point for our students. Consider that per an article in *TechCrunch*:

Wealthfront has raised \$130 million, Motif Investing \$126 million, Personal Capital \$104 million, Betterment \$45 million and FutureAdvisor \$22 million....Let's put their war chests in perspective. The asset management industry generates \$215 billion in sales every year. Charles Schwab, a giant in the retail space, spends \$300 million a year on marketing, just 5 percent of its net revenue. BlackRock, a global giant, spends \$400 million a year or 4 percent of its net revenues. Both companies have healthy growth and high margins.<sup>xiii</sup>

It's obviously impossible to know what will happen going forward with Robo-Advisors, but, nevertheless, given that it's relatively easy for incumbents to invest directly to build their own software platforms or acquire a successful

upstart, panic isn't a strategy. We remind our students that only about five percent of Americans even recognize the term *Robo-Advisors* and that switching financial services providers has much higher transactions costs than changing to Uber from taxicabs or buying razor blades.

### Applying D'Aveni's Work

Richard A. D'Aveni in his article titled, "The Empire Strikes Back: Counterrevolutionary Strategies for Industry Leaders" suggests five types of counterrevolutionary strategies for incumbents: (1) containment; (2) shaping; (3) absorption; (4) neutralization; and (5) annulment.<sup>xiv</sup>

We ask our students to study D'Aveni's work and apply it to developing strategies for incumbents in the financial services industry, particularly wealth management. To give our students a headstart we suggest that they research activities by startup robo-advisors and well-known incumbents. This enables the students to see that the playing field of robo-advisors already has startups and incumbents. The students also quickly learn that some incumbents have already begun to respond to the disrupters by, drawing from D'Aveni's work, containment, shaping, absorbing, neutralizing, and annulling.

One of our first discussion points is how some of the incumbents have already entered the marketplace with their own Robo-Advisors. We cite Fidelity, Vanguard, TDAmeritrade, Schwab, and E\*Trade, all major companies that have begun to respond to the disruptors. These incumbents are locking in their customers, leapfrogging the threats from the "disrupters," and effectively swamping distribution channels by launching their own brands, all strategies that students can cite from D'Aveni's work.

We next cover how some incumbents have also developed partnerships, an example of D'Aveni's strategy of shaping by co-opting the disrupters, acquisitions, and neutralizing through creation and distribution of new and existing products. Some of the notable incumbents following this approach are: Bank of America, JP Morgan, and Wells Fargo. Wells Fargo, for example, partnered with SigFig Wealth Management LLC to develop its solution, the Intuitive Investor, slated for roll-out in 2017 as an offering to clients of the brokerage division of Wells Fargo, Wells Fargo Advisors. William Trout, a senior analyst at research firm Celent, noted: "They're going to try and leverage their existing client base and want to offer a price point roughly in with their other service channels."<sup>xv</sup> With a minimum investment of \$10,000 and a management fee of 0.50 percent, its services won't be cheap, but according to Ms. Angie Lai, a senior vice president at Wells Fargo and director of digital programs, "the price for the service factors in the research and expertise offered by Wells Fargo Advisors' investment office, as well as the ability to reach financial advisers for further guidance."<sup>xvi</sup> (Wells Fargo Advisors currently has more than \$1.5 trillion AUM and a network of 15,000 brokers throughout the U.S.)<sup>xvii</sup> BlackRock, by contrast, eager to have a Robo-Advisory up and running quickly, acquired FutureAdvisor for \$152 million in 2015.<sup>xviii</sup>

A third topic area of discussion in our courses borrows another page from D'Aveni's playbook; here we ask students to consider if incumbents are "creating smoke" and "delegitimizing the revolution," strategies that D'Aveni labels as containment. We reference (or hopefully our students have found this action on their own) how Citi, for example, seeks to combine its strengths in personal investment advice with Robo-Advisors. They see Robo-advice as a complement to human advisors, allowing them to become more efficient and allowing the institutions to reach a wider range of clients.<sup>xix</sup> Other well-known brokerage houses with Robo-Advisory services include Fidelity, Raymond James, TD Ameritrade, Edwards Jones, Merrill Lynch and Ameriprise.<sup>xx</sup>

A fourth example of D'Aveni's strategies that we discuss is giving away benefits offered by revolutionaries. Here we see incumbents lowering their fees and giving away services in response to competitive pressures from Robo-Advisors as well as other incumbents. Fidelity's Robo-Advisory, called Fidelity Go, for example, charges .35-.39 percent of client's investments as a fee. Rates for Schwab's automated advisor are similar. Vanguard's Personal Advisor Service, an automated and human hybrid, costs around 0.40 percent and requires a \$50,000 investment.

For wealthier clients, most services will cap their fees for portfolios; for instance, Schwab caps its fees for clients with portfolios over \$1.2 million at \$3,600. The implementation of this strategy leverages the scale benefits of incumbents. For example, consider start-up Betterment, which has about \$4 billion (AUM), making about \$10 million in revenue; whereas an incumbent brokerage, like Schwab, has \$2 trillion total AUM.

## Controlling Access to Customer Data

Perhaps the best example of incumbents neutralizing and annulling the disrupters is controlling access to their customer data. One of the greatest challenges for Fintechs and, more specifically, Robo-Advisors, is gaining access to the personal financial and account data for their customers in lieu of ‘data scraping,’ an arduous process involving logging into a customer’s account, capturing data from the screens, and, then, updating all of the account data.

This process is resource intensive and can bog down the servers of the legacy institutions from which the scraping is done. Because many incumbents did not appreciate the heavy burden put on their computing resources, many began denying access from the IP addresses of the Fintechs.

We discuss the challenge of obtaining customer data and how incumbents can “drag their feet” creating delays and related issues for the disrupters. Many incumbents, including, for example, Wells Fargo, Bank of America and J.P. Morgan Chase limited the flow of information. They cited, with justification, cybersecurity concerns because they often couldn’t discern whether a data scrape was coming from a legitimate source or not.

More recently, some incumbents, including Wells Fargo have enabled access to selected Fintechs, including Robo-Advisors, through API (application program interfaces). The European Union and UK are ahead of the U.S. on this issue as the government has already stepped in and issued regulations that mandate the financial institutions offer API access to Fintech companies by 2018.<sup>xxi xxii</sup>

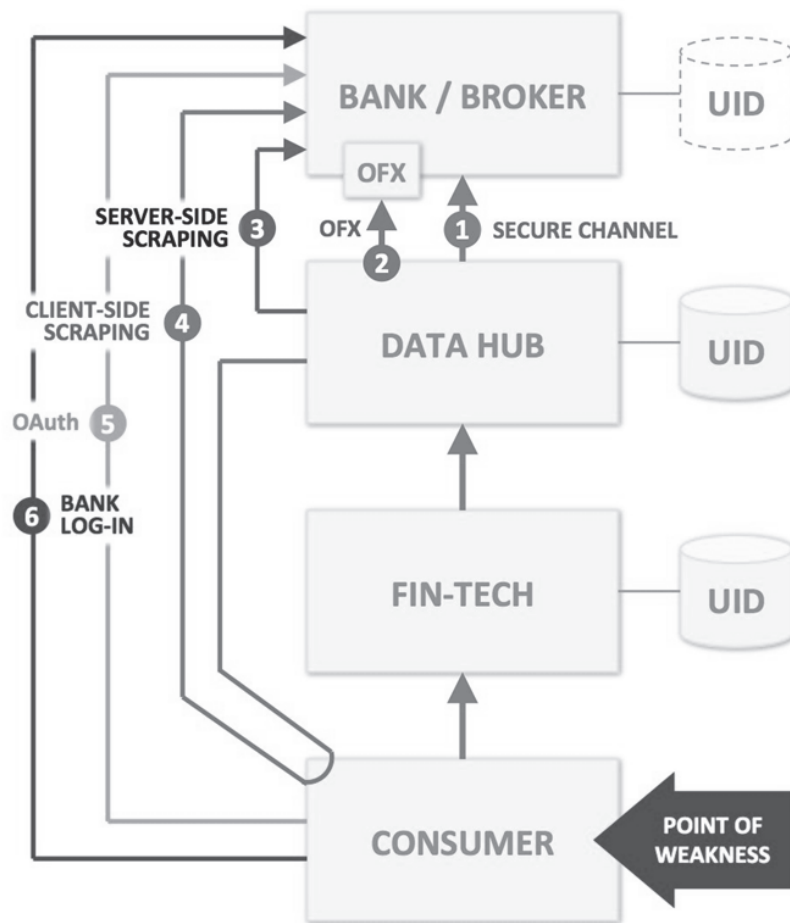
Cybersecurity remains a critical concern for incumbents and Robo-Advisors. J.P. Morgan Chase CEO Jamie Dimon wrote to his shareholders: “One item that I think warrants special attention is when our customers want to allow outside parties to have access to their bank accounts and their bank account information. Our customers have done this with payment companies, aggregators, financial planners and others. We want to be helpful, but we have a responsibility to each of our customers, and we are extremely concerned... We are now actively working with all third parties who are willing to work with us to set up data sharing the right way.”<sup>xxiii</sup>

Currently, customer’s personal financial data is shared in numerous ways, with varying levels of security as shown in Exhibit 1 below:



## METHODS OF PROVIDING CONSUMER FINANCIAL DATA

- 1 SECURE CHANNEL**  
Data Hub connects directly to Bank to API with dedicated connection. Very secure.
- 2 OFX**  
Same as Secure Channel, but using OFX or other protocol at the Bank. Very secure.
- 3 SERVER-SIDE SCRAPING**  
Data Hub logs in to Bank and collects data from website. Highly secure.
- 4 CLIENT-SIDE SCRAPING**  
Data Hub connects to Bank via software on consumer's device. Moderately secure.
- 5 OAuth**  
Consumer sends password to Bank to receive a token. Less secure.
- 6 BANK LOG-IN**  
Consumer logs in to Bank website by entering username and password. Least secure.



Source: <http://www.prnewswire.com/news-releases/banks-plan-would-weaken-cybersecurity-of-consumer-bank-accounts-300410503.html>

In the example above, Personal Capital and J.P. Morgan Chase are not in agreement as to the most secure option for customers. J.P. Morgan is pursuing OAuth as its method of data sharing, whereas the CEO at Personal Capital believes that Secure Channel and OFX are the best solutions. This is one example and we take time to explain the above exhibit to our students. This, then, offers an opportunity to discuss the role of regulators in creating a “level playing field.”

## CONCLUSION

This paper provides a review of our research related to Fintech and specifically Robo-Advisors and how we use this research in our teaching of disruption in our strategy courses. Given the great publicity surrounding disruption, for example, Uber and Airbnb, many students are interested in disruption, starting business that will “disrupt” an industry, and strategic responses by incumbents to disruption. Drawing from D’Aveni’s work and our own research we discussed how incumbent financial institutions can and have responded to Robo-Advisors and other Fintech ventures.

i Richard A. D’Aveni, “The Empire Strikes Back: Counterrevolutionary Strategies for Industry Leaders,” *Harvard Business Review*, November 2002.

ii Tom Baker & Benedict Dellaert, “Regulating Robo Advice Across the Financial Services Industry,” *Iowa Law Review*, Vol. 103, forthcoming, University of Pennsylvania Institute for Law & Economics Research Paper No. 17-11.

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- iii <http://riabiz.com/a/2014/3/31/how-one-Robo-Advisor-got-25-billion-on-its-platform-with-a-mintcom-mindset-401k-friendliness-a-merger-and-16-years-of-work>
- iv Ibid.
- v <http://www.wsj.com/articles/charles-schwab-joins-wave-for-robo-services-with-human-element-1481634379>
- vi Ibid.
- vii [http://www.wsj.com/articles/robo-adviser-betterment-adds-human-option-1485871204?mod=Evernote\\_ws](http://www.wsj.com/articles/robo-adviser-betterment-adds-human-option-1485871204?mod=Evernote_ws)
- viii “The Pulse of Fintech, Q1 2016, Global Analysis of Fintech Venture Funding, KPMG International and CB Insights,” (data provided by CB Insights) May 25th, 2016.
- ix Ibid.
- x Samantha Sharf, “The Fintech 50: The Complete List.” *Forbes*, November 7, 2016.
- xi <http://social.techcrunch.com/2015/01/27/will-2015-see-the-death-of-the-Robo-Advisors/>
- xii Sarah Kocianski | Senior Research Analyst, THE FINTECH ECOSYSTEM REPORT, BI Intelligence. Please note that Ms. Kocianski includes Robo-Advisory services from more than just startups in her analysis.
- xiii <http://social.techcrunch.com/2015/01/27/will-2015-see-the-death-of-the-Robo-Advisors/>
- xiv Richard A. D’Aveni, “The Empire Strikes Back: Counterrevolutionary Strategies for Industry Leaders,” *Harvard Business Review*, November 2002.
- xv <http://www.wsj.com/articles/wells-fargo-goes-robo-with-sigfig-wealth-management-1479242552> and <https://www.wsj.com/articles/wells-fargos-robo-adviser-to-cost-more-than-rivals-options-1490639957> (Accessed March 28, 2017).
- xvi Ibid.
- xvii Ibid.
- xviii <https://www.forbes.com/sites/samanthasharf/2015/08/26/blackrock-to-buy-futureadvisor-signaling-robo-advice-is-here-to-stay/#561fbcc43023>
- xix <https://www.bloomberg.com/news/articles/2016-03-31/citi-robo-advisers-will-never-take-the-place-of-traditional-investment-managers>
- xx <http://aitegroup.com/report/digital-advisor-technologies-Fintech-and-move-beyond-traditional-service>
- xxi [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services_en)
- xxii <https://www.ashurst.com/en/news-and-insights/legal-updates/open-banking-can-apis-transform-the-banking-landscape/>
- xxiii <http://www.prnewswire.com/news-releases/banks-plan-would-weaken-cybersecurity-of-consumer-bank-accounts-300410503.html>

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## Manuscript Guidelines, Submission and Review Process

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- Course design – current courses, new courses, new trends in course topics
- Course management – successful policies for attendance, homework, academic honesty ...
- Class material
  - Description and use of new cases or material
  - Lecture notes, particularly new and emerging topics not covered effectively in textbooks
  - Innovative class activities and action-learning – games, active learning, problem based
- Major or emphasis area program design that is new or innovative.
- Assessment – all aspects including AACSB and university level assessment strategies and programs
- Integration of programs or courses with other academic disciplines
- Internship programs
- Business partnerships
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- Manuscripts should be limited to 8 to 10 pages or less, although longer will be accepted if warranted.
- Articles can be either regular research papers, or shorter notes that succinctly describe innovative classroom teaching methods or activities.
- Manuscripts should be completely finished documents ready for publication if accepted.
- Manuscripts must be in standard acceptable English grammatical construction.
- Manuscripts should be in MS Office Word format. Word 2007 files are acceptable, as are earlier versions of Word. If you are using a new version of Word after Word 2007, save in Word 2007 format.

#### Submit your manuscript

- Manuscripts may not have been published previously or be under review with another journal.
- Submit the manuscript attached to an email to **submit@beijournal.com**
- We will respond that we have received the manuscript.
- Article submissions can be made at any time.
- Submission deadlines: September 15 for December issue, March 15 for June issue.

#### Manuscript review

- The editor and reviewers will review your submission to determine if 1) the content makes a contribution to innovative business education, 2) is of the proper page length, 3) is written in proper grammatical English, and 4) is formatted ready for publication.

- 
- Submissions not meeting any of these standards will be returned. You are invited to make revisions and resubmit.
  - If the submission meets the standards, the manuscript will be sent to two reviewers who will read, evaluate and comment on your submission.
  - The editor will evaluate the reviews and make the final decision. There are 3 possible outcomes:
    - Accept as is.
    - Accept with minor revisions.
    - Not accepted.
  - Reviews will be returned promptly. Our commitment is to have a decision to you in less than two months.
  - If your paper is not accepted, the evaluation may contain comments from reviewers. You are invited to rewrite and submit again.

#### **If your paper is accepted**

- Minor revision suggestions will be transmitted back to you.
- Revise and send back as quickly as possible to meet printer deadlines.
- Upon final acceptance, we will bill you publication fees. See [www.beijournal.com](http://www.beijournal.com) for latest per page fees. Sole author fees are discounted.
- The fees include all costs of mailing a copy of the issue to each author via standard postal ground.
- Delivery to locations outside the continental US will cost an additional \$10 per author for 5 day delivery.
- Faster delivery methods are available for US and international delivery. Contact the editor for a specific pricing.
- All publication fees should be remitted within 10 business days of acceptance, if possible.
- If you decide not to publish your paper with BEI Journal after submitting payment, we will refund publication fees less \$200 to cover costs of review and processing.
- Cancellation cannot occur after the paper has been formatted into the final printer's file.

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## Manuscript Style Guide and Example

An example is provided following these instructions.

This style guide represents style guidelines in effect for future issues, but always check for updates online.

Authors are responsible for checking for correct grammar, construction and spelling. Authors are also responsible for formatting pictures, tables, and figures such that a pdf black and white file sent to the publisher will reproduce in a readable manner.

### General Setup:

- All fonts other than exceptions noted below: Times New Roman. 10 point for text. Other sizes as noted below
- Margins: 1 inch on all sides of 8½x11 inch paper size.
- No headers or footers.
- Absolutely no footnotes or endnotes via footnote or endnote formatting. For footnotes or endnotes, place a number of the footnote in the proper location as a superscript. Then at the end of the paper or bottom of the page, add the footnote as text with a superscript number to correspond to that footnote.
- Page numbering bottom centered.
- No section breaks in the paper.
- No color, including url's. Format to black. No color in tables or figures. Use shading if necessary.
- All pages must be portrait orientation. Tables and figures in landscape orientations should be reformatted into portrait orientation.
- All paragraphs should be justified left and right, single spaced, in 10 point Times font, no indent on first line, 1 line between each heading and paragraph.
- One line between each paragraph.

### Titles, Authors, and Headings:

- **Title centered 14 point bold.** One line between title and author's name.
- Authors: centered, 12 point. Name, affiliation, state, country.
- One line space to **ABSTRACT** (title 10 point, bold, all capitalized, aligned left; text of abstract 10 point, no bold)
- After **ABSTRACT**, one line space, then **Keywords**. Followed by one line space to first major heading.
- **HEADINGS, MAJOR**, 10 point, bold, all capitalized, aligned left.  
The specific headlines will be based on the content of the paper, but major sections should at a minimum include an abstract, keywords, introduction, conclusion, and references.
- **Sub-headings:** 10 point, bold, first letter capitalized, no line to following paragraph. Align left.
- *Third level headings:* *Italic*, 10 point, first letter capitalized, no line to following paragraph. Align left.
- **Keywords:** heading: 10 point, bold, first letter capitalized, no line to following paragraph. Align left.  
Your list of keywords in 10 point, no bold.

### Tables, Figures and Graphs:

- All fonts 10 point.
- Numbered consecutively within each category. Table 1, Figure 1 etc.
- Title: 10 point, bold, left justify title, one space, then the table, figure, etc.
- Example: **Table 1: Statistical Analysis**

### References:

- APA format when citing in the text. For example (Smith, 2009).
  - References section: 8 point font, first line left margin, continuation lines 0.25 inch indent. Justify left and right. No line spacing between references. List alphabetically by first author.
  - Specific references: Last name, First initial, middle initial (and additional authors same style) (year of publication in parentheses). Title of article. *Journal or source in italics*. Volume and issue, page number range.
  - Example: Clon, E. and Johanson, E. (2006). Sloppy Writing and Performance in Principles of Economics. *Educational Economics*. V. 14, No. 2, pp 211-233.
  - For books: last name, first initial, middle initial (and additional authors same style) (year of publication in parentheses). *Title of book in italics*. Publisher information.
  - Example: Houghton, P.M, and Houghton, T.J. (2009). *APA: The Easy Way!* Flint, MI: Baker College.
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*Example (note that this example represents a change from previous style guides)*  
**Evidence to Support Sloppy Writing Leads to Sloppy Thinking<sup>1</sup>**

Peter J. Billington, Colorado State University - Pueblo, Colorado, USA (12 point)  
Terri Dactil, High Plains University, Alberta, Canada

**ABSTRACT (10 point, bold, all capitalized, left justified)**

(text: 10 point Times font, no indent, justified, single space, 150 words maximum for the abstract)

The classic phrase “sloppy writing leads to sloppy thinking” has been used by many to make writers develop structured and clear writing. However, although many people do believe this phrase, no one has yet been able to prove that, in fact, sloppy writing leads to sloppy thinking. In this paper, we study the causal relationship between sloppy writing and sloppy thinking.

**Keywords:** sloppy writing, sloppy thinking (10 point, bold title, first letter capitalized, left justified).

**INTRODUCTION (10 point, bold, all capitalized, left justified).**

The classic phrase “sloppy writing leads to sloppy thinking” has been used by many to make writers develop structured and clear writing. However, since many people do believe this phrase, no one has yet been able to prove that in fact, sloppy writing leads to sloppy thinking. Is it possible that sloppy writing is done, even with good thinking. Or perhaps excellent writing is developed, even with sloppy thinking.

In this paper, we study the writing of 200 students that attempts to test the theory that sloppy writing leads to sloppy thinking.

**PREVIOUS RESEARCH**

The original phrase came into wide use around 2005 (Clon, 2006), who observed sloppy writing in economics classes. Sloppy writing was observed in other economics classes (Druden and Ellias, 2003).

**RESEARCH DESIGN**

Two hundred students in two business statistics sections during one semester were given assignments to write reports on statistical sampling results. The papers were graded on a “sloppiness” factor using...

**Data Collection** (Sub-heading, bold but not all caps, 10 point, aligned left, bold, no line after to paragraph)

The two hundred students were asked to write 2 short papers during the semester...

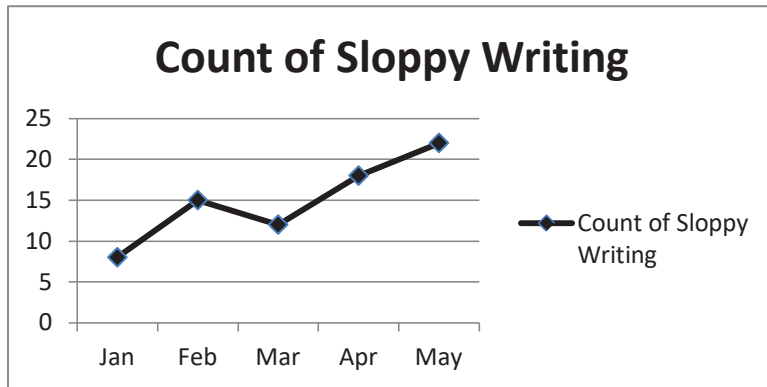
**Data Analysis**(Sub-heading, bold but not all caps, 10 point, aligned left, bold, no line after to paragraph)

The two hundred students were asked to write 2 short papers during the semester...

**DISCUSSION**

The resulting statistical analysis shows a significant correlation between sloppy writing and sloppy thinking. As noted below in Figure 1, the amount of sloppy writing increases over the course of the spring semester.

**Figure 1: Sloppy Writing During the Semester**



The count results were compiled and shown in Table 1 below.

**Table 1: Counts of Good and Sloppy Writing and Thinking (bold, 1 line after to table, left justify)**

	<b>Good Thinking</b>	<b>Sloppy Thinking</b>
<b>Good Writing</b>	5	22
<b>Sloppy Writing</b>	21	36

\*-Indicates significance at the 5% level)

As Table 1 shows conclusively, there is not much good writing nor good thinking going on.

## CONCLUSIONS

The statistical analysis shows that there is a strong relation between sloppy writing and sloppy thinking, however, it is not clear which causes the other...

Future research will try to determine causality.

## REFERENCES (title 10 point, all caps, bold, align left, one line to first reference)

**(1 line spacing)** (All references 8 point, indent second line 0.25 inch, justify left and right)

- Clon, E. (2006). Sloppy Writing and Performance in Principles of Economics. *Educational Economics*. V. 14, No. 2, pp 211-233.  
 Devad, S. and Flotz, J. Evaluation of Factors Influencing Student Class Writing and Performance. *American Journal of Farming Economics*. V. 78, Issue 3, pp 499-502.  
 Druden, G. and Ellias, L. (1995). *Principles of Economics*. New York: Irwin.

(short bio section optional, can run longer than these examples; removed before sent to reviewers)

**Peter J. Billington**, Ph.D., is a professor of operations management at Colorado State University – Pueblo. His research interests include lean six sigma and innovative education.

**Terri Dactil**, Ph.D., is a professor of business communication in the College of Business at High Plains University, Alberta, Canada. His research interests include instructional methods to improve student communication skills.

Endnote: (do not use word footnote or endnote formatting to accomplish this; see comments above)

1 The authors wish to acknowledge the assistance of graduate student Philipp Sleekin in compiling and reading numerous student papers.