DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

DeVry University
Keller Graduate School of Management

DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

TABLE OF CONTENTS

LETTER TO THE EDITOR:

ARTICLES:

DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

TABLE OF CONTENTS (CONT'D)

BOOK REVIEWS:

CASE STUDY:

CALL FOR PAPERS:

A MESSAGE FROM THE PROVOST

Scholarly activity is an important part of a faculty member's role at DeVry University. We take great pride in the work they produce and are thrilled to highlight some of their efforts in the DeVry University Journal of Scholarly Research. The papers shared in the Journal are testaments to our professors' dedication to their fields of study and their engaging perspectives.

Supporting scholarly activity through the Journal is one of several initiatives within the Academic Excellence team. By working with peers reviewers and editors, our professors can receive objective feedback and push their research-driven work to new heights.

Through our professors' pursuit of scholarly work, we believe our culture of Care will become stronger than ever and ultimately lead to enhancing the student classroom experience. We look forward to sharing more thought-provoking articles and perspectives in future Journals.

Sincerely,

Shantanu Bose

Shantanu Bose, PhD
Provost and Vice President of
Academic Excellence

A MESSAGE FROM THE MANAGING EDITORS

We are pleased to introduce the Spring 2017 release of the DeVry University Journal of Scholarly Research. This issue includes papers, book reviews and case studies specifically for those interested in the fields of business, technology and education.

Within our community of scholars, we believe producing research-based work is an important endeavor. It prompts discussion and contributes to the greater body of knowledge within academia. The contributors to the Journal believe that pushing the boundaries of what we know and engaging in discussions around academic theories can help us better serve students and refine our teaching practices for the future.

It's an honor to share papers prepared by our esteemed faculty members, which explore the following topics:

- Teaching styles in relation to improving a student's reading and writing skills
- The role of organizational change agents in business
- The validation of an emotional intelligence scale for use in businesses
- JavaScript in the learning process of object-oriented programming

Along with the papers, you will find two reviews of books on the subjects of investing philosophies and principles of fundamental financial analysis; and the role of German women in World War One. At DeVry University, we greatly value the lessons that can be learned from real-world experiences. As such, we have included a case study that prompts thought around what happens when philanthropy, style and social media come together. This is a tool that can be used in the classroom and includes tasks as well as supportive teaching notes.

The enthusiasm and dedication of the Journal staff and the authors who have submitted their work for publication has provided a broad spectrum of research that will enlighten professionals and educators in related fields. We congratulate and thank our contributors for engaging in this activity and for their dedication to the research process. We all benefit from their efforts.

To view or share current and past issues of the Journal, visit the DeVry University Newsroom: *newsroom@devry.edu*.

Sincerely,

Deborah Helman, PhD
Managing Editor

Michael Bird, PhD
Managing Editor

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EDITORIAL BOARD OF THE DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

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INSTITUTIONAL REVIEW BOARD
DeVry University has an Institutional Review Board (IRB) to protect the rights and welfare of humans participating as subjects in a research study. The IRB ensures the protection of subjects by reviewing research protocols and related materials. DeVry University's colleagues and Masters students who want to conduct research, must first contact the IRB for an application. Once received, the IRB will review the application and supporting materials to determine if all criteria have been met before approving the research.

In support of helping colleagues and students gain an in-depth understanding of ethical research processes, the IRB obtained a Collaborative Institutional Training Initiative (CITI) membership. CITI provides globally accepted training that aids the research process. Those who wish to submit applications to the IRB are required to complete CITI training beforehand.

For additional information, you can contact the DeVry University IRB through the following email address: *dvuirb@devry.edu*.

LETTER TO THE EDITOR, JIM SCHNEIDER, PHD

WEB CONFERENCING EDUCATION TECHNOLOGY

Dear Editors,

Online or distance education is here to stay, and its popularity is likely to grow as more traditional and nontraditional students alike take advantage of its convenience and (in our modern society) its safety. Still in its infancy, online education has been reframing itself rapidly as new technologies emerge and evolve.

Web conferencing tools have been available for more than a decade, but the latest evolution of these technologies holds great promise for encouraging both students and faculty engagement at deeper levels. Modern web-conferencing platforms can help transition the online experience beyond mindless watching of recorded lectures to engaging interactions that foster true learning. Early (admittedly anecdotal) indicators show that offering live lecture/discussion (which can be recorded for subsequent listening) and having drop-in virtual office hours enhance student experiences, involvement, and connection with their professors and course material. Web conferencing opportunities transcend mere digital and phone communications in that they allow remote sharing of video, documents, whiteboards, applications, entire screens, and even devices. Communications with web conferencing is very like sitting across a table from a student in a face-to-face setting. Although web conferencing is essential to intensified student and faculty engagement in the online world, it can also serve as a profound enhancement to on-site and blended teaching.

In prior years, DeVry University provided various conferencing platforms, which were sporadically adopted by individual professors. With the recent move to WebEx, DeVry institutions are poised to revitalize both online and blended education; to deepen value, quality, and rigor where it had been lacking; and to provide our students with an immersive education that eclipses the limitations of a merely digital "shell" format.

As faculty who accepted the challenge to learn WebEx and help train the other 4000 faculty members, we sincerely hope that all colleagues will take advantage of the opportunities web-conferencing tools offer and that students will be institutionally oriented to take full advantage of them as well. If we are to reinvigorate our pedagogy, develop new best practices, and re-establish our edge as a leader in higher education, we at DeVry and its affiliates must begin with the basics of effectively engaging students and faculty in active learning. WebEx, Kaltura, our network of classrooms that are connected by technology, the shiny, new learning management system we will roll out next year, and many other of the newest ed-tech resources will make that possible.

Sincerely,

Michelle Bradford, Michael Dufresne, Paula Herring, Judy McCarthy

BECOMING A "GUIDE ON THE SIDE" IN A READING AND WRITING SKILLS COURSE

MICHAEL GOOCH
COLLEGE OF LIBERAL ARTS & SCIENCES

Author Note: Michael Gooch is a senior professor in the College of Liberal Arts & Sciences at DeVry College of New York.

ABSTRACT

This paper reflects on the author's experience in applying Alison King's idea of the instructor as a "guide on the side" rather than a "sage on the stage" to an introductory reading and writing class offered in the blended mode. Initially, the course was offered in a more conventional lecture/discussion format, but the results were mixed. Subsequently, the course provided individualized instruction to each student, drawing upon King as well as best practices of a number of math instructors observed in the past. This "guide on the side" method yielded improved results. In the spirit of continuous improvement, the author will continue to refine his teaching methods.

Correspondence regarding this article should be addressed to Michael Gooch at 212-312-4428 or mgooch@devry.edu.

Keywords: flipped learning, blended learning

Over the past few years, one of the most popular terms in education has been flipped learning, which for simplicity may be defined as a teaching methodology in which lecture becomes homework, and homework is done during class time. The term flipped learning is consistently attributed to Bergmann and Sams (2012), and a database search for "flipping the classroom" between 2012-2016 yielded 658 peer-reviewed results. While Bergmann and Sams have garnered a great deal of attention, it was Alison King (1993) who first made the case for putting an end to the instructor as "sage on the stage," in favor of an individualized approach she termed as the "guide on the side." Influenced by King as well as my research into flipped learning, and prodded into change by middling results, I decided to try to become a "guide on the side" in an introductory reading and writing course offered in the blended mode. I was encouraged by the initial positive results of this change, and will continue to refine my methods going forward.

DISCUSSION

ENGL062 is a recently developed prerequisite skills course in reading and writing, offered at DeVry University. It replaces a two-course sequence my institution had used for several years. An innovative feature of the new course is MyReadingLab, a Pearson product that applies the concepts of mastery learning familiar

to users of MyMathLab to the acquisition of reading comprehension skills. In addition to the completion of ten reading modules, students write developed paragraphs and essays and participate in asynchronous online written discussions.

The first time I taught the course, I used methods similar to those I had used for other reading and writing courses. In the first half of the three-hour, fifty-minute class session, I would carefully explain the writing assignment to the students, and then remind students of the reading modules that needed to be completed that week. In other words, for the first half of the class, I was the classic "sage on the stage." In the second half of the class, students worked individually on their modules and essays. I included a class activities grade based on attendance and participation that counted for about 20% of the total grade. I used the pre-loaded threaded discussion topics provided within the learning platform, many of which were not directly tied to the writing assignments.

My fundamental mistake, in retrospect, was in treating the class as a unified entity rather than as a loosely affiliated group of individuals with different abilities and needs. I would start the class by telling the students as a group what they needed to do, and then I expected, and assumed, that they would go do it. Finally, while I had been trained in how to use MyReadingLab, I was still learning the nuances of how to use it effectively as a teaching and learning tool.

The results of this first attempt were not terrible, but they should have been better. While attendance was pretty good (88%), some students weren't accomplishing what they needed to during class time. Students would get lost in the MyReadingLab modules, sometimes working on unnecessary exercises or completing them out of order, thus making things much more difficult on themselves. Because I was a novice in teaching with MyReadingLab, I did not always catch these problems early and get the students back on track as quickly as I should have. In the end, only 8 out of 12 students passed the course,

and my end of course evaluation score was only 3.37/4.00, well below my average.

The second time I taught the course I was determined to learn from my mistakes and do it better. I decided to become a "guide on the side." Having observed many math professors teaching MyMathLab, I applied some of the best practices they had shown me. Each week before the on-site class meeting, I printed out a copy of each student's current grades. I wrote a short message on the printout and highlighted any missing assignments, telling the student what needed to be accomplished by the end of the class period. If the student had written a finished essay or a rough draft, I printed out a copy and wrote comments on it. I then handed these items to the student and had a short conversation with him or her. These conversations were usually of one of two types: keep up the good work, or, come on, let's get going!

In the online component of the course, I changed many of the threaded discussion topics to make them clearly related to the essay topics. For example, when the students were beginning a new essay, the topic was simply "What is your essay about?" The students each wrote a one-paragraph response to the prompt, plus at least two shorter replies to their classmates. When students were revising an essay, the topic was "What changes are you going to make to your essay?" These changes made the discussions much more relevant and resulted in more and better responses from the students.

I also started using class time for peer reviews, asking students to read each other's rough drafts in class and provide feedback. Finally, near the end of each class, I asked students to show me their work in progress before leaving. If I saw that an essay was in good order, I told the student to submit it to the Dropbox, where, time permitting, I graded it immediately and returned it to the student. If further changes were needed, I told the student to make those changes and submit the final version by Sunday night, which is the official deadline.

I made one additional change, just for this class: I removed the attendance and participation grade that I'd included the first time I taught the class. I did this for two reasons. First, I wanted to see how this change would affect attendance and passing rates. My hypothesis was that it would modestly impact the former, and have no effect on the latter. Second, while attendance was good in my previous session, it was not always productive attendance. Most students were on task, but some spent significant time visiting various web sites unrelated to class assignments. My hope was that if students felt they were attending by choice, they would exhibit a positive attitude and work ethic during class time. It was a risky move, and by one measure it was a failure. Attendance declined precipitously to 72%. On the other hand, the students who did attend were attentive and on task. The web-surfing almost completely disappeared.

In the end, the results were better: This time ten out of twelve students earned passing grades, and my course evaluation score increased to a respectable 3.60. The sample size was small, but I believe that my proactive and personalized approach helped more students complete the course successfully. As of this writing, I have started teaching the class for the third time. I have kept the same overall "guide on the side" approach I used previously, but due to the large attendance decrease, I decided to reinstate the class attendance and participation grade this time, but made it a more modest 8% of the final grade (ten points per week). My hope is that a smaller allocation of points to attendance will encourage high attendance rates, but that students will attend primarily because they want to, not because they feel they have to.

CONCLUSION

Although these results are based on my limited experiences of teaching this particular version of an introductory reading and writing course only twice, I am encouraged by the improved outcomes and positive reception to my new role as a "guide on the side." I encourage other instructors teaching similar courses to read King's article and implement personalized instructional methodologies to meet their students' individual needs.

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Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. Washington, DC: *International Society for Technology in Education*.

King, A. (1993). From sage on the stage to guide on the side. *College Teaching, 41(1)*, 30-35.

IS THE CHANGE AGENT TRIANGLE A VIABLE SOLUTION FOR ORGANIZATIONAL CHANGE AGENTS TO AVOID BECOMING SYMBOLIC SACRIFICIAL LAMBS?

MICHAEL MILFORD
COLLEGE OF BUSINESS & MANAGEMENT

Author Note: Michael Milford is a professor in the College of Business & Management at DeVry University, Sherman Oaks, CA.

ABSTRACT

This paper identifies a timely real-world problem in the tendency for organizational change agents to become "sacrificial lambs" when attempting to transact with individuals in positions of power. This paper is based on an integrative review of scholarly articles that present an understanding of why this happens in terms of the Bowen Theory of Triangulation, the Karpman Drama Triangle, and organizational change and stress management. While there is a solid theoretical framework for understanding why this happens, there is a gap in the literature for how to change this scenario. The author has developed a Change Agent Triangle as an alternative to the Drama Triangle in visualizing a collaborative process for change.

The implications for using a Change Agent Triangle as a method to visualize one's role in a collaborative process for change in the field of organizational development and design are far ranging and can have a significant impact on reducing the number of sacrificial lamb scenarios and improving talent retention within an organization.

Correspondence regarding this article should be addressed to Michael Milford at 818-932-3080 or mmilford@devry.edu.

Several years ago, I hit a rough spot in my marriage. I was doing my best to make changes that would further the greater good, but try as I may, the outcomes were often the same, and I felt marginalized in some instances and a sacrificial lamb in others.

I decided to seek family therapy. In one meeting, I was asked to draw a picture of what I wanted to change in my marriage. I drew a triangle that represented the Greek letter "delta," the mathematical symbol for change. I identified the top of the "triangle" as the change I wanted to see in my marriage (C). At the bottom left of the triangle, I identified myself as (A). At the bottom right of the triangle, I identified my wife, whom I needed to partner with to accomplish the change, as (B). Based on life experience, I knew I wanted to change the direction of our marriage, not my wife. In other words, my change goal was objective and not about personalities (see *Figure 1*).
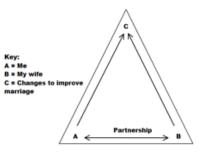

Key:
A = Me
B = My wife
C = Changes to improve marriage

Figure 1. *The Change Agent Triangle. This figure demonstrates the positional roles and relationships involved between myself and my wife in partnering to improve our marriage.*

Seeing the diagram of the triangle was a transformational experience. I realized that if I wanted to make a change, I had to be clear on what change was required, what and where my role was in that change process, and who I needed an explicit partnership with to help overcome any obstacles in making that change. I learned quickly that if the person I wanted to collaborate with did not want to explicitly partner with me on a proposed change, then I could not move forward with the goal. I also learned that if I pushed for the change, I became a persecutor and was moved to the top of the triangle as the issue, that my wife would naturally triangulate with others, and that I would become the problem that needed to be changed — in other words, I would become a sacrificial lamb.

It became apparent that what I later labeled as "The Change Agent Triangle" (CA Triangle) was a useful tool to use for ascertaining where I was in relationship to others when addressing change, not only personally but also in business.

Over time and multiple uses, the CA Triangle allowed me to have a safer conversation with a Business Agent but did not always result in a solution if they did not see the need for change. In fact, I quickly discovered that the Business Agent would view the Change Agent as a threat to the status quo of the organization and move the Change Agent to the top of the triangle into the role of a "sacrificial lamb." In this case, even though one has good intentions as an agent of change, he can nevertheless be deemed disruptive to the organization, and thus, needs to be sacrificed for the good of the organization.

In countless conversations, I discovered that individuals who attempted to make changes in their lives often experienced a role reversal from being a change agent to becoming a sacrificial lamb. I also observed that change agents did not realize that they had been moved to the top of the CA Triangle, as the symbolic sacrificial lamb, until it was too late. Ultimately, they suffered a setback in their professional relationships. When they saw the dynamics exemplified in the CA Triangle, they often experienced a paradigm shift and clearly understood how the dynamics had played out (see *Figure 2*).

Figure 2. *The Change Agent Triangle. This figure demonstrates the positional roles and relationships involved between a change agent and a business agent, partnering in an organizational change process.*

This paper will analyze how the CA Triangle may be a useful tool to help a change agent successfully manage resistance to change from individuals and organizational sources, which can be a contributing factor in the longevity of both the change agent and the organization.

Before I began this paper, I knew the CA Triangle was an easy concept for clients to follow. This was based on numerous coaching sessions with professional colleagues and business leaders. After researching the topic of triangulation, I have concluded there is currently a gap in the availability of simple tools that change agents can use to effect collaborative change within organizations.

PROBLEM STATEMENT

Generally, continuous improvement is created through strategic planning, which is a higher level activity within an organization. Change agents often act as the catalysts and assume the responsibility for managing change activities that support improvement. The paradox is that if the suggestions for improvement are generated outside this process—that is, ad hoc— then the "Change Agent" tends to become a "sacrificial lamb." The dilemma is that although organizations need to continuously improve in order to grow, they may be sacrificing talented individuals as a natural outcome of the change process. A notable example would be the firing of Steve Jobs from Apple.

So the question proposed in this paper is as follows: Is the CA Triangle a viable solution for organizational change agents to avoid becoming sacrificial lambs?

LITERATURE REVIEW

Using triangles to isolate factors that contribute to a problem or solution may not be a new attempt. Before beginning the literature review for this paper, I viewed the CA Triangle as a simple visual tool for managing change and being aware of the role one is playing and one's position within the change management process. After reviewing organizational development literature on this topic, it is clear that triangles have been used by previous authors as a tool to convey important concepts. This approach is applicable to collaborative change and is a method uniquely applied to change management. This review will build on other models as a predecessor to the proposed CA Triangle.

PRINCIPLED NEGOTIATIONS IS KEY TO UNDERSTANDING THE GOAL OF THE CA TRIANGLE

Fisher and Ury (2011) discuss "Principled Negotiations" as an approach to negotiations. The goal is to achieve a mutually-shared outcome, or win/win, and has four central guidelines. First, people are separated from the problem. Second, the focus is on the interests of each party and not on the positions they may bring to the table. Third, multiple options must be generated for mutual gain prior to a decision. And fourth, the outcome of the principled negotiation must be based on objective criteria. The justification for this method is that it can increase the chance for agreement and decrease costly posturing.

THERE IS A CORRELATION BETWEEN THE CA TRIANGLE AND TRANSACTIONAL ANALYSIS

The CA Triangle correlates with Transactional Analysis (TA) methods. The philosophy of TA was originated by Eric Berne and first became popular in his bestselling book Games People Play. Bern (1964) states, "At any given moment each individual in a social aggregation will exhibit a Parental, Adult or Child ego state, and the individuals can shift with varying digress of readiness from one ego state to another" (p. 24). The Adult is an autonomous state that is focused on an objective appraisal of reality. The CA Triangle requires an Adult to Adult partnering and the willingness of each player to be aware of their reality states (roles) and to be open to spontaneity and intimacy.

TRANSACTIONAL ANALYSIS IS USED AS A CHANGE STRATEGY FOR ORGANIZATIONS

It is important to note that Transactional Analysis (TA) enjoyed a renewed interest in the late 1990s. Neath (1995) states, "Organizations are paying more attention to the quality of interpersonal relationships" (p. 13). The purpose of the article was to review how TA was being used in organizations and to evaluate its effects. Neath shares from other others in his article that the development of adult-to-adult transactions is the primary focus of most organizational change programs which use TA. Or, as Bern (1964) stated, "You have just made an autonomous, objective appraisal of the situation and are starting these thought-processes, or the problems you perceive, or the conclusions you have come to, in a non-prejudicial manner" (p. 24).

TRIANGLES HAVE PROVIDED A MEANS OF FIXING IDENTITIES VISUALLY IN DRAMA

Karpman (2011) conceived the "Drama Triangle." Only three roles are needed to represent the "emotional reversals" that are drama. In the diagram, the "action" roles are the Persecutor, Rescuer, and Victim, or P, R, and V (see *Figure 3*). The drama begins when these roles are established or are anticipated by the audience. The key to understanding the dynamics of the roles is that the arrows in the diagram do not indicate sequential action, but rather that all roles are interchangeable, thus meaning role reversals can occur. In fact, if they do not occur, there is no drama. The diagram provides a means of fixing identities visually.

P = Persecutor
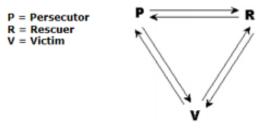R = Rescuer
V = Victim

Figure 3. *The Karman Drama Triangle. Karpman (2011) points out "this figure is a useful model of archetypical role switching dynamics of Persecutor, Rescuer, and Victim that can often play out between people in conflicted situations." (p. 50).*

ORGANIZATIONS SHOULD BE ON THE LOOKOUT FOR TRIANGULATION

Kott (2014) provides an excellent overview of the Bowen Theory Concepts and their importance as a tool for organizational development consultants in what Kott describes as an "anxious work system." Anxious work systems are reflective of organizations going through change, such as shifts in technology, downsizing, and turn-a-rounds. Consequently, organizational change disrupts relationship systems and social networks. The author provides an introduction to Murray Bowen, a psychiatrist and family therapist who established a "family systems theory" that focused on the sensitivity human beings have to each other at a biological level. Key to Bowen's theory is the focus on a group (family) and not an individual. Bowen developed eight interrelated concepts to describe human behavior in a family. One concept that relates directly to this paper is "triangulation," which simply means that when two individuals (a dyad) come into conflict, either one of the individuals, under stress, will seek out a third person to ""stabilize" the relationship. In Kott's (2014) dissertation study, organizational development consultants were "on the look-out for a situation where they might have been called in to calm intense relationships between two people in an organization, thereby being "triangle in" to the work system even before the engagement was launched" (p. 78).

Kott (2014) creates a "Process Flow for Organizational Development consultants" (p. 78). Kott's visual instruction plan guides a consultant through each step of the consulting process. Key to this plan is the consultant's stance as a coach and neutral observer, using a systems perspective as the foundation throughout the process. Kott concurs with Bowen's earlier work that the "Bowen Theory" can be extended to work systems, thereby creating awareness of hidden emotions in work systems and creating transformative change.

ANALYSIS

The CA Triangle was an original idea that presented itself during a marriage counseling session. However, using charts and triangles to isolate factors that contribute to a solution is supported by the literature covered in this paper. Kott (2014) argued that when two individuals (dyad) come into conflict, either one of the individuals, under stress, will seek out a third person (triangulation) to "stabilize" the relationship. When this occurs, it can naturally transition into a Karpman Drama Triangle. Karpman (2011) explained that this transition typically occurs subconsciously, without any of the participants being aware that they are "playing the game." In the game of drama, there are both winners and losers. Also, there are surprises. A change agent may start out in the role of a rescuer, only to discover that they have suddenly become the victim (sacrificial lamb). This type of win/lose drama occurs day in and day out in group settings. Without an awareness of the dynamics of triangulation, organizational change agents may have less time and fewer resources to successfully implement substantive and sustainable change.

SOLUTIONS

Karpman (2011) created a visual tool (the Karpman Drama Triangle) as an effective method to help players become aware of their roles when dealing with conflict. Once a player becomes aware, the game is over. Karpman suggested that the only solution to the game was, simply put, not to play the game. Once the game is over, what tools are still available to the change agent? If the competitive game of drama does not achieve change and move an organization forward, then the alternative may be the solution: a collaborative game where all the players either win or lose together. If the goal is achieved, the change agent wins, the business agent wins, and the organization wins.

The CA Triangle is one possible solution to use in collaborative change. In essence, it allows two agents to partner and or collaborate as a dyad (A & B), with the focus on an objective goal (C) without the risk of drama. Fisher and Ury (2011) describe this focus or goal as "Principled Negotiations," an approach to negotiations where people are separated from the problem.

Because the Change Agent Triangle is a transparent process, in that it requires awareness of the participants and their explicit partnering, it side-steps many of the drama issues that can typically occur in change management. This is supported by Berne (1964).

The CA Triangle is an effective visual tool for fixing roles and their position with each other in change management scenarios. This tool correlates with the Karman Drama Triangle and Transactional Analysis methods as it requires "Adult to Adult" relationships as well as spontaneity and intimacy.

The CA Triangle is an effective visual tool in the form of a stable triangle that isolates factors that contribute to a problem and/or solutions within work systems. And, because it is less stressful, it preserves the dyad relationship by allowing agents to focus on an issue they both can come to an agreement on, thus avoiding triangulation and the potential of evolving into a Karpman Drama Triangle.

CASE EXAMPLE: MANAGEMENT CONSULTANT FINDS TRIANGLE USEFUL

In a personal interview, the CEO and Managing Partner of an established management consulting firm responded to several questions regarding the CA Triangle (C.E.O, personal communication, October 6, 2016). He is a trusted advisor to CEOs, board leaders, entrepreneurs, and business owners. His firm provides highly tailored, confidential strategic advising around critical, high-stakes issues that help organizations realize their full potential as they address leadership and operational needs.

When asked how he would explain to a business agent what the CA Triangle is and how to use it, he shared that the best method would be to have the user draw the triangle on paper, explain how the CA Triangle works as a tool to track roles and positions in the change management process, seek their support or commitment to the change being proposed, and then move forward with their explicit collaborative support or back away from it if there is no explicit commitment. The interviewee believed the timeliness of becoming

a sacrificial lamb when trying to make change within an organization is a bit less than it used to be within some organizations due to trends for less hierarchy. However, he shared that, once clients understand it, it will help them ask the right questions and avoid things going poorly. He went on to share a story about a business leader who was having a disagreement with his business partner and was about to approach the board of directors with his grievance and recommendations for change. However, the business leader decided not to move forward when he realized he may not have the support he needed from the board and the move would most likely limit his career or possibly end it. In looking back, the interviewee could see how the dynamics of the CA Triangle could be easily tracked. The implications to the interviewee were that the CA Triangle is useful because it is easy to remember and easy to analyze. He concluded that the CA Triangle would be useful to leadership and could find its way into corporate management development courses.

CASE EXAMPLE: INVESTMENT FIRM EXECUTIVE EASILY EXPLAINS THE CA TRIANGLE

Similar questions to those above were posed in another personal interview with a Senior Vice President of a large investment firm (Sr. V.P, personal communication, October 6, 2016). The interviewee stated that the CA Triangle helps him to understand his position in a particular relationship. Is he in a position of influence where he can improve his position on a business issue? Is he working with a team forming alliances where the team wins or loses together? Is he alone, at the top of the triangle, taking on the role of a symbolic sacrificial lamb and risking a career-limiting or possibly career-ending move?

The interviewee believes becoming a sacrificial lamb when trying to work with someone in making change continues to be a timely issue in business, especially with decision making in group settings. He has found it useful as part of a team where decisions on compensation and business direction are being made. Are people with him or not when influencing the outcome? He shared that his manager partner wanted to bring on a new partner in his firm. The working

partners did not see the benefit and collaborated as one to move the Managing Partner in a different direction (change). An agreement was made by the working partners (Change Agent [s]) and the Managing Partner (Business Agent) to conduct a blind vote. The outcome was that the new partner was not hired.

What is interesting in this scenario is that the "Working Partners" formed into one entity as a change agent to collaborate with the "Business Agent" for a change in the business decision (see *Figure 4*).

Figure 4. *The Change Agent Triangle. This figure showcases the roles and relationship of the Managing Partner, Working Partners, and the Change Goal.*

The interviewee of the investment firm shared that the implications of the CA Triangle are that in business, it is not all about one person; rather it is all about collaboration and getting everyone on the same page to move forward. Sacrificial lambs slow the process down. He believes this tool can be used in all organizations.

REFLECTIONS

I had some initial ideas about how the CA Triangle might be a useful tool in business for anyone trying to partner with another person to deal with an issue and together implement a change that would be a triple win: one for the change agent, one for the person who was willing help make the change (business agent), and one for the organization.

After researching triangles and triangulation and their application in organizational behavior and organizational development, I now see there is a gap in tools and methods that can be used after one stops playing a competitive game, such

as the Karpman Drama Triangle. I now believe that CA Triangle is a legitimate Organizational Development tool, which can be used by change agents to escape becoming sacrificial lambs. In my one-on-one interviews with corporate leaders, I observed that the ability to explain, grasp, and remember the CA Triangle was clearly advantageous for adoption as a tool. In addition, I noticed in the interviews that the CA Triangle can be used for groups as well as individuals, as long as the group forms into one entity as a Change Agent when partnering with the Business Agent. Having a group represented by one or more change agents is beyond the scope of this paper and will be pursued in future publications.

CONCLUSION AND FUTURE STUDY

This paper began with the question "Is the CA Triangle a viable solution for organizational change agents to avoid becoming sacrificial lambs?" The research for CA Triangle to date is qualitative in nature and has focused on gaining an understanding of the dynamics of human nature in a change management scenario. This approach is inductive and pulled from empirical observations, interviews, and scholarly articles. The limited empirical research was done on Transactional Analysis and the CA Triangle suggests there is a correlation between the two theories. The CA Triangle is a new addition to the field of thought for Organizational Change and Organizational Management. I hope this article spurs additional research into the effectiveness of using the CA Triangle as a viable solution for organizational change agents to avoid becoming sacrificial lambs.

In the 1983 movie WarGames, Joshua (an AI computer) states, after playing out all possible outcomes for Global Thermonuclear War, "A strange game. The only winning move is not to play. How about a nice game of chess?" (IMDb.com, Inc., n.d.).

So too is the game of drama. The game itself is pointless because the roles will continue to change as the unknowing participants react to the stress of change. Anyone within an organization can, and often does, take on the role of a change agent in response to a variety of forces, both internal and external. When they try to partner with a colleague to make a change and that colleague is an agent that represents the power structure within the organization, they are often caught by surprise and they suddenly become a sacrificial lamb or, as Karpman (2011) would state, "a victim." They find that they have made a career-limiting move, or in a worst case scenario, a career-ending move. This is a common experience for many change agents. The solution is to stop playing the competitive drama game with winners and losers and transition to a new, collaborative win/win game: the CA Triangle.

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INITIAL VALIDATION OF A SCALE TO MEASURE EMOTIONAL INTELLIGENCE

JACQUELINE SALDANA
CENTER FOR TEACHING EXCELLENCE

Author Note: Jacqueline Saldana is an assistant professor and faculty chair in the Center for Teaching Excellence, at DeVry University, Tampa, FL.

ABSTRACT

Emotional intelligence is defined as the ability to self-regulate feelings and emotions during the process of thinking. Most models of emotional intelligence are based on the analysis of emotional traits, emotional ability, and emotional competence. Several frameworks have been proposed to measure emotional intelligence, including Bar-On (1988), Mayer and Salovey (1997), and Goleman (1998). From these models, Goleman's framework of emotional intelligence seems to be better fitted to understand emotional intelligence from a managerial perspective, as it is inclusive of cultural diversity, conflict management, teamwork, and developing others (besides the traditional self-awareness, empathy, and managing emotions frames). As organizations become highly competitive environments, more companies are investing in screening tools that allow aligning individual personalities to diverse work environments. The purpose of this paper is to validate an emotional intelligence scale based on Goleman's model of emotional intelligence (1995, 1998). The validity of the scale is ensured through the operationalization of Goleman's five dimensions of emotional intelligence in an exercise that yielded 95 indicators. A 5-point Likert self-rating scale representing five dimensions of emotional intelligence was created and administered to 66 individuals with the purpose of confirming reliability. Reliability of the five dimensions of self-awareness, self-regulation, self-motivation, social awareness, and social skills was proven through Cronbach's alpha coefficients fluctuating from .744 to .927. The dissemination of a measurement scale that follows Goleman's framework could contribute to organizations by helping managers and employees to assess and refine emotional intelligence in the workplace.

Although Reuven Bar-On (1988) presented emotional intelligence as part of his work about personality theory and psychological well-being, scholars adjudicate the introduction of emotional intelligence as a research construct to Mayer and Salovey (1997), who proposed the term emotional intelligence to formalize social and emotional competencies. The theory defines emotional intelligence as the ability to self-regulate feelings and emotions during the process of thinking (Connelly, Gaddis, & Helton-Fauth, 2008). Mayer and Salovey (1997) explained that emotional intelligence increases as the individual matures, and emotions happen

within a context of social relationships. Mayer also proposed that emotions are universal expressions able to transcend cultural contexts (White & Coleman, 2000). However, it was Goleman (1995, 1998) who made emotional intelligence a popular topic among managers and organizations, assessing control of the emotions as a behavior conducive to high productivity. Since then, emotional intelligence has appeared in academic textbooks as one of the desired behaviors for high performance in management, psychology, sociology, and the arts (Zeidner, Matthews, & Roberts, 2009).

PROBLEM STATEMENT

As organizations become highly competitive environments, more companies are investing in screening tools to assess individual personalities and match these personalities to diverse work environments. Today, the designing of workplace personality tests represents a growing market of $2 billion, and employers continue to declare that these tests are critical in reducing the high costs of turnover when workers are not equipped with the abilities they need to perform specific tasks (Gray, 2015). However, the number of personality tests focused specifically on emotional intelligence is limited, although the advent of emotional intelligence promoted the utilization of emotional intelligence scales by private and public institutions during the 1990s. Cherniss (1999) emphasized that the case for the adoption of emotional intelligence screening tools decreased because of the proliferation of popular screening tests, numerous emotional intelligence paradigms, and the costs associated with these business investments.

PURPOSE STATEMENT

This paper aims to initiate the steps for validating a scale with 95 emotional intelligence indicators, representing five dimensions of the construct, with the purpose of disseminating a measurement instrument that can be used by organizational managers. This scale is based on the emotional intelligence model proposed by Goleman (1995, 1998), which is the most disseminated frame in the field of

management and organizational behavior (Seal, & Andrews-Brown, 2009). Testing the reliability of these indicators created through Goleman's frame will allow creating a manageable-size emotional intelligence scale that managers can use to identify and refine socio-emotional skills in the workplace. The use of emotional intelligence profiles will facilitate affordable personal improvement tools for recruitment and professional development.

THEORETICAL BACKGROUND

In the classic theory of intelligence, scholars focused on the development of cognitive abilities as a measurement for intellectual abilities (e.g., Piaget). However, contemporary human psychology theorists such as Gardner (2008) proposed in the 1980s that intelligence must be studied from more inclusive approaches (e.g., multiple intelligences). Gardner (2008) defined total intelligence as multidimensional, with seven dimensions of information processing including logical and mathematical, verbal and linguistic, musical and rhythmic, body-kinesthetic, visual-spatial, intrapersonal, interpersonal, and naturalistic. Gardner (2008) argued that the multiplicity of intelligence leads to distinctive intellectual profiles with different developmental trajectories. The theory of multiple intelligences influenced diverse practice fields, including management and education, which adopted this frame during the 1990s and participated in studies that contributed to the body of knowledge of multiple intelligences.

Influenced by Gardner's work on multiple intelligences, scholars developed a special interest in the emotional intelligence construct. Research during the 1990s provided the emotional intelligence construct with significant notoriety when studies found an intrinsic relationship between emotions, positive psychology, greater happiness and well-being, self-awareness, positive socialization, optimism, and self-efficacy (Costas & Faria, 2015). The scholarly work by Mayer, Salovey, and Caruso (2004) proposed the term emotional intelligence to define the intelligence construct related

to emotions and tested it through research applying emotional competencies' frameworks during the late 1980s and mid-1990s. Mayer and Salovey (1997) proposed the emotional intelligence construct as the set of skills necessary to adapt successfully to uncertainty and change, developing a frame consequently to identify, manage, and regulate emotions. Consequently, Daniel Goleman released a series of articles and books disseminating the utility of emotional intelligence in social contexts using both Mayer et al. (2004) and Gardner's (2008) work. According to Goleman (1995, 1998), the main elements of emotional intelligence are self-awareness, self-regulation, self-motivation, social awareness, and social skills.

Because the emotional intelligence frame has supported positive outcomes in social contexts, its use has proliferated in both private and public institutions. Individuals who can understand social and emotional competencies can create positive workplace environments that are conducive to positive outcomes, such as team performance, collaboration, and improved social behaviors (Dunn, 2012). One of the main elements of most emotional intelligence frames is the concept of self-awareness or the ability that individuals have to evaluate continually how they develop and deliver relationships, social skills, and emotions. Kunimoto (1994) defined self-awareness as a mental state that depends on people's subjective report of their inner states. The gap between what people want to be and how people perceive themselves is called distance. With self-awareness comes self-regulation, which is the individual ability to modify behaviors instead of reacting impulsively (Goleman, 1998).

Managers applied extensively the concept of emotional intelligence to organizational systems during the 1990s, and soon the concept extended to industry, education, and society. Vaida and Opre (2014) reported that a search of the term *emotional intelligence* yielded approximately 70,000 articles in academic databases (e.g.,

APA Psych Info, Ebsco Host, Sage Journals). Moreover, Amazon, the largest online bookstore, featured approximately 15,000 books on the topic of *emotional intelligence.* Vaida and Opre (2014) reported that scholars had extensively studied the construct of emotional intelligence in the three approaches of emotional traits, emotional ability, and emotional competence.

EMOTIONAL INTELLIGENCE SCALES

Goleman developed the Emotional Competence Inventory (ECI) in 1995. Goleman re-defined the emotional intelligence competencies as part of his framework as empathy, motivation, self-awareness, self-regulation, and social adaptability. Vaida and Opre (2014) reported that while Goleman applied emotional intelligence to the managerial field, it was the scale by Mayer et al. (2004) — the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) — that most industries adopted, a movement led by educational institutions that adopted the MSCEIT to help teachers to develop socio-emotional competencies. The MSCEIT is based in four dimensions of emotional intelligence, (a) perceiving emotions, (b) understanding emotions, (c) facilitating thought, and (d) managing emotions. The combination of these four branches of emotional intelligence yields 141 measurement indicators and can take as long as an hour to complete.

Another popular emotional intelligence scale is the Bar-On Emotional Quotient (EQ-i) Inventory (1997). The EQ-i consists of scales and subscales, exemplifying the following abilities, (a) intrapersonal, (b) interpersonal, (c) stress management, (d) adaptability, and (e) self-motivation or general mood. Additional existing emotional intelligence scales have also been showcased by the Consortium for Research on Emotional Intelligence (Charniss, 1999). *Table 1* (next page) presents a summary of the main indicators in eight different emotional scales that have been validated through research.

TABLE 1: SUMMARY OF INDIVIDUAL EMOTIONAL INTELLIGENCE SCALES (IN ALPHABETICAL ORDER)

SCALES	EMOTIONAL INTELLIGENCE DIMENSIONS	NUMBER OF ITEMS	TIME TO COMPLETE
BarOn Emotional Quotient Inventory	Adaptability: Change Management, Reality-Testing, Problem-Solving Flexibility Interpersonal: Interpersonal Relationships, Social Responsibility, Empathy Intrapersonal: Independence, self-regard, assertiveness, self-awareness, and self-actualization Self-Motivation: Happiness and Optimism Stress Management: Impulse Control and Stress Tolerance	133 items	30 minutes
Emotional & Social Competencies Inventory	Achievement Orientation Adaptability Coach and Mentor Emotional Self-Awareness Emotional Self-Control Empathy Influence Inspirational Leadership Organizational Awareness Positive Outlook	140 items	45 minutes
Genos Emotional Intelligence Inventory	Self-Awareness Self-Control and Self-Management Emotional Awareness of Others Emotional Expression Emotional Management of Others Emotional Reasoning	70 items	15 minutes
Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	Perceiving Emotions Facilitating Thought Understanding Emotions Managing Emotions	141 items	30- 45 minutes
Schutte Self Report EI Test	Appraisal and Expression of Emotion Regulation of Emotion Utilization of Emotion	33 items	10 minutes
Trait Emotional Intelligence Questionnaire (TEIQue)	Emotional Adaptability Emotional Assertiveness Emotion Management (others) Empathy Self-Regulation Low Impulsiveness Perception (self and others) Relationship management Self-esteem Self-motivation Sociability Stress Control	153 items	30- 45 minutes
Wong's Emotional Intelligence Scale	Evaluation of Emotions Recognition of Emotions Regulation of Emotions Utilization of Emotions for Performance	20 scenarios	30 minutes

GOLEMAN'S MODEL OF EMOTIONAL INTELLIGENCE

Based on studies showing that life success, happiness, and psychological well-being have little correlation with cognitive intelligence, Goleman (1995) proposed that emotional intelligence is an alternative model to develop leadership among managers. Goleman (1995) proposed that managers who can understand and manage their emotions, and the emotions of those working with them, can lead workers to achieve higher job performance and productivity. Other theorists concurred with Goleman in that managers today must be equipped with soft skills more similar to emotional intelligence than to concepts of traditional intelligence (Crainer, 2003). In this managerial notion, effective managers are those who can combine both intellectual and emotional intelligence skills to deal with organizational politics, the demands of changing markets, and cultural diversity.

Goleman (1995) also proposed that emotional intelligence can be learned through self-assessment and introspective evaluation, suggesting soft skills should be part of management schools and the traditional curriculum (Crainer, 2003). Coaching and mentoring activities have been identified as part of the organizational efforts to teach these socio-emotional competencies. Goleman (1995, 1998) deconstructed emotional intelligence into the five dimensions of (a) self-awareness, (b) self-regulation, (c) self-motivation, (d) social awareness, and (e) social skills. The framework encompasses 25 subcategories under these five dimensions, with 95 distinctive indicators. The main indicators are defined as follows:

1. Self-awareness: Individual ability to identify feelings and past and present emotional experiences to make decisions. Goleman (1995, 1998) defined self-awareness as the attributes of accurate self-assessment, emotional awareness, and self-confidence.

2. Self-regulation: Individual ability to modify emotional states, such as anxiety, anger, sadness, or stress as a decisive life skill. The self-regulation attributes are defined as adaptability, conscientiousness, self-control, and innovativeness, and trustworthiness.

3. Self-motivation: Individual ability to understand inner emotions and feelings, and using this information to motivate them to deal with the difficult situation and accomplish higher performance. The attributes of self-motivation are commitment, initiative, achievement drive, and optimism.

4. Social awareness: Individual ability to be attuned to surrounding environments and others' feelings (i.e., empathy), and using this information to motivate others. Goleman (1995, 1998) described social awareness as empathy, service orientation, developing others, leveraging diversity, and political awareness.

5. Social skills: Individual ability to feel and stay connected to his/her emotions, and even to pass these emotions to others. Goleman (1995) coined the term "secret economy" to describe the synergy that happens when people transfer these emotions from one to the other, making the other to feel a "little better or a little worse" according to the positive or negative charge of these emotions. The attributes described under the dimension of social skills are building bonds, communication, conflict management, change catalyst, leadership, influence, team capabilities, and collaboration and cooperation. This is the dimension with the larger amount of attributes.

Validated scales like the Bar-On Q1 and MSCEIT present with the traditional indicators of self-awareness, self-assessment, empathy, and tolerance for change. However, Goleman's (1995) framework expanded emotional intelligence concepts to organizational dynamics, such as cultural diversity, developing others (e.g., coaching, mentoring), power politics, and teamwork.

VALIDITY

Validity is the ability that the instrumentation demonstrates in measuring a phenomenon as intended to be studied. Neuman (2011) described three steps to increase instrument validity, (a) conceptualization of the constructs, (b) operationalization, and (c) application of operational definitions during the collection of data. Ideas that are abstract at the beginning of the research process must transform into precise information to be interpreted as quantities. The rules of correspondence allow a researcher to convert conceptual definitions of a construct into measurement indicators. This research design followed three levels of correspondence: (a) selection of a pre-established measurement framework (e.g., Goleman); (b) alignment of indicators to quantitative and qualitative instruments; (c) and the establishment of a systematic procedure to merge data results into a cohesive composite. The comparison of the scale against two main models is also relevant to the concept of validity (see *Table 2*).

TABLE 2: COMPARISON OF GOLEMAN'S EMOTIONAL INTELLIGENCE FRAME AND EXISTING VALIDATED SCALES

INDICATORS	BARON EMOTIONAL QUOTIENT INVENTORY	MAYER-SALOVEY-CARUSO EI TEST (MSCEIT)	GOLEMAN'S FRAME
Adaptability	✓		✓
Assertiveness	✓		✓
Collaboration/Teamwork			✓
Conflict management			✓
Cultural diversity tolerance			✓
Developing others (mentoring/coaching)			✓
Empathy	✓	✓	✓
Flexibility	✓	✓	✓
Independence	✓		✓
Interpersonal relationships	✓	✓	✓
Impulse control	✓	✓	✓
Optimism	✓		✓
Motivation in others		✓	✓
Power relationships (recognition)			✓
Problem solving	✓	✓	✓
Self-actualization	✓		✓
Self-awareness	✓	✓	✓
Self-expression	✓		✓
Self-motivation			✓
Social responsibility	✓		✓
Stress tolerance	✓	✓	✓

RELIABILITY

Neuman (2011) reported that reliability relates to stability, representation, and equivalence. Reliability means dependability and consistency (Cooper & Schindler, 2006) because the same phenomenon repeats numerous times under similar circumstances. Measurement reliability happens when an instrument accomplishes numerical results or indicators that maintain stability across time and different types of cases. Sekaran (2003) recommended the Cronbach's alpha coefficient as a reliability measurement. Ideally, a reliable Cronbach's alpha must be between .7 and .9, as a coefficient of .70 or higher is considered as "acceptable" in the construction of measurement scales. The analysis of reliability coefficients was completed through the Statistical Package for the Social Sciences (SPSS) software.

METHOD

DATA ANALYSIS

Methods for validation of measurement scales allow for the testing of items quantitatively to be later administered to a bigger sample (Hinkin, Tracey, & Enz, 1997). Testing this emotional intelligence scale encompasses three construction phases, and this study encompasses phases I and II. Recommendations on how to conduct Phase III are further discussed later in this paper. *Figure 1* below explains the three phases of the data analysis for the validation of this emotional intelligence scale.

PHASE I	**PHASE II**	**PHASE III**
• Definition of the theory and scale • Definition of the five dimensions • Delimitation of individual indicators • Construction of 5-point Likert Scale	• Validation of initial scale (i.e., expert validation, theoretical constructs) • Reliability study of initial scale (e.g., Cronbach's alpha)	• Massive distribution of the scale for second validation (i.e., 10 participants per each indicator) • Development of emotional intelligence profiles

Figure 1. *Emotional Intelligence Scale Validation Process.*

A self-rating scale representing the dimensions of self-awareness was constructed using a 5-point Likert Scale (*Appendix A*). The scale yielded to 95 items, with 11 items in the dimension of self-awareness, 19 items in the dimension of self-regulation, 14 items in the dimension of self-motivation, 18 items in the dimension of self-awareness, and 33 items in the dimension of social skills (see *Table 3*).

TABLE 3: COMPARISON OF GOLEMAN'S EMOTIONAL INTELLIGENCE FRAME AND EXISTING VALIDATED SCALES

CONSTRUCT	ATTRIBUTE	INDICATORS	TOTAL ITEMS
Self-awareness	Emotional awareness Accurate self-assessment Self-confidence	4 Items 4 Items 3 Items	= 11 Items
Self-regulation	Self-control Trustworthiness Conscientiousness Adaptability Innovativeness	4 Items 4 Items 3 Items 4 Items 4 Items	= 19 Items
Self-motivation	Achievement drive Commitment Initiative Optimism	3 Items 4 Items 4 Items 3 Items	= 14 Items
Social awareness	Empathy Service orientation Developing others Leveraging diversity Political awareness	3 Items 4 Items 3 Items 4 Items 4 Items	= 18 Items
Social skills	Influence Communication Leadership Change Catalyst Conflict management Building bonds Collaboration and cooperation Team capabilities	4 Items 4 Items 4 Items 4 Items 5 Items 4 Items 4 Items 4 Items	= 33 Items

SAMPLE

A scale based on Goleman's framework of emotional intelligence was tested among a group of 66 individuals with the purpose of confirming reliability. Individuals were recruited by personal invitation in two universities and the professional network LinkedIn. No effort to isolate sample by race, profession, or background was made purposefully because the goal of the research was to develop an emotional scale that can be disseminated among people from a large range of backgrounds and a wide array of interests. From the 66 individuals completing this scale in phase II, 62% were female, and 38% were male (see *Table 4*).

TABLE 4: GENDER OF PARTICIPANTS

		FREQUENCY	PERCENT	VALID PERCENT	CUMMULATIVE PERCENT
Valid	Female	41	62.1	62.1	62.1
	Male	25	37.9	37.9	100.00
	Total	66	100.0	100.01	

Ages of participants fluctuated from 25 to 74 years, with the majority of the participants in the age group of 55-64 years old at 25.8%. The second age group was 35-44, at 24.2%, and group ages 25-34 and 45-54 at 22.7% each (see *Figure 2*).
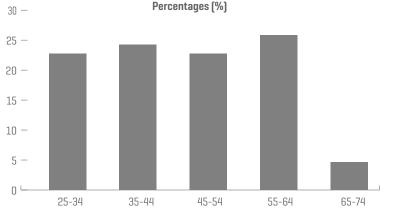

Figure 2: *Age of Participants*

Most of the participants of this study presented with higher level of education (see *Figure 3*), as 39 completed graduate school (59%), 13 graduated from college (19.7%), and eight completed some graduate school (12.1%). Six students completed three years or less of college education (9.1%).
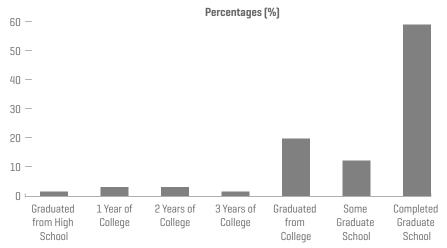

Figure 3: *Education Level of Participants*

RELIABILITY OF AN EMOTIONAL INTELLIGENCE SCALE ON GOLEMAN'S FRAMEWORK

Dimension 1: Self-Awareness. The first dimension of a measurement scale based on Goleman's framework of emotional intelligence represented *self-awareness* and encompassed 11 items divided among the attributes of emotional awareness (4 items), accurate self-assessment (4 items), and self-confidence (3 items). This dimension reached an acceptable level of reliability, demonstrated through a Cronbach's alpha of .744, and a .750 of Cronbach's alpha based of the standardization of items (see *Table 5*).

TABLE 5: SELF-AWARENESS CRONBACH'S ALPHA COEFFICIENT

CRONBACH'S ALPHA	STANDARDIZED ITEMS	NO. OF ITEMS
.77	.750	11

Therefore, the measurement of self-awareness in this scale can be considered reliable, as a coefficient of .70 or more is considered as acceptation in scale validation. *Table 6* reports the Cronbach's Alpha measurement per each of the individual indicators of the scale. Ideally, a reliable Cronbach's alpha must be between .7 and .9, as a coefficient of .70 or higher is considered as "acceptable" in the construction of measurement scales.

TABLE 6: SELF-AWARENESS CRONBACH'S ALPHA COEFFICIENT FOR INDIVIDUAL INDICATORS

	CRONBACH'S ALPHA
Self-Awareness 1	.745
Self-Awareness 2	.730
Self-Awareness 3	.735
Self-Awareness 4	.727
Self-Assessment 1	.699
Self-Assessment 2	.717
Self-Assessment 3	.739
Self-Assessment 4	.732
Self-Confidence 1	.704
Self-Confidence 2	.719
Self-Confidence 3	.729
Total Items: 11	

Dimension 2: Self-Regulation. The second dimension of a measurement scale based on Goleman's (1995) framework of emotional intelligence represented *self-regulation*, and encompassed 19 items divided among the attributes of self-control (4 items), trustworthiness (4 items), conscientiousness (3 items), adaptability (4 items), and innovativeness (4 items). This dimension reached an acceptable level of reliability, demonstrated through a Cronbach's alpha of .744, and a .750 of Cronbach's alpha based of the standardization of items (see *Table 7*).

TABLE 7: SELF-REGULATION CRONBACH'S ALPHA COEFFICIENT

CRONBACH'S ALPHA	STANDARDIZED ITEMS	NO. OF ITEMS
.854	.861	19

Therefore, the measurement of self-regulation in this scale can be considered reliable, as a coefficient of .70 or more is considered as acceptation in scale validation. *Table 8* reports the Cronbach's Alpha measurement per each of the individual indicators of the scale, all of them higher than the minimum of .70

TABLE 8: SELF-REGULATION CRONBACH'S ALPHA COEFFICIENT FOR INDIVIDUAL INDICATORS

	CRONBACH'S ALPHA
Self-Control 1	.856
Self-Control 2	.848
Self-Control 3	.839
Self-Control 4	.845
Trustworthiness 1	.846
Trustworthiness 2	.852
Trustworthiness 3	.851
Trustworthiness 4	.845
Conscientiousness 1	.839
Conscientiousness 2	.843
Conscientiousness 3	.847
Adaptability 1	.845
Adaptability 2	.859
Adaptability 3	.849
Adaptability 4	.843
Innovativeness 1	.856
Innovativeness 2	.851
Innovativeness 3	.846
Innovativeness 4	.843
Total Items: 19	

Dimension 3: Self-Motivation. The third dimension of a measurement scale based on Goleman's (1995) framework of emotional intelligence represented *self-motivation* and encompassed 14 items divided among the attributes of achievement drive (3 items),

commitment (4 items), initiative (4 items), and optimism (3 items). This dimension reached an acceptable level of reliability of .767, demonstrated through a Cronbach's alpha of .767, and a .780 of Cronbach's alpha based of the standardization of items (see *Table 9*).

TABLE 9: SELF-MOTIVATION CRONBACH'S ALPHA COEFFICIENT

CRONBACH'S ALPHA	STANDARDIZED ITEMS	NO. OF ITEMS
.767	.780	14

The measurement of self-awareness in this scale can be considered reliable, as a coefficient of .70 or more is considered as acceptation in scale validation. *Table 10* reports the Cronbach's Alpha measurement per each of the individual indicators of the scale; all of them are higher than the minimum of .70, with coefficients that fluctuate from .73 to .78.

TABLE 10: SELF-MOTIVATION CRONBACH'S ALPHA COEFFICIENT FOR INDIVIDUAL INDICATORS

	CRONBACH'S ALPHA
Achievement 1	.771
Achievement 2	.750
Achievement 3	.749
Commitment 1	.767
Commitment 2	.751
Commitment 3	.760
Commitment 4	.754
Initiative 1	.744
Initiative 2	.749
Initiative 3	.787
Initiative 4	.730
Optimism 1	.738
Optimism 2	.746
Optimism 3	.746
Total Items: 14	

Dimension 4: Social awareness. The fourth dimension of a measurement scale based on Goleman's framework of emotional intelligence represented *social awareness* and encompassed 18 items divided among the attributes of empathy (3 items), service orientation (4 items), developing others (3 items), leveraging diversity (4 items), and political awareness (4 items). This dimension reached an acceptable level of reliability, demonstrated through a Cronbach's alpha of

.767, and a .780 of Cronbach's alpha based of the standardization of items (see *Table 11*).

TABLE 11: SOCIAL AWARENESS CRONBACH'S ALPHA COEFFICIENT

CRONBACH'S ALPHA	STANDARDIZED ITEMS	NO. OF ITEMS
.860	.976	18

Therefore, the measurement of social awareness in this scale can be considered reliable, as a coefficient of .70 or more is considered as acceptation in scale validation. *Table 12* reports the Cronbach's Alpha measurement per each of the individual indicators of the scale; all of them are higher than the minimum of .70, and with coefficients as high as .86.

TABLE 12: SOCIAL AWARENESS CRONBACH'S ALPHA COEFFICIENT FOR INDIVIDUAL INDICATORS

	CRONBACH'S ALPHA
Empathy 1	.856
Empathy 2	.866
Empathy 3	.852
Service 1	.861
Service 2	.857
Service 3	.851
Service 4	.845
Developing Others 1	.853
Developing Others 2	.852
Developing Others 3	.853
Diversity 1	.865
Diversity 2	.848
Diversity 3	.854
Diversity 4	.850
Political Awareness 1	.844
Political Awareness 2	.849
Political Awareness 3	.844
Political Awareness 4	.846
Total Items: 18	

Dimension 5: Social skills. The fifth, and biggest dimension of this measurement scale is based on Goleman's framework of emotional intelligence represented *social skills* and encompassed 33 items divided among the attributes of Influence (4 items), communication (4 items), leadership (4 items), change catalyst (4 items), conflict management (5 items), building bonds (4 items), collaboration and cooperation (4 items), and team capabilities (4 items). This dimension

reached an acceptable level of reliability of .925, demonstrated through a Cronbach's alpha of .925, and a .932 of Cronbach's alpha based of the standardization of items (see *Table 13*).

TABLE 13: SOCIAL AWARENESS CRONBACH'S ALPHA COEFFICIENT

CRONBACH'S ALPHA	STANDARDIZED ITEMS	NO. OF ITEMS
.925	.932	18

Therefore, the measurement of social awareness in this scale can be considered reliable, as a coefficient of .70 or more is considered as acceptation in scale validation. *Table 14* reports the Cronbach's Alpha measurement per each of the individual indicators of the scale, all of them in the high coefficients of .90.

TABLE 14: SOCIAL SKILLS CRONBACH'S ALPHA COEFFICIENT FOR INDIVIDUAL INDICATORS

	CRONBACH'S ALPHA
Influence 1	.922
Influence 2	.922
Influence 3	.920
Influence 4	.924
Communication 1	.922
Communication 2	.923
Communication 3	.927
Communication 4	.922
Leadership 1	.922
Leadership 2	.922
Leadership 3	.922
Leadership 4	.923
Change Catalyst 1	.923
Change Catalyst 2	.921
Change Catalyst 3	.922
Change Catalyst 4	.922
Conflict Management 1	.921
Conflict Management 2	.923
Conflict Management 3	.926
Conflict Management 4	.922
Conflict Management 5	.920
Building Bonds 1	.923
Building Bonds 2	.925
Building Bonds 3	.926
Building Bonds 4	.923
Collaboration 1	.923
Collaboration 2	.923
Collaboration 3	.923
Collaboration 4	.922
Team Building 1	.922
Team Building 2	.920
Team Building 3	.922
Team Building 4	.922

RECOMMENDATIONS

A third phase is necessary to demonstrate a higher level of reliability of the emotional intelligence scale. Scholars recommend a minimum of five participants per each of the items of a scale to be validated, although others argue that 10 would be a better measurement (Plichta-Kellar & Kelvin, 2013). Therefore, a scale with 95 indicators must be administered to a minimum of 475 to a maximum of 950 participants to test the full reliability of the scale. Also, emotional intelligence profiles will be developed during the third phase of validation. These emotional intelligence profiles will be developed to provide anybody who completes this scale with a tool that identifies strengths, weaknesses, and areas for improvement, and that can be used for personal and professional improvement.

Along with each of each of the potential profiles, a series of practical recommendations will be developed, so that all participants can work in their temperament, control of emotions, communication styles, decision-making methods, and attitudes in general dealing with people and groups in the workplace. These emotional intelligence profiles will also serve to match different personalities with different types of jobs, organize workers in teams, and nurture future leaders. As these emotional responses influence job performance, they can also be associated with performance evaluation cycles and professional improvement plans.

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IS IT PRACTICAL TO TEACH OBJECT-ORIENTED PROGRAMMING USING JAVASCRIPT?

PENN WU
COLLEGE OF ENGINEERING & INFORMATION SCIENCES

Author Note: Penn Wu is a professor in the College of Engineering & Information Sciences at DeVry University, Sherman Oaks, CA.

ABSTRACT

An object-oriented programming course is not a programming language course. It is a software engineering course designed to equip students with techniques and skills to build efficient software applications. Therefore, instructors have the flexibility to adopt programming languages that have a built-in support on the object-oriented paradigm including C++, C#, or Java, or scripting language like Python. However, in an accelerated course with most of students seemingly demonstrated a better proficiency in JavaScript, students often become frustrated to learn (or re-learn) the programming language chosen by instructors as they struggle to learn the object-oriented concepts. The study results suggest that it is practical to teach object-oriented programming using JavaScript in an accelerated course when time and proficiency in languages are significant constraints. This paper thus proposes to teach object-oriented programming using JavaScript if most students demonstrated a better proficiency in JavaScript.

Correspondence regarding this article should be addressed to Penn Wu at 818-932-3078 or pwu@devry.edu.

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Object-oriented programming is a language independent-paradigm for software development. It provides a model for building modular and reusable software. Most instructors teaching such courses will focus the discussion on the underlying concepts of software design; therefore, such courses are categorized as software engineering courses, not programming courses. The instructional objectives are to teach methodologies for designing efficient applications, not language-specific coding skills. Husain, Akki, Maralappanavar, and Narayan. (2015) even advocate teaching object-oriented theory as a language-independent course.

There is no "ad hoc" language for teaching object-oriented concepts. Programming languages like Java, C++, and C# and scripting language like Python (Goldwasser & Letscher, 2007), Ruby (McBreen, 2001), and PHP are candidates for teaching object-oriented concepts. *Table 1* (next page) is a sample list of schools, courses, and their chosen languages. Interestingly, Black, Bruce, Homer, Noble, Ruskin, & Yannow (2013) suggest that these languages are often complicated in syntax, instructors should consider other candidates to teach object-oriented concepts.

TABLE 1: COLLEGE COURSES THAT TEACH OBJECT-ORIENTED PROGRAMMING

SCHOOL	LANGUAGE	COURSE
Stanford University	Java	CS108 Object Oriented System Design
Cornell University	Java	CS2110 Object-Oriented Programming and Data Structures
University of Texas - Austin	C++	CS371 Object-Oriented Programming
Florida State University	C++	COP3330 Object Oriented Programming
Loyola University Chicago	C#	COMP170 Introduction to Object Oriented Programming
City University London	C#	CS2540 .NET Object-Oriented Programming Using C#

Note: Some schools choose a particular language as departmental decision, not individual instructor's decision

Apparently, the choice of language for teaching object-oriented programming is not a predominating issue, then, the question arises: Of what practical value is the time, money, and effort spent by students to learn a language that is syntactically restricted, grammatically difficult, structurally complicated, and linguistically unfamiliar prior to learning object-oriented concepts in an accelerated course that lasts for eight weeks or fewer?

In such accelerated course, the need to find a scenario-optimal language to teach object-oriented paradigm is an urgent challenge. This paper, thus, attempts to answer a research problem: Is it practical to teach object-oriented programming using JavaScript? The entire paper is organized in four sections: (a) descriptions of research methodology, (b) a summary of findings, (c) discussions of limits and barriers that could deteriorate the teaching of object-oriented concepts with JavaScript as well as the recommendations for future research, and (d) conclusion.

METHODOLOGY

To answer the research problem, this study needs to: (a) investigate how JavaScript supports the object-oriented paradigm, (b) compare JavaScript object-oriented codes with codes written in other languages, (c) determine how JavaScript can illustrate basic object-oriented concepts, (d) evaluate the feasibility of teaching basic object-oriented concepts with scripting languages, and (e) search for any existing courses as models. The next few subsections will lead reader through the discussion of the research methodologies.

IS JAVASCRIPT AN OBJECT-ORIENTED LANGUAGE?

According to InformIT (Friesen, 2016), JavaScript is one of the three core technologies for producing web content besides HTML and CSS, and is one the most popular languages. Prior to version 6 of the ECMAScript specification (known as ECMAScript 6 or ES6), JavaScript does not provide a structure similar to those of C++, C#, or Java to support object-oriented programming (Ecma International, 2015). ECMAScript is the "ad hoc" specification of scripting languages, including JavaScript, ActionScript, and JScript.

As of ECMAScript 5 (or ES5), programmers must write "prototypal inheritance" code to build object-oriented applications in JavaScript (MDN, 2016; Zakas, 2014; Stefanov and Sharma, 2013). This approach uses JavaScript functions to simulate a "class" and its "constructors." Other class members (properties and methods) are defined within the function that simulates the "class." It is necessary to note that some distributions of C++ require programmers' implementations in order to delivery all object-oriented features, which arguably implies that a language can be categorized as an object-orientated language even if it requires programmers' implementations.

The ES5 version of JavaScript code in *Table 2* declares a class named "Shape" which has a default constructor "Shape()" and a method named "drawIt()". It also has two properties: "type" and "color". The "type" property has a default value, "line", while the "color" property

is empty by default. *Table 2* also illustrates how to declare a "class" and its "properties" and "methods" in Java.

TABLE 2: CLASS DECLARATION (JAVASCRIPT ES5 VS. JAVA)

JAVASCRIPT ES5	JAVA
| ```
var Shape = func-
tion() {
this.type = "line";
// default value
this.color;
this.drawIt = func-
tion() { alert("Do
something!!!"); };
}
``` | ```
class Shape {
String type = "line"; //
default value
String color;
void drawIt() {
System.out.print
("Do something!!!"); };
}
``` |

Note: Illustrating how ES5-based JavaScript is not object-oriented compliant

The ES6 version of JavaScript has adopted a set of new structures for writing object-oriented scripts (MDN, 2016). *Table 3* demonstrates how a JavaScript code declares a "class" without the need to simulate a "class." JavaScript's new structure is syntactically similar to the object-oriented convention.

TABLE 3: CLASS DECLARATION (JAVASCRIPT ES6 VS. C++)

JAVASCRIPT ES6	C++
| ```
class Shape {
constructor(color) {
this.tye="line";
this.color=color;
}
drawIt(){
document.write(this.
showColor();
}
showColor(){ return
this.color}
}
``` | ```
classShape {
public:
string type="line";
string color
Shape(){}
void drawIt() {cout
<<showColor();}
string showColor() {re-
turn color;}
};
``` |

Note: Illustrating how ES6-base JavaScript is structurally object-oriented compliant

HOW DOES JAVASCRIPT SUPPORT OBJECT-ORIENTATED CORE CONCEPTS?

To be an object-orientated language is one thing, but to be a candidate to teach object-orientated core concepts is another. *Table 4* lists topics that must be discussed in a class that teaches core concepts of the object-orientated paradigm. It also illustrates how three programming languages and three scripting languages comply with these core concepts. This table was compiled by referencing published books listed

in *Appendix A*. These books provide illustrations showing that these six languages support the ten object-orientated core concepts.

TABLE 4: COMPLIANCES TO OBJECT-ORIENTATED CORE CONCEPTS

OO TOPICS	C++	C#	JAVA	PHP	PYTHON	RUBY
Class	✓	✓	✓	✓	✓	✓
Property	✓	✓	✓	✓	✓	✓
Method	✓	✓	✓	✓	✓	✓
Constructor	✓	✓	✓	✓	✓	✓
Object	✓	✓	✓	✓	✓	✓
Inheritance	✓	✓	✓	✓	✓	✓
Encapsulation	✓	✓	✓	✓	✓	✓
Abstraction	✓	✓	✓	✓	✓	✓
Polymorphism	✓	✓	✓	✓	✓	✓
Composition	✓	✓	✓	✓	✓	✓

Note: All core concepts are identified by referencing books listed in Appendix A

At the minimum, JavaScript must demonstrate support of these core concepts to be a component candidate; therefore, it is necessary to develop ES6-based JavaScript codes to investigate and understand how JavaScript supports these core concepts. In this section, JavaScript compliance with these core concepts is explored by organizing them into subsections.

CLASS

A "class" is a structure for defining a data type and behaviors of the type. A class could contain a combination of property(ies), method(s), and constructor(s) as its members, as illustrated by *Figure 1* (next page). Once a class is defined, a programmer can create an instance (or object) by declaring a variable using the data type defined by the class. Typically, a constructor of the class performs the actual creation of the instance. A previous section has discussed the new structure of class declaration in JavaScript and its similarity to conventional object-orientated structure. A sample JavaScript code

that demonstrates how to declare and create a "class" is available in *Table 3*. *Figure 2* is a class diagram of the "Shape" class that is drawn in accordance with the UML (Unified Modeling Language) standard.
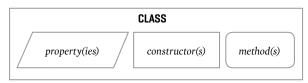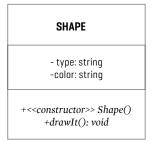

Figure 1: *Possible members of a class*

Figure 2: *UML Class Diagram*

Property

Properties of a class are variables available to instances of the class. In *Table 3*, "type" and "color" are two properties of the "Shape" class. Some languages, such as C# and Java, further divide properties into "fields" and "properties." In C#, a field is the variable of the class, while

a property is a function-like structure that gets or sets the value of a class field. The purpose of C# properties is to keep external objects from directly accessing the fields; therefore, a C# property is a special function that gets or sets the value of a field. The one that gets value of a field is the "get accessor" (or "getter") in C#, while the one that sets value is the "set accessor" (or "setter"). Java uses the term "accessor" for the "get" function, which returns the value of a class variable (field). A "mutator" is Java's term of the "set" function that sets the value of a class variable. *Table 5* illustrates how Java and C# defines the "getter" and "setter."

TABLE 5: "GETTER" AND "SETTER"

JAVA	C#
``class Shape {
private String
color; //field
public String get-
Color() {return
color;}
public void
setColor(String_
color) {
this.color=_color;
}
}```	```class Shape{
private string color;//
field
public string Color{
get{return color;}
set{color=value;}
}
}```

Note: "return" is a keyword

JavaScript now uses "get" and "set" keywords to create "getter" and "setter" functions. Interestingly, whether or not to distinguish fields and properties in JavaScript is the programmer's decision. *Table 6* demonstrates how JavaScript handles properties with and without the use of "getter" and "setter."

TABLE 6: JAVASCRIPT PROPERTY

WITH "GET" AND "SET"	WITHOUT "GET" AND "SET"
``class Shape {
constructor(type, color){
this.type=type;
this.color=color;
}
getType(){return this._type;}
setType(t){this._type=t;}
getColor(){return this._color;}
setColor(c){this._color=c;}
window.onload=function init(){
var obj1=newShape("line","blue");
document.write(obj1.Type+obj1.Color);
}```	```class Shape{
constructor(type,color)}
this._type=type;
this._color=color;
}
}
window.onload=function init(){
var obj1=newShape("line","blue");
document.write(obj1.type+obj1.color);
}```

Note: "Type()" is a maethod, "_type" is a property

METHOD

"Methods" of a class are functions defined by the class. Some methods are defined to be directly accessed and used by the class instances, and are known as "instance methods." Some methods, known as "class methods," are defined as used only by the class, but could indirectly support the operations of the instance. In *Table 3*, "drawIt()" is a sample "instance method" of the "Shape" class, and "showColor()" is a "class method" that supports the "drawIt()" method. A JavaScript method of a class is a code block that contains a series of statements.

CONSTRUCTOR

ES6-based JavaScript requires the use of "constructor" keyword to create a constructor. According to the object-oriented paradigm, constructors are class methods that are executed automatically when a class instance is created. They are special methods for creating an object of the class. Interestingly, most object-oriented languages require constructors to have exactly the same identifier as the class. In *Table 7*, the C++ code declares a class named "Shape," which includes a default constructor named "Shape()". They share the common identifier--the word "Shape". The "Shape()" constructor requires a parameter named "clr" to accept value ("blue") which is passed by the object instantiation. In the JavaScript code, the "constructor" method plays the role of "Shape()". Java and C# versions are available in *Table 8* of the next subsection.

TABLE 7: CONSTRUCTOR

WITH "GET" AND "SET"	WITHOUT "GET" AND "SET"
| ```
class Shape[
constructor(clr){
this.type = "line";
this.color = clr;
this.length;
}
drawIt() {
document.write(this.color + "<br>" + this.length +
"<br>" + this.type);
  }
}
window.onload = function init() {
var obj1 = new Shape("blue");
obj1.length = 14;
obj1.drawIt();
}
``` | ```
#include <iostream>
#include <string>
using namespace std;
class Shape { // class declaration
 public: string type = "line";
        string color;
        int length;
 Shape(string clr) { color = clr; }
void drawIt() { cout << color << "\n" <<
length << "\n" << type; }
};
int main(){
 Shape * obj1 = new Shape("blue");
 obj1->length = 14;
 obj1->drawIt();
}
``` |

Note: Shape(string clr) is a constructor, drawIt() is a method.

When instantiating an object of the class, the runtime invokes the constructor; therefore, programmers typically use the constructor to set the initial state of an object. The "constructor" of JavaScript plays such a role, often by accepting parameters passed by object instantiation. The "constructor" also supports polymorphism, which means two or more forms of the "constructor" can co-exists in a given class. If a programmer does not specify a constructor method, a default constructor is automatically used. Overall, JavaScript's use of constructors matches the convention of most object-oriented languages.

OBJECT

Although a class provides the definition for objects, programmers must declare a variable and use it to refer to an object in order for the code defined in the class to be applied to the newly declared object. The action that creates an object is known as "instantiation." Like most languag;es, JavaScript uses the "new" operator to create new objects. The following code snippet, excerpted from *Table 6*, illustrates how instantiation works in JavaScript. *Table 8* provides Java and C# code for the sake of comparison.

```
var obj1 = new Shape();
obj1.drawIt();
```

TABLE 8: INSTANTIATION

JAVA	C#
```class Shape { // class declaration String type = "line"; String color; int length; Shape(String clr) { color = clr; } void drawIt() { System.out.print(color + "\n" + length + "\n" + type); } public static void main(String[] args){ Shape obj1 = new Shape("blue"); obj1.length = 14; obj1.drawIt(); } }```	```class Shape { // class declaration string type = "line"; string color; int length; Shape(string clr) { color = clr; } void drawIt() { System.Console.Write(color + "\n" + length + "\n" + type); } static void Main(string[] args){ Shape obj1 = new Shape("blue"); obj1.length = 14; obj1.drawIt(); } }```

Note: JavaScript's instantiation is similar to those of Java and C# in this aspect

INHERITANCE

Inheritance enables programmers to declare new classes that use, extend, or modify the behavior defined in another classes. The syntax for creating a subclass ("child class") that inherits the superclass ("parent class") is done by using the "extends" keyword. This use is a close imitation of Java. The following JavaScript code demonstrates how the "Rectangle" and "Circle" classes inherit the "id", "*x*", and "*y*" properties from the "Shape" class. The super() method is used by the subclasses to call functions on the superclass, such as the constructor.

```
class Shape {
 constructor(id, x, y) {
  this.id = id;
  this.x = x;
  this.y = y;
 }
}

class Rectangle extends Shape {
 constructor(id, x, y, width,
height) {
  super(id, x, y);
  this.width  = width;
  this.height = height;
 }
}

class Circle extends Shape {
 constructor(id, x, y, radius) {
  super(id, x, y);
  this.radius = radius;
 }
}
```

```
window.onload = function init() {
 var obj1 = new Shape("s1", 10, 25);
 document.write(obj1.id + ", " +
obj1.x + ", " + obj1.y "<br>");

 var obj2 = new Rectangle("s2",
110, 25, 50, 75);
 document.write(obj2.id + ", " +
obj2.x + ", " + obj2.y + ", " +
obj2.width + ", " + obj2.height +
"<br>");

 var obj3 = new Circle("s2", 110,
25, 45);
 document.write(obj3.id + ", " +
obj3.x + ", " + obj3.y + ", " +
obj3.radius + "<br>");
}
```

ENCAPSULATION

Encapsulation is the process of packing up of data and functions into a single unit called a class, and then using the newly created class as a data type. An encapsulated object is often called an abstract data type. A class can also define a property with either "get" or "set" function (or both) to encapsulate a field. In *Table 7*, the JavaScript code packs three variables (type, color, and length), one method ("drawIt()"), and the constructor as a data type named "Shape." JavaScript programmers can programmatically implement the feature of access specifiers ("access modifiers") such as "private" and "protected."

ABSTRACTION

The term "abstraction" refers to the building of a data type which only provides a blueprint of what the data type could offer, but does not provide a fully defined member of the class for implementation. In other words, it defines classes with properties that do not have default values and methods that have empty bodies. The purpose of abstraction is to provide the extensibility for coding of a specific feature by allowing programmers to assign values to each property and override the methods to meet special requirements. Like Java, JavaScript abstraction is achieved by declaring an abstract class. In the following example, "Shape" is an abstract class. All its members, properties, methods, and constructor are defined by the subclass that extends it through "inheritance."

```
class Shape { //abstract class
 constructor() {
  this.width;
  this.height;
 }
}
class Rectangle extends Shape {
 constructor() {
  super();
  this.width = 50;
  this.height = 75;
 }
}
```

POLYMORPHISM

The term "polymorphism" describes the declaration of a function that has multiple forms including function overloading and overriding. Overloading occurs when multiple functions co-exist in the same scope, with the same identifier but different signatures. Overriding refers to the capability of a function in a subclass to re-define a function with the same identifier and signatures in a superclass. In JavaScript, polymorphism is to simply create different constructors for different kinds of subclass objects to inherit from the same superclass.

```
class Shape {
 constructor(id) {
  this.id = id;
 }
 //Overloading
 drawIt() {
  var result = "Shape:<br>";

  for (var i=0; i< arguments.
length; i++)
  {
   result += arguments[i] + " ";
  }
  return result;
 }
}
class Rectangle extends Shape {
 constructor(id) {
  super(id);
 }
  //Overriding
 drawIt() {
  var result = "Rectangle:<br>";

  for (var i=0; i< arguments.
length; i++)
  {
   result += arguments[i] + " ";
  }
  return result;
 }
}
window.onload = function init() {
 var obj1 = new Shape("s1");
 document.write(obj1.drawIt(10, 20)
+ "<br>" + obj1.drawIt(10, 20, 30,
40) + "<br>");

 var obj2 = new Rectangle("s2");
 document.write(obj2.drawIt(15, 25)
+ "<br>" + obj2.drawIt(15, 25, 35,
45) + "<br>");
}
```

COMPOSITION

The term "composition" refers to the building of complex objects from simpler ones. It is the process of forming "has-a" relationships for objects. For instance, a dog has a nose, and a dog has a tail. Programmers can write code to implement object composition by explicitly defining that each dog object would contain one nose object and one tail object (Kamani, 2016). The following is a sample implementation. The "Shape" class contains a "Line" and a "Rectangle" type.

```
class Line {
 drawLine() { return "Draw a
line."; }
}
class Rectangle {
 drawRectangle() { return "Draw a
rectangle."; }
}
class Shape { // composition
 constructor() {
  var l1 = new Line();
  document.write(l1.drawLine());

  var r1 = new Rectangle();
  document.write(l1.drawLine());
 }
}
window.onload = function() {
 var s1 = new Shape();
}
```

SCRIPTING LANGUAGE VS. PROGRAMMING LANGUAGES

It is not the norm in academia to teach programming with a scripting language (Syropoulos & Stavrianos, 2014), particularly object-oriented programming. An analytical comparison between programming and scripting languages, yields a discussion of the feasibility of teaching object-oriented programming using a scripting language.

From the perspective of coding, the source code of programming languages must be compiled to binary codes to create stand-alone, permanent, self-executable applications. Source codes are human-readable text files, while binary codes are meant for the CPU to read for execution. After compilation, the source code of programming languages are no longer needed for running the application.

On the other hand, source code of scripting languages ("scripts") are text files designed for the interpreters to read and translate the text-based code into binary form and immediately produce the execution results at the moment when the scripts are called for execution. The translated binary code will temporarily reside in the machine's physical memory throughout the execution, and their lifespans end at the moment the execution completes.

Many programming languages need to generate intermediate object code which further requires linking during the compilation, while no object code is needed during the interpretation of source code of scripting languages. However, scripting languages require very limited access to the computer's machine-level operations, because they usually are written on a programming language and heavily rely on the underlying interpretation mechanism to perform machine-level works. JavaScript, for example, is not able to access a machine's file system. As a result, scripting languages are slower in execution compared to programming languages.

Syntactically, programming languages have a more restricted structure than scripting languages; therefore, scripting languages have a high level of error tolerance, which makes them simpler to code, quicker to debug, and easier to learn. Since scripting languages do not require an explicit compilation, it take less time and effort for students to build the application, test the scripts, and see the immediate results while the scripts remain a text file.

As to the common use, scripting languages are used to manipulate, customize, and automate the facilities of an existing system. In such systems, built-in functionalities are already available so that the scripting language may be used to develop user interfaces or controls to manipulate these functionalities. Programming language tends to provide general-purpose support of a

wider range of potential uses, and are not specific to any pre-built functions. *Table 9* provides an overview of the comparisons.

TABLE 9: PROGRAMMING VS. SCRIPTING LANGUAGES

CRITERIA	PROGRAMMING	SCRIPTING
Coding Effort	Manageable	Simpler
Code Processing	Compiler	Interpreter
Total Execution Time	Faster	Slower
Application File Type	Binary	Text
Debugging	Difficult	Easier
Syntactical Complexity	High	Moderate

Note: The evaluation results could be arguable

Apparently, scripting languages can be considered a special subset of programming languages that do not require an explicit compilation step. From the coding perspective, programming logic, basic coding skills, and program development techniques are inter-usable between programming and scripting languages. Regarding coding complexity, scripting languages could be treated as a scaled-down version of programming languages. As a result, there is no any significant difference between a scripting language and a programming language for teaching basic object-oriented concepts, except the "compiling" requirements.

EXISTING PRACTICES

Udacity (Phillips and Wales, 2016) and Udemy (2016) offer online courses to teach object-oriented programming with JavaScript. O'Reilly Media (2016) also sells a video-based course. However, their instructional objective is to lead students to build websites using reusable and modularized code, not to teach object-oriented programming. Currently, no academic courses at the college level that actually teach object-oriented programming with JavaScript are to be found.

FINDINGS

Discussions in the previous section lead to findings in four aspects: (a) JavaScript is functionally sufficient to write basic object-oriented codes, (b) JavaScript has adequate supports to illustrate the ten "must-teach"

topical areas as shown in *Table 10,* (c) scripting language, particularly JavaScript, may substitute (not completely replace) C++, C#, or Java in teaching basic object-oriented concepts, and (d) non-academic sector has been teaching object-oriented programming with JavaScript.

LIMITS, BARRIERS AND RECOMMENDATIONS FOR FUTURE RESEARCH

JavaScript is a parasitic language. In its most common form, JavaScript must be placed inside HTML documents to provide interactive features of the web content; otherwise, it has no use. JavaScript is used to create web applications which are not achievable with simple HTML (Oracle Inc., 2016). Interestingly, there is no "ad hoc" standard for all web browsers to follow. Browsers' compliance to the version of HTML and ECMAScript specification is chaotic. Instructors must consult with the "compatibility table" maintained by the *http://kangax.github. io/compat-table/es6/* site to ensure the browsers' compatibility to ES6 standard.

JavaScript is a loosely typed language, which means programmers are not required to declare data types of variables explicitly, and JavaScript could perform type casting automatically whenever necessary. Students need to know that the debugger of a loosely typed language typically catches fewer errors and some of these un-caught errors might remain after the program debugging has been completed. Learning to write code with a loosely typed language could possibly develop a habit of ignoring the important role of data type. Instructors also need to take some precautions to avoid leading students to ignore type-sensitivity.

Prior to the introduction of ES6, many programmers with experience in building object-oriented programs in other languages developed "go-around" approaches to write object-oriented features in JavaScript. They typically use procedural programming to implement object-oriented concepts and write prototype-based functions to deliver object-oriented features. However, these approaches do not optimally comply with object-oriented techniques.

TABLE 10: JAVASCRIPT COMPLIES OBJECT-ORIENTED PARADIGM

OO TOPICS	JAVASCRIPT ES6	REMARKS
Class	✓	• Use "class" keyword to declare a class. • Comply with conventional object-oriented structure.
Object	✓	• Instantiation is done with the "new" keyword as in other object-oriented languages. • Once instantiated, the format for objects to access class member comply with the conventional object-oriented formats.
Property	✓	• Can distinguish a field from a property. • Support "getter" and "setter" to improve security.
Method	✓	• Support both instance method and class methods
Constructor	✓	• Can create constructor[s] that work as those in Java, C++, and C#.
Inheritance	✓	• The structure is a close mimic of Java. • Use the "extends" keyword.
Encapsulation	✓	• "Class declaration" is fully capable for illustrating the concept
Abstraction	✓	• The structure is a close mimic of Java.
Polymorphism	✓	• Support both overloading and overriding.
Composition	✓	• Can write code to explain how a class aggregates different classes.

Note: Remarks are the author's perspectives

Instructors must avoid teaching object-oriented code with the procedural approach; otherwise, it defeats the purpose of using JavaScript to teach basic object-oriented concepts.

Using JavaScript to teach object-oriented concepts is not a common practice at college level, although non-collegial courses are available online. There are few published instructional materials and books that can serve as a textbook. Instructors wishing to adopt the proposed pedagogy must prepare instructional materials including lecture notes, hands-on learning activities, and coding assignments.

At the time this paper was written, the seventh edition of ECMAScript standard (ES7) has entered its final revision. Future research could investigate how ES7-based JavaScript simplifies the creation of class constructors, provides a structural syntax for "composition", standardize the object-oriented support across web browsers, and offers a more complete support of overloading.

CONCLUSION

JavaScript can practically be a candidate for teaching basic object-oriented concepts, particularly in an accelerated class. The reasons are: (a) JavaScript has evolved to comply with object-oriented paradigm, (b) JavaScript is capable of illustrating the ten core concepts, (c) JavaScript is easy to learn, (d) there is no significant weakness to teach object-oriented programming with scripting languages, and (e) limits, barriers, and issues identified in this paper are programmatically resolvable. Plus, JavaScript is probably the language to learn in today's environment when so many browser applications are written in JavaScript. If the instructional goal of an introductory course is to teach web programming majors the basic concepts of object oriented programming, then JavaScript is a good choice. However, it is important to note that JavaScript could be an ideal substitute of C++, C#, or Java only when time and students' levels of language proficiency are significant constraints. The loosely-typed nature of JavaScript remains a significant weakness for it to completely replace C++, C#, or Java to teach object-oriented techniques in a traditional semester-long course.

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APPENDIX A. PUBLISHED BOOKS (1ST EDITION)

LANGUAGE	BOOK
C++	Lafore, R. (1992). Object-Oriented Programming in C++. Bolinas, CA: Waite Group Press
C#	Harwani, B. (2011). Beginning C# Object-Oriented Programming. Apress
Java	McCarty, B., & Gilbert, S. (1997). Object Oriented Programming in Java. Bolinas, CA: Waite Group Press
PHP	Lavin, P. (2006). Object-Oriented PHP: Concepts, Techniques, and Code. San Francisco, CA: No Starch Press
Python	Goldwasser, M. (2008). Object-oriented programming in Python. Pearson Prentice Hall
Ruby	Metz, S. (2012). Practical Object-Oriented Design in Ruby: An Agile Primer. Addison-Wesley Professional
JavaScript	Zakas, N. (2014). The Principles of Object-Oriented JavaScript, 1st ed. San Francisco, CA: No Starch Press

TAKING IT TO THE STREET

Lynch, P. (1994). Beating the street. New York, NY: Fireside.
ISBN: 0-671-75915-9. 332 pp. $12.95

THOMAS EVELAND
COLLEGE OF BUSINESS & MANAGEMENT

Reviewer Note: Thomas Eveland is an associate professor in the College of Business & Management at DeVry University, Columbus, OH.

The principles of fundamental financial analysis have been tested by great market corrections, world wars, currency fluctuations, and innumerable natural and financial disasters. Such timeless methods of analysis have been propagated, and used to make great fortunes, by well-known investors such as T. Rowe Price Jr., Benjamin Graham, Warren Buffet, and other notable names in the financial industry. In his book, Beating the Street, Peter Lynch describes his investing philosophy and fundamental principles of security valuation and portfolio management in layman's terms. It is a well-written, easy-to-read narrative of his life as a father and arguably the most successful mutual fund manager of all time. As delineated through parables and reflections, Lynch's methods are clearly as applicable today, after two market booms and severe corrections, as they were when originally published more than 20 years ago.

There is great value in learning directly from a Wall Street insider whose experiences can be honestly and openly shared after leaving active trading and fund management. Active investors and students and scholars of finance, economics, and similar disciplines have much to learn from Lynch's success. A graduate of the Wharton School of Business, Lynch managed Fidelity's Magellan Fund from 1977 to 1990. His record is reported to include beating the S&P 500 in all but two years of his tenure (an unprecedented

streak) and providing investors with an average annual return of 29%. An investment of less than $40,000 would have been worth more than a million dollars just 13 years later under Lynch's direction. When Lynch speaks, the finance education communities should listen.

With the exception of the chronologically ordered accounts of Lynch's experiences managing the 14 billion dollar mutual fund in chapters documenting the early, middle, and later years of his tenure, the rest of the book's structure allows readers to study each chapter independently or approach the book as they would any novel centered on a financial topic. This structure is advantageous and allows the book to be used either by readers seeking general knowledge by reading it from start to finish or by investors seeking expert advice in specific subjects. Told in the context of experiences, both good and bad, each chapter provides another lesson learned from Lynch's trials and triumphs. My recommendation would be to read the book cover to cover first to better understand Lynch's investment philosophy and analysis methods and then use each chapter as a reference when conducting analysis and making investment decisions.

The key theme of the book centers on Lynch's untiring commitment to finding, analyzing, and acquiring healthy businesses behind common

stock securities. Lynch recounts his meetings with countless companies across the globe in search of strong management teams and solid business structures before acquiring shares of the company's stock. He describes his knack for seeking out solid businesses and acquiring them at a discount. They can usually be found in undervalued bear markets which most often negatively affect overlooked companies, especially those in downtrodden industries. Although Lynch's investing philosophy may align with that of Graham and Buffet (my apologies to the value investing puritans touting the *Intelligent Investor* [Graham, 1949] as the only resource for value investing), Lynch's methods allow new and advanced investors to connect stock issues with actual companies. He recounts some of his most profitable leads coming from trips to the mall with his daughters, casual dinners with family and friends at local restaurants, and trips to amusement parks. The book provides excellent examples of profits from mall shopping (for stocks, that is) such as Toys"R"Us, whose stock rocketed from 25 cents to $36, and Radio Shack, which would have turned $1000 in 1970 into $1 million in 1982.

Although the book is guided by colloquial narratives and witty "Peter's Principles," Lynch does not forgo substance and analysis in the spirit of easy reading. Behind the stories are discussions of market trends, investment instruments, historical context, industry analysis, and security and enterprise valuation. Data tables, charts, graphs, and ratios are all used to illustrate the quantitative facts that led to the buy and sell decisions that grew the Magellan fund from $20 million to $14 billion under his care. Most notably, Lynch discusses the analysis of the price-to-earnings line analysis that informed many of his profitable investments by graphically representing earnings trends and price trends. Comparing the graphing of the price line relative to the earnings line readily shows the long-term and immediate relationship between earnings and stock price and informs the analysis of the securities current price relative to earnings.

Despite being published more than 20 years ago, Beating the Street is an educational and applicable text for audiences of all levels. This book is rare in that there are many hidden complexities in Lynch's writing. New investors and students understand the fundamental principles through narratives, yet the book shows high-level insights into the business and financial analysis to advanced investors with enough experience to appreciate the nuances in Lynch's philosophy and analysis.

Correspondence regarding this book review should be addressed to Thomas Eveland at 614-257-5047 or teveland@devry.edu.

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WOMEN'S WORK

Lower, W. (2013). Hitler's furies: German women in the Nazi killing fields. Boston: Houghton Mifflin. ISBN: 978-0-544-33449-6. 270pp. $14.95.

JOHN MORELLO
COLLEGE OF LIBERAL ARTS & SCIENCES

Reviewer Note: John Morello is senior professor of history at DeVry University, Chicago, IL

The world may never know just how many people died as a result of Hitler's cruelty. The numbers of those who perished can sometimes test our ability to see them as anything but numbers, anonymous, except to those who knew them. The same could also be said of those who acted on Hitler's behalf. Who were they? Now and then the world gets a glimpse of the perpetrators. And, as they face justice, society finds itself as interested in 'why' they did it as in the 'what' and 'how' of it all. In 1996, Daniel Goldhagen's *Hitler's Willing Executioners* helped lift the curtain on the motivations of Hitler's servants. Wendy Lower's *Hitler's Furies: German Women in the Nazi Killing Fields* adds to that effort. Challenging conventional assumptions about the Holocaust, Lower documents the role of German women in Nazi-occupied Eastern Europe. They may have come as teachers, nurses, secretaries, and wives, Lower contends, but they became "direct witnesses, accomplices and perpetrators of murder" (p. 16).

Not content with just who they were and what they did, Lower also posits why some women behaved in such a manner. Germany after World War One, she says, was "a collapsed patriarchal world, and in its ruins anything seemed possible" (p. 16). Women won the vote in 1919 and hoped to establish a political presence. But the political landscape, crowded with emerging parties, had no room for them. These parties were xenophobic, anti-Semitic, fiercely nationalistic, and skeptical of outside ideas (p. 17). Modern notions about women were no exception. "In the chaos and uncertainty of modernity and democracy," Lower argues, "restoring order and tradition became more important" (p. 18). There were no champions of women's rights in post war Germany. Even the Nazi Party turned a cold shoulder towards women, she says, not allowing them to join or seek office under its banner. Alfred Rosenberg, the party's ideologue, said "All possibilities for the development of a woman's energies should remain open to her. But there must be clarity on one point: only man must be and remain a judge, soldier and ruler of the state" (as cited in Lower, 2013, p. 23). Women were relegated to subordinate roles as Hitler and his men led Germany out of democracy and back into an authoritarian state. Once in power, they abolished other political parties and readjusted German society to fit their needs, closing many of the avenues German women might have taken to a more meaningful life in the process. For women, the Nazi Party soon became the only game in town and they fell in line, says Lower. They followed orders, sacrificed for the greater good, and developed nerves of steel. Female prisoners (Communists, Socialists, and Jews) needed female guards. Lower calculates at least 3,500 women were trained as concentration camp guards (p. 21). Women were part of

Germany's post-war baby boom. They reached puberty, adolescence, and adulthood under the umbrella of Nazi life and thought. They joined compulsory girls' groups, learned to march and shoot, gave up cosmetics and the vote, adopted Hitler's view that equal rights for women was a Marxist demand (p. 22), and eventually came to see Jews, Communists, and feminists as the enemy. If, as Lower contends, "the Nazi movement emancipated women from woman's emancipation" (24), the women who went into Nazi-occupied Eastern Europe during World War Two, to places such as Ukraine, Latvia, and Belarus, saw them less as mass-murder sites than as places of employment and opportunity.

Five hundred thousand German women went east during the war as teachers, nurses, secretaries, or wives. Lower documents the experiences of about a dozen of them, and the stories are compelling: a teacher who, charged with spreading Nazi ideology, expelled non-German children from school and plundered property for the German educational system (p. 42); a nurse who euthanized patients (p. 52); a secretary who, not content with typing up execution and deportation lists, accompanied her boss into Jewish ghettos where she brutally murdered children by throwing them out of buildings (p. 127); and an SS commandant's wife who shot prisoners from the balcony of their villa as a way to entertain guests (p. 134). The work tends to repeat itself in places. Lower hop-scotches between the profiles, requiring frequent refreshers of each woman's story. Yet implicit in them all is that the actions seemed

even more brutal when meted out by a woman. A moral point which Lower makes—but not nearly emphatically enough—is that there were choices concerning how one behaved during wartime. Few Germans were punished for refusing to kill. But once there, whether it was for travel, adventure, romance, or even doing what they thought was their duty, women murdered. Lower quotes a father, who, upon seeing the body of his child bludgeoned to death by a German secretary, said "Such sadism from a woman I have never seen. I will never forget this" (p. 126).

But after the war, many others did forget. Lower reports that unlike German men, women were not pursued for their roles in Eastern Europe. Those who were brought to trial were judged incapable of such monstrous acts. They cried in court, taken by many as a sign of empathy and innocence. Between 1945 and 1955, Lower points to fewer than 10 indictments of German women who committed murder or were accessories to murder in mass shootings and ghetto liquidations (p. 169). Putting it bluntly, she argues, most German women who participated in the Holocaust quietly resumed normal lives (p. 168).

The Holocaust was genocide, a mass crime committed by an entire society. *Hitler's Furies* is a reminder that even though the world tends to think of genocide as men's work, it is also women's business.

Correspondence regarding this book review should be addressed to John Morello at 630-415-6311 or jmorello@devry.edu.

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THE LIVESTRONG AND ALS CHALLENGE CASE STUDY

WHAT HAPPENS WHEN PHILANTHROPY AND STYLE AND SOCIAL MEDIA TEAM UP?

DEBORAH HELMAN, COLLEGE OF BUSINESS & MANAGEMENT
MICHAEL STEPHEN BIRD, COLLEGE OF BUSINESS & MANAGEMENT

Study Author Note: Deborah Helman and Michael Bird are professors in the College of Business & Management, DeVry University, North Brunswick, NJ and Orlando, FL.

Charitable events and activities designed to elicit donations to support charitable causes are very familiar to us. To name but a few – everything goes pink in October in the US for breast cancer awareness; Remembrance Day in the United Kingdom is marked by an entire population wearing poppies on their lapels in the month of November; Product Red is supported by industry partners in support of Aids in Africa; and the recent appearance of websites JustGiving and GoFundMe has helped personalize and make charitable donation more effective. Organizations engaged in charitable giving have adopted aggressive marketing concepts and techniques. Strong brands have emerged, value chain networks have been configured that include business partners, policy makers, and donors, and sophisticated integrated marketing approaches are used to engage the donor segments and capture value. Strong branding that most people are familiar with regarding charitable organizations include the United Way, Muscular Dystrophy Association, Catholic Charities, and Humane Society. Charities understand donor behavior and this is based on an understanding of consumer decision making processes and the factors that influence that decision making. Reflect on the following descriptions of two important charitable giving campaigns. What aspects of the study of consumer behavior are important, and how is this connected with effective marketing decision making? What would you do if you had the opportunity?

LIVESTRONG

In a New York Times Magazine article Rob Walker (2004) discussed the key success factors of the Livestrong Campaign, these points are presented in an edited form here:

Alliances among corporations and nonprofits on behalf of a cause are hardly uncommon these days. The Cause Marketing Forum has estimated that U.S. for profit organizations invest about $1 billion a year into partnerships with non-profit, charitable benefactor organizations, approximately ten times what they had spent for similar partnerships in the early 1990s (Walker, 2004). While a few of these endeavors are successful; most are not. Seldom does one accomplish what the Livestrong yellow bracelet did, which was create a consumer craze. The silicon bracelet embossed with the expression "Live Strong" began selling at various Niketown outlets, as well as at Foot Locker stores and numerous independent

retailers. It cost consumers only one dollar and the proceeds were remitted to the Lance Armstrong Foundation, the nonprofit charitable organization connected with the champion cyclist, a well-known cancer survivor. "Live Strong" was the foundation's motto, and the color of yellow actually resembled the color of the prime leading rider's jersey in the Tour de France. Nike funded and countersigned the manufacture and distribution of the complete first run of five million produced bracelets, meaning that 100 percent of the proceeds, plus another $1 million which was actually contributed by Nike itself, went directly to the foundation. Sales were strong from the beginning, but the sales actually took off when the Tour de France started (Walker, 2004). Armstrong wore the wristband during the event, along with his entire team, including the supporting technicians and mechanics. As the tour continued, many of the other competitors and even the tour officials started to wear the wristbands. As Armstrong cruised onto his record-setting sixth consecutive Tour de France victory, there were many celebrities who started to wear these bracelets as well, and all of a sudden they were all over the place – a charitable must-have. Senator and 2004 President Elect John Kerry even wore one of these wristbands as he made his acceptance speech during the nomination process at the Democratic convention (Walker, 2004).

THE ALS CHALLENGE

As Ruiz-Grossman (2016) has reflected, if you had an ice bucket dumped over your head just a few years ago as part of the Ice Bucket Challenge, this will definitely give you goosebumps yet again. The ice bucket challenge actually began as a process to improve the overall awareness of Amyotrophic Lateral Sclerosis (ALS), also known as Lou Gehrig's disease. As the process continued, it has turned into an extraordinary and noteworthy fundraiser for the ALS Association as well (Sen, 2014). The fast-growing Ice Bucket Challenge aided in funding the discovery of a new gene associated with ALS. The identification of the NEK1 gene by Project MinE has provided scientists with a new potential target for therapy expansion for ALS, a progressive neurodegenerative disease that can destroy and steal the body's ability to eat, move, speak, and even to breathe, according to the ALS Association (Sen, 2014). Project MinE's discovery made possible with the backing of numerous sources, including the money that was received during the viral growth of the ice bucket craze. This ice bucket, which has become a social media phenomenon, was critical to supporting the charitable enterprise because it generated more monitorial funding from "new sources in new parts of the world," explained Bernard Muller, an ALS patient who helped found Project MinE, in a statement (Sen, 2014).

Organized and headed up by Pete Frates, a former Division 1 athlete with ALS, the Ice Bucket Challenge went viral during the summer of 2014 (Ruiz-Grossman, 2016). Basically, the process challenged people across the globe to film themselves having buckets filled with ice or iced water poured over their heads, to nominate friends to do the same and/or donate, and to share the moment on social media to raise awareness and funds for ALS research (Sen, 2014). The campaign was wildly popular, engaging many celebrities that included Oprah and Bill Gates. The Ice Bucket Challenge raised $88.5 million in just a matter of weeks permitting the ALS Association to fund numerous research projects, including Project MinE (Ruiz-Grossman, 2016). Actor Patrick Stewart even provided a selfie as he was doing his ice bucket challenge, just as many other celebrities were dared to take selfies of dumping an ice bucket on themselves in an effort to raise valuable donations for the charity (Sen, 2014). By having celebrities joining in the fun, the amount of both awareness and donations have grown steadily for the ALS organization.

YOUR TASK:

- Identify a worthy cause and a relevant target donor segment.

- Describe the problem, identify alternative solutions, make recommendations for the most promising solution in a series of implementation steps.

- Illustrate and explain your mission statement and your goal

- Develop a marketing plan that will ensure the target donors will respond and support your fundraising endeavor. Use the 4Ps in marketing and the any of the consumer behavior concepts discussed in class (culture, sub-cultures, values, self-concept, lifestyle).

- Develop 10 PowerPoint slides with annotations to present your plan.

Address correspondence about this case study to Deborah Helman at 732-729-3951 or dhelman@devry.edu. Michael Bird can also be contacted at 630-645-1106 or mbird@ devry.edu.

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TEACHING NOTES

- This case study has been developed for use in MKTG 578, but it can be used in MKTG 522/ MKTG 525

- It is designed to be a Week 4 case study to be worked on individually or in teams. The case study could be used as a discussion topic or in-class activity

- TCOs related to this case: MKTG 578 TCOs A, B, C, D, E, F relating to concepts and theories that underpin consumer behavior

- The case study enables students to link consumer behavior theory to marketing decision making

- At a minimum, the student should make the connection between consumer insights and marketing decision making

- Through the case study, students have the opportunity to demonstrate competency in applying the appropriate consumer behavior theories, show an understanding of the consumer decision making process or the consumer journey, and apply the notion of value creation via a marketing strategy based upon segmentation, targeting and positioning, the marketing mix, branding and value chain network development with partners (from MKTG 522). Moreover, students should demonstrate an ability to describe and apply the relevant concepts, as well as demonstrate the ability to develop a creative solution, evaluate alternative solutions, and develop a recommended implementation plan.

DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

CALL FOR PAPERS, FALL 2017 ISSUE

The *DeVry University Journal of Scholarly Research* (DUJOSR) continues to expand its pages to include a variety of publishing opportunities for faculty. Academic scholarship remains a staple for the journal, but new categories include Case Studies, Book Reviews, Letters to the Editor, and a "From the Classroom" section, in which faculty can share vital experiences and best practices. These categories of submission are fully described below. Specific deadlines and instructions for submission conclude this "Call for Papers."

ACADEMIC SCHOLARLY ARTICLES

For the Fall 2017 issue, we continue to solicit "working papers" (3000 to 5000 words) in our scholarly article category.

Papers of all types are welcome including theory, empirical, or methodology papers, as well as literature reviews, from both positivist and naturalistic traditions. Research- and evidence-based papers emphasizing practical relevance that resonate with our readers are preferred. We regard submissions as "working papers" that can be submitted to other journals for consideration (but have not been previously published elsewhere).
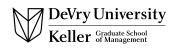
The review process requires that each paper is coded and blind reviewed by two peer reviewers with expertise in the author's discipline. Faculty volunteers (for whom profound gratitude is expressed) comprise the peer review board. Final publication decisions are made by the editorial board, consisting of College and Managing Editors.

Authors who have previously submitted academic scholarly papers for past issues are encouraged to re-submit their revised papers. Papers should be sent with an additional document that specifies detailed responses to reviewers' and editors' feedback.

CASE STUDIES

DUJOSR solicits case studies (ranging from approximately 500-word short cases, to 1000 to 3000-word long cases) that have not been published elsewhere, but are considered "working papers." The purpose of this initiative is to create a repository of case studies that can be used by faculty to teach Keller MBA courses. Our aim is to provide Keller students with a unique and valuable learning experience that has been generated by our faculty.

Case studies of all types are welcome, including multi-media. We would prefer case studies that emphasize practical relevance that resonate with our faculty and students. Case study submissions must also be supported by a set of directions, i.e., Faculty Teaching Notes. The teaching notes must indicate the relevant courses and TCOs associated with the case study, as well as suggested question strategies and pedagogical practices.

The case study should be

- significant,
- complete,
- compelling,
- inclusive of alternative perspectives,
- qualitative,

- sufficiently evidenced,
- aligned with one or more Keller Course Objectives, and
- written with accuracy and relevance.

The review process for case studies is the same as for academic scholarly papers. Case studies will be evaluated on the following criteria:

1. Timeliness of case & relevancy (tied to 1 or more Keller Course Objectives),
2. Theoretical framework,
3. Case development (including discussions if applicable),
4. Case notes for faculty,
5. Study results,
6. Opportunity to expand knowledge,

7. Implications to field of studies,
8. Writing quality: Clarity, conciseness, and organization,
9. Writing quality: Grammar and Mechanics, and
10. APA format, including citations and reference page.

There is no submission deadline; case studies will be accepted on an ongoing basis.

BOOK REVIEWS

Book reviews continue to be a regular feature in the journal pages. They are an important part of scholarly life. They alert colleagues to new developments in the academy, foster discussions that can lead to new scholarship, and ultimately provide us with both a broader and deeper view of the world, which we in turn can share with our students.

Reviews of either fiction or non-fiction works should adhere to the following publication guidelines:

1. Reviews should be between 500 to 1000 words in length, double spaced, and include the following: author, title, place of publication, publisher, year, price, page length (including introduction and text), and International Standard Book Number (ISBN).
2. Reviews should include a brief summary of the scope, purpose, content of the work, and its significance in the literature of the subject. Reviews should evaluate the strengths and weaknesses of the work as well as attend to its use of sources, including documentation, methodology, organization, and presentation.
3. Reviews should be fair, balanced, and treat authors with respect.
4. A signed permission form to publish a review is required.

DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

LETTERS TO THE EDITOR

Letters to the Editor are a welcome addition to the journal pages. Letters that reply to or extend academic scholarship published within DUJOSR pages are particularly welcome, as these add rich texture and dialogue to ideas presented. Letters should be professional, well-tempered, and engage with content meaningfully. Letters that do not necessarily attend to previously published work, but are timely and relevant are also welcome.

Letters responding to published articles in DUJOSR should identify the month and year of the article, review, or previous letter on which it is commenting. The full title of the article, review, or letter as well as the author(s) name(s) should be included. Letters should be double-spaced and 500 to 1000 words in length. Letters may express well-tempered opinions, but should include citations in cases where academic integrity requires documentation. Letters should be fair, balanced, and treat authors with respect.

FROM THE CLASSROOM

This section of the journal is newly offered to faculty who have rich pedagogical experiences worthy of sharing with a larger audience. Papers in this category may use research to support ideas, but may also consist of valuable experiences about which research may not have yet caught up. Well-crafted papers that demonstrate increased student engagement in the classroom are particularly prized. In this category, the recommendations for length are 750 to 1000 words, but longer papers of exceptional quality and relevance will be considered. Content should seek to express pedagogies that transcend the commonplace or that provide an interesting new spin on well-trod best practices.

EDITORS' INSTRUCTIONS FOR SUBMISSION AND DEADLINES

All submissions are expected to follow the APA style sheet. Templates and APA source materials are available through the DeVry Commons intranet community site, *DeVry University Journal of Scholarly Research*, under the following headings:

- Guide to APA Research Writing and Formatting Template Revised Nov 2013

- Guide to APA Research Writing and Formatting Revised Nov 2013

- DeVry University APA Handbook

- APA 6th Guide to Citing Sources

The submission deadline is August 1, 2017. Please submit work in any category to Managing Editors, Deborah Helman and Michael Bird, at DUJOSR@devry.edu.

The Managing Editors reserve the right to edit all submissions in any category of submission for length, tone, and content, over and above recommendations made by peer reviewers and College Editors.

CHAMADA DE ARTIGOS

O *DeVry University Journal of Scholarly Research* (DUJOSR) continua expandindo suas páginas para incluir dentro de siuma ampla variedade de oportunidades de publicação para acadêmicos. A produção acadêmica continua sendo o ponto central deste periódico, mas dentre suas novas categorias incluem-se agora estudos de caso, resenhas de livros, cartas ao editor e a seção "da sala de aula", onde professores poderão compartilhar experiências e boas práticas. Estes tipos de ensaio encontram-se descritos de forma completa mais adiante. Prazos e instruções específicas para submissão concluem esta chamada de artigos.

ARTIGOS CIENTÍFICOS

Para a edição de outono de 2017 desta revista, nos continuamos a solicitar artigos científicos (3000 a 5000 palavras) que ainda não foram publicados em outros periódicos e que constituam "trabalhos em andamento".

Trabalhos de qualquer tipo são benvindos, incluindo trabalhos teóricos, empíricos ou estudos de caso, papeis de metodologia, revisões de literatura e demais, tanto de tradições positivistas quanto naturalistas. Nós preferiremos trabalhos que sejam relevantes a prática de nossos leitores, não deixando de lado o fato de que devem ser baseados em pesquisas. Também entendam que estas submissões serão consideradas como "pesquisas em andamento" o que não impede sua publicação futura em outros periódicos (mas que ainda não foram publicadas em outros periódicos).

Cada submissão será codificada antes de ser enviada para a revisão. As submissões passaram pelo método de revisão às cegas (double blind review) por dois colegas revisores (agradeço a todos os professores que se voluntariaram para esta tarefa emprestando seus conhecimentos). A seleção final dos artigos será feita pelo conselho editorial, que consiste nos editores de centro e os editores administradores.

Encorajamos os autores que submeteram trabalhos para edições anteriores a re-submeter seus trabalhos. Estes trabalhos devem ser enviados com um documento adicional com os comentários que demonstrem como de recebeu o feedback de seus revisores e editores.

ESTUDOS DE CASO

O *DUJOSR* busca estudos de caso (que vão de estudos curtos com aproximadamente 500 palavras a estudos mais longos, com 1000 a 3000 palavras), que ainda não foram publicados em outros locais, mas ainda são considerados trabalhos em andamento. O motive desta iniciativa é criar um repositório de casos para que os mesmos possam ser utilizados pelos discentes que ensinam os cursos de MBA da Keller. Nosso objetivo é prover os alunos da Keller com uma experiência única e valiosa de ensino gerada pelo nosso corpo discente.

DEVRY UNIVERSITY JOURNAL OF SCHOLARLY RESEARCH

Estudos de caso de todos os tipos são bem-vindos, incluindo estudos em multimídia. Nós preferimos estudos de caso que enfatizam conceitos práticos e que ressoem em nosso corpo discente e docente. As submissões de Estudo de caso devem ser apoiadas por uma série de diretivas, descritas em Anotações de Apoio ao Ensino (Faculty Teaching Notes). As anotações devem indicar os cursos e objetivos específicos dos mesmos com o Estudo de caso, bem como sugestões de questionamentos e estratégias e de práticas pedagógicas.

O estudo de caso deve ser:

- Significante;
- Completo;
- Atraente;
- Com múltiplas perspectivas;

- Qualitativo;
- Com evidências comprobatórias;
- Alinhado com um ou mais objetivos dos cursos Keller; e
- Escrito com precisão e relevâncias.

O processo de revisão de estudos de caso é o mesmo que para trabalhos acadêmicos. Os estudos de caso serão avaliados segundo os critérios abaixo:

1. Contemporaneidade do caso e relevância (amarrado a 1 ou mais Objetivos Keller claro),
2. Referencial teórico,
3. Desenvolvimento do caso (incluindo discussões, se aplicável),
4. Anotações do Caso para professores,
5. Os resultados do estudo,
6. Oportunidade de expandir o conhecimento,
7. Implicações para campo de estudos,
8. Escrita de qualidade: clareza, concisão, e organização,
9. Escrita de qualidade: Gramática e Mecânica, e
10. Formato APA, incluindo citações e página de referência.

Não há prazo de submissão; estudos de caso serão aceitos em fluxo contínuo.

RESENHAS DE LIVROS

Resenhas de livros continuam a ter presença regular nas páginas do *journal*. Elas são uma parte importante da vida acadêmica. Elas alertam os colegas para novos desenvolvimentos na academia, alimentam discussões que podem levar a novas pesquisas, e, finalmente, nos fornecer tanto uma visão mais ampla e mais profunda do mundo, que por sua vez podemos compartilhar com nossos alunos.

1. As resenhas de obras de ficção ou não-ficção devem atender as seguintes diretrizes:
2. As resenhas devem ter entre 500 e 1000 palavras, espaçamento duplo e incluir: nome do autor, título, local de publicação, editora, ano, preço, número de páginas e o *International Standard Book Number* (ISBN).
3. As resenhas devem incluir um rápido resumo do escopo, proposta, conteúdo do trabalho e seu significado na revisão da literatura da temática. Elas devem avaliar os pontos positivos e negativos do trabalho e ter atenção para o uso de referências (incluindo documentações), metodologia, organização e apresentação da obra.
4. As revisões devem ser justas, balanceadas e tratar os autores com respeito.
5. A apresentação de uma permissão por escrito para publicar a resenha é obrigatória.

DA SALA DE AULA

Esta seção da revista é recém oferecida aos professores que tem experiências pedagógicas ricas e dignas de serem compartilhadas com um público maior. Ensaios nesta categoria podem usar pesquisas para apoiar suas ideias, mas pode também consistir de experiências valiosas sobre o que a pesquisa pode ainda não ter consolidado. Ensaios bem trabalhados que demonstrem maior envolvimento dos alunos em sala de aula são particularmente apreciados. Nesta categoria, as recomendações para o comprimento é de 750 a 1000 palavras, mas ensaios de maior qualidade e de relevância excepcional serão considerados. O conteúdo deve procurar expressar pedagogias que transcendem o lugar comum ou que forneçam uma nova rodada interessante sobre práticas bem trilhadas.

AS INSTRUÇÕES DO EDITOR DE APRESENTAÇÃO E PRAZOS

Todas as submissões devem seguir o estilo *APA*. Modelos e materiais de base da *APA* estão disponíveis através do link de pesquisa disponível no portal Academus , sob os seguintes títulos:
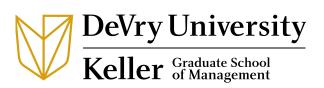
- Guide to APA Research Writing and Formatting Template Revised Nov 2013

- Guide to APA Research Writing and

- Formatting Revised Nov 2013

- DeVry University APA Handbook

- APA 6th Guide to Citing Sources

O prazo para envio é 01 de agosto de 2017. Por favor envie o trabalho em qualquer categoria para as de Editoras executivas Deborah Helman e Michael Bird, no DUJOSR@devry.edu

As editoras executivas reservam-se o direito de editar todos os arquivos submetidos em qualquer categoria de comprimento, tom e conteúdo, para além recomendações feitas pelos revisores e editores universitários.

NOTES:

DeVry University
Keller Graduate School of Management

DeVry University Main Campus
3005 Highland Pkwy, #100
Downers Grove, Illinois 60515
877.388.3374

devry.edu

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