Increasing Performance Through English Language Proficiency: American Cultural Model

DOI: 10.7595/management.fon.2018.0014

Abstract: Research Question: The purpose of this study was to determine whether the addition of an American Cultural Model to an existing English as a Second Language (ESL) program improved the performance of international students. Idea: The English language proficiency is essential for students in global emerging economies in order to be competitive, and our study can be generalized to learning other languages within the respective cultural model. Motivation: The results of our study can be applied to higher education worldwide since currently the international business language is English. Data: The data collected were analyzed and interpreted to determine whether cultural training improved scores on the Test of English as a Foreign Language (TOEFL). Tools: Two groups of incoming students were compared as the treatment and control groups, using the t-test with appropriate statistical package. Findings: Data analysis showed a statistically significant difference in TOEFL scores between the control group and the experimental group benefiting from the implementation of the American Cultural Model. Contribution: The English language proficiency is essential for students in global emerging economies in order for them to be competitive, and our study can be generalized to learning other languages within a respective cultural model.

Keywords: Communication, Cultural Model, Instructional Design, International Education, Language Proficiency, Emerging Economies

JEL Classification: D84, Z10, I20

1. Introduction

Current research has shown how the increased level of educational exchange among newly globalized institutions of learning is creating the need for an increase in English-language proficiency (Friedman & Antal, 2005; Institute of International Education, 2010; Mitry, 2008; Person, 2007). In academia, cultural understanding of content delivered in the classroom has become a topic of research and application for an increasing number of prominent educational institutions (Marshall University, 2011; University of Southern California, 2010).

In a study conducted by Howell (2010), faculty members were surveyed to assess the international students’ classroom performance at the target university. The data demonstrated a language-proficiency problem. This study was designed to meet the current need by implementing a cultural component to the established English as a Second Language (ESL) intensive-immersion program to increase international students’ language proficiency. The potential increase in language proficiency was measured by comparing students’ pre- and post-intervention TOEFL test scores.

This study determined whether academic performance could be improved by adding a cultural component to the ESL program to assist in the comprehension of the traditional elements of the TOEFL: (a) listening comprehension, (b) structure, and (c) writing comprehension. With this model, the researcher sought to expand on the newly researched and validated need for global competency for students currently seeking admission to American universities (Person, 2007). The results of this study have worldwide implication in higher education and the improved competence of the local workforce in global emerging economies.

* Corresponding author: Janice Scarinci, e-mail: janscarinci@gmail.com
2. Literature Review

This literature review contains three main sections: (a) the current quantitative measures of language proficiency, (b) current qualitative measures of language proficiency, and (c) alternative methods of measuring language proficiency to support the implementation of a cultural component to increase language proficiency of international college students. The literature review provided the basis of the research questions for this study.

2.1. Quantitative Measures of Language Proficiency

Currently, TOEFL scores are used in admitting students under the main assumption that complying with the requirements of the test would provide evidence of language competency. Each test consists of three major parts administered in sections timed separately. In each section, questions are in the form of multiple choices with four answers or options. Eighty-three percent of the total TOEFL score is provided by multiple-choice questions (Roemer, 2008). Roemer (2008) viewed the delivery of the test as too heavily dependent on one learning style, leaving out critical reasoning.

De Vita (2001) echoed the same criticism. His study centered on the problem of academic performance due to the mismatch of learning styles and cultural conditioning. De Vita gathered data based on Felder and Solomon’s Index of Learning Styles. Over 75% of international students displayed a preference for visual rather than verbal inputs. De Vita suggested that culture influenced the development of individual learning styles and strongly affected the sequential processing of individual thinking.

First instituted in 1963, the TOEFL has traditionally represented the criteria to measure the language and assumed communication proficiency of students applying to colleges and universities throughout the United States. The TOEFL was deemed necessary and sufficient for students to gain admission and perform successfully in their academic studies. The test consists of three areas of traditional cognition of the language: (a) listening comprehension, (b) structure and written expression, and (c) reading comprehension.

The current practices in the quantitative selection of international students for admission in the major American universities (Institute of International Education, 2010) show a wide range of requirements. Requirements range from a minimum of 600 for the University of Southern California to a TOEFL minimum of 525 for the Ohio State University. The average minimum TOEFL score for the top 15 universities hosting international students in the United States is 550 (ETS, 2010). The target university in this study requires a TOEFL score of 500.

The TOEFL is designed to measure the communicative competence of nonnative speakers of English seeking admission to the U.S. and Canadian colleges and universities (ETS, 2010). However, Duran, Canale, Penfield, Stanfield, and Liskin-Gasparro (as cited in O’Neill & Theuri, 2007) first challenged the test in 1986 and showed deficiencies in the construction of the test due to the omission of cultural considerations. O’Neill and Theuri’s (2007) findings supported this study’s inquiry into the value of implementing a cultural component to increase international college students’ performance by showing the impact of language on content-based performance. Increasingly, validation has been advocated (Hofstede, 2003; Mitry 2008; Person, 2002) to demonstrate the linkage between native culture and the recognition of its expression in and through the native language. The implementation of the Introduction to the American Cultural Model in this study was to test this aspect of language competency.

2.2. Qualitative Measures of Language Proficiency

Person’s (2002) study investigated the need to evaluate whether students admitted to the university through the completion of an ESL program benefited from the experience. She compared the GPAs of those students with international students not receiving a language-proficiency supplement. Her data were gathered from 64 females and 62 males from 22 countries. Person (2002) correlated ESL students’ scores and TOEFL students’ scores with their first and last GPAs.

The conclusion reached by Person (2002) was calling for qualitative research in validating the criteria in measuring the TOEFL for ESL students. The cultural evidence uncovered by Person (2002) led her to complete another study (Person, 2007), which broadened her research into the internationalization of the educational field. Person (2007) explained in simple terms two of Hofstede’s (2003) cultural measurement
indices, collectivism and individualism. The significance of Person’s (2007) study was in the evidence of the language-culture problem in students’ performance needing a more qualitatively based analysis.

Numerous studies have been conducted using the comparison of TOFEL and GPA scores and Dual Language Learners (DLL) who have higher needs to be prepared for school (Ginther & Yan, 2017; Ackerman & Tazi, 2015; Guzman-Orth, Lopez & Tolentino, 2017). However, these studies do not take into account the cultural-social dimensions which make this study unique.

The need for further research in the identification of critical variables influencing the language-proficiency topic of this study includes extending some current studies (Person, 2002, 2007) and replicating others (Mitry, 2008). The researcher sought to identify the critical variables to be tested to answer the main research question of whether international students’ proficiency could be improved through the addition of a cultural component (Mitry, 2008; O’Neill & Theuri, 2007; Roemer, 2002).

2.3. Alternative Methods of Measuring Language Proficiency

Traditionally, research studies testing the validity of the TOEFL for admission have centered on quantitative correlations between TOEFL scores and the academic GPAs of students. The assumption is that evidence of language proficiency as measured by the TOEFL will lead to successful academic achievement (Person, 2002). Chen and Li (2008), among others, have challenged this assumption and demonstrated the deficiency present in the TOEFL. They showed why a high TOEFL score may not lead to success in many subject-specific academic programs that require a higher level of communicative competency. This has led to the need to explore alternative testing of language proficiency to include culture and language as separate variables.

Mitry (2008), a university professor in economics, conducted research with students to test the impact of including cultural-diversity measures in the teaching of his discipline, known for its strong emphasis on quantitative measurements, especially in the United States. His initial rationale for the investigation was that in economics, the general performance of students was lower than in other subjects as measured by standardized testing (ETS, as cited in Mitry, 2008). The purpose of the experiment was to measure the impact of discussing cultural attitudes when explaining the *ceteris paribus* assumption underlying the explanations of macro- and microeconomic concepts. In gathering his data, Mitry used Hofstede’s (2003) scale of cultural values started and periodically updated since the 1980s.

Mitry (2008) designed his experiments to show that cultures perceive information differently when they exist in a different context. The cultural-value measures offered by Hofstede’s (2003) model of cultural dimensions provided the basic design for data collection. The results showed an improvement in economic interpretations by students when taught cultural diversity as compared to students who were not taught diversity. Mitry concluded that cultural factors affected the perception of information. The peer-reviewed publication of Mitry’s experiments illustrated the vital importance of a student’s understanding of the cultural context needed to understand a content-based subject such as economics. Two of the cultural dimensions of Hofstede’s index, individualism and uncertainty avoidance, used by Mitry were similarly used in the Introduction to American Cultural Model in this study. His conclusion was that the students having received the cultural increase, the experimental group, scored much higher on standard economic tests. With some variation, this experiment was replicated in the implementation of the American Cultural Model of this study.

As important as it is, assessing an individual’s command of English to meet expected criteria of success at university for international students is not a simple procedure. The most widely used instrument is still the TOEFL, an exam required for admission at over 7,200 colleges and universities in the United States and Canada (International Institute of Education, 2010). Researchers have recognized that despite its widespread acceptance, the test may not be an accurate measure of English-language proficiency (Mestenhauser & Ellingboe, 2005; Person, 2002, 2007; Roemer, 2002).

This literature review has attempted to account for three major ways that language proficiency can be measured and performance assessed for international students who come to study at American universities. The review revealed the possible reason for a language-proficiency issue facing these students. Traditional research focused on quantitative measures of language proficiency through the sole use of the TOEFL exam. However, more current research has shown that English-language proficiency can be increased by employing qualitative instruments based on cultural factors that can be measured. Many researchers (e.g., De Vita, 2001; Friedman & Antal, 2005; Mitry, 2008; Person, 2007; Welch & Welch, 2008) have recommended...
the pursuit of alternative cultural-diversity methods to increase international students’ language proficiency along with the traditional method.

There are worldwide implications of English-language proficiency for students in emerging economies. The results of this study can be applied to higher education and business worldwide as English is the universal language of modern business. In a study conducted by Jin and Cortazzi (2006) the authors outline the importance of English Language Teaching (ELT) in the People’s Republic of China (PRC) as the bridge to the future. According to Selmer’s (2006) study of language ability and adjustment to Western expatriates in China, the findings indicated that “language ability had a positive association with their sociocultural adjustment” (para 1). Enderwich and Akoozie (1994) conducted a pilot study of the employment of foreign language specialists and export success. They found that the most successful companies employed more foreign language specialists and had a much deeper understanding of language proficiency. The results of these studies support the need for this research and further study of language and social cultural implications for higher education and international business.

Research Questions
1. How will the ESL program affect students’ TOEFL scores as measured by pre- and posttests in the control group?
2. How will the implementation of the Introduction to American Cultural Model significantly affect students’ TOEFL scores as measured by pre- and posttests in the experimental group?
3. How will the implementation of the Introduction to American Cultural Model significantly affect students’ TOEFL scores as measured by the difference in mean TOEFL scores between the control group and experimental group?

3. Methodology
The methodology used for this study partially borrowed from the educational research methods developed by Gall et al. (2007). According to Gall et al., “The most commonly used quasi-experimental design in educational research is the nonequivalent control-group design. In this design, research participants are not randomly assigned to the experimental and control groups and both groups take a pretest and a posttest” (p. 416). In this study, language proficiency was measured by comparing the TOEFL scores of two ESL classes to determine whether there was a statistically significant increase in the TOEFL scores as measured by a pre- and posttest in (a) one class without a cultural addition to the language instruction and (b) another class with the cultural component added. The former, ESL class, did not include the cultural component and was the control group, and the latter, ESL class, included the cultural component as the experimental group. Language proficiency was further measured by comparing the TOEFL scores of the two ESL classes to determine whether any difference between the two groups was statistically significant.

Control group. The control group was composed of the ESL students who did not receive a cultural component added to their class. The ESL class ENG 0980-1 had 24 multinational students, 9 female and 15 male, ages 19–23. The class was scheduled on Tuesday and Thursday from 8:00 a.m. to 9:20 a.m. These students were not given any additional cultural component to their class but were pre- and post-tested on the TOEFL.

Experimental group. The other sample also consisted of 24 multinational students, 13 female and 11 male, of the same age range as the control group. They were enrolled in ENG 0980-2 of the ESL class, scheduled Tuesday nights from 6:00 p.m. to 9:00 p.m. The curriculum for this ENG 0980-2 ESL program included the Introduction to American Cultural Model as a 5-week addition to its curriculum between April 19 and May 23, 2012. That group was tested prior to and subsequent to program exposure. The standardized TOEFL was the instrument administered to measure the international students’ language proficiency.

Data analysis. Analysis of the data using the Statistical Package for the Social Sciences program (Cronk, 1999) determined whether the students in the experimental group, who received the cultural component, showed a larger language increase in TOEFL scores than the students in the control group. Within each sample, t tests were conducted to determine whether the pre- and posttest TOEFL scores were significantly different at a selected probability level (Research Questions 1 and 2). A paired-samples t test (Gall et al., 2007) was used to identify any significant difference between control and experimental groups to determine whether the Introduction to American Cultural Model had a significant impact (Research Question 3). Mitry (2008) referred to this improvement as the cultural-diversity measure.
For the purposes of this study, “A paired t-test is used to compare two population means where you have two samples in which observations in one sample can be paired with observations in the other sample.” For the purposes of this study, we used a parametric test since we were comparing the mean TOEFL scores of 2 groups, the control group and the experimental group. Secondly, each group shared a total population of 24 participants which is large enough for a parametric test. Thirdly, the parametric test was used for there was a known variance in the two normal populations. The 2 sample t-test is used when the data come from two normal populations with the same variances. De Winter, supports the use of t-tests with smaller sample sizes (Pearson, 1931; Barlett, 1935; Geary, 1947; De Winter, 2013).

4. Results

The quantitative evidence of the impact of the implementation of the Introduction to American Cultural Model was collected in the form of pre- and post-intervention TOEFL scores of an experimental group (n = 24) and a control group (n = 24). In the experimental group, 11 students were male and 13 were female. In the control group, 15 students were male and 9 were female. The TOEFL scores of the experimental group were compared to those of the control group. The t test was applied to the data to determine whether the mean change in scores of the control group differed significantly from that of the experimental group. A 95% confidence interval was used to indicate statistically significant findings.

Research Question 1
How will the ESL program affect students’ TOEFL scores as measured by pre- and posttests in the control group? A t test was used to identify any significant differences between the pre- and posttest scores on the TOEFL for the control group, which did not receive the Introduction to American Cultural Model. The t test revealed no statistically significant difference, p = 4.301.

Research Question 2
How will the implementation of the Introduction to American Cultural Model significantly affect students’ TOEFL scores as measured by pre- and posttests in the experimental group? A t test was used to identify any significant differences between the TOEFL pre- and post-intervention scores for the experimental group. The t test revealed no statistically significant difference, p = 1.254.

Research Question 3
How will the implementation of the Introduction to American Cultural Model significantly affect students’ TOEFL scores as measured by the difference in mean TOEFL scores between the control group and experimental group? The average mean score increase was 24.21 for the experimental group, compared to 17.83 for the control group. A paired-samples t test was performed on the mean change in TOEFL scores between pre- and posttest for both the control and experimental groups. This was to support more accurately the results for the change in the TOEFL scores. The result showed a statistically significant difference in the change in the TOEFL scores between the control group and the experimental group, t = 1.83, p = .04.

In conclusion, the quantitative TOEFL scores significantly improved in the experimental group who were exposed to the Introduction to American Cultural Model. The increase in the mean TOEFL score following the intervention for the experimental group was statistically significantly higher than that of the control group, with a 95% confidence interval.

Conclusion

The data for the quantitative analysis showed that the experimental group’s TOEFL scores following the intervention showed a statistically significant increase as compared to the control group. The implementation of the Introduction to American Cultural Model increased the experimental group’s scores on the TOEFL by a percentage that was 36.8% more than the percentage the control group’s scores increased. The most consistently observed increases were in verbal and experiential communication, supporting the positive impact of the Introduction to the American Cultural Model.

The implementation of the American Cultural Model to increase English-language proficiency at an international college has shown positive results. The findings are encouraging and validate the positive impact of the teaching of culture on language proficiency. Adding qualitative to quantitative research had been suggested by several previous studies (De Vita, 2001; Person, 2002, 2007; O’Neill & Theuri, 2007; Mitry, 2008; Welch & Welch, 2008). Specifically, in this study, the teaching of American values in the implementation of the Introduction to the American Cultural Model successfully increased the English-language proficiency of a small, selected group of international students at a South Florida university.
The wider positive implications of the use of the American Cultural Model in higher education in other countries includes the importance of English language proficiency for students in emerging economies and businesses. Previous studies have shown a positive correlation in socio cultural adjustments in expatriates in China and the growing importance of the use of English in China (Selmer, 2006; Jin, Cortazzi, 2006). Additionally, in New Zealand, those companies that used foreign language specialists, showed an increase in major exports in comparison with the previous three years.

Some of the possible negative implications of using the American Cultural Model inappropriately in a foreign culture could result in resistance from the host community. This could lead to the inability to integrate the host values and assumptions into the social cultural context and language. This could affect the behavior performance and expectations of the host community.

Limitations and Recommendations

Some limitations of the study must be considered. This study was exploratory in nature due to the small total sample of 48 students. Twenty-four students were in the control group, and 24 were in the experimental group. This suggests that the study can be repeated using larger class sizes and the results compared to these findings.

Another limitation of this study was related to the lack of random selection of the students due to its quasi-experimental design. Only students enrolled in the ESL course participated in the study. This study should be repeated for other content-based courses with random-based student selection. The findings in this study apply to the specific school selected and should be further tested in other institutions.

The validity of the qualitative analysis of the data is dependent on the qualifications of the facilitator. Therefore, the researcher recommends a comprehensive cultural training course for the facilitators of the any future program using the Introduction to the American Cultural Model. This research should be conducted by qualified observers and should include meticulous use of the Cross-Cultural Educator Checklist to ensure the proper implementation and validation of future courses using the Introduction to the American Cultural Model.

REFERENCES


Received: 2017-03-29
Accepted: 2018-04-25

About the Author

Janice Lee Scarinci
Southern Utah University in Cedar City, Utah
janicescarinci@suu.edu

Dr. Janice Scarinci is a Professor at Southern Utah University in Cedar City, Utah. She has earned her Ph.D. in Tourism at James Cook University in North Queensland, Australia on a Rotary Ambassadorial Scholarship. Dr. Scarinci has taught Hospitality and Tourism in 5 countries on 3 continents and has over 20 years of academic experience as a Department Chair and Director of a Hospitality and Tourism Institute. Her research interests include guest satisfaction, motivation and marketing, sustainable tourism and lodging and the effects of international travel on employable skills and experiential learning. She has published in peer reviewed journals, presented at international conferences and has published book chapters on these topics.

Ed Howell
Keiser University West Palm Beach, Florida
ehowell@keiseruniversity.edu

Dr. Ed Howell has always been fascinated by what makes people tick and the relationship between motivation and success in his students. Following a 25-year career as a financial executive in banking and securities, as well as eight years as an elected official, Ed is now a university Professor and Chair of the Economics & Finance in West Palm Beach, Florida. He received his Doctor of Education degree in 2013. Ed holds an Experimental Sciences degree from Aix-en-Provence, France, a B. A. from Vanderbilt University, and a Master’s in Economics and Finance. Dr. Howell co-authored the publication of a self-improvement workbook in 2017 under the title of What Are You Waiting For. He has authored other various short articles and essays; Dr. Howell’s Wheel of Motivation © emphasizes his teaching focus: motivation and application. “I want to see my students wanting to learn and feeling that they can confidently handle any new situation that comes their way after graduation,” he says. Ed is married to Jayne and they have five children together; two cats make up a family of seven. Ed and Jayne live in Jupiter, Florida.