



**Proceedings for the 3<sup>rd</sup> Annual Interdisciplinary Symposium:  
Free Market Systems ~ Teaching & Research  
Held at Litchfield Beach & Golf Resort in Pawleys Island, SC on  
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The purpose of our Symposium is to bring to light the best practices of Free Market Systems in Higher Education: how it informs and advances our economy, our society, and our lives. The secondary purpose is to have professors and instructors meet like-minded people to network and establish support groups through their research. Finally, since our system of government depends on the Free Market remaining free, we need to teach our students that the Free Market is a morally good system for living, working and governing. We welcome any and all support in our endeavors.

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# CONFESSIONS OF AN AUTHOR: TO WRITE OR NOT TO WRITE?

by

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## INTRODUCTION

Writing a book is certainly an adventurous journey! Many aspiring authors may be surprised to learn that “after you write a book,” another type of journey begins. The second journey involves answering a plethora of questions that stimulate the curiosity of would-be authors. Just as I did, it appears that many people at some point in their lives consider writing a book. Their questions range from “how to get started” to “how to employ publishers” to “how to market” their book—to name a few.

This paper relates the author’s experience while answering those questions for himself as well as addresses misconceptions that are quite prevalent. Specifically, the paper examines writing myths, having a clear purpose, publishing options, business considerations, and writing challenges.

### Writing Myths (Misconceptions)

Book authorship is fraught with myths and misconceptions that run the gamut from “do I have to be an exceptional writer” to “must I be wealthy to write a book” to “will I see financial gains.” A few of those myths are debunked here.

Only extraordinary people write books. The idea that one must be extraordinary to write a book is a misconception. Over 100,000 books are published annually in the United States! No test is required to write a book. No license is required to write a book. Basically, no financial barrier disqualifies you from writing a book. However, if you self-publish or seek a publisher, financial resources must be considered. Rather than being extraordinary, writing a book is more like ordinary people doing something they consider extraordinary.

Only people with college degrees write books. Regardless of their educational level, most people write on a regular basis. For some it may be nothing more than personal cards, letters, or social media messages. Others may find memos, emails, and reports a major part of their daily job requirements. Voltaire and the Apostle Paul wrote in prison! So clearly college campuses do not hold a monopoly as a place for writing. A college degree should help one write, but it is not a prerequisite to writing a book.

Only people with great financial resources can afford to write a book. This is a third misconception, of course, because anyone can gather several pages of writing, go to a professional print shop with \$20, and assemble, print, and bind a book. The self-publishing market has grown tremendously in recent years, primarily because of the motivation of writers.

### Importance of Your Purpose

Knowing your purpose—how you hope to benefit—before you begin your writing is critical. About half the people who ask me about writing a book make comments about either

becoming rich and/or famous from writing. Since my book never made the *New York Times* Best Seller list, I'm certainly not qualified to give advice on gaining riches or fame from writing a book. For the miniscule number of authors fortunate enough to have Oprah endorse their book, fame and fortune may be in their future. Most authors, however, quickly learn that writing a book is not an effective way to get rich or to gain fame.

Another group of people seem to want my "blessing" to write a book, apparently because they see me as the expert since I am a published author. Remember, no license, permission, or test is required to write a book. No one is required to get my approval—or any other author's approval—to write a book.

A third group of people have publishing questions that are typically well-founded. Should they seek a publisher or self-publish? Having a publisher will increase the cost, add to the bureaucracy, and decrease the profit margin. However, a publisher will provide valuable printing options, assist in editing and revision, and become your partner in legal business terms. Self-publishing leaves all decisions in every stage to you but will decrease costs and maximize profits. The value of determining the publishing decision is that it forces you to answer a crucial question: Why do you want to write a book?

### **Publishing Options**

If you want to write a book solely as a personal accomplishment, self-publishing is probably in your future and your better option. Your printed copies will be few, and you will probably give your copies to family and friends. You will need only limited financial resources since paper and copying costs will be your chief cash outlay.

If you desire to write a book (for personal accomplishment) but you also want to share your book with a broader market, a publisher should be sought. Broad markets require you to examine size of print, quality of paper, cover design and color, binding, bar code registration, and quantity to print. Seeking a broader market turns your personal endeavor into a business endeavor.

### **Business Considerations**

"A business is any activity that seeks to provide goods and services to others while operating at a profit" (Nickels, McHugh, & McHugh, 2013, p. 4). Lapin (2014) provides a simpler definition: "Everyone who works for compensation can be considered in 'business'" (p. 2). Thus, if your plan is to sell copies of your book, you have formed a business. Furthermore, the publisher becomes your partner, and the publisher is a business and must make a profit as well.

While entering into a contractual agreement with the publisher, you may be required to purchase a "fixed" number of books personally so that the publishing company can recover its cost. This requirement lessens the publisher's risk and provides additional incentive to the writer to promote the book.

As a business selling an item in the marketplace, you will need to obtain a sales tax number to submit quarterly payments to your state's revenue department. When the book is sold by bookstores and other retail establishments, those businesses pay the sales tax; however, when the author sells the books during a promotion or book signing, the author must collect and submit sales tax.

After the contractual agreement is signed with the publisher, an editor is usually assigned since your book becomes a reflection of the publishing company. Some degree of propriety must be ensured; and the publisher will have suggestions on promotion, market identification, bar code registration, writing requirements, and possibly others.

### **Writing Challenges**

Writing is a skill. As with any skill, you must practice the skill to become proficient. Dale Carnegie trainers often say during training that "Practice doesn't make perfect; practice

makes permanent.” Regardless of how well we think we write, all of us need a proofreader, or editor, to ensure we are communicating clearly. Clarity is usually a challenge for everyone. Since writers are so close to the subject about which they write, they assume the readers “know” what they mean. An unfamiliar perspective, however, on the reader’s part may prevent comprehension. A general rule of thumb is to find a proofreader/editor who has skills in any areas where you are weak.

After teaching formal business writing for decades, one of my challenges emerged to be more casual in writing style. For example, in formal business writing, contractions are usually avoided; however, my editor advised me to “let up” on formality and to write in a conversational style. Her advice was fundamental since my book was going to the general public and did not require any degree of formality.

We also had different writing style manuals, so we chose our rules from different sources. For example, we disagreed on number usage, comma placement, parallelism, and clarity issues. As our relationship developed, we each insisted on some rules and conceded on others and succeeded in meeting those challenges.

Another challenge you may have is a co-author. Many disagreements can occur when both authors are equally involved in writing, editing, and decisions about books. My co-author was an absolute blessing! We shared a common vision of telling stories (anecdotes) from our lives and crystallizing “bits of wisdom” from our experiences. He left basically all of the printing decisions and other mechanical decisions to me. He would share his stories with me, and I would rewrite and integrate his words into the manuscript which included my stories.

The challenge came when I initially wrote his stories in third voice and my stories in first voice. Nothing flowed. Creative ideas ceased. Paralysis set in. After my discussion with him concerning writing paralysis, it was agreed that I would write his part (as well as mine) in first voice. This agreement not only stimulated my writing but also helped the book’s coherence.

## **Conclusions**

Writing a book is an aspiration of many, many people. I encourage you to write “the” book that has been bouncing around in your head for years! You have ample options to self-publish or seek a publisher should you wish to share your book with a broader market.

On a personal note, the rewards for writing my book were two-fold: First, my co-author became a dear friend during the endeavor. Second, the book signings allowed me to share time with my father (to whom the book is dedicated) and renew old acquaintances and friends. Those personal rewards outweigh, by far, any financial gains that may be realized.

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# **Internationalizing the Curriculum**

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## **KEYWORDS**

internationalizing the curriculum; GLOBE study; international business; cultural awareness; professional communication

This paper uses APA formatting.

## **ABSTRACT**

Internationalizing the curriculum is a necessity for all business schools in America. The global economy and the Internet have created an international environment within all businesses from small to large. The continual increase of immigrants in our country has produced a need for businesses to understand how to interact with most cultures within the world.

Adding courses that contain elements introducing students to communication with other cultures is a beginning step in internationalizing the entire curriculum. The Globe Study (Hofstede, House, et al.) is a resource that is essential to understanding how cultures approach leadership and business communication. By understanding each culture's approach to the concepts within the Globe Study, professors can assist students in interpreting appropriate ways to approach business partners and customers from other cultures. Several websites also provide aids for understanding culture, etiquette, and communication nuances around the world. With these resources, any program can begin to internationalize the curriculum.

## **INTRODUCTION**

Universities and colleges have been grappling with internationalizing the curriculum for many years. While most scholars, faculty members, and administrators agree that internationalizing the curriculum is good in theory, most have found that the theory is difficult to convert to reality. In some cases, the core problem is financial with too few language courses offered. In other cases, the difficulties can be that faculty members have no international experience and, thus, are attempting to teach what they have not experienced.

A foundational need of any business program desiring to continue its international program, to strengthen a weaker program, or to prepare students for the reality of today's workplace is providing students with resources that can assist them in learning to appreciate other cultures.

I will first examine some of the models that have been proposed for strengthening international programs. From the concept that cultural awareness is a necessity for business students, I will build a list of resources for faculty to provide to business students so that they can develop and appreciate the differences between cultures. The GLOBE study's findings are an excellent starting point to understand the differences among leaders throughout the world. Once a student understands the distinctions between cultures, then students can better understand the web resources that explain the practical differences in etiquette and business practices that are part of other cultures. These websites include Michigan State's GlobalEdge.com, the U.S. State Department's Travel page, and Kwantessential.com. With these easily accessible resources, professors can make their students aware of cultural differences and similarities around the globe.

## **INTERNATIONALIZATION**

Oftentimes, the terms, "internationalization" and "globalization" are confused by students and others. Understanding the distinction between these terms is essential to understanding the process of internationalization. The following definitions are from the Global Policy Forum:

Internationalization refers to the increasing importance of international trade, international relations, treaties, alliances, etc. International, of course, means "between or among nations." The basic unit remains the nation, even as relations among nations become increasingly necessary and important.

Globalization refers to global economic integration of many formerly national economies into one global economy, mainly by free trade and free capital mobility, but also by easy or uncontrolled migration. It is the effective erasure of national boundaries for economic purposes. (Saunders, 2013)

For the purposes of this paper, we will discuss "internationalization" and not "globalization."

### **1. The Need for Internationalization**

Judith Ainsworth (2013) presents the following concept:

Researchers studying internationalization [sic] of higher education agree that all undergraduates require contact with and understanding of other nations, languages, and cultures in order to develop the appropriate level of competence to handle the increasingly complex and ill-structured nature of professional work and to function effectively in the rapidly emerging global environment. (p. 29)

Thus, undergraduates require international experiences and understanding of culture, languages, and other nations to be able to function in the business world today. Students who will graduate, return to their small towns, and work in the family businesses are not exempt from this need to understand other cultures. The influx of immigrants from almost every continent in the world requires business schools to adequately prepare their students for business in international settings.

**1.1 Preparation of Graduates.** Ainsworth continues her argument by stating the “preparation of graduates who have a strong knowledge and skill base in intercultural relations and communications is considered by many academics as one of the strongest rationales for internationalising [sic] the teaching/learning experience of students in undergraduate and graduate programs” (2013, p. 29). Thus, the call to build a strong knowledge base and skill sets among our students is one that we should answer. We should teach intercultural relations and communications in our business programs.

**1.2 Micro and Macro Levels.** Two levels of internationalization are available to business schools—the macro and the micro levels. The first level of internationalization, the macro level, is one that “refers to the creation of programs, special degrees, or graduation requirements, such as foreign language and cultural studies, that require decision making at the program, academic, or institutional levels” (Ainsworth, 2013, p. 31). At the macro level, many business schools find themselves not able to provide for their students because of budget cuts and other decisions that are out of their hands.

The second level, the micro level, “refers to curricular innovation and change over which faculty members have control, such as focusing on international approaches to subject matter or exploring the economic, social, cultural, and political lives of people and societies within a global framework” (Ainsworth, 2013, p. 31). This approach is one that the global marketplace demands we teach our graduates. Foreign language study, an essential part of communicating with other cultures, is too often overlooked in our programs. A simple connection to the Internet produces a need for international business knowledge, no matter how large or small the business. “In this context, the internationalisation [sic] of the business school curriculum becomes an essential component in the success of business school students” (Ainsworth, 2013, p. 31).

Judith Ainsworth spotlights the need for language study as the most important skill that is needed for internationalizing a curriculum. She identifies several skills as “necessary for business graduates to operate successfully in multinational contexts” (2013, p. 31). These skills include participating in “meetings, teams, and informal work-related discussions, giving formal presentations, listening to and following instructions, and using informal communication for networking and creating bridging and bonding relationships between employees, which in turn contribute to knowledge sharing and the accumulation of social capital within the company” (Ainsworth, 2013, p. 31). Without solid language skills, graduates will not be able to perform these essential skills in the workplace. Business schools need to stress the importance of language studies in their curriculum. If the business schools are struggling with the macro-level items, then those schools need to focus on the micro-level, a place where change can happen.

**1.3 Important to Business Education.** Anshu Arora, Jun Wu, and Reginal Leseane conducted research at an historically black university. As part of their study, they asked the participants (faculty and students) what elements were most important to a business school’s curriculum. The answers include:

1. 87% of the participants stated that the “ability to adopt different perspectives and understanding the larger picture” is the most important trait

2. 58% said that “holistic decision-making skills, including the societal and environmental factors” were the second most important
3. The rest stated that “entrepreneurship and leadership skills are important” for business school success (Arora, et al., 2013, p. 12).

Thus, at a university seeking to internationalize its curriculum, the students and the faculty viewed understanding different perspectives and other cultures as a significant part of their educational needs.

**1.4 Lack of Faculty Preparedness.** In the agreement with those faculty members and students, Nancy Boykin, Janice Petronis, and Stuart Warnack present the following ideas:

Business academics and business executives mutually acknowledge the responsibility of academic institutions to prepare college students for the challenging road in front of them. Yet, evidence suggests that some colleges/schools of business continue to struggle to internationalize their programs. One promising approach, the shadow program, immerses faculty members in an international field experience that provides fertile ground for the development of international content and programming. (Boykin, et al., 2013, pp. 812-13)

The majority of stakeholders agree that the need for internationalizing exists; however, attempting to resolve these needs is part of the challenge facing business schools.

Acknowledging the need is not as difficult as meeting that need. Reporting on a pilot program, Boykin, Petronis, and Warnack shared their concept that most faculty members lack international experience. This gap in experience presents the issue that “students may struggle to gain critical international business preparation if faculty first are not internationalized” (Boykin, et al., 2013, p. 814). They conducted a case study on a program in which faculty members “studied abroad” in an immersion program that provided them with this needed experience (Boykin, et al., 2013, p. 812). From their case study, this immersion program was successful.

**1.5 Summary of Problems with Internationalization.** Boykin, et al., (2013) summarize the current state of internationalization in business schools.

Despite many efforts to educate their students, many students still seem ill-prepared to operate successfully in the international business environment. Students are primarily monolingual and many do not have adequate knowledge related to the cultural differences and complexities they will inevitably encounter. This is not just a problem found at smaller colleges that are oftentimes constrained by limited resources. In fact, it has been found that even students graduating from large universities have deficient levels of knowledge and understanding about foreign countries and cultures. (p. 813)

Thus, many of the issues with internationalizing the curriculum appear in small and large universities.

## **2. Solutions to the Problem: A Beginning**

In “Global and International Issues in College Education,” Alina Zapalska, Steve Shuklian, Denis Rudd, and Frank Flanigen argue that “relevant social and cultural influences must serve as the foundation for curricular renewal” (2013, p. 103). They continue with “Knowledge of how other countries affect us and how we affect the rest of the world must be incorporated in business curriculum. International concepts and procedures, including issues of safety in doing international business, must be integrated into the business education curriculum to prepare students to function in a global society” (Zapalska, et al., 2013, p. 103). This call to educate students in cultural differences is also at the core of this paper.

From their call to action, we have several items that can become the solution to part of the problems of internationalizing the curriculum. Their first emphasis is to learn about relevant social and cultural influences. Next, they emphasize learning how a country’s influence affects another country. Other issues of cultural awareness as well as the issue of safety in this time of terror attacks must become a part of each business school’s teachings so that our students graduate prepared for a global workplace.

**2.1 AACSB Report.** Nader Shoostari and Timothy Manuel surveyed AACSB accredited schools concerning their internationalization efforts. Their conclusions found that many schools have some sort of internationalization curriculum, but few delve deeply into the knowledge and skills that will provide students with an ability to analyze situations and apply the knowledge that they have learned. “According to AACSB, too many schools only teach general international principles in both international and functional area courses. This may imply that curricula do not encourage realistic applications that will help the students acquire the skills they need to operate in a global environment (Shoostari & Manuel, 2014, p. 136). Thus, programs exist, but they are not fully meeting the needs of students. In some cases, the language study falls short. In others, no immersion experiences exist. Still others are taught by faculty members with no international experience.

In understanding the results of their survey, Shoostari and Manuel weighed the meaning against Bloom’s Taxonomy. They found that in many programs

...students may gain basic level knowledge and comprehension, but they may not achieve the application and analysis level of learning that is likely to be needed to succeed in a global business environment. There is general agreement on the primary characteristics that determine business operating conditions in different countries. These can be summarized in six broadly defined categories: (a) cultural conditions, (b) legal and regulatory environment, (c) political environment, (d) economic conditions, (e) financial structures and institutions, and (f) a miscellaneous other category that may apply in some countries or regions. Understanding differences in operating conditions along these dimensions should be part of a well-designed international curriculum. (Shoostari & Manuel, 2014, p. 136-37)

Understanding how Bloom’s taxonomy applies to the results of the survey is crucial for business schools to understand. If students understand differences in etiquette between their own customs and those of other countries, then those students have taken the first step in understanding

another culture. This step is basic learning that requires no analysis from the student; however, if this same student learns how to interpret the cultural differences through the GLOBE study, then that student is equipped to handle unexpected circumstances. That student can understand the cultural characteristics motivating the other person so that this student becomes a successful international business person.

**2.2. Easily Accessible Helps.** While many sources acknowledge the almost unison outcry for internationalization of curriculum, most of them agree that students are not being prepared to work successfully in the international setting. The students may understand how to greet someone, but they lack the deeper understanding of cultural awareness. Many sources exist on the Internet to assist us in teaching our students to understand these cultures and their nuances.

The GLOBE Study is a primary source for analyzing cultures and the leadership skills that those cultures value. Michigan State's GlobalEdge.com is a website that provides access to multi-layered information on every country in the world. These two sources contain layers of information that students can continue to use after graduation.

Two other sources that are easily accessible are the U.S. State Department and Kwantessential.com, a British travel agency site. The U.S. State Department's "Travel" page (<http://www.state.gov/travel/>) provides information concerning practical concerns such as immunizations and travel warnings. Kwantessential.com has an in-depth listing of etiquette concerns that are collected in one website for easy access.

**2.2.1 The GLOBE Study.** The GLOBE study was the largest study of middle managers' approaches to leadership that has ever been conducted. The survey respondents included 17,300 middle managers from 951 organizations and 62 countries. Surveys were completed by people who actually live in the country and not by researchers who visited the country to observe and then draw conclusions.

As a result of the survey, societies were divided into ten societal clusters based on the answers the middle managers gave. The questions explored the current practices and values of these managers. The surveys measured culturally different ideas about the effectiveness of outstanding leaders. The GLOBE study offers a range of cross-cultural business observations ("Leader Effectiveness and Culture," 2014).

The GLOBE study's ten regions and some of the countries in each region are as follows:

- Anglo: USA, England, Canada, Ireland, New Zealand, Australia, South Africa (white sample)
- Latin Europe: Spain, Portugal, Israel, Italy, France, Switzerland (French speaking)
- Nordic Europe: Sweden, Denmark, Finland
- Germanic Europe: Germany, Austria, The Netherlands, Switzerland

- Eastern Europe: Greece, Hungary, Albania, Slovenia, Poland, Russia, Georgia, Kazakhstan
- Latin America: Ecuador, El Salvador, Columbia, Bolivia, Brazil, Guatemala, Argentina, Costa Rica, Venezuela, Mexico
- Sub-Saharan Africa: Zimbabwe, Namibia, Zambia, Nigeria, South Africa (black sample)
- Middle East: Turkey, Kuwait, Egypt, Morocco, Qatar
- Southern Asia: Philippines, Indonesia, Malaysia, Thailand, India, Iran
- Confucian Asia: South Korea, Hong Kong, Taiwan, China, Japan, Singapore. (Grove, n.d., p 103).

The primary section of the GLOBE Study that provides the higher levels of thinking on Bloom's Taxonomy are the divisions that are as follows:

- Power Distance: The degree to which members of a collective expect power to be distributed equally.
- Uncertainty Avoidance: The extent to which a society, organization, or group relies on social norms, rules, and procedures to alleviate unpredictability of future events.
- Humane Orientation: The degree to which a collective encourages and rewards individuals for being fair, altruistic, generous, caring, and kind to others.
- Collectivism I (Institutional): The degree to which organizational and societal institutional practice, encourage, and reward collective distribution of resources and collective action.
- Collectivism II (In-Group): The degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families.
- Assertiveness: The degree to which individuals are assertive, confrontational, and aggressive in their relationships with others.
- Gender Egalitarianism: The degree to which a collective minimizes gender inequality.
- Future Orientation: The extent to which individuals engage in future-oriented behaviors such as delaying gratification, planning, and investing in the future.
- Performance Orientation: The degree to which a collective encourages and rewards group members for performance improvement and excellence. (Leader effectiveness and culture, 2014)

As students begin to understand that what divides cultures is deeper than a language, handshake, or custom, they can begin to analyze how they should conduct business with members of a culture. For example, a culture that has high uncertainty avoidance does not like unpredictability in future events. Thus, approaching a business relationship by offering a risky transaction would

not be a productive move. Students can begin to analyze the culture and then adjust the business options accordingly.

The GLOBE study provides an opportunity for students to base decisions on deeper elements of a society. They can analyze situations and business opportunities in a way that will prepare them to be successful in international business ventures as they learn to appreciate the differences between cultures.

**2.2.2 GlobalEdge.com.** Michigan State University has constructed a comprehensive website, *GlobalEdge.com*. This site allows access to all countries in the world. One way to enter the choices is through “Get GlobalEdge Insights.” This entry point is one way into the deeper elements; however, the home page also allows entry to these sections.

The first choice is “Search by Country.” This allows users to select any country in the world. The information for each country varies, but there is economic, cultural, and other business information for each country. There are also links to outside sources that are helpful.

The other entry points are “Search by Trade Bloc,” “Search by Classification (Emerging Markets or Frontier Markets),” “Search by Industry,” and “Search by State.” This website is helpful for ready information about business information throughout the world and is easily accessible to students (at no cost).

**2.2.3 The U.S. State Department.** The U.S. State Department’s “Tourism” page offers excellent helps for people traveling overseas. The site contains the following information:

- Travel Documents: Passport and visa information as well as other information that travelers may need
- Immunization information per country
- Hazardous areas of the world
- Travel warnings
- An email sign up to receive travel warnings when you are traveling
- Specific information on countries like the sections to avoid and interesting information (“Tourism,” 2016).

The State Department’s website has much more information for travelers which students can easily access at no charge.

**2.2.4 Kwintessential.com.** Another source that is available for free to students is Kwintessential.com, a British travel website (<http://www.kwintessential.co.uk/resources/country-profiles.html>). This website provides information about etiquette and dining protocols in each country in the world. Their website states that they provide “Country Profiles, Customs, and Etiquette.” They also provide business etiquette for the student seeking this information.

The countries are listed under the continent on which they are located. This website does not encourage a deeper level of thinking in Bloom's taxonomy, but it does provide some necessary information in learning about other cultures ("Country Profiles," 2016).

## CONCLUSION

In the past, many people cried out about the lack of internationalization in business schools' curricula. In response, business schools started global supply chain programs, international business programs, and similar programs to respond to the need. Research has proven since that time that the programs are having difficulty sustaining themselves in part due to the lack of language courses and insufficient funding.

Our students need to understand cultures throughout the world so that they can be successful in the international economy. Using the GLOBE study to encourage analytical thinking is a beginning step to provide business students with the tools they need to become successful in their international dealings. Through using the GLOBE study and several easily accessible websites, students can learn to appreciate the differences between people and thus, can become successful international business people.

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# COMPETITIVE COMMUNICATIONS

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## ***ABSTRACT***

*The Competition Communications simulation creates an environment in which individual teams must make decisions based on possibly imperfect information and with conflicting goals. The game allows players to control certain aspects of the information flow relevant to the market, and players create their own ethical business environment.*

**KEYWORDS:** communications, competition, simulation, ethics

## **INTRODUCTION**

One of the most difficult concepts to convey to students is the dynamic nature of decision making under incomplete or possibly inaccurate information. Problems in books have solutions in the back. Case studies have solutions in instructor's manuals, and some of those solutions can even be found posted on the internet. Computer simulations are often based on a spreadsheet model that includes predetermined parameters that result in a "winner" when the "right" decisions are made. While all of these educational experiences have an inherent value, they lack the real-time interactions found in competitive markets, and these are the types of markets in which students will eventually live and work.

The Competitive Communications simulation is a set of exercises that explore the various aspects of a competitive market. These exercises are expanded by limiting or allowing information flow among the competitors, though there is no requirement for honesty. The actions of the players will define the ethical environment of the market.

## **OBJECTIVES AND BACKGROUND**

The first objective of the Competitive Communications simulation is to provide students with the opportunity to make production allocation decisions within a competitive market. Since the decisions deal with allocation of production rather than the production process itself, the specification of production capacity and selling that production focuses the decision process on the allocation problem. A second objective is to examine the manner in which information can be used in the production allocation decision. Since no requirement is made for teams to provide any information or accurate information, this allows the teams to create their own business

environment and ethical system. The development of this ethical framework is the third objective of the simulation.

The Competitive Communications simulation draws upon a rich heritage of games and simulations. Keyt and Cadotte (1981) created a game that demonstrated the complex interaction of production decisions. This was a multi-period game that allowed groups to interact and introduced random factors determined by the roll of the dice. While comprehensive games have their place, it is often useful for the instructor to have an exercise that can be conducted in a single period (Brozik & Zapalska, 1997). In order to construct a single period exercise that is meaningful to the students, it is necessary to simplify the market structure (Thavikulwat, 1988) and create an environment that is intuitive (Cannon & Ternan, 1997). Additional benefit can be gained if an ethical dimension can be designed into the exercise (Scott, Schumann, & Anderson, 1998).

The Competitive Communications simulation was designed to meet all these requirements. Each of the rounds is independent and can be played relatively quickly because the market structure has been simplified. This market, however, can be understood by the students, and student interaction creates a unique ethical environment.

## **THE SIMULATION**

In a competitive market, firms are forced to compete with other firms that have different production capacities and production cost structures. Information concerning the competition is usually incomplete and possibly inaccurate. Knowledge of the market demand for various products may not be available. The managers of each firm must make decisions concerning production and product mix in an uncertain environment.

The Competitive Communications simulation creates a controlled, uncertain environment for decision making. Players are formed into teams that must decide what is best for their firm, in the presence of other teams trying to do what is best for their firms. Opportunities are created for collaboration and collusion, though teams are not required to communicate any information with any other party. The interactions of the teams develop a business ethic that can also be examined.

Each round of the simulation takes about 10 to 20 minutes. Rounds can be repeated as necessary until students demonstrate the required level of mastery. It is not necessary to complete the entire exercise in one session. The rounds are sequenced in a manner that allows the instructor to choose those that best match the class material. The periodic scheduling of the rounds may actually prove more effective in some classes since it would allow students multiple exercises to break the flow of the normal class routine and give them time to assimilate what they learn in each particular exercise.

The Competitive Communications simulation is designed to be played without computer assistance. While some instructors might choose to create spreadsheets that duplicate the Instructor's Forms, it is not necessary to do so. All required calculations can be done easily in the classroom.

## CONDUCTING THE SIMULATION

The Competitive Communications simulation is designed to be played by four teams. Team sizes can vary between three and five members. For larger classes it is recommended that eight teams be formed and that they alternate playing the rounds. The mechanics of recording the results of each round can become complex when more than four teams are present. The teams should be formed at least one class session prior to playing the game by whatever protocol the instructor chooses. Each team is then given a Team Information Packet (Appendix A), which describes exactly how the simulation is played. This permits each team to use the time between classes to meet and possibly determine an initial strategy. The Team Information Packet contains all relevant information about the simulation and Tally Sheets to facilitate score keeping. The Instructor's Forms (Appendix B) include the Master Tally Sheet and other schedules needed by the instructor.

The simulation is composed of several rounds, each designed to illustrate a specific dimension of decision making and the information flows associated with it. The format creates a rich enough environment that factors like group dynamics and market ethics can be examined. The areas explored in each round are:

**Round 1** - This round examines decision making in isolation. All groups have the same cost structure and production capacity, so there are no inherent differences in market power. No communication is allowed between teams, and the results of the round are random. Sometimes all groups will choose to pursue a middle-of-the-road strategy, and each group gets roughly the same score. The purpose of this round is to demonstrate the disadvantages of decision making without information.

**Round 2** - This round extends round 1, but the groups are allowed to communicate with each other. They can collude or allocate markets or do anything they wish. This gives the players a chance to experience the advantages of information and presents them with the opportunity to use it for personal gain. No requirement is made that the information exchanged must be accurate. Players are allowed to lie if they so choose. This is the beginning of the development of a market ethical system.

**Round 3** - Production capacity, manufacturing costs, and market demand remain unchanged. In this round, an "Industry Expert" will be available to all firms for advice. During the first part of the round each firm develops a plan based upon available resources, and the Expert visits each team to review their individual strategies. Teams are then allowed a short period of time to communicate with each other and exchange whatever information they see fit. Teams then work alone to develop their final market plans. The Expert visits the teams to answer any questions concerning overall industry trends that may be beneficial in the planning process. There is no requirement that the Expert convey accurate information.

These three rounds allow the class to experience decision making under various conditions and to develop a market ethic. Subsequent discussion can focus on the value of specific market and product characteristics, the development of the information flow, and the behavior of market participants. It is instructive to foster a discussion concerning each team's opinion of the relative honesty of the other teams. There are definitely different opinions of exactly what happened, and it can be shown that concepts like truth and fairness can be relative or misunderstood.

There should be class discussion after each round concerning the success of each team and the market conditions that led to that success. Some of this discussion should focus on what information was available, the utility of this information, and the validity of the information. This final discussion provides the overview to the problems of decision making in a dynamic environment.

## **CONCLUSION**

The Competitive Communications simulation is designed to give students the opportunity to experience decision making in a dynamic setting. The firms may or may not have similar information. The information received may or may not be accurate. Expert intervention may be honest or misleading. The game shows the importance of information in decision making. Players are required to establish a market ethical system, and honesty may or may not be a part of that system. In short, the Competition Game allows students to experience a bit of the real world in the classroom.

The Competitive Communications simulation gives the instructor the ability to tailor the learning experience to classroom needs. The game can be conducted in a concentrated or extended manner, and it is only necessary to use those modules appropriate to the class. Besides the exercise in decision making and information processing, the game creates a common body of experience that is rich enough to foster discussion concerning business ethics from an experiential angle. The Competition Game can be used many ways and thus provides the instructor with another approach to effective learning.

## **REFERENCES**

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## **APPENDIX A**

### **TEAM INFORMATION PACKET**

## COMPETITIVE MARKETS AND COMMUNICATIONS

### THE SCENARIO:

Your firm is one of several international manufacturers of electrical generation and transmission equipment. Due to the recent power shortages in the United States and other parts of the world, there has been an increased demand for the products you manufacture. As managers of your firm, it is your responsibility to plan production and sales to meet the demands of a competitive market in order to maximize the wealth of your shareholders.

### THE COMPETITION:

You have three major competitors that are roughly the same size and that produce equipment with the same capabilities as your firm's products. These four firms form an industry subgroup:

Northern Wind Energy  
Eastern Solar Equipment  
Southern Hydrodynamics Systems  
Western Hybrid Components

These firms compete directly on the following items:

Frequency Modulators (FM)  
Voltage Transformers (VT)  
Power Regulators (PR)

From the point of view of potential customers, your firm's products are interchangeable with those of any of your competitors. For example, a frequency modulator from any of the four firms is considered to be identical in capability. (Note: A frequency modulator is not interchangeable with a voltage transformer or power regulator.)

### DOMICILE:

None of the four firms is based in the United States even though the US is a major market for these products. Since the firms are not bound by US laws, there is no legal restriction (anti-trust laws) against sharing information between firms, but there is likewise no requirement that information be shared. The amount of information exchanged between firms is decided by the managers of the firm, as is the accuracy of that information. Even though these firms are based in different countries, since their products are sold in the US, all cost and price information is quoted in US dollars.

### THE DECISION REQUIREMENT:

In each round of the game, you will be required to decide how many of each type of product to sell in order to maximize the wealth of your individual shareholders. There are two specific production factors that you must consider in making your product allocation.

1. The quantity of each item you plan to produce must be a multiple of ten. For example, if you have 100 items to allocate, you can choose to produce 10 FM, 20 VT, and 70 PR or any other combination that adds to 100 units as long as each individual allocation is a multiple of ten. You

cannot choose to produce 3 FM, 5 VT, and 92 PR. Should you choose to allocate production quantities that are not multiples of ten, the number that you choose will be rounded down to the nearest multiple of ten; this will result in your team losing production and thus losing revenues.

2. In order to maintain the ability to offer a product in the next round, you must offer at least 10 of that product in the preceding round. This requirement assures that the equipment and personnel needed for production will be available. For example, if in Round 1 you choose not to produce any FM, then you will not be allowed to offer any FM in Round 2. You will be allowed to offer FM in Round 3 should you wish to do so. The reason that you must skip a round after not offering a product is that it will take you this much time to restart the production process.

### **THE GAME STRUCTURE:**

There are multiple rounds to the game, each round examining a different aspect of competition and information flow. Cost and price structures may change between rounds, and it is your responsibility to make decisions in light of the changing market conditions. During each round, you will have approximately 10 minutes to decide your production mix.

### **MANAGERIAL INCENTIVES:**

In order to receive credit for this part of the course, you will be required to submit a paper documenting the game and your performance during the game. This paper will be graded on a 100 point scale. The members of the winning team in each round of the game will receive a 5 point bonus which will be added to the grade on the paper. For example, if a single team is able to win three rounds, it would be possible for the members of that team to receive a score of 115 points on the 100 point paper (if the paper itself does not merit a score of 100, the bonus points will still be added to whatever score the paper receives). In each round, the members of the second place team will receive a bonus of 3 points, and the members of the third place team will receive a bonus of 1 point.

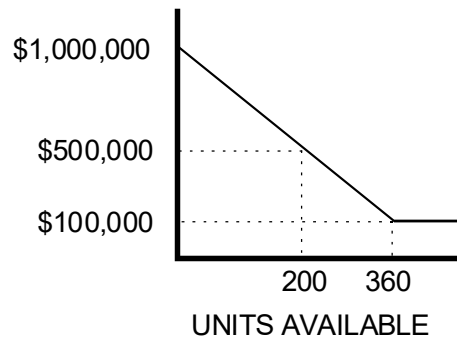
In the event of a two-way tie in any round, the combined points will be split equally between the two tying teams. If the tie involves more than two teams, that is, if three or more teams receive the same score in a specific round, no bonus points will be awarded to those teams for that round.

### **COMPETITIVE MARKETS PRODUCT DEMAND CURVES**

An industry marketing board has surveyed potential buyers of electrical equipment. Based on the information from this survey, the following demand schedules have been constructed for the products your firm manufactures. Due to market conditions, the minimum price for any product is \$100,000 regardless of the quantity available in the market.

### FREQUENCY MODULATORS

$$\text{PRICE} = \$1,000,000 - (\$2,500)(\text{UNITS AVAILABLE})$$



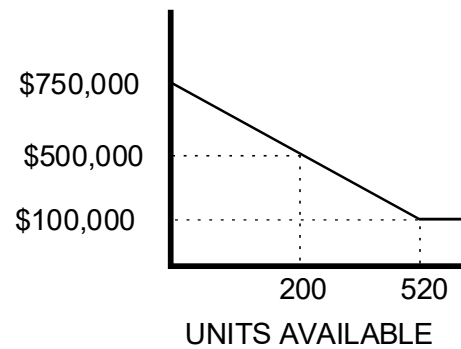
### VOLTAGE TRANSFORMERS

$$\text{PRICE} = \$1,250,000 - (\$3,750)(\text{UNITS AVAILABLE})$$



### POWER REGULATORS

$$\text{PRICE} = \$750,000 - (\$1,250)(\text{UNITS AVAILABLE})$$



## COMPETITIVE MARKETS AND COMMUNICATIONS

Manufacturing Capacity: Each firm has the capacity to produce a total of 150 units. Due to the manufacturing process, it takes the same amount of time and materials for each product. The firm can therefore produce various combinations of finished products, like 150 FM and 0 VT and 0 PR, or 50 FM and 50 VT and 50 PR, or any other combination that totals 150 units.

Manufacturing Costs: The cost to produce a single unit (FM, VT, or PR) is \$300,000.

Product Demand: See Product Demand Curve graphs.

### ROUND 1

Make your decision concerning your output mix without communicating with any of the other teams. Use the Tally Sheet to record your decision. Once all teams have announced their production decisions, the sales price of each item will be calculated, and you can calculate the total profits earned.

### ROUND 2

Prior to making the output mix decision, you may share information with the other teams. The type of information you share and its accuracy is up to you. You are under no compulsion to share information nor will there be any direct sanction for sharing inaccurate information. Use the Tally Sheet to record your decision. Once all teams have announced their production decisions, the sales price of each item will be calculated, and you can calculate the total profits earned.

### ROUND 3

An Industry Expert will be available to assist you should you wish. While you are making your initial plans, the Expert will visit your team and ask questions. It is your choice whether or not the information you provide is accurate. After the Expert has visited all teams, the teams can share information with the other teams. There is no requirement concerning the accuracy of the information you share. After you have had the opportunity to share information, the Expert will visit each team and answer questions concerning market conditions. Use the Tally Sheet to record your decision. Once all teams have announced their production decisions, the sales price of each item will be calculated, and you can calculate the total profits earned.

**Team Name/Members:**

**ROUND 1**

| Product                  | FM        | VT        | PR        |                    |
|--------------------------|-----------|-----------|-----------|--------------------|
| Sales Price per Unit     |           |           |           |                    |
| Cost per Unit            | \$300,000 | \$300,000 | \$300,000 |                    |
| Profit per Unit          |           |           |           | Total Units Sold   |
| Units Sold               |           |           |           | 150                |
| Total Profit per Product |           |           |           |                    |
|                          |           |           |           | Grand Total Profit |

**ROUND 2**

| Product                  | FM        | VT        | PR        |                    |
|--------------------------|-----------|-----------|-----------|--------------------|
| Sales Price per Unit     |           |           |           |                    |
| Cost per Unit            | \$300,000 | \$300,000 | \$300,000 |                    |
| Profit per Unit          |           |           |           | Total Units Sold   |
| Units Sold               |           |           |           | 150                |
| Total Profit per Product |           |           |           |                    |
|                          |           |           |           | Grand Total Profit |

**ROUND 3**

| Product                  | FM        | VT        | PR        |                    |
|--------------------------|-----------|-----------|-----------|--------------------|
| Sales Price per Unit     |           |           |           |                    |
| Cost per Unit            | \$300,000 | \$300,000 | \$300,000 |                    |
| Profit per Unit          |           |           |           | Total Units Sold   |
| Units Sold               |           |           |           |                    |
| Total Profit per Product |           |           |           |                    |
|                          |           |           |           | Grand Total Profit |

**APPENDIX B**  
**INSTRUCTOR'S FORMS**

**PRODUCTION ALLOCATION**

**ROUND 1**

|              | <b>FM</b> | <b>VT</b> | <b>PR</b> | <b>Total units</b> |
|--------------|-----------|-----------|-----------|--------------------|
| <b>North</b> |           |           |           | 150                |
| <b>East</b>  |           |           |           | 150                |
| <b>South</b> |           |           |           | 150                |
| <b>West</b>  |           |           |           | 150                |
| <b>Total</b> |           |           |           |                    |

**ROUND 2**

|              | <b>FM</b> | <b>VT</b> | <b>PR</b> | <b>Total units</b> |
|--------------|-----------|-----------|-----------|--------------------|
| <b>North</b> |           |           |           | 150                |
| <b>East</b>  |           |           |           | 150                |
| <b>South</b> |           |           |           | 150                |
| <b>West</b>  |           |           |           | 150                |
| <b>Total</b> |           |           |           |                    |

**ROUND 3**

|              | <b>FM</b> | <b>VT</b> | <b>PR</b> | <b>Total units</b> |
|--------------|-----------|-----------|-----------|--------------------|
| <b>North</b> |           |           |           | 150                |
| <b>East</b>  |           |           |           | 150                |
| <b>South</b> |           |           |           | 150                |
| <b>West</b>  |           |           |           | 150                |
| <b>Total</b> |           |           |           |                    |

**ROUND 1**

|              |             | <b>FM</b> | <b>VT</b> | <b>PR</b> |                     |
|--------------|-------------|-----------|-----------|-----------|---------------------|
| <b>North</b> | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>East</b>  | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>South</b> | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>West</b>  | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |

## ROUND 2

|              |             | FM        | VT        | PR        |                     |
|--------------|-------------|-----------|-----------|-----------|---------------------|
| <b>North</b> | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>East</b>  | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>South</b> | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>West</b>  | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |

**ROUND 3**

|              |             | <b>FM</b> | <b>VT</b> | <b>PR</b> |                     |
|--------------|-------------|-----------|-----------|-----------|---------------------|
| <b>North</b> | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>East</b>  | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>South</b> | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |
| <b>West</b>  | # UNITS     |           |           |           |                     |
|              | PRICE/UNIT  |           |           |           |                     |
|              | COST/UNIT   | \$300,000 | \$300,000 | \$300,000 |                     |
|              | PROFIT/UNIT |           |           |           | <b>TOTAL PROFIT</b> |
|              | PROFIT      |           |           |           |                     |

### UNIT PRICES

| # UNITS | VT        | FM        | PR      |
|---------|-----------|-----------|---------|
| 0       | 1,250,000 | 1,000,000 | 750,000 |
| 10      | 1,212,500 | 975,000   | 737,500 |
| 20      | 1,175,000 | 950,000   | 725,000 |
| 30      | 1,137,500 | 925,000   | 712,500 |
| 40      | 1,100,000 | 900,000   | 700,000 |
| 50      | 1,062,500 | 875,000   | 687,500 |
| 60      | 1,025,000 | 850,000   | 675,000 |
| 70      | 987,500   | 825,000   | 662,500 |
| 80      | 950,000   | 800,000   | 650,000 |
| 90      | 912,500   | 775,000   | 637,500 |
| 100     | 875,000   | 750,000   | 625,000 |
| 110     | 837,500   | 725,000   | 612,500 |
| 120     | 800,000   | 700,000   | 600,000 |
| 130     | 762,500   | 675,000   | 587,500 |
| 140     | 725,000   | 650,000   | 575,000 |
| 150     | 687,500   | 625,000   | 562,500 |
| 160     | 650,000   | 600,000   | 550,000 |
| 170     | 612,500   | 575,000   | 537,500 |
| 180     | 575,000   | 550,000   | 525,000 |
| 190     | 537,500   | 525,000   | 512,500 |
| 200     | 500,000   | 500,000   | 500,000 |
| 210     | 462,500   | 475,000   | 487,500 |
| 220     | 425,000   | 450,000   | 475,000 |
| 230     | 387,500   | 425,000   | 462,500 |
| 240     | 350,000   | 400,000   | 450,000 |
| 250     | 312,500   | 375,000   | 437,500 |
| 260     | 275,000   | 350,000   | 425,000 |
| 270     | 237,500   | 325,000   | 412,500 |
| 280     | 200,000   | 300,000   | 400,000 |
| 290     | 162,500   | 275,000   | 387,500 |
| 300     | 125,000   | 250,000   | 375,000 |
| 310     | 100,000   | 225,000   | 362,500 |
| 320     | 100,000   | 200,000   | 350,000 |
| 330     | 100,000   | 175,000   | 337,500 |
| 340     | 100,000   | 150,000   | 325,000 |
| 350     | 100,000   | 125,000   | 312,500 |
| 360     | 100,000   | 100,000   | 300,000 |
| 370     | 100,000   | 100,000   | 287,500 |
| 380     | 100,000   | 100,000   | 275,000 |
| 390     | 100,000   | 100,000   | 262,500 |
| 400     | 100,000   | 100,000   | 250,000 |

# **Using Overlooked Economic Concepts to Teach Economic Principles**

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## **Abstract**

Poor public policies often result from a lack of knowledge regarding basic economic concepts. These overlooked concepts are fundamental to the functioning of a free enterprise system and, when they are ignored, problems large and small are likely to arise. The same is true for individual decision-makers. Overlooked economic concepts can often lead to poor choices and inferior outcomes for people making these choices. This article suggests how a focus on powerful economic concepts that are often overlooked can be a useful way to communicate various aspects of economic principles. This approach is designed to get individuals to think critically about various aspects of the decision making process on the micro as well as macro level. It also includes a section on how overlooked concepts lead to poor collective choices.

The presented paper discussed each of the 28 concepts. For brevity's sake, only four are discussed at length here, while the others are listed. For the complete paper, please contact the author.

## **1. Introduction**

This document was written to serve two purposes. First, it is designed to introduce any interested person to some important economic concepts that are often not considered when evaluating current events or activities. From private markets to public policy there are powerful considerations in place that need to be known by decision makers but are frequently overlooked. A more general knowledge of these concepts is important for the free enterprise system to function effectively. Both markets and governments are powerful forces that can accomplish beneficial goals for society, as well as cause inefficient and costly results. For the reader of this document, a better understanding of choices and consequences will result.

The second goal of this work is to serve as a supplement for students studying college level economics. It is not meant to replace a comprehensive textbook but, rather, to serve as a bridge to understanding more deeply the principles discussed in the text. Surveys show that the goal of most economics professors is to have their students think more like economists. This document is designed for students to better develop an economic way of thinking by providing examples and ideas that complement the material found in a textbook.

## **2. Methods and First Principles**

Concept 1: Scarcity is a universal and insurmountable condition in an economic system.

All economic goods are scarce. We can recognize a scarce good because we benefit from it and it has a price, or cost. You may think that when you walk out of class and enjoy a drink of water from the fountain that you just received benefits from a free good, but your college pays the water bill and they are able to do this because you, or someone, has paid tuition.

You may think, well what about air? We all benefit from breathing air and it doesn't cost us anything, but actually what we benefit from is clean air. The fact that we have clean air results from manufacturing firms using scrubbers on their smokestacks to keep air pollution at a minimum. This costs these companies money that they pass on to us in the form of higher prices on their products.

In some counties in the U. S. all automobiles are required to pass an emissions test, and this usually costs the vehicle owner \$20 to \$50. This is a direct example of how the consumer pays for free air.

Recently some people have been pointing out how valuable the ozone layer is and how we need to reduce carbon emissions to protect it. In this case, we will end up with higher electricity prices, more costly gasoline and other price increases to protect the "scarce" ozone layer.

Concept 2: All choices involve giving up something of value.

Concept 3: In a voluntary exchange both parties expect to gain, otherwise the exchange will not take place.

Concept 4: Private ownership rights require decision-makers to be accountable for their own actions. Private owners both reap the benefits and bear the consequences of how their property is used.

Concept 5: Communal property rights permit individuals to use a property without regard to the cost of their actions. Waste and overutilization will result.

Concept 6: Output is constrained by our knowledge about how to transform available resources into goods we desire. Discovery of better (more efficient) ways of doing things will permit us to produce a larger output from the Earth's resources.

Concept 7: What happens in the short run is often a poor indicator of what will happen over a longer period of time.

### **3. Primarily Microeconomics**

Concept 8: Except for transportation costs, there will be a tendency for products to sell for the same price in all markets when there are no trade restraints.

In competitive markets, where there are no artificial constraints imposed by the public sector, prices will tend to equalize across geographic locations, except for what it might cost to transport the goods to markets further away from where they are produced.

Most all oranges purchased on the east coast come from Florida. With many orange growers in Florida we would expect competition in the sunshine state to keep the price of oranges at a level where growers and sellers are earning a normal rate of return on their investment. If a bushel basket of oranges costs \$10 in Florida and it costs \$1 to transport the bushels to Georgia then we would expect a bushel of oranges in Georgia to cost \$11. If it costs \$5 to transport a bushel to New York then we would expect a bushel to cost \$15 in New York.

If oranges in New York are selling for \$20 a bushel then I have an incentive to transport oranges to New York and sell them for \$18. Someone else might decide to do the same and undercut my price. This process will lead to the price of oranges eventually returning to the competitive price of \$15.

Speaking of New York, an illegal example of this is occurring today. In the empire state cigarette taxes are quite high. This gives people the incentive to buy cartons of cigarettes in lower tax states and bring them to New York for resale. Since taxes are an impediment to the market, prices cannot adjust to reflect only transportation costs. All the government can do is outlaw the process of interstate transport.

Concept 9: There will be a tendency for rates of return on capital investments to move towards equalization.

Concept 10: Other things constant, wage rates will be higher in occupations requiring larger amounts of investments in education and training.

Concept 11: Economic profit indicates that a good is valued higher than the resources it contains, while economic losses indicate that a good is valued less highly than the resources it contains.

Concept 12: In the absence of entry or exit restraints, there will be a tendency for product price and per unit cost to be equal.

Concept 13: People pay all taxes. Businesses may collect taxes, but only people bear their burden.

Concept 14: Business people in a free society are totally dependent on consumers. In order to make a profit (or avoid a loss) they must satisfy consumers' desires that are constantly changing.

Concept 15: Sunk costs are costs that have already been incurred and should have no effect on future decisions.

#### **4. Primarily Macroeconomics**

Concept 16: The government is the only institution that can permanently repeal the laws of supply and demand over an extended period of time.

- A. When the price of the product is fixed below market equilibrium the quantity supplied of the product will fall and a shortage will result.

Sometimes people observe prices and think “that price is too high, there ought to be a law against it.” If enough people agree with this subjective observation (there is no way to objectively measure if a price is “too high”) they can petition the government to pass a law that fixes a lower price to a product.

For example, suppose that people in your town generally agree that the rent on apartments is too high and that you successfully petition the City Council to pass a law that lowers all rents by 50 percent and that the price (rent) is fixed at the new lower rate. Average rents fall from \$700 to \$350. This is great for renters, right? Not really. Remember Concept 7, the immediate effect of lower rents appears desirable, but what will be the longer term effects?

Some landlords will convert their properties to condominiums, selling the individual units to buyers who will live in the former apartments as homeowners. Some buildings might be abandoned as owners can no longer afford the upkeep given the reduced profitability of the units. No new buildings are likely to be developed given the restrictions on what can be charged. For those that continue to exist, the quality of the apartments is likely to decline drastically, because they are costly to maintain and there are many willing renters looking for housing.

So, in the market for rental housing the supply of existing units will be reduced and the number of units desired by possible renters will increase due to the substantial price reduction. A shortage will exist that the market cannot eliminate through an increase in price.

Another relevant example is a southern coastal city that was hit by a strong hurricane recently. In the aftermath the demand for products people typically desire after a disaster increased greatly, and so did their prices. Items such as generators, chainsaws, plywood, and even bags of ice saw their prices increase by several hundred percent. The city government quickly passed a law decreeing that items had to be sold at prices that prevailed before the hurricane. Needless to say severe shortages developed for all of these items and most people went without the benefits these items might have provided.

Some states have laws that codify the actions of the city government in this example. They are called “price gouging laws” that prevent prices from rising after a disaster. In economics there is no such thing as price gouging. Any price agreed to by both buyer and seller in a voluntary exchange is a fair price and the transaction should be allowed to proceed. In the hurricane example, if prices had been allowed to rise, more of all the goods desired by the residents would have flowed into the city as sellers sought to take advantage of the higher prices in this city. As this happened prices would naturally have adjusted downward and many more of the residents would have benefitted from having the needed goods at a price they were willing to pay.

B. When the price of the product is fixed above market equilibrium an excess supply of the product will result unless the government becomes a “purchaser of last resort.”

It is odd to think that someone would observe a price and consider it to be unfairly low. Yet this happens in some instances. Consider the wages of unskilled laborers. Many people believe that without minimum wage laws unskilled workers would be paid less than they contribute to the production of goods and services. In economics we know that people are paid based on what they contribute to a firm’s output and a worker that is paid less than this will likely find a job that will pay what the worker is worth.

This is not how the federal government views the market, however. Thus minimum wage laws establish a minimum price for an hour's worth of labor. If someone is not able to contribute that amount of productivity to a business that person will not get a job. Similarly, when the minimum wage is raised, employees that cannot contribute the value of the higher wage will lose their jobs and there will be a surplus of unskilled workers, as reflected in higher levels of unemployment. Teenagers are generally considered to be a large pool of unskilled labor. Every time the minimum wage rises teenage unemployment increases.

Elected representatives in a large city have proposed raising the minimum wage to \$20 an hour. What do you think this would do to unemployment in that city?

Some people look at commodity prices and think that they are too low and unfair to farmers. Because of this there is an array of price support programs in agriculture and farmers are guaranteed a certain price for their output. If this price is higher than the market clearing price then buyers will only purchase so much of the product and there will be a surplus.

If a farmer cannot sell his product then the program is not doing him or her much good. To address this problem the government needs to buy up the surplus or further interfere in the market by limiting production. Past experiences with the government buying surplus products, that are perishable, provided a very visible example of waste as these goods rotted in large quantities. Now most programs seek to limit supply by only granting certain farmers permission to produce particular commodities. This keeps the price for the consumers artificially high and rewards the farmers with the permission to grow certain commodities quite well. Farmers that are not allowed to grow the crop are also made worse off by the program.

These programs are bad for consumers, bad for farmers not allowed to participate, and quite rewarding to a select few farmers that are granted benefits by the government.

Concept 17: The growth of real income is contingent on the growth of real output. We cannot expand our wealth without expanding the production of goods, services and real assets that provide us with our wealth.

Concept 18: Savings represent past productive efforts that created goods and services. People that save create a greater amount of value to society than they consume.

Concept 19: A rapid expansion in the money supply will cause inflation. Inflation transfers real resources from the private sector to the public sector.

Concept 20: Changes in fiscal policies (taxing and spending) that are enacted to change the level of aggregate demand will also have a significant effect on aggregate supply, through changes in the incentive structure.

## **5. Primarily Collective Choice**

Concept 21: When an activity is subsidized the number of people engaged in the activity will rise. When an activity is taxed the number of people engaged in the activity will fall.

Suppose a government agency adopts a program that gives an annual subsidy of \$50 to everyone who drives a blue car. While this minor amount would not cause people to run out and buy a new blue car, it would provide some incentive for people who are in the market for a new car to purchase a blue one. Over time as more and more people need to replace their cars we might expect that the number of blue cars would significantly increase. If we raise the amount to \$100 or \$1,000 then we would expect the number of blue cars would increase accordingly. Subsidizing the purchase of blue cars will increase the number of blue cars.

Now consider what would happen if the government places a \$50 annual tax on all red cars. While this would be an annoyance to red car owners, most would grudgingly pay the tax, but they would be less likely to buy a red car in the future. Similarly, future car buyers would be discouraged from purchasing red cars and, over time, the economy would have a lot fewer red cars. If the tax were raised to \$100 or \$1,000, it is likely the number of red cars would decrease more rapidly. Taxing red cars will reduce the number of red cars.

There are many instances where we subsidize what would otherwise be poor choices. The federal governments, and some state programs, provide insurance subsidies for people that build houses in coastal areas, especially beachfront properties. Without these subsidies very few people could afford the insurance costs to own beachfront properties but, with the government's help, we get more beachfront houses than would otherwise be the case. People build houses in areas that are prone to hurricanes (poor choice) because the government subsidizes it.

There are a variety of programs to assist the poor. Food stamps, public and subsidized housing, cash payments, free medical care. According to this concept, we would expect these subsidies to lead to more poor people than would otherwise be the case. While some might be poor through no fault of their own, others become poor as a result of making poor choices.

Most would consider the act of dropping out of high school and having babies while not having a job is a series of poor choices. Yet, this is the exact type of behavior that antipoverty programs encourage through the perverse incentive structure we have created.

Some people believe that individuals with high incomes should pay higher amounts of taxes. These beliefs have given us progressive income tax rates. Taxing additional income at higher and higher rates means there will be less additional income. This is a loss to society because it is income that would have otherwise been created had taxes been lower. The government derives no additional revenue from income that is not earned no matter how high the tax rate is.

If allowed to keep more of their money high income earners may spend it on goods that you and I can only dream about, such as jets and yachts. But the ability of these individuals to spend on these goods is a great benefit to workers that produce jets and yachts. Higher taxes would imply less demand for luxury goods, which would mean fewer jobs and lower incomes in the industries that produce these goods.

Concept 22: Under capitalism individuals acquire income by helping others. People that help others a great deal will have large incomes. Self-interest motivates individuals to help others.

Concept 23: Under socialism people acquire income by engaging in activities that are rewarded by the state. Self-interest motivates individuals to do those things rewarded by the state.

Concept 24: Under a democratic legislative system political entrepreneurs have a strong incentive to institute policies that provide substantial individuals benefits to members of well-organized interest groups even though the policies impose small individual costs on the disorganized majority. This cost can be quite large in the aggregate.

Concept 25: Under a democratic legislative system political entrepreneurs have a strong incentive to favor policies that provide immediate, easily identifiable benefits at the expense of future costs that are not immediately observable. When taken in total, most often the costs greatly outweigh the benefits.

Concept 26: Bureaucratic decision-makers have a strong incentive to engage in activities that they expect will increase the size of the bureau's budget.

Concept 27: Government bureaus, agencies, committees, etc. are not monolithic industries that act to achieve an idealized goal. Instead, these organizations consist of a large number of individuals, each acting in accordance with his or her own preference function.

Concept 28: An increase in tax rates will cause a decline in the tax base. Therefore an increase in tax rates will fail to increase tax revenues proportionally. Similarly, decreases in tax rates tend to expand the tax base such that the decline in revenue is not proportional to the cut in tax rates.

## **6. Summary and Conclusions**

Throughout this article I have sought to present concepts that allow for a better understanding of economics. General concepts, micro and macro concepts, and collective choice concepts have all been explored from what might be called a "common sense" point of view. When someone has both knowledge of and appreciation for these concepts they are a better informed citizen that can more critically analyze events taking place in both the public and private sectors.

The free enterprise system has served us well and resulted in the creation of vast amounts of wealth and well-being. Markets are powerful forces that help individuals achieve their goals and better their lives. Limited government can sometime assist in improving the outcomes generated by markets, primarily by enforcing efficient laws and protecting property rights.

Unfortunately, some people believe in the primacy of government over free markets and promote intervention that is to the detriment of all (except perhaps the implementers of the policies) including those for whom the benefits are intended. Hopefully this is a clear point throughout this work.

## **Automated License Plate Readers: Maintaining Civil Privacy While Ensuring Public Safety**

“It has become appallingly obvious that our technology has exceeded our humanity.” Albert Einstein

Abigail Bowen, Wesley Dismuke, Lindsey Weathers, John A. Tures, Ryan Driesse, Patrick Goodin, Osborn Theam, Carly Farrow, Jake Hipple, Nick Stavrow, and Justin Braddy.

### **Foreword**

**By John A. Tures**

The young teenager was scared. She had told her parents that she was only going out with the family station wagon on that Sunday evening to get school supplies. But instead, the curious white high school student wanted to see Dr. Martin Luther King Jr. preach at the famous Dexter Street Baptist Church in Montgomery, Alabama. Though the message by the civil rights icon moved her spirit, she was terrified as she saw a number of dark suited men moving through the darkness, writing down license plate numbers of the attendees. Would her father, a civil engineer with the Federal Bureau of Public Roads, lose his job because the family car “made the list?” The young lady was also concerned about how her family would react because she had put herself in danger by going to Dr. King’s event, and was under surveillance as a result.

Dr. Dulin-Mallory adds that she was concerned about her family being distressed that their daughter had put herself in danger.

That young woman, Dr. Nina Dulin-Mallory, is my co-worker, a respected Professor of English at LaGrange College. That story was one she told at a local forum on civil rights. “The early 1960s were a dark time in Montgomery, Alabama,” Dr. Dulin-Mallory added in an email communique. But the story is about more than a tale of America’s struggle in the 1960s. It’s about the right to privacy, something increasingly challenged by a new technology known as the Automated License Plate Reader (ALPR).

ALPRs are an anti-crime cameras that can be used to track the movements of lawbreakers. Several media sources have touted the ability to this device to stop car thieves, or even track down felons guilty of other crimes. They could follow license plate data far more quickly and effectively than government agents in a parking lot ever could. But without restrictions, such devices may be open to abuse by those who seek to keep tabs on citizens who have not committed any crimes.

Dr. Dulin-Mallory had committed no crime that evening, yet she was treated as a criminal. Whether the license plate writers were government agents or some private group opposed to civil rights, it shows that some have an interest in tracking our movements for political purposes. These can be used to determine who is meeting when and where. It’s not too far of a stretch to say that such devices can also be used by one business with access to government data to act against a rival business, subverting the free market system. Governments

can do the monitoring, or share such information with others who can use that information against those under surveillance, unless reasonable restrictions can be employed.

This study outlines the pros and cons of these ALPRs. It also analyzes whether the states which have adopted such restrictions are more likely to embrace the free market, adopt a certain political preference (for Republicans or Democrats), or be affected by crime, corruption, or budgetary concerns. These results represent a first step in attempting to determine why some states seek to limit the surveillance of American citizens, and others seek no such constraints on government powers to track the people using ALPRs.

## **Introduction**

British rabbi, philosopher, and scholar Jonathan Sacks (2012) once stated, “Technology gives us power, but it does not and cannot tell us how to use that power.” The globalization of technology has allowed us to advance our capabilities and improve our efficiency at astronomical rates. The advent of technology can be seen in literally every aspect of our existence. Whether it is a handheld device with the aptitude of desktop computer or robots that eliminate the need for human capital, technology has continued to fascinate us. There is no doubt that technology is a benefit to our world, but we must also be increasingly vigilant and aware of technology’s shortcomings, whether intended or unintended.

As our world evolves, the age of cyber profiles becomes more extensive. Technological advances have created a world in which we depend on our electronics to survive. Cell phones, cars, infrastructure, banks, and pretty much everything else we use depend on a stable foundation within this technical world. As we use all of these components in our lives, a profile of each person is created. In the past few years, governments and businesses have gained the ability to save profiles on each of us based on what we do with our devices. Our Internet histories, call and text histories, commonly shopped places, and even our car travel is recorded and stored in databases accessed by various different companies or agencies.

This holds true in the case of Automated License Plate Reader (ALPR) technology. ALPR technology provides us with an obvious advancement in the way of law enforcement and public safety. For the same reasons that ALPR technology is useful, ALPR technology can be a detriment to society. Jurisdictions must decide if the benefits of ALPR outweigh the disadvantages. Jurisdictions must also resolve to what degree ALPR technology should be regulated. ALPR technology has provided us greater potential to increase security; now we must decide how to manage this potential.

Automated License Plate Readers (sometimes referred to in the literature as Automatic License Plate Readers) function to automatically process images of vehicle license plates and transform the image into numbers that can be compared to a database of other known license plates (Roberts and Casanova 2012). The processing of license plate data by ALPRs takes place within seconds, allowing officers to know instantly when a wanted vehicle has been located.

These ALPR devices called are being used around the globe to store people’s information and patterns. “Exurban, suburban, state, and federal police in the United States are increasingly using what has been called Automatic License Plate Recognition, or ALPR to identify license plates and then compare them with databases (Cousineau 2013).”

So what are ALPRs? “[An] ALPR can be considered a kind of computerized and automated closed circuit television (CCTV) surveillance system. While CCTV tends to pipe the video imagery from several cameras to a central location where it is displayed on many screens monitored by workers, ALPR does this and more (Cousineau 2013).” Wired to a laptop computer inside the car, these cameras automatically scan and identify up to 1,800 license plates per minute before comparing them to FBI databases (Steffen 2010).<sup>1</sup> A process to mix the LPRs with all of the squad vehicles and all of the agencies has been put into place where agencies learn from each other and make the process of obtaining data easier (Gierlack et.al. 2014). Not only can agencies use this product to find stolen vehicles, but they could use it for all sorts of other reasons (Gierlack et.al. 2014). Agencies can use this technology to find missing persons who disappeared in their vehicles, or to help find a teen that drove away in his dad’s vehicle without the dad knowing.

## **Benefits**

ALPR technology was first developed in the United Kingdom in 1976 at the Police Scientific Development Branch, now known as the Home Office Scientific Development Branch, with the purpose of combating the use of car bombs in mainland Britain by the Irish Republican Army (Armstrong, Czeck, Franklin, and Plecas 2010, Aegerter 2013). This is technology that can pinpoint a vehicle and can run a vehicle’s tag just from the click of a button. It can scan thousands of plates at a time and can compare all of the tags with a central database. A report of a license plate number can pinpoint a location, and can stop a car thief, foil a kidnapping, or even thwart a terrorist.

By 1996, there was an ALPR at every western port in the United Kingdom, and all license plates entering the country from Ireland were tracked (Gaumont 2008). By 1999, every police force in England and Wales was equipped with van-based ALPR technology (Gaumont 2008). Currently, in the United States, ALPR technology is used to locate vehicles that have been reported stolen, monitor vehicles of owners suspected of being involved in criminal or terrorist activities, locate vehicles of persons who are wanted by authorities, and to locate vehicles in which the owner has failed to pay traffic fines or maintain vehicle license registration (Roberts and Casanova 2012). Today, ALPR technology is used in over 40 countries (Armstrong, Czeck, Franklin, and Plecas 2010). ALPR technology is also used to regulate access to restricted areas and to patrol international borders (Armstrong, Czeck, Franklin and Plecas 2010).

This technology has given law enforcement the ability to more effectively prevent and apprehend criminals. Stephen Rushin says, “Police today utilize technological replacements for traditional investigations that dramatically improve the efficiency of surveillance (Rushin 2013, 2).” As criminals become greater masterminds and wielders of our matrix-like world, so must those who combat them.

New LPR technology for four cars enabled Gwinnett County, Georgia police to make 50 arrests in a single month (Kavanaugh 2011), including several wanted by the police, which could not have been made without the technology. And a study of Mesa, Arizona found that LPRs had success in hot spot crackdowns for several offenses (Koper, Taylor and Woods 2013).

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<sup>1</sup> ELSAG North America is a company that produces ALPRs. Their new Mobile Plate Hunter 900 (MPH-900) has the ability to read an astounding 1,800 tags per minute. It can be either mounted to police cars or on the roadway. As the police are riding down the road, the MPH-900 is constantly reading tag numbers and if there is a hit, there will be an alert on the computer in the car (ELSAG North America 2015).

In nearby Tempe, Arizona, four cars were used to test the new Internet-capable technology. Some of the new capabilities that were now provided by the internet include the ability to now file reports, send emails, download mug shots, and access information from other laptops. Prior to this upgrade the officers simply had a laptop with analog radio in order to keep in touch with other officers and receive information.

The mayor of Tempe even made a comment on this trial run by saying, “When we deployed this technology in the police department, we saw immediate improvements in communications and operations (*American City & County* 2010).” After running this technology for several months, they did decide to go ahead and deploy their entire line of cars, numbering over 200, with the technology. With better success, more fines can be paid, giving agencies more money to allow for better management of the system (Gierlack et.al. 2014).

Before ALPR technology became available, officers relied heavily on instincts when deciding whether to run a driver’s plate number (Armstrong, Czeck, Franklin, and Plecas 2010). Additionally, before officers had access to ALPR technology, they had to recite plate numbers to a dispatcher or manually enter plate numbers. With ALPR technology, officers have the ability to process about 1,800 plates per minute (Roberts and Casanova 2012). Previously, officers were able to manually enter, on average, between 50-100 license plate numbers (Armstrong, Czeck, Franklin, Plecas 2010). ALPRs greatly increase the amount of license plates being processed, thus leading to more productivity from officers in documenting license plates, as well as other aspects of their job.

Over the past years there has been a drop in the crime rate. From the best-selling book *Freakonomics* (Levitt and Dubner 2005), the authors write “When the crime rate began falling in the early 1990s, it did so with such speed and suddenness that it surprised everyone. It took some experts many years to even recognize that crime was falling, so confident had they been of its continuing rise.”

Levitt and Dubner (2005) claim that one of the main reasons for the drop in the crime is because of “new policing strategies” which can be any type of technological innovations such as the LPRs, new strategies to stop drug trafficking, and even something as simple as a change in the type of car a police officer might drive. “The most compelling new idea that [NYPD Police Chief] Bratton brought to life stemmed from the broken window theory, which was conceived by the criminologists James Q. Wilson and George Kelling. The broken window theory argues that minor nuisances, if left unchecked, turn into major nuisances (Levitt and Dubner 2005).” This is basically saying that one small crime that will only result in detainment for a night or probation for a month could potentially lead to a felony murder charge or a crime of that level if not stopped. New ideas like the broken window theory start chain reactions that can lead into even more powerful policies. Some of the broken window policy is seen within the LPRs. If a scanner pulls over someone and arrests them because they are wanted for petty theft, then they could potentially stop the person who might have been on the way to commit another more terrifying crime such as armed robbery.

ALPRs could help improve accuracy in who the cops pull over, accountability of why the officer stopped a certain car, efficiency in how officers use their resources to stop the right people, and they would led to unexpected data. Unexpected data could lead to finding trends in places and times certain crimes occurs which could lead to more arrests and a decrease in the crime rate (Ferguson 2015).

This technology will help stop crime before it even begins. Minor criminals can now be tracked and hunted down before they end up committing murder. People of interest will have their movements analyzed by the FBI and aggressive action can be taken before any innocent lives are harmed. Bill Frist, a former U.S Senate Majority Leader said after the 2001 attacks, “Our top focus – protecting our Nation – must go beyond homeland preparedness; America will only be secure if we deal with threats before they happen, not just after they happen (U.S. Air Force 2014).” Indeed, the hidden potential is the ability to track patterns, create “hotlists,” and predict possible criminals and their actions (Gierlack et.al. 2014).

ALPRs can pinpoint any particular vehicle and can run the vehicle’s tag all by one click of a button. They can be one of the most important technologies in the war on crime, whether it is the theories of which they are invented on, or whether or not it is the strategies that they act through. Over twenty years of new strategies and ideas have laid the foundation to create the ALPRs, without creating a police state. “These digitally efficient technologies do not give police any unique extrasensory ability. They merely improve the efficiency of public surveillance. Furthermore, these technologies only collect information on public movements and behaviors. They do not intrude on any constitutionally protected or private space (Rushin 2013, 3).”

Such advances can also improve transportation as well, including those who break traffic laws. “Traffic surveillance and incident management constitute the most widespread uses of video technology; machine vision processing of license plate images for purposes of electronic toll enforcement make up most of the other common applications (Shuldiner 1999, 377).”<sup>2</sup> For example, the cameras that are installed at the top of many traffic lights survey that specific area of driving and can also catch speeders going through red lights. The cameras can snap a picture of the speeder’s license plate and fine the person.<sup>3</sup>

ALPR technology could provide monetary return on investments. Since ALPRs are used to locate vehicles in which the owner hasn’t paid a traffic fine, ALPRs could add additional revenue to agencies (Motorola 2006). ALPRs also help officers identify vehicles associated with drug crimes. If drug money is collected during drug busts, a percentage of the money usually goes to the agency (Motorola 2006). ALPRs can lead to more drivers being apprehended for offenses associated with fines.

“In 1997, around 20% of American police departments reported using some type of technological surveillance. By 2007, that number had risen to over 70% (Rushin 2013).” It’s no wonder that a third of all law enforcement agencies adopted ALPRs by 2010, with more on the list five years since. Given these success stories supported by rigorous analysis, who could be opposed to such technology?

## **Concerns**

There is no question that ALPRs significantly expand the abilities of law enforcement agencies to ensure public safety. The advantages of ALPR do not come without its share of

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<sup>2</sup> Shuldiner adds “The choice of video and associated image processing technology depends upon the specific applications of these technologies. The technological requirements of, say, freeway flow condition monitoring are quite different from those associated with the collection of data as part of a mail-out, mail-black origin-destination survey (Shuldiner 1999, 377).”

<sup>3</sup> Shuldiner states “The pace of application has been significantly enhanced by funding targeted by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). Since the advent of ISTEA, many additional applications have come into use (Shuldiner 1999, 377).” The increase of this technology is due to the result of an increase of population and more cars on the roads.

weaknesses. ALPRs present difficulties related to citizens' privacy, policy regulations, and possible discriminatory profiling.

With concerns to privacy, citizens' personal information is available regardless of if they have committed crime. The ACLU reports that 99% of Americans under surveillance have no knowledge of such surveillance (Aegerter 2013). With inconsistencies concerning data retention, data collection, and data sharing, citizen information isn't secure. ALPR databases could be subject to hacks from outside institutions, or mismanagement by officers.

The toughest part of this technology is finding the medium between protecting the public and invading the public's privacy. NBC's Devin Coldewey wrote an online article "How You're Tracked Digitally All Day (And What You Can Do About It)," a personal account about a study his news team did on the matter. On a normal day, they went through every aspect of his life with a fine-toothed comb to see exactly how his movements were being documented and by whom. His phone, GPS, Internet, television usage, and even cameras on the road were used to formulate a play-by-play of his typical workday. Even while driving, he was being photographed by cameras.

An NBC News Producer named Robin was used as a test subject for their analysis. "Leaving the house, Robin enters the view of the public, and therefore the view of any number of traffic and security cameras. Many of these cameras will passively record his license plate, using special software to convert the image into numbers and letter. The make, model and color of his car are also recorded in some situations (Coldewey 2013)."

Despite the presence of these cameras in nearly every road and town, we never seem to notice them. Despite their relative anonymity, their impact is important. Access to that information could be a key battleground in the war for the right to privacy, especially when it comes to Fourth Amendment concerns. The Fourth Amendment right states that there shall be no search and seizure without probable cause.

According to the ACLU, "In our society, it is a core principle that the government does not invade people's privacy and collect information about citizens' innocent activities just in case they do something wrong (ACLU 2015)."

The ACLU adds "While ALPRs have legitimate uses, when misused they can pose a serious threat to Americans' privacy. As ALPRs increasingly blanket American roads and highways, they raise the prospect of pervasive and prolonged surveillance of Americans' movements, a problem exacerbated when law enforcement agencies keep data about people not suspected of wrongdoing, and when data from discrete ALPR systems is pooled together into state, regional and even national databases (ACLU 2012)."

A report by the American Civil Liberties Union (ACLU) concluded that 99 percent of entries gathered from U.S. law enforcement are innocent people (Aegerter 2013). And voters are expressing greater concerns about such surveillance. "In a new HuffPost/YouGov poll, 40 percent said they'd prefer a presidential candidate who wants to place more limits on government surveillance, while just 16 percent said they'd rather have a candidate who didn't support such limits," writes Edwards-Levy (2015). "The remaining 43 percent were undecided, or said it didn't matter."

One of the drawbacks of using ALPRs is that you could have bad data. The data has to be updated every day and if for some reason it doesn't get updated, you may stop someone that isn't

breaking the law anymore. Another drawback would be a false positive, which would include someone with a criminal record but isn't currently breaking the law (Ferguson 2015, 398-403).

With the information overload through all the agencies that use this technology, it starts to have the constitutional privacy of our citizens blurred and some say that they are having their privacy invaded. Whenever a better look is taken, the readers are made to help keep the people safe from criminals. But at the same time, if an agency is corrupted and uses this information for its own benefit such as the IRS has used in their recent scandals these past few months, then the people are in danger.

"Given the IRS' track record of failing to protect confidential tax information, this lack of agency oversight is a threat to our privacy and democracy," stated Dan Epstein, the president of Cause of Action, in a statement (Barton 2015)."

ALPRs have many uses that can benefit the public and keep them safe, but it also can be abused and the power can be used against certain groups of people (Gierlack et.al. 2014). If an agency that is corrupt sees a person of interest, but that person has paid off the officers, or something of that nature and the officer overlooks that vehicle, then the ALPR is not performing its sole purpose of protecting the people from thefts and other offenses (Gierlack et.al. 2014).

Monitoring by government is not the only concern. There are also worries when big business gets involved. Jerry Wachtel points out in his article *Digital Billboards, Distracted Drivers* that "specialized cameras and software can detect the approach of specific vehicles and send their drivers immediate messages about products or services tailored to their interests (Wachtel 2011)." These programs know certain information about the car's driver due to the cyber profile, which is linked to that specific license plate. Though this may be a way to create a better market for consumers, it is an invasion of privacy and a danger to society.

Wachtel (2011) warns us "The merger of automated license plate recognition, vehicle identification, driver facial recognition, and vehicle location data provides a powerful new tool for advertisers—and raises new concerns about privacy for drivers (Wachtel 2011, 27)." Companies are now able to track our behavioral patterns, keep record of them, and plan consumer advertising accordingly. For instance, if you are caught by one of these cameras squinting on the daily commute to work, that data will be saved by whatever companies have access to these cameras. The next day, as you are checking your Facebook, an advertisement from Ray Ban pops up stating that one will drive safer by seeing clearer. If these same cameras weren't closely monitored, a criminal could use the data to plan exactly where and what time of day would be the optimal time to commit a crime since your senses are lessened. It is not hard to see that our privacy is being violated, but most people have no idea it is even occurring. Honesty and integrity are a virtue in this day and age, and it impossible to expect it from businesses or criminals when money is at stake.

Cost is another issue. These applications obviously require lots of management and costs, some more than others. A video camera, weatherproof housing, and pan-tilt mounting: \$4,000-\$8,000 compared to automated license plate reader: \$20,000-\$25,000 (Shuldiner 1999). The city of Fairfield purchased 4 Ford Police Interceptors that cost a total of \$105,960 including the original price of \$25,000 and \$5,000 for special police installments (Robinette 2013). Others find the price range of an ALPR system ranges between \$10,000 and \$22,000, depending on the manufacturer and configuration (Roberts and Casanova 2012).

The problem arises with the additional costs of maintenance and labor. There needs to be people that are tech savvy who can help keep the system clean and large enough for storage. There also needs to be training within the agency that teaches officers how to run and manage the system without overloading occurring. Once all of these additional costs are included, only the largest of agencies could afford this system with funding at the rate it currently is (Gierlack et.al. 2014). And the price may be too high for some, especially smaller, or less well-funded agencies. “Technology to deal with these issues can be daunting; because many departments tapped grants that once were plentiful to buy their systems, they did not plan for repairing, maintaining, upgrading, and expanding their plate reader systems... nor do they have money to do so (Gierlack et.al. 2014, 7).”

Now that the abilities of the ALPRs have been seen, a look at their impact on crime rates must be taken. The highest rate of crime in the United States excluding Washington D.C. is within the state of Alaska of a 602.2 violent crimes (per 100,000 inhabitants), and the lowest rate of crime in the U.S. is in the state of Maine with a 120.6 rate of violent crime (FBI 2013). Maine has laws pending on the ALPRs and Alaska has no laws or legislation pending on the status of ALPR usage (Knell 2015). Clearly, Maine’s restrictions on ALPRs have not hampered crime fighting in that state, while the lack of restrictions has not helped Alaska battle lawbreakers.

There is also a lack of sufficient uniform policy regulations on ALPRs. Local, state, and national law making bodies have not implemented policies to regulate how ALPRs are administered. There are general guidelines for usage determined by agencies (Roberts and Casanova 2012), but legislatures must provide more insight into who has access to citizen’s information, how often information and hotlists are updated, and who is accountable for database breaches. There are also no regulations on how law enforcement agencies construct hot lists. Legislatures must set parameters to regulate ALPR usage so that citizens’ privacy isn’t infringed upon and so that law enforcement agencies aren’t too powerful.

## Research

Understanding the factors associated with states<sup>4</sup> that regulate ALPRs could shed some insight as to why some states have chosen to monitor these devices a little better. Some states with strong support for economic freedom might be wary of too much power of the government in the economy, and therefore put limits on these readers. Additionally it would be interesting to see if states that support the Republican or Democratic Party back restrictions on ALPRs, as each party insists its party does more to rein in the excesses of the state. States may also adopt ALPR restrictions if they have a lower crime rate, or adopt such regulations if it has a higher level of government corruption. Given the costs of these ALPRs, those states with tight budgets may be more likely to adopt limits on the use of these devices.

Our dependent variables are (DV 1) state regulations of ALPRs and (DV 2) regulations plus proposed regulations on ALPRs, gathered by the National Conference on State Legislatures (NCSL 2016).

Our first independent variable is economic freedom in the state, measured by the publication *Economic Freedom of North America* (Stansel, Torra and McMahon 2014). A “1” means “more economic freedom,” and a “0” means less economic freedom. Our next independent variable is the presence or absence of budget concerns” for each state. A “1” means

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<sup>4</sup> Washington DC was also included in this study, where data exists for it.

higher debt and a “0” means lower debt. The data comes from USGovernmentSpending.com (2015).

To see if politics plays a role in ALPR regulation, we looked at state presidential leanings. States that favored the GOP in two or more of the last three elections got a score of one, while Democratic Party states (picking this party in two or three of the last three elections) received a score of zero ([http://electoralmap.net/PastElections/past\\_elections.php?year=2012](http://electoralmap.net/PastElections/past_elections.php?year=2012)). In a similar fashion, we examined the politics of the state in terms of gubernatorial control and control of the state legislature, in two separate variables. Over the last three elections, if a majority of the years featured a Republican legislature or governor, the state received a score of one for each variable; otherwise it received a score of zero for each variable. Such data can be found at the NCSL website (NCSL 2016)/

Also, we examined state corruption (Center for Public Integrity 2012) to see if this had an impact on state ALPR regulations. The data came from the State Integrity 2012 report. For the study, a state received a “1” if it was in the lower half ranking of state corruption (meaning less corruption). If the state was in the top half of the study, among the most corrupt states, it got a score of zero. State crime levels were measured in a similar fashion, breaking states into two categories based on rankings. States in the top half of crime levels received a one, while low crime states (bottom 50 percent of the number of crimes committed) received a zero. The data can be found at the Federal Bureau of Investigation (2013).

## Results

**Table 1:** Dependent Variable (Y): ALPR Limits (Laws or AG Rulings?)

| Independent                                                         |                                   | Yes = 1  | No = 0   | Row Total |
|---------------------------------------------------------------------|-----------------------------------|----------|----------|-----------|
| Variable                                                            | Category 1: More Economic Freedom | 5        | 15       | 20        |
|                                                                     | (X)                               | 3.921569 | 16.07843 |           |
| Economic Freedom                                                    | Category 0: Less Economic Freedom | 5        | 26       | 31        |
|                                                                     |                                   | 6.078431 | 24.92157 |           |
| Column Total                                                        |                                   | 10       | 41       | 51        |
| Pearson                                                             | Chi-Square Statistic              | 0.606904 | 3.841    |           |
| Degrees of Freedom = (# of rows-1)(# of columns-1)                  |                                   |          |          |           |
| Is Chi-Square Statistic Statistically Significant At The .05 Level? |                                   |          |          |           |
| Not Statistically Significant                                       |                                   |          |          |           |

**Table 2:** Dependent Variable (Y): ALPR Limits (Laws or AG Rulings?)

| Independent        |                                        | Yes = 1  | No = 0   | Row Total |
|--------------------|----------------------------------------|----------|----------|-----------|
| Variable           | Category 1: GOP State Legislature      | 3        | 24       | 27        |
|                    | (X)                                    | 5.294118 | 21.70588 |           |
| State Legislatures | Category 0: Democrat State Legislature | 7        | 17       | 24        |
|                    |                                        | 4.705882 | 19.29412 |           |
| Column Total       |                                        | 10       | 41       | 51        |

Pearson Chi-Square Statistic 2.627744 3.841

Degrees of Freedom = (# of rows-1)(# of columns-1)

Is Chi-Square Statistic Statistically Significant At The .05 Level?

Not Statistically Significant

**Table 3:** Dependent Variable (Y): ALPR Limits (Laws, AG Rulings + Proposed Ones?)

| Independent                 |                                        | Yes = 1  | No = 0   | Row Total |
|-----------------------------|----------------------------------------|----------|----------|-----------|
| Variable                    | Category 1: GOP Presidential Vote      | 3        | 21       | 24        |
|                             | (X)                                    | 4.705882 | 19.29412 |           |
| State Presidential Leanings | Category 0: Democrat Presidential Vote | 7        | 20       | 27        |
|                             |                                        | 5.294118 | 21.70588 |           |
| Column Total                |                                        | 10       | 41       | 51        |

Pearson Chi-Square Statistic 1.452947 3.841

Degrees of Freedom = (# of rows-1)(# of columns-1)

Is Chi-Square Statistic Statistically Significant At The .05 Level?

Not Statistically Significant

**Table 4:** Dependent Variable (Y): ALPR Limits (Laws or AG Rulings?)

| Independent     |                       | Yes = 1  | No = 0   | Row Total |
|-----------------|-----------------------|----------|----------|-----------|
| Variable (X)    | Category 1: High Debt | 4        | 22       | 26        |
|                 |                       | 5.098039 | 20.90196 |           |
| Budget Concerns | Category 0: Low Debt  | 6        | 19       | 25        |
|                 |                       | 4.901961 | 20.09804 |           |
| Column Total    |                       | 10       | 41       | 51        |

Pearson Chi-Square Statistic 0.600135 3.841

Degrees of Freedom = (# of rows-1)(# of columns-1)

Is Chi-Square Statistic Statistically Significant At The .05 Level?

Not Statistically Significant

**Table 5:** Dependent Variable (Y): ALPR Limits (Laws or AG Rulings?)

| Independent |                  | Yes = 1 | No = 0 | Row Total |
|-------------|------------------|---------|--------|-----------|
| Variable    | Category 1: Less | 3       | 21     | 24        |

|              |                  |          |          |    |
|--------------|------------------|----------|----------|----|
| Corruption   |                  |          |          |    |
| (X)          |                  | 4.705882 | 19.29412 |    |
| State        | Category 0: More |          |          |    |
|              | Corruption       | 7        | 20       | 27 |
| Corruption   |                  | 5.294118 | 21.70588 |    |
| Column Total |                  | 10       | 41       | 51 |

Pearson Chi-Square Statistic 1.452947 3.841

Degrees of Freedom = (# of rows-1)(# of columns-1)

Is Chi-Square Statistic Statistically Significant At The .05 Level?

Not Statistically Significant

**Table 6:** Dependent Variable (Y): ALPR Limits (Laws, AG Rulings + Proposed Ones?)

|              |                              |          |          |           |
|--------------|------------------------------|----------|----------|-----------|
| Independent  |                              | Yes = 1  | No = 0   | Row Total |
| Variable     | Category 1: State Republican |          |          |           |
|              | Governors                    | 5        | 24       | 29        |
| (X)          |                              | 5.686275 | 23.31373 |           |
| State        | Category 0: State Democratic |          |          |           |
|              | Governors                    | 5        | 17       | 22        |
| Governors    |                              | 4.313725 | 17.68627 |           |
| Column Total |                              | 10       | 41       | 51        |

Pearson Chi-Square Statistic 0.238837 3.841

Degrees of Freedom = (# of rows-1)(# of columns-1)

Is Chi-Square Statistic Statistically Significant At The .05 Level?

Not Statistically Significant

**Table 7:** Dependent Variable (Y): ALPR Limits (Laws or AG Rulings?)

| Independent  |                        | Yes = 1  | No = 0   | Row Total |
|--------------|------------------------|----------|----------|-----------|
| Variable (X) | Category 1: More Crime | 5        | 21       | 26        |
|              |                        | 5.098039 | 20.90196 |           |
| Crime Levels | Category 0: Less Crime | 5        | 20       | 25        |
|              |                        | 4.901961 | 20.09804 |           |
| Column Total |                        | 10       | 41       | 51        |

Pearson Chi-Square Statistic      0.004784      3.841

Degrees of Freedom = (# of rows-1)(# of columns-1)

Is Chi-Square Statistic Statistically Significant At The .05 Level?

Not Statistically Significant

None of our independent variables were statistically significant in Chi-Square tests. This means that there among the states which regulate ALPRs, none are significantly more likely to embrace the free market more than states with no ALPR restrictions, be more or less corrupt, have higher or lower crime rates, prefer Republicans to Democrats, or be more likely to have budget restrictions. Those states that passed an ALPR laws to slow their growth or make them answer the government are a random group, not tied to corruption, politics, crime, or economics.

There were some tendencies in the variables. States that regulate ALPRs are slightly more likely to support free market policies in their state. These states that limit ALPR usage are also slightly more likely to prefer Democrats in national and state races. These two results are not statistically significant (though stronger than other independent variables), but may show support for libertarian ideology, where supporters want less of a role for the government in the economy and one's personal life. A measure which combines these two factors may yield some positive results in future studies.

### Possible Solutions

The American Civil Liberties Union (ACLU 2015) has set some legislation guidelines in their article called "You Are Being Tracked." They are as follows. "License plate readers may be used by law enforcement agencies only. The government must not store data about innocent people. People should be able to find out if plate data of vehicles is registered to them. Law enforcement agencies should not share plate reader data. Any entity that uses license plate readers should be required to report it (ACLU 2015)."

It may be possible to protect the public while respecting their privacy when using this technology. Ten states passed laws since 2007 that state explicitly that LPR data collection only be used for law enforcement purposes. Another two states have directives from the Attorney General with similar limits on the use of LPRs only for law enforcement agencies (Greenberg 2015). Another 11 states are considering similar legislation that restricts the use of LPRs only for law enforcement. Georgia's, in particular, calls for the tracking data must be purged after 90 days, unless one is suspected of a crime (Pezold et.al. 2015). As long as there are strict laws put in place to protect the people of this country, ALPR technology can serve as an important facet in the protection of us all.

## Conclusion

The advent of ALPR technology has provided society with a substantially more efficient means for safeguarding public safety, but only a few states have regulated the power that ALPRs have afforded us. ALPRs have improved the efficiency in production of officers, investigative measures, and revenue creation. Officers have at their discretion, extensive and accurate readings from ALPRs, allowing law enforcement agencies to better police communities. We must not forget, though, that ALPR technology isn't consistently or uniformly regulated. The lack of regulation puts a citizen's information at risk and gives law enforcement too much power. Technology is increasingly advancing to meet the needs of an increasingly complex society, but we have to examine whether or not technology is necessary and how we control unintended negative consequences.

Additional studies may be needed to determine the efficacy of these ALPR regulations. Perhaps some states have not adopted laws restricting the use of these devices because they fear such limits may limit the ability to fight crime. A follow-up study is needed to determine whether the states that check the unlimited powers of ALPRs experience problems combatting crime, or whether the state can reap the benefits of regulated security with the important benefits of freedom, so citizens can live their lives without having to wonder if Big Brother is doing more than fight crime with the information at its disposal.

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## **Abstracts**

### **Inexpensive Interdisciplinary Digital Tools**

Any brief review of the literature on “instructional technology” or “digital tools for instruction” will provide a long list of sources. Each area of study has its own disciplinary-based set of hardware, software, and websites that can help faculty and students. While these are all important, this paper will examine digital tools for instruction that cut across disciplinary boundaries, browsers, and learning management systems, and cuts out the worry over budgets. Our intent is to identify and demonstrate the use of a series of free digital tools that have been tried and shown useful in face-to-face and online classroom environments. Coupled with our major requirement of being free and usable in a variety of classroom situations, the digital tools selected must also bring value to the experience of adult learners, have a short learning curve, and be useful in a professional setting.

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*The Nature To Serve. The Knowledge To Lead.*

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## **EconApps: A mobile app for teaching free markets**

EconApps is a tablet/smartphone app that can be used for quick customizing and conducting of popular economic experiments (i.e. pit market, public goods) in the classroom. Its technical strengths include the quick feedback of computerized experiments, the movement and interaction of hand-run experiments, and freedom from having to procure a computer lab or even an internet connection. Its pedagogical strength is that it has been purposefully designed to teach the merits of free enterprise and capitalism. Instead of being lectured on these merits, students experience the lesson themselves and the fun and interactive app features make the experience more immersive than traditional methods of running experiments. In the Pit Market module, we show the efficiency of free markets and inefficiency of price controls. In the Public Goods module, we show that the so-called market failure in public goods provision is unlikely to have a simple government solution.

EconApps website <http://econapps.highpoint.edu>

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“Whither the international curriculum?”

Abstract: We are told that we live in a globalized society. This is not true. The fantasy of globalization comes from disembodied news, exotic logos and virtual voyeurism that never goes beyond the laptop or iPhone in either direction. The global goods that come from somewhere offshore are generic if not Americanized with labels in English and tailored for styles and standards we recognize and expect. We do not acknowledge them as foreign. Foreign contact that does occur is with westernized businesspeople in conference rooms that could be anywhere in the world, easily accessed by plane and taxi without maybe even breathing the local air.

What we study in US universities that passes for *international* is plain vanilla theory with some wholesome full color pictures, complete with a tagline that says by the way this works in all countries, just add a dash of local flavor. In a business school, *international* is just another bucket like accounting, finance, marketing, etc. rather than being the bucket that contains them all. So the dynamic world of cultural and linguistic differences, trade, migration, exchange rates, and foreign currencies is tucked away as irrelevant or too difficult to understand. Even “study abroad” trips, while perhaps a better opportunity to see the world than never venturing outside the classroom, are scripted, sanitized and bubble-wrapped encounters during which the likelihood of meeting a real native close up is minimized. Consequently, the 95% who live outside the US, and the 95% who are not native English speakers, and those who create 80% of the world’s wealth remain excruciatingly distant.

The *national profile* is used in my classroom to bring my students closer to international business. Each profile is built on the concept that nations themselves are both platforms for business and business partners, and that each country is different. The profile is focused on understanding GDP, exchange rates, FDI, trade, and conveying a sense that the wild west of world trade and international business is not under the command of anyone. The UN, the WTO, the G-8 or G-20, the IMF, and the World Bank are loose players; remittances are a significant flow of wealth that goes directly to where the need is greatest around the world. There is little that is international that does not affect every nation. That’s where and how business education should start.

# 3<sup>rd</sup> Annual Interdisciplinary Symposium: Free Market Systems ~ Teaching & Research Overview



**Program:** Friday, March 18, 2016 at Litchfield Beach and Golf Resort in Pawleys Island, SC

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 AM                            | Check-in                                                                                                                                                                                                                                                                                                                                                                                                          |
| 9:45 AM                            | Brief Welcome! Room Francis Marion C&D                                                                                                                                                                                                                                                                                                                                                                            |
| 10:00 AM<br>Concurrent<br>Sessions | <p>Session 1: Room Francis Marion C&amp;D: Dr. M Wayne Rollins (Middle Tennessee State University)</p> <p>Session 2: Room Francis Marion B: Dr. John Bethune (Barton College)</p> <p>Session 3: Room Francis Marion A: Dr Daniel Hall and Dr. Stephanie Crofton (<i>in absentia</i>) (High Point University)</p>                                                                                                  |
| 10:45 AM                           | Break                                                                                                                                                                                                                                                                                                                                                                                                             |
| 11:00 AM<br>Concurrent<br>Sessions | <p>Session 1: Room Francis Marion C&amp;D: Mr. Christopher Calton (Marshall University)</p> <p>Session 2: Room Francis Marion B: Dr. Merrill Boyce (Coastal Carolina University)</p> <p>Session 3: Room Francis Marion A: Dr. Susan Luck (co-author Dr. Anne Murray; The Graduate School, Pfeiffer University)</p>                                                                                                |
| 11:45 AM                           | Break                                                                                                                                                                                                                                                                                                                                                                                                             |
| 12:00 PM<br>Lunch                  | <p>Special Keynote Session: Room Francis Marion C&amp;D</p> <p>Distinguished Speakers: Dr. Dallas Brozik (Lewis College of Business, Marshall University) and Doris Brozik</p>                                                                                                                                                                                                                                    |
| 1:45 PM                            | Break                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2:00 PM<br>Concurrent<br>Sessions  | <p>Session 1: Room Francis Marion C&amp;D: Ross Gardiner (Americans for Prosperity Foundation)</p> <p>Session 2: Room Francis Marion B: Dr. John Tures (LaGrange College)</p> <p>Session 3: Room Francis Marion A: Dr. Kathy J. Langston (Darla Moore School of Business, University of South Carolina)</p>                                                                                                       |
| 2:45 PM                            | Break                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3:00 PM<br>Concurrent<br>Sessions  | <p>Session 1: Room Francis Marion C&amp;D: Mr. Paul R. (Dick) Drass (Coastal Carolina University)</p> <p>Session 2: Room Francis Marion B: Dr. Bryan Dennis (University of S. Carolina Beaufort)</p> <p>Session 3: Room Francis Marion A: Dr. Alan Belcher (Ashford University) and Dr. Susan Luck (The Graduate School, Pfeiffer University)</p>                                                                 |
| 3:45 PM                            | Break                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4:00 PM                            | <p><b>Room Francis Marion C&amp;D: Robin McCutcheon</b></p> <p><b>Idea Generating Panel Discussion for the 4<sup>th</sup> Annual Interdisciplinary Symposium</b></p> <p><b>Samples:</b></p> <ul style="list-style-type: none"> <li>a. Academic Freedom across the Curriculum</li> <li>b. Free Enterprise in Higher Education</li> <li>c. Creating an Atmosphere of Entrepreneurship across Disciplines</li> </ul> |
| 5:00 PM                            | Cool Down with Cocktails                                                                                                                                                                                                                                                                                                                                                                                          |
| 6:00 PM                            | Farewell Dinner                                                                                                                                                                                                                                                                                                                                                                                                   |

# 3<sup>rd</sup> Annual Interdisciplinary Symposium: Free Market Systems ~ Teaching & Research Program Details



**Program:** Friday, March 18, 2016 at Litchfield Beach and Golf Resort in Pawleys Island, SC

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| 9:00 AM                            | Check-in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 9:45 AM                            | Brief Welcome! Room Francis Mario C&D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10:00 AM<br>Concurrent<br>Sessions | <p><b>Session 1: Room Francis Marion C&amp;D: Dr. M Wayne Rollins (Middle Tennessee State University)</b><br/> <b>Title of Presentation: “Confession of an Author: To Write or Not to Write.”</b><br/> <b>Abstract:</b> Writing a book is certainly an adventurous journey! Many aspiring authors may be surprised to learn that “after you write a book,” another type of journey begins. The second journey involves answering a plethora of questions that stimulate the curiosity of would-be authors. Just as I did, it appears that many people at some point in their lives consider writing a book. Their questions range from “how to get started” to “how to employ publishers” to “how to market” their book—to name a few. This paper relates the author’s experience while answering those questions for himself as well as addresses misconceptions that are quite prevalent. Specifically, the paper examines writing myths, having a clear purpose, publishing options, business considerations, and writing challenges.</p> <p><b>Session 2: Room Francis Marion B: Dr. John Bethune (Barton College)</b><br/> <b>Title of Presentation: “Using Overlooked Economic Concepts to Teach the Principles of Economics.”</b><br/> <b>Abstract:</b> Basic economic concepts are fundamental to the functioning of a free enterprise system and, when they are ignored, problems, such as poor decision-making resulting in inferior outcomes, arise. This presentation is designed to aid instructors to get students to think critically about various aspects of the decision making process on the micro as well as macro level. It also includes a section on how overlooked concepts lead to poor collective choices.</p> <p><b>Session 3: Room Francis Marion A: Dr Daniel Hall and Dr. Stephanie Crofton (<i>in absentia</i>) (High Point University)</b><br/> <b>Title of Presentation: EconApps: A Mobile App for Teaching Free Markets</b><br/> <b>Abstract:</b> EconApps is a tablet/smartphone app that can be used for quick customizing and conducting of popular economic experiments (i.e. pit market, public goods) in the classroom. Its technical and pedagogical strengths include quick feedback and ability to teach free market principles. Students experience the lesson themselves and the fun and interactive app features make the experience more immersive than traditional methods of running experiments. Presentation includes two modules (Pit Market &amp; Public Goods Market) to illustrate free market efficiency versus market failure of government solutions.</p> |
| 10:45 AM                           | Break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 11:00 AM<br>Concurrent<br>Sessions | <p><b>Session 1: Room Francis Marion C&amp;D: Mr. Christopher Calton (Marshall University)</b><br/> <b>Title of Presentation: “The Not-So-Socialist Josiah Warren.”</b><br/> <b>Abstract:</b> The tradition of anarchist intellectual thought generally claim universal acceptance of socialist economic ideas. In the case of Josiah Warren, the first American anarchist, this appears not to be the case. Prior to the 1870s, all Classically Liberal thinkers held to a labor value theory. Unlike Marx, though, Josiah Warren had an incredibly complex method of calculating cost and value that factored in variables that Marx neglected in his own value theory. Thus, this evidence of Warren’s socialism is anachronistic and misleading.</p> <p><b>Session 2: Room Francis Marion B: Dr. Merrill Boyce (Coastal Carolina University)</b><br/> <b>Title of Presentation: “Whither the international curriculum?”</b><br/> <b>Abstract:</b> We are told that we live in a globalized society. This is not true. The fantasy of globalization comes from disembodied news, exotic logos and virtual voyeurism that never goes beyond the laptop or iPhone in either direction. The global goods that come from somewhere offshore are generic if not Americanized with labels in English and tailored for styles and standards we recognize and expect. We do not acknowledge them as foreign. Foreign contact that does occur is with westernized businesspeople in conference rooms that could be anywhere in the world, easily accessed by plane and taxi without maybe even breathing the local air.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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|                                | <p><b>Session 3: Room Francis Marion A: Dr. Susan Luck (co-author Dr. Anne Murray The Graduate School, Pfeiffer University)</b><br/> <b>Title of Presentation: “How not to bore your students to death.”</b><br/> <b>Abstract:</b> Online teaching techniques, research on best practices, and free software tools. We feel these can apply to any subject and any discipline.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11:45 AM                       | Break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 12:00 PM<br>Lunch              | <p><b>Special Keynote Session: Room Francis Marion C&amp;D</b><br/> <b>Distinguished Speakers: Dr. Dallas Brozik (Lewis College of Business, Marshall University) and Doris Brozik</b><br/> <b>Title of Presentation: “Competitive Communications: A Simulation of Free Market system communications.”</b><br/> <b>Abstract:</b> This simulation demonstrates aspects of inter-firm communications in a free market environment. It is designed for use in college-level classes in business, but it can be adapted for use in a corporate setting. Simulation participants will be provided with a complete set of supporting materials after they have completed the simulation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1:45 PM                        | Break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2:00 PM<br>Concurrent Sessions | <p><b>Session 1: Room Francis Marion C&amp;D: Mr. Ross Gardiner (Americans for Prosperity Foundation)</b><br/> <b>Title of Presentation: “Hayek, Hockey, and Human Action: Spontaneous Orders in Sports”</b><br/> <b>Abstract:</b> The free market is a glorious result of human action but not necessarily of human design. Through the marketplace, humans follow rules and signals which can be seldom articulated, but are nonetheless understood. This also occurs in a different market which attracts the attention of millions of Americans: the wide world of sports. This paper will elaborate Hayek’s theory of spontaneous orders in the marketplace and trace the similarities of spontaneous orders through football, NASCAR, and hockey. Just as the sporting world develops codes of conduct through these human actions, so too does the marketplace.</p> <p><b>Session 2: Room Francis Marion B: Dr. John Tures (LaGrange College)</b><br/> <b>Title of Presentation: “Automated License Plate Reader (ALPR) – Good or Evil?”</b><br/> <b>Abstract:</b> Chances are, you’ve been tracked by the police today, thanks to something known as an Automated License Plate Reader (ALPR). Every road that was taken, every errand that was run, every household that was visited today became part of an ever growing database. For whom, or what purpose, was this data collected? We’ve been told that it is necessary for law enforcement to have such information. Research uncovered for the paper reveals stories of policing success, where the cops have been able to catch criminals, thanks to this ability to track cars.</p> <p><b>Session 3: Room Francis Marion A: Dr. Kathy J. Langston (Darla Moore School of Business, University of South Carolina)</b><br/> <b>Title of Presentation: “Internationalizing the Curriculum.”</b><br/> <b>Abstract:</b> Internationalizing the curriculum is a necessity for all business schools in America. The global economy and the Internet have served to create an international environment within all businesses from small to large. The continual increase of immigrants in our country has created a need for businesses to understand how to interact with most cultures within the world. Adding courses that contain elements introducing students to communication with other cultures is a beginning step in internationalizing the entire curriculum.</p> |
| 2:45 PM                        | Break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3:00 PM<br>Concurrent Sessions | <p><b>Session 1: Room Francis Marion C&amp;D: Mr. Paul R. (Dick) Drass (Coastal Carolina University)</b><br/> <b>Title of Presentation: “Applied Learning in Entrepreneurial Leadership.”</b><br/> <b>Abstract:</b> A Progression from Freshmen to MBA’s.” This session will focus on early introduction and stepped reinforcement of the Entrepreneurship process. It begins with how we introduce our freshman in an 'Intro to Global Business' class to entrepreneurial business ventures and the Entrepreneurship process. Secondly, we'll talk briefly about how we scale it up with our 300-level management principles classes, then spend the greatest part of the session on the mentored MBA projects and how we create student learning value through applied learning, in a "Leading Organizations" course. In this final objective, we look at the parallel processes of how pedagogy and projects mutually reinforce the learning experience, augmented by experienced executive mentorship. Your questions and comments are encouraged.</p> <p><b>Session 2: Room Francis Marion B: Dr. Bryan Dennis (University of S. Carolina Beaufort) Title of Presentation: “The rise and fall of Hoku Scientific: A strategic analysis.”</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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|         | <p><b>Abstract:</b> In 2007, the Hoku Scientific broke ground on a \$700 million dollar polysilicon factory in Pocatello, Idaho. CEO Dustin Shindo had negotiated over \$2 Billion dollars' worth of polysilicon contracts before the factory was even built. 6 years later, his company was bankrupt and the half built polysilicon factory lay abandoned. This paper examines the factors behind the rise and fall of this unique firm.</p> <p><b>Session 3: Room Francis Marion A: Dr. Alan Belcher (Ashford University) and Dr. Susan Luck (The Graduate School, Pfeiffer University)</b><br/> <b>Title of Presentation: "Improving Learning and Engagement: Free Digital Tools that Work."</b><br/> <b>Abstract:</b> We examine digital tools for instruction that cut across disciplinary boundaries, browsers, and learning management systems, and cuts out the worry over budgets. Our intent is to identify and demonstrate the use of a series of free digital tools that have been tried and shown useful in face-to-face and online classroom environments. Coupled with our major requirement of being free and usable in a variety of classroom situations, the digital tools selected must also bring value to the experience of adult learners, have a short learning curve, and be useful in a professional setting.</p> |
| 3:45 PM | Break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 4:00 PM | <p><b>Room Francis Marion C&amp;D: Robin McCutcheon</b><br/> <b>Idea Generating Panel Discussion for the 4<sup>th</sup> Annual Interdisciplinary Symposium</b><br/> <b>Samples:</b><br/> <b>Academic Freedom across the Curriculum</b><br/> <b>Free Enterprise in Higher Education</b><br/> <b>Creating an Atmosphere of Entrepreneurship across Disciplines</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 5:00 PM | Cool Down with Cocktails                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 6:00 PM | Farewell Dinner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

***Please join us at the***  
***4<sup>th</sup> Annual Interdisciplinary Symposium:***  
***"Academic Freedom: Free Market Principles at Work"***  
***March 17, 2017,***  
***location: The Bay Watch in Myrtle Beach, SC.***

Brought to you by Dr. Robin McCutcheon and the Lync-Sync.com Team



## Guest & Presenter List

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