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Culture in Context: A Pilot Study on
Culturally-Oriented Metacognitive Feedback (COMF)

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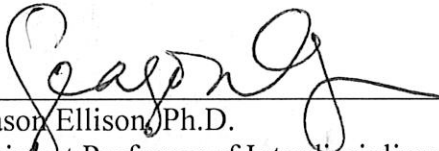Culture in Context: A Pilot study on Culturally-Oriented Metacognitive Feedback

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Culture in Context:

A Pilot Study on Culturally-Oriented Metacognitive Feedback (COMF)

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Abstract

Many institutions aim to bring new social dynamics to their education system, as well as to increase diversity within and between institutions. One way higher-education institutions reach this goal is with outreach programs geared towards international students. These students' cultures have provided a framework that built their schemas, and this in turn molded their style of writing. Lacking years of foundation building through the American school system, international students may struggle to fulfill the requirements for successful writing in American universities. However, professors have at their disposal a tool to aide students – feedback that incorporates metacognition. This study investigated whether Culturally-Oriented Metacognitive Feedback (COMF) improved the writing performance of international students more than Traditional Feedback (TF) using the PEG Writing Scholars Program. A between-subjects experiment was conducted, and results demonstrated that there was no significant difference in pre-test and post-test scores between the COMF and TF groups, nor were there any significant changes in the categorical scores given by PEG, between groups. Despite this, qualitative data demonstrated *perceived* differences between the writing pedagogy in the students' country of origin and the writing pedagogy of professors at American universities. Furthermore, the differences went beyond country to country: there were also perceived differences in writing within the *same* culture. These differences highlight the complexity of cultural influences, and the need for greater awareness.

Culture in Context: A Pilot Study on Culturally-Oriented Metacognitive Feedback

(COMF)

This project aimed to help international students succeed in their English Composition courses. From the 1950s, the number of international students attending a higher-education institution in the United States has increased dramatically, to the point of reaching nearly one million students in 2014-2015. Of these international students, approximately 31.2% are from China, 13.6% are from India and 6.5% are from South Korea (Institute of International Education, 2016). The top reasons for international students to come to the United States include, but are not limited to, the excellent academic programs, the career-minded learning opportunities, the availability of specialized libraries and resources, and the advanced-level English language programs at our universities. Without a doubt, this is a growing population with unique needs that universities must consider in order to provide successful academic programs.

Having a successful transition and experience into a higher-education institution may serve as motivation for international students to further their academic vision, and to better their socio-emotional development. However, this group of students is confronted with the fact that they lack years of experience writing within the standards established by the curriculum of American schools. Though many have had years learning the English language, they have had even more years learning their own language and being formed and molded by their own culture. Therefore, difficulties can arise when the composition style they have far greater experience in contradicts what they are expected to acknowledge, understand, and follow concerning American composition.

Culture shapes schemas (patterns of thought), and schemas in turn shape writing. "Cultural Thought Patterns in Inter-Cultural Education," written by Robert Kaplan in 1966, studies how an individual's native language influences how they write in a second language, and how they analyze works written in that second language. This idea is based on the Safir-Whorf Hypothesis, which states that language influences thought. Robert Kaplan's Contrastive Rhetoric research specifically studied English paragraph development in comparison to the paragraph development in other linguistic systems. With the obtained information, he created "doodles" to graphically represent paragraph development in grouped language categories (Kaplan, 1966). Though there are limitations to his research design, an important issue was brought to light - the increasingly complex definition of culture and its increasingly complex role in development, particularly in education.

Contrastive Rhetoric

Kaplan's theory of Contrastive Rhetoric had several limitations. His theory didn't take into account factors such as the particular language backgrounds and previous writing instruction of the writers. In addition, he didn't take into account genre factors and developmental factors. Therefore, the revised version of Contrastive Rhetoric not only compares and contrasts how people organize texts in different languages, but also compares and contrasts people's 1) approach to audience, 2) perception of the purposes of writing, 3) comfort with certain types of writing tasks, 4) composing processes, and 5) understanding of the role writing plays in their education (Smith, 2005).. The following studies serve as examples on how this revised definition of Contrastive Rhetoric influenced more research questions, including the one tested in the present study.

In a study by Indrasutra (1988), Thai students' narratives (in English and Thai) were compared with the narratives of U.S. students. Thai students, when writing in English and Thai, focused more on the psychological plot and internal images, whereas English students focused more on the physical plot and external events to move the narrative forward. This design improved upon Kaplan's original in several ways: 1) native language discourses were examined, 2) genre, age, and class background were controlled of and 3) a complex discourse analysis was performed. Discourse analysis takes into account both content and organizational features. Studying content features is just as revealing of cultural differences as organizational features are. Indrasutra provides an emic perspective on Thai culture and writing. She proposes that both the Buddhist philosophy and the didactic purpose of using narrative in Thai culture serves as explanations for the fact that Thai students focused on describing *mental states* when asked to write in Thai and in English. In the same study, English students were given the same prompt. Unlike their Thai counterparts, their writing reflected two things: 1) that they saw themselves having a high level of *control* of many events in the story and 2) that their purpose was to *entertain* their audience, and not to educate them. This study serves as an example of how culture (when other things are controlled for), influences the approach to audience and the composition process.

Smith (2005) conducted a study in which ESL students were asked to answer the same prompt, but to different audiences. One of the letters would be addressed to their English professors from their country of origin, and the other to their American English professors. Figures throughout the article showed side-by-side comparisons of the discourse analysis conducted on the two letters done by the same student. Consider the first letter in Table 10 (Appendix).

In the example given by the first letter in Table 10, the Arabic student immediately introduced himself in the letter. For the second letter (of the same table), the student immediately establishes that a sense of solidarity exists between him and his classmates. The strong sense of "I" in the first letter is replaced by a strong sense of "we" in the second. Furthermore, while in the first letter he provided a list of *justifications* based strongly on logos for his request, in the second letter he resorted instead to *rationalization* and ethos. Even the way the letters were closed differed as well. This discourse analysis revealed how vastly different the composition process and level of comfort was as the student changed their cultural audience.

In yet another study, ESL students throughout a semester performed five formal assignments, with the aim of becoming culturally decentered, and learning the language of academia (Liebman, 1988). One of the assignments was to create a summary of Robert Kaplan's theory, an argument to support or critique it, and a research paper on intercultural communication. In this study students actively engaged in metacognition concerning their academics, and were surprised when they realized how much culture affected their writing and, ultimately, their worldview. Overall, these studies address questions involving the role culture plays in writing, particularly in academia. Moreover, they bring us to question the definition of culture and the extent of its influence on the lives of people.

Culture

Narrowly defined, culture is "limited to race, ethnicity and/or nationality" (Mio, Barker, & Tumambing, 2009, p.6). Contrasting this is the broader definition, which states that culture is "any and all potentially salient ethnographic, status or affiliation identities" (Pederson, 1999 p.3). Furthermore, the concept of culture can be divided among three dimensions: 1) Power Distance, 2) Collectivism vs. Individualism, and 3) Uncertainty Avoidance (Hofstede, 2005). These

dimensions affect day-to-day living situations, though the classroom setting and overall teaching methodology is what this study chose to investigate. The study of cultural dimensions provides the key to unlock a deeper understanding of cognition, metacognition and, ultimately, of behavior.

Metacognition

Metacognition has become an object of study throughout past decades, and it "addresses self-regulation, self-knowledge, and the conscious experience of cognitions and emotions" (Wagener, 2016 p. 48). In other words it is defined as "thinking about thinking", and accomplishes two primary tasks: 1) it tells us what we know and 2) it tells us what we understand. Metacognition goes beyond simply obtaining learning strategies. In fact, the results of several studies have shown a clear distinction between the two concepts and their outcomes. In one study 30 elementary school students were given a computer-based problem-solving game. They were divided into three training groups: 1) problem-solving training, 2) problem-solving and self-monitoring training, and 3) no training. The problem-solving and self-monitoring group not only performed the best, but they also took less time to solve problems and were able to solve more complex problems (Delclos & Harrington, 1991). In other words, metacognition not only improves performance, but also allows the individual to use that and learning strategies with more difficult topics, or with new topics altogether.

Nietfeld, Cao and Osborne (2006) created a metacognitive intervention specifically for a college class. Most metacognitive interventions are limited to a specific learning task, but this one was created with the intention to be applicable in most, if not all, college settings. The intervention occurred as follows: At the end of each lesson, students had to estimate their global understanding of it on a scale ranging from 0-100. At the same time, they had to name the

concepts they found difficult, as well as providing an explanation of what they planned to do to improve their understanding of those topics. After this, students were given 3 multiple-choice questions. Alongside each question, a confidence rating from 0-100 was required. This intervention occurred weekly, and when students received the answers to the 3 questions, they were able to compare their confidence rating to their actual performance. The results of the study demonstrated an improvement not only in performance, but also in metacognition.

Studies conducted by Kruger and Dunning (1999) had similar results, but added more emphasis and analysis on students' estimation of their own performances. The authors had university students take exams in humor, logical reasoning, and English grammar and had them estimate their performance. In every scenario, the students overestimated their actual performance. Those who overestimated the *most* tended to perform the *worst*. However, when a metacognitive intervention on logical reasoning was conducted, those who received the intervention were significantly more likely to 1) improve their scores when given the ability to re-test and 2) better predict their scores. In other words, in this study metacognition made a difference and was key for the work of participants to improve. Moreover, feedback is considered a type of metacognitive tool (Montgomery & Baker, 2007), which more and more professors are using in the classroom. Metacognition, in essence, would allow the student to engage in self-monitoring behavior as he or she learns techniques to improve and/or judge their work.

Given the power of metacognition, would its incorporation into academic feedback help International students in their English writing courses? Specifically, would having them *think* about the role their culture plays in their writing allow them to differentiate more clearly about what is expected, with regard to writing, in their country versus in American university writing

courses? In other words, would creating Culturally-Oriented Metacognitive Feedback be feasible? If so, would this type of feedback greatly improve their performance, when compared to a form of Traditional Feedback? The present study investigated these important questions.

The Present Study

A between-subjects experimental design was conducted, with five international students from Bemidji State University. We compared two types of feedback: Culturally-Oriented Metacognitive Feedback (COMF) and Traditional Feedback (TF). It was hypothesized that students who received COMF would show greater improvement in their writing than students in the TF group.

Method

Participants & Setting

A total of five women participated. Mean participant age was 21.8 (SD =1.48), ranging from 20-24. The sampling frame consisted of International students attending Bemidji State University. Countries were Malaysia (N=2), Nepal, Canada and Kenya. Participants were recruited through flyers and e-mail announcements made by the International Program Center and the Diversity Center on campus. As an incentive, the participants had their names placed in a raffle, for the opportunity to win one of two prizes (Ninja Bullet and Bluetooth headphones). Research was conducted in the research laboratory of the psychology department.

Materials

Materials included the Demographic Questionnaire, Instructions for Feedback Group, Instructions for Control Group, Writing Prompt, Culturally-Oriented Feedback Worksheet, Academic Self-Efficacy Scale and the PEG Writing Scholar Program.

Demographic Questionnaire. The demographic questionnaire was created specifically for this study. It asked 16 questions, including items on gender, age, major, number of years learning English, number of English courses taken at an American university or universities, and prior experience with feedback.

Instructions for feedback group. Instructions were created specifically for the COMF group of participants. The instructions consisted of three components outlined on a typed, 8.5 x 11 piece of paper. First, they were asked to respond to a writing prompt to the best of their abilities in up to 35 minutes. Next, they were to complete the COMF worksheet, and then revise what they deemed necessary in their for up to 20 minutes.

Instructions for control group. Instructions were created specifically for the TF group of participants. The instructions consisted of three components outlined on a typed, 8 x 11.5 piece of paper. First, they were asked to respond to a writing prompt to the best of their abilities in up to 35 minutes. Next, they were to read through the feedback given by the PEG writing scholar program, and then revise what they deemed necessary for up to 20 minutes.

Writing prompt. Students were asked to write a one-page paper in response to the following prompt: "*Bemidji State University is considering increasing student tuition. Is this a good idea? Create an argument for why or why not. "* The writing prompt was provided to participants, typed, on an 8.5 x 11 piece of paper.

Culturally-oriented metacognitive feedback worksheet. This was created specifically for this study. Students answered questions regarding what makes good writing from their country of origin. Then, they were asked the same questions regarding their experiences in an American higher education institution. In the last segment, they were asked to compare and contrast their experiences.

Academic self-efficacy scale. The academic Self-Efficacy subscale was created from both the Academic Milestones Scale (Lent et al., 1986) and the College Self-Efficacy Inventory (Solberg, O'Brien, Villareal, Kennel, and Davis, 1993). The Academic Milestones Scale measured self-efficacy and perceived stress with 27 items. Not only does this have strong reliability, but it also shows a negative correlation between the two concepts. The college Self-Efficacy Inventory, a 20-item instrument, has three subscales. These subscales have convergent and discriminant validity, as well as internal consistency (Solberg, O'Brien, Villareal, Kennel, and Davis, 1993). This scale has two parts: one that assesses level of stress from 0-10 (with 10 being the most stressed) on 27 items, and one that assesses confidence from 0-10 (with 10 being the most confident) on 27 items as well.

PEG writing scholar program. The PEG Writing Scholar is designed for post-secondary and adult learners. It is an automated essay scoring engine that provides immediate feedback to help students take writing skills to the collegiate level and to allow instructors to focus more on teaching.

Procedure

The researcher distributed a flyer and email to international students on campus. Interested students volunteered by attending a 90-minute session. The overall investigation lasted two weeks. Participants were randomly assigned to one of the two conditions before coming to the research lab. Participants reported to the psychology department, were greeted by a researcher and brought into a computer lab. After reading and signing an informed consent form, the participants did the following:

Pre-test. Participants were seated at a desk with a computer. The computer was logged into the PEG program, containing a box within which to complete the writing prompt. They

were given an instruction sheet based on their assigned condition, the writing prompt, and an

emphasis on the instruction that they would have 35 minutes to respond to the writing prompt.

The instructions asked students to respond to the writing prompt, and then raise their hands to

notify the researcher when they were done writing. The researcher clicked "submit" and

recorded the PEG results. Specifically, the score was a number up to 30, compromised of 6

categories, each worth 5 points (see Appendix).

   Test condition. Participants in the TF condition were allowed to view their PEG scores,

and asked to read carefully through the feedback generated by the program.

Participants in the COMF condition were allowed to see their scores, and then given the

culturally-oriented metacognitive feedback worksheet to complete.

   Post-test. Upon completion of the test condition, participants were asked to revise their

drafts based on the feedback they had received; they were told that they would be given up to 20

minutes. When they were finished with their revisions, they were asked to raise their hands to

notify the researcher. Afterwards, the researcher administered measures, including the

Demographic Questionnaire and the Academic Self-Efficacy Scale. Afterwards, the participants

were asked to write their email and insert it into a box for a raffle.

<div align="center">**Results**</div>

   To test the hypotheses that 1) scores would improve from pretest to posttest, and 2) that

scores would improve more for the COMF group, a 2 (pre vs. post) x 2 (COMF vs. TF) analysis

of variance (ANOVA) was conducted.. It failed to reveal a main effect for timing, $F(1,6) = .075$,

$MS=1.667$, $p = .794$, $\alpha = .05$, suggesting scores did not improve from pretest to posttest. There

was also no timing x condition interaction, $F(1,6) = .023$, $MS = .523$, $p = .883$, $\alpha = .05$,

suggesting no differences in change between the two conditions.   These findings are illustrated

in Figure 1.

An analysis was conducted to take a closer look at the categories that comprise the total

PEG score. Each categorical score was compared against condition (COMF vs. TF) and timing

(pre-test vs. post-test). These scores did not differ between conditions or timing. Table 1 depicts

these findings. To test whether there was a relationship between perceived stress level on the

academic self-efficacy scale scores and condition, a between-subject analysis of variance

(ANOVA) was conducted. This ANOVA failed to show a relationship, $F(1, 4) = 2.245$, $p = .231$,

$\alpha = 0.5$. To test whether there was a relationship between perceived confidence level, scores and

condition, a between-subject analysis of variance (ANOVA) was also conducted. Similarly to the

previous one, this ANOVA failed to reveal a relationship, $F(1, 4) = .004$, $p = .955$, $\alpha = 0.5$.

Qualitative analysis of data on the COMF worksheet demonstrates the perceived

differences between the writing styles in participants' country of origin versus the writing styles

found throughout their American university experiences. Participants 1 and 2 are from Malaysia

and Participant 5 is from Kenya. When asked about what they were taught to focus on in their

country of origin and at American universities, they had some overlap. However, there were

differences *between* countries, *within* countries, and differences in their experiences with

university professors *in America*. Tables 2-4 demonstrate these differences through a side-by-

side comparison of three students.

In addition to this question, participants were asked to choose a diagram (with the

corresponding description) that they believed best represented paragraph development from their

country of origin. Then, they were asked the same question, but towards their experience with

university professors in America. This question was based on the information gathered by

Kaplan in his doodles. Again, there were differences *between* countries, *within* countries, and differences in their experiences with university professors *in America*. Interestingly enough, none of the students chose option A, which is what Kaplan argues is the type of paragraph development that is most direct, and to the point. Tables 5-7 demonstrate these differences through a side-by-side comparison of the three students.

To better understand not only what the International students' country of origin taught them to focus on when writing, but what were their *priorities*, we asked them to rank the top three concepts out of a list of six. These categories were the ones defined by PEG, and what they use to score essays. Similarly to the questions above, we presented the same question but in relation to their experience with university professors in America. There were differences *between* countries, *within* countries, and differences in their experiences with university professors *in America*. Tables 8 and 9 demonstrate these differences through a side-by-side comparison of the two students (one created markings, but did not rank).

Discussion

When beginning this study, the hypothesis was that International Students receiving COMF would show greater overall improvement in writing than those in the TF group. Specifically, it was believed that the students in COMF would show a greater improvement in scores from pretest to posttest, than those in the TF group. However, the results showed no improvement in scores between COMF and TF, nor was there a real change between pre-test and post-test for any of the participants. This lack of difference could be attributed to several things: 1) our intervention, 2) our control, 3) small sample size, 4) length of the writing sample 5) writing prompt, and 6) perceived audience. Several of these limitations coincide with areas of

research that the new definition of contrastive rhetoric is leading researchers to pursue (Smith,

2005).

Limitations

Although unintended in the beginning, it was realized that the TF (given by the PEG

Writing Scholar's Program) was quite detailed, and was a form of metacognition as well.

Feedback, as mentioned previously is a form of feedback (Montgomery & Baker, 2007).

Therefore, this experiment is truly testing the effects *different* forms of metacognition have on

students. Still, this would mean that there would be a significant change between the pre-test and

post-test in the TF condition. However, this was not the case in this experiment, though it has

been the conclusion in other experiments involving student success and metacognition.

This brings to question if the TF given by PEG and the one formed for this research had

validity. In other words, were these feedback styles truly engaging the student in order to make

them "think about what they are thinking." The TF given by PEG had three components: 1)

grammar and spelling mistakes underlined on the actual draft, 2) a score (out of 5) next to each

category, and 3) a set of questions created to help them focus on improving each category. Each

underlined portion had the option to click on it and by doing so, the participant received

11pertinent comments. Comments on spelling offered alternative word choices, while comments

on grammar offered a brief explanation and an example. The questions attached to each category

were varied, and not generalized across students. Each component acts as a different form of

feedback, so could there be a way to separate them and find which leads to the most

improvement? On the other hand, do all three components work best together? Figueredo and

Varnhagen (2006) conducted a study to see whether highlighted surface errors distracted

participants from engaging in content revision. Based on their results, they argued that having

feedback on surface errors is not too great of a cognitive load. In other words, these aren't enough to impair participants' ability to make content revisions. Overall, automated writing evaluations systems (AWE), such as PEG, have shown promising results. These effects are dependent on the students' level of language proficiency, and their professors' perception and use of the AWE program (Li, Link, & Hegelmeir, 2015). The results of this experiment are limited by the sample size (N=5), and the fact that we weren't primarily assessing the effects of this system, but that of the COMF worksheet.

Concerning the COMF, could the attentional load (as cited by Wagener, 2016) of this metacognitive activity have been too much? Students who completed the COMF worksheet spent more time on this part than those who received TF. Due to this, the factor of time could have affected the internal validity of our intervention. The COMF worksheet was an original creation for this project, and therefore lacks testing that would ensure whether it has construct validity. The intent behind the worksheet was to have a tool that students could use to help them realize (if they hadn't already) the specific differences between how writing is taught and emphasized in their country of origin versus what is taught and emphasized by professors in America. This realization, in turn, would theoretically prompt the student to change their writing style to best fit their American audience. Though this was the intent, it may not have translated in its execution. Therefore, research needs to be done on this measure, to make sure that it has validity and reliability.

Apart from the potential downfalls mentioned above, the potential effect of the research environment should also be taken into consideration. Our research environment was somewhat controlled, making the experience not a faithful representation of what happens in the real world. For example, students often use various devices for relaxation and/or entertainment purposes

while studying (e.g., music, television). In this experiment, they were constricted to just using

pen, paper, and the Internet site opened only to the PEG writing prompt site. The presence of

researchers nearby and having your scores recorded by a peer may have added stress and/or

anxiety to the situation, which in turn could have affected the outcome.

In addition to these, the length, type of writing prompt, writing topic, and audience could

have been a limitation. One page, double-spaced is not enough to fully assess aspects of writing,

particularly of paragraph development like the works done by Robert Kaplan. At the same time,

we reasoned that for the sake of time and keeping control in an unpredictable environment (such

as the schedule of university students) we should stick to those restrictions. Considering the

length of the prompt, no studies have sought to measure the best length to aim for to determine

the differences in writing styles through discourse analysis. Studies have writing prompts that

range from paragraphs (Kaplan, 1966) to letters (Smith, 2005) to essays (Liebman, 1988).

Concerning the type of writing prompt, studies have shown common themes in writing that relate

type of writing prompt (argumentative, creative, research, etc..) to country and/or ethnicity.

Specifically, they demonstrated the differences that do exist in the level of comfort students feel

with approaching certain writing tasks (Smith, 2005), as well as differences in the composition

processes used to answer these tasks (Indrasutra, 1988).

Research has also shown the effects the culture of a society has on *topic accent* in

discourse. In one study (Noor, 2001), a group of Chinese and Australian students were asked to

answer the following prompt in English: "Pretend that you have a younger brother who does not

work hard at school. What would you say that might persuade him to work hard?" (p. 265). The

answers given by Chinese students reflected the fact that higher education is limited there, and

that if that is not an option, they are encouraged to settle in rural areas by their government. For

Australian students this was not a problem. In addition, the answers given by Chinese students reflected the responsibility the elder brother holds to look after the younger brother. Their answers were direct, and spoken with a position of authority. On the other hand, the Australians used a suggestive tone, and approached the brother in the scenario as an equal. Through this example, it is clear to see that social and cultural contexts determine topic accents. It is important to note that studies like this highlight the dimensions of culture reported by (Hofstede, 2005), and its importance in studying the cognition behind writing.

Lastly, literature has shown that writing varies with the perception of an audience, or type of audience. Prevailing social and cultural trends affect the following: perceptions of academia (its role and value), perceptions of professors (their relationship with students and their role and status in society) and perceptions of pedagogy (philosophy and effectiveness), to name a few (Wa Sit, 2013). In an academic setting in China, for example, silent learning is practiced and is based upon the Confucian tradition. This tradition encourages Chinese students to know and respect the role of hierarchy, which places scholars and professors in a high place of esteem. This influences rapport and classroom behaviors significantly (Wa Sit, 2013). In this experiment, students' work was graded by a computer system, instead of a professor. This can lead to a decrease in effort, which is just as important as their intellectual abilities. The fact that the results of this writing won't be an actual "grade" or affect their ability to pass/fail a class could have also skewed the results.

Conclusions

Despite all these limitations, this study highlighted the diversity in perception of writing, and how that changes when an international student is asked for a comparison of writing practices from country of origin and their experiences at American universities. Moreover, these

results exemplify the fact that Robert Kaplan's contrastive rhetoric is an oversimplification.
There exists not only a difference between cultures, but also within these cultures. This fact
makes it much harder to study the writing practices of international students, but at the same
time, it highlights the richness and complexity of diversity.

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Table 1. *Mean and SD of categorical scores compared against conditions and timing.*

Measure	COMF (N = 3)		TF (N= 2)	
	Pre M (SD)	Post M (SD)	Pre M (SD)	Post M (SD)
Development	3.17 (.70)	3.17 (.70)	3.00 (.71)	3.15 (.64)
Organization	3.23 (.80)	3.17 (.80)	2.95 (.64)	3.19 (.70)
Style	3.47 (.80)	3.50 (.75)	3.25 (.64)	3.40 (.57)
Word Choice	3.40 (.90)	3.47 (.85)	3.20 (.71)	3.40 (.71)
Sentence Structure	3.33 (.95)	3.40 (.85)	3.05 (.78)	3.20 (.71)

Convention	3.10 (1.01)	3.37 (.65)	2.50 (.71)	2.95 (1.34)

Table 2. *Priorities in writing education, based on Participant 1's experiences in country of origin vs. experiences in American University.*

Country of Origin Education (Malaysia)		American University Education	
Beauty of Language		Beauty of Language	X
Clarity of main idea	X	Clarity of main idea	X
Correct grammar and spelling		Correct grammar and spelling	X
Expressing your true feelings honestly		Expressing your true feelings honestly	X
Creativity & imagination	X	Creativity & imagination	X
Truth of your ideas	X	Truth of your ideas	X
Topic sentence in each paragraph	X	Topic sentence in each paragraph	
Thesis Statement	X	Thesis Statement	
Using personal examples		Using personal examples	X
Referring to past history and past events		Referring to past history and past events	
Using good, logical examples and details to illustrate a main idea		Using good, logical examples and details to illustrate a main idea	

Flow of ideas	X	Flow of ideas	X
Varied Sentence Structure		Varied Sentence Structure	

Table 3.. *Priorities in writing education, based on Participant 2's experiences in country of origin vs. experiences in American University.*

Country of Origin Education (Malaysia)		American University Education	
Beauty of Language	X	Beauty of Language	X
Clarity of main idea	X	Clarity of main idea	X
Correct grammar and spelling	X	Correct grammar and spelling	X
Expressing your true feelings honestly	X	Expressing your true feelings honestly	
Creativity & imagination		Creativity & imagination	X
Truth of your ideas		Truth of your ideas	X
Topic sentence in each paragraph	X	Topic sentence in each paragraph	
Thesis Statement	X	Thesis Statement	X
Using personal examples		Using personal examples	
Referring to past history and past events	X	Referring to past history and past events	X

Using good, logical examples and details to illustrate a main idea	X	Using good, logical examples and details to illustrate a main idea	
Flow of ideas	X	Flow of ideas	X
Varied Sentence Structure	X	Varied Sentence Structure	X

Table 4. *Priorities in writing education, based on Participant 5's experiences in country of origin vs. experiences in American University.*

Country of Origin Education (Kenya)		American University Education	
Beauty of Language	X	Beauty of Language	
Clarity of main idea	X	Clarity of main idea	X
Correct grammar and spelling		Correct grammar and spelling	
Expressing your true feelings honestly	X	Expressing your true feelings honestly	X
Creativity & imagination	X	Creativity & imagination	X
Truth of your ideas	X	Truth of your ideas	X
Topic sentence in each paragraph		Topic sentence in each paragraph	X
Thesis Statement		Thesis Statement	X
Using personal examples	X	Using personal examples	
Referring to past history and past events	X	Referring to past history and past events	
Using good, logical examples and details to illustrate a main idea	X	Using good, logical examples and details to illustrate a main idea	

| Flow of ideas | X | Flow of ideas | X |
| Varied Sentence Structure | X | Varied Sentence Structure | X |

Table 5. *Doodle description that compared Participant 1's country of origin's writing style vs. their perceived writing style in an American University. Items in bold were the chosen answers.*

	Country of Origin Education (Malaysia)		American University Education
A	**Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.**	A	Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.
B	Paragraph development moves back and forth between multiple topics.	B	Paragraph development moves back and forth between multiple topics.
C	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at	C	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly

	directly.		
D	Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.	**D**	**Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.**

Table 6. Doodle description that compared Participant 2's country of origin's writing style vs. their perceived writing style in an American University.

	Country of Origin Education (Malaysia)		American University Education
A	**Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.**	A	Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.
B	Paragraph development moves back and forth between multiple topics.	B	Paragraph development moves back and forth between multiple topics.
C	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly.	**C**	**Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly**
D	Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.	D	Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.

Table 7. Doodle description that compared Participant 5's country of origin's writing style vs. their perceived writing style in an American University.

	Country of Origin Education (Kenya)		American University Education
A	Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.	A	Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.
B	Paragraph development moves back and forth between multiple topics.	**B**	**Paragraph development moves back and forth between multiple topics.**
C	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly.	**C**	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly
D	**Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.**	D	Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.

Table 8. Top three rank of what professors prioritize in country of origin vs. in America
for Participant 2.

	Country of Origin (Malaysia)		American University Experience
1	Development		Development
2	Organization		Organization
	Style		Style
	Word Choice	2	Word Choice
3	Sentence Structure	1	Sentence Structure
	Conventions	3	Conventions

Table 9. Top three rank of what professors prioritize in country of origin vs. in America for
Participant 5.

	Country of Origin (Kenya)		American University Experience
2	Development	1	Development
1	Organization		Organization
	Style	2	Style
3	Word Choice	3	Word Choice
	Sentence Structure		Sentence Structure
	Conventions		Conventions

Table 10. Pending permission. Taken from Smith (2005).

Figure 1: Ahmed (Male, L1 Arabic, UAE)—English Letter to American Professor

Prompt: Request that your professor cancel your final exam	
FUNCTION	**STUDENT LETTER**
Self-introduction Purpose	Dear Dr. Grimes, **I am** a student in your Biology class and **I have** a small **request** with respect to our final exam.
Rationale Request	Since our final **exam is worth such a huge part of our grade** **I feel** that it is only fair to cancel it.
Justification	The assignments and **other exams should be sufficient** as they give a more balanced look of a students performance.
Justification	**Having one grade decide the grade for the class does not give a fair judment** of the students efforts and knowledge over the whole semester.
Closing	Thank you, your student XXX

The following letter is based on the same prompt as the previous one, with a home-country professor as audience.

Figure 2: Ahmed (Male, L1 Arabic, UAE)—English Letter to UAE Professor

| Prompt: Request that your professor cancel your final exam	
FUNCTION	**STUDENT LETTER**
Solidarity with other students	Dear Dr. Ahmed, Over the last few weeks **some of my classmates and I have** been disscussing our grades for your biology class.
Solidarity / Background	**We realized** that the final exam is going to decide our grade for the class.
Rational	**We feel** that it would be very unfortunate is some of the students worked hard through out the whole semester and simply because **they didint perform** well on the final for whatever reason **all their efforts** during the semester would have gone in vain.
Request	**I personal request** that you reconsider the weight of the final exam.
Deference	Hopefully you will come up with a fair decision as you are known to do.
Closing	Thank you, your student XXX
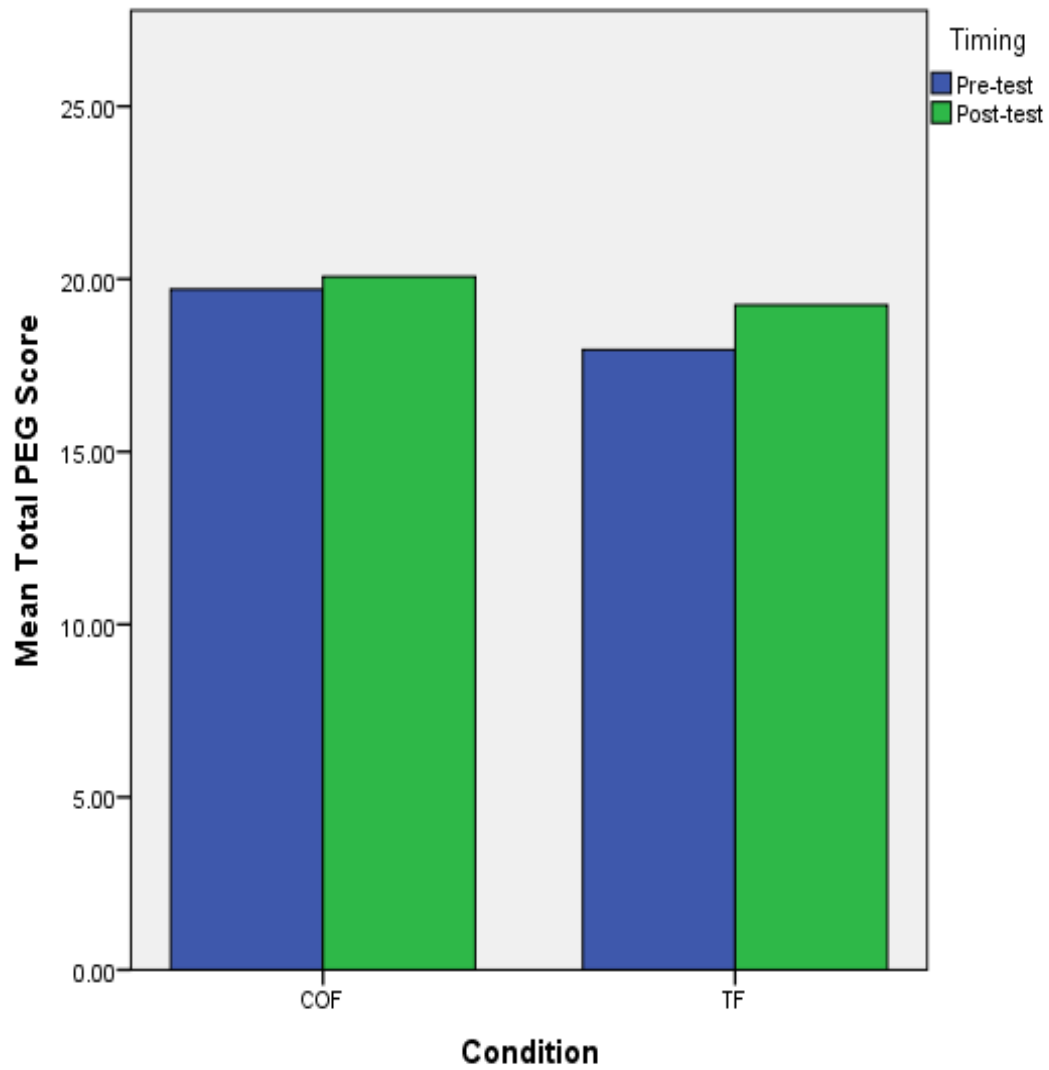
Figure 1. No main effects for timing or condition. No interaction between timing and condition.

Appendix

Informed Consent Form

Purpose of the Study: The purpose of the study is to better understand the role of Culture and Metacognition in improving the scores of Students. You were chosen because you are an International Student at Bemidji State University. The study is being conducted by Daniela Maltais, a Senior Psychology Student.

Requirements: You must be at least 18 years of age to participate and currently attending Bemidji State University.

Procedures: You will be asked to answer survey questions and provide a one page-writing sample. This will take approximately 90-minutes of your time.

Confidentiality: Your participation as well as any information provided by you will remain confidential. You will write an anonymous code, rather than your name, on all surveys. Your information will be kept locked in the psychology department.

Risks: The risks to you for participating are minimal. You may experience slight stress in writing a sample and in receiving feedback on writing.

Benefits: You will be entered into a drawing to receive one of several gift cards for your participation. You may also benefit from reflecting on your thoughts while completing the surveys and may enjoy interacting with an animal.

Freedom to Withdraw: Participation is completely voluntary. You are free to withdraw your consent and terminate your participation at any time. You are free to decline to answer any specific items asked. Your signature below indicates that you have read the information provided above, and that you are at least 18 years of age. You may withdraw at any time without prejudice after signing this form, should you choose to discontinue.

_____   _____

_____

Participant Signature   Date   E-mail Address

Investigator Signature

(tear here)

- - - - - - - - -- -

(keep this part)

If you have any additional questions at a later time, please contact:

Daniela Maltais Dr. Angela Fournier

malt1dan@live.bemidjistate.edu   afournier@bemidjistate.edu

If you need additional support, please contact the Student Center for Health & Counseling on 1st floor of Cedar Hall, (218)755-2053.

Demographic Questionnaire

Please do not write your name on this form. It will be stored separately from any other information that you completed during his study and will not be linked with your responses in any way. The information will allow us to provide an accurate description of the sample.

For the following items, please select one response that is most descriptive of you or fill in the blank as appropriate.

Gender: _____   Age: _____

Ethnicity: _____

Major(s): _____   Minor(s): _____

GPA: _____

Year in college: ____First-year ____Sophomore _____Junior ____Senior

Country of Origin: _____

Reason(s) for studying in the US: _____

Years Learning English: _____
Number of English courses taken at University(s) in America: _____
Average Grade in these courses: _____
Was feedback given on papers? _____yes _____no
If so, what kind of feedback have you received?
_____
_____

Did you find the feedback helpful? ____yes _____no
Explain:
_____
____

Which of the following have you found to be difficult when writing for English courses:

Creating a Thesis _____
Conducting Research _____
Content _____
Grammar _____
Spelling _____
Organization of Paper_____
Flow (or movement) _____
Proper Citations _____

Writing Prompt:

Instructions: To the best of your abilities, answer the following question. Create a document that is approximately 1 page in length, double-spaced and has size 12 font.

Question: Bemidji State University is considering increasing student tuition. Is this a good idea? Create an argument for why or why not.

Feedback Group Instructions

Welcome! Thank you for choosing to participate in our study.

Below are instructions:

Part 1:
1.   Begin writing in the PEG Scholar box.
2.   You do NOT have to fill the entire text box.
3.   When you have completed your writing, do <u>NOT</u> press "Submit."
4.   Please raise your hand and one of the Researchers will come.

Part 2:
1.   Read your feedback material carefully.
2.   Answer each question to the best of your ability.
3.   Once you are done, please raise your hand.

Part 3:
1.   Now, we would like to you **revise** your essay based on the feedback.
2.   When you have completed your editing, do <u>NOT</u> press "Submit."
3.   Please raise your hand and one of the Researchers will come.

Control Group Instructions

Welcome! Thank you for choosing to participate in our study.

Below are instructions:

Part 1:
1.   Begin writing in the PEG Scholar box.
2.   You do NOT have to fill the entire text box.
3.   When you have completed your writing, do <u>NOT</u> press "Submit."
4.   Please raise your hand and one of the Researchers will come.

Part 2:
1.   Read your feedback material carefully.
2.   Once you are done, please raise your hand.

Part 3:
1.   Now, we would like to you **revise** your essay based on the feedback.
2.   When you have completed your editing, do <u>NOT </u>press "Submit."
3.   Please raise your hand and one of the Researchers will come.
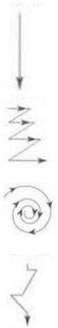
COMF Worksheet

From your <u>Country of Origin</u>, rank the top three items your Professors prioritize when it comes to writing:
- Development of Ideas - Choose a strong topic. Use plenty of strong details to make your writing interesting. Stick to the topic so your writing is clear and makes sense.
- Organization - Start with a strong beginning. Order your thoughts so your writing makes sense. Ensure you have a strong ending.
- Style - Write in your own style. Allow your personality to shine through.
- Word Choice - Choose words carefully. Use imagery to allow your readers to envision your descriptions. Use effective words to make your writing stand out.
- Sentence Structure - Make sentences easy to read and flow smoothly. Start each sentence differently. Vary your sentence length.
- Conventions - Use capitalization, punctuation, spelling and grammar correctly.

From your <u>Country of Origin</u>, place a mark on the items you were taught to focus on:
- 1. Beauty of language – W, St
- 2. Clarity of main idea- D, O
- 3. Correct grammar and spelling- C
- 4. Expressing your true feelings honestly- E, St
- 5. Creativity and imagination-W, St
- 6. Truth of your ideas-D
- 7. Topic sentence in each paragraph- D, O
- 8. Thesis statement-O
- 9. Using personal examples-D
- 10. Referring to past histories and past current events- D
- 11. Using good logical examples and details to illustrate main ideas-D
- Flow of ideas- S
- Varied Sentence Structure- S

Read the descriptions below, and choose which of these Diagrams BEST reflects the writing style from your country of origin?

	A	Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.
	B	Paragraph development moves back and forth between multiple topics.
	C	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly.
	D	Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.

Please turn over to continue…

From your experience in American Universities, rank the top three items your Professors prioritize when it comes to writing:
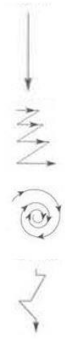- Development of Ideas - Choose a strong topic. Use plenty of strong details to make your writing interesting. Stick to the topic so your writing is clear and makes sense.
- Organization - Start with a strong beginning. Order your thoughts so your writing makes sense. Ensure you have a strong ending.
- Style - Write in your own style. Allow your personality to shine through.
- Word Choice - Choose words carefully. Use imagery to allow your readers to envision your descriptions. Use effective words to make your writing stand out.
- Sentence Structure - Make sentences easy to read and flow smoothly. Start each sentence differently. Vary your sentence length.
- Conventions - Use capitalization, punctuation, spelling and grammar correctly.

From your experience in American Universities, place a mark on the items you were taught to focus on:

- 1. Beauty of language – W, St
- 2. Clarity of main idea- D, O
- 3. Correct grammar and spelling- C
- 4. Expressing your true feelings honestly- E, St
- 5. Creativity and imagination-W, St
- 6. Truth of your ideas-D
- 7. Topic sentence in each paragraph- D, O
- 8. Thesis statement-O
- 9. Using personal examples-D
- 10. Referring to past histories and past current events- D
- 11. Using good logical examples and details to illustrate main ideas-D
- Flow of ideas- S
- Varied Sentence Structure- S

Read the descriptions below, and choose which of these Diagrams BEST reflects the writing style you have learned from your American professors?

1. According to the two checklists, what are some <u>similarities</u> in the things that are considered a priority?

A	Paragraph development is forward, to the point. Each paragraph begins with a topic sentence that related back to the main idea.
B	Paragraph development moves back and forth between multiple topics.
C	Paragraph development turns around the subject and shows it from a variety of unrelated views, but the subject is never looked at directly.
D	Paragraph development unfolds as a story, and there is much greater freedom to introduce extraneous material.

2. According to the two checklists, what are some <u>differences</u> in the things that are considered a priority?

3. According to English Professors, what makes English writing good?

4. Did I show these qualities in the Writing Prompt done previously? If yes, which ones?

5. How can you improve your writing?

Academic Self-Efficacy subscale created from both the Academic Milestones Scale

(Lent et al., 1986) and the College Self-Efficacy Inventory (Solberg, O'Brien, Villareal, Kennel, and Davis, 1993)

APPENDIX TABLE A. Tasks for Measuring Stress and Self-Efficacy

Task	Not stressful										Very stressful		Not confident										Extremely confident
	0	1	2	3	4	5	6	7	8	9	10		0	1	2	3	4	5	6	7	8	9	10
Studying																							
Asking questions in class																							
Keeping up with the required readings																							
Understanding my professors																							
Writing term papers																							
My parents' expectations of my grades																							
Making friends at school																							
Doing well on exams																							
Getting papers done on time																							
Having more tests in the same week																							
Taking good class notes																							
Managing both school and work																							
Preparing for exams																							
Managing time efficiently																							
Getting along with family members																							
Improving my reading & writing skills																							
Researching term papers																							
Getting the grades I want																							
Having enough money																							
Talking to my professors																							
Getting help and information at school																							
Doing well in my toughest class																							
Talking to college staff																							
Finding time to study																							
Understanding my textbooks																							
Participating in class discussions																							
Understanding college regulations																							

Directions: On the first scale, please answer how stressful are these tasks for you, **from 0=not at all stressful to 10=extremely stressful.**
On the second scale, please answer how confident you are that you can successfully complete the tasks, **from 0=not at all confident, to 10=extremely confident.**

PEG Writing Scholar's six categories to measure writing performance.

Development of Ideas	Choose a strong topic. Use plenty of strong details to make your writing interesting. Stick to the topic so your writing is clear and
Organization	Start with a strong beginning. Order your thoughts so the writing makes sense. Ensure you have a strong ending.
Style	Write in your own style. Allow your personality to shine through.
Word Choice	Choose words carefully. Use imagery to allow your readers to envision your descriptions. Use effective words to make your writing stand out.
Sentence Structure	Make sentences easy to read and flow smoothly. Start each sentence differently. Vary your sentence length.
6) Conventions	Use capitalization, punctuation, spelling and grammar correctly.