Memo

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| To: | Brother Ted Finch |
| From: | Mariah |
| CC: | N/A |
| Date: | 16 May 2017 |
| Re: | Research Proposal “The Benefits of Studying English” |

**PURPOSE**

I hope that my research will show that English majors still have a place in our STEM-advocating world. There is a lot of advocating, especially here in the United States, for more people to go into the various STEM majors – science, technology, engineering, and math. While many tech firms will outsource to China, India, and/or Taiwan, English is a necessary skill. My research questions are:

* What benefits does a study of the English language bring to the table in the tech-obsessed world we have today (Jiang; Neely; Spence)?
* What consequences does the STEM push have in the United States (Cohen; Drew; Enderson)?

I anticipate that by studying these two questions, I will be able to help others understand why people continue to pick an English degree amidst the push for STEM.

**BACKGROUND**

As an English major, I have come across many people in my day-to-day life that ask me “what do you plan to do with *that*?” I’m interested in learning why English has been so devalued, and this is actually a topic close to my heart. Since I’m an English major. I’ve actually written a paper for English 101 that was a variant of this topic. Instead of looking at the reasons English is important in today’s world, I made a case for teaching English side-by-side with STEM topics - creating something known as STEAM, where the “a” stands for “arts”.

Another reason I’m so interested in this topic is the fact that it has actually been - in a way - in our news since President Trump was sworn in. Trump is systematically defunding the governmental programs associated with various humanities degrees - the museums, PBS, etc. All in an effort to lower the governmental deficit, which is a worthy goal. However, this stems from the larger, quieter debate about what good an arts, humanities, or English degree is in today’s world, and the push for more people - especially women - to go into a STEM area (Cohen). In addition to that push, there’s a global push for people to know English (Neely; Spence). I hope to shed some light on why English is still needed today, especially as double majors become more common.

**SIGNIFICANCE**

This topic is significant because this is a debate that has been going on for a few years now, and will most likely continue to rage as the United States vies for a spot in the top 10 countries producing engineers, scientists, and innovators. As technology becomes more advanced, the need for creative thinkers will increase, and thus the push for more people to enter STEM majors will become greater. This paper will link the two majors - English and STEM - in a way that will, hopefully, show why English is still needed today.

I hope to learn how I could potentially reconcile the dissonance between the two majors. I feel that I fall into a category that has been described in preliminary research: where I have a love of a STEM category (I’m in love with biology), but not enough to go into it. The ability to reconcile the dissonance will also help me explain why I didn’t pursue biology in a way a STEM-advocate here in the United States would understand.

In addition to other English majors who want to explain why they’re pursuing their passion in the arts instead of in a STEM major, the advocates of more STEM majors in the government should care about this research. This article will particularly address the government officials who “talk down to” English majors, or discredit the humanities. As a result, I will be writing to a wider range of people who discredit humanities majors, and English majors in particular.

This research matters because, as the world continues to become technology-focused, we will need good writing skills. Not simply to write a scientific report, but to write emails, to type up PowerPoint presentations, and to write professional letters. These latter three require more skills than what scientific writing will teach. In addition, grant proposals require a certain type of writing. Grants will be of particular interest to scientists and to other technologically focused careers. When few English classes are required of STEM majors, these skills aren’t easily cultivated.

**DESCRIPTION**

As I have done the research for this topic, I have found a variety of peer-reviewed sources that will be helpful. These come from various journals, from *PLoS One* to *English for Specific Purposes*. A few pieces from *The New York Times* have particular relevance to this topic. Ultimately, I will be using studies on how English affects other skills in foreign countries, in the United States, and the push for STEM to be the singular focus in the United States.

**OUTLINE**

My working thesis is: Despite the government’s advocating for more people to go into STEM areas in college in the United States, the rest of the technology world is pushing for more people to know English.

**ANNOTATED BIBLIOGRAPHY**

Cohen, Patricia. "A Rising Call to Promote STEM Education and Cut Liberal Arts Funding." *The*

*New York Times*. The New York Times, 21 Feb. 2016. www.nytimes.com/2016/02/22/business/a-rising-call-to-promote-stem-education-and-cut-liberal-arts-funding.html?\_r=1. *Describes the recent call to defund the humanities classes on campus at various public colleges.*

Drew, Christopher. “Why Science Majors Change Their Minds (It’s Just So Darn Hard).” *The*

*New York Times*. The New York Times, 05 Nov. 2011. www.nytimes.com/2011/11/06/education/edlife/why-science-majors-change-their-mind-its-just-so-darn-hard.html. *Describes why science majors change their minds.*

Enderson, Mary C. and John Ritz. “STEM in General Education: Does Mathematics Competence

Influence Course Selection.” *Journal of Technology Studies*, vol. 42, no. 1, Spring 2016,

pp. 30-40. EBSCO*host*, byui.idm.oclc.org/login?url=https://search.ebscohost.com/

login.aspx?direct=true&db=tfh&AN=121330168&site=eds-live. *Details a survey that was given to 412 students to see how they do in math and how that correlates to what their major is and why they’re in a particular STEM elective class.*

Feldman, Anna. “STEAM Rising”. *Slate*, 16 June 2015.

www.slate.com/articles/technology/future\_tense/2017/05/the\_fuzzy\_regulations\_surroun

ding\_diy\_synthetic\_biology.html *Describes what happens when the arts are added to a*

*STEM education.*

Jiang, Jingyan, et al. “Can Learning a Foreign Language Foster Analytic Thinking? – Evidence

from Chinese EFL Learners’ Writings.” *Plos ONE*, vol. 11, no. 10, 14 Oct. 2016, pp.

1-17. EBSCO*host*, doi:10.1371/journal.pone.0164448 *Explores how learning English as*

*a second language helps foreginers learn Western thinking and how it applies to the*

*technology sector.*

NEELY, TSDAL B.and TRACY L. DUMAS. “Unearned Status Gain: Evidence from a Global

Language Mandate.” *Academy of Management Journal,* vol. 59, no. 1, Feb. 2016, pp.

14-43. EBSCO*host*, doi:10.5465/amj.2014.0535 *Describes how unearned status gain –*

*like knowing English before it is made the official business language – makes employees*

*feel.*

Spence, Paul, and Gi-Zen Liu. “Engineering English and the High-Tech Industry: A Case Study

of an English Needs Analysis of Process Integration Engineers at a Semiconductor

Manufacturing Company in Taiwan.” *English for Specific Purposes,* vol. 32, 01. Apr.

2013, pp. 97-109. EBSCO*host*, doi:10.1016/j.esp.2012.11.003 *Explores the results of a*

*study that determined the benefits of knowing English in the Taiwanese technology*

*sector.*

**TIMETABLE AND SCHEDULE**

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| --- | --- | --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
|  |  | (Past due) May 10: Proposal Peer Review |  |  | May 13: Final proposal draft due |  |
| May 15: Prep to begin | May 16: Resubmit Proposal; Begin. Write at least 500 words (2 pages), if not more. | May 17: Post 500 or so words to discussion board for feedback | May 18: Hopefully finish paper. |  | May 20: Gather final feedback and let paper “sit” over weekend |  |
| May 22: Finish and/or Revise | May 23: Revise | May 24: Revise | May 25: Let sit again. | May 26: Final look over and submit | May 27: PARTY! |  |

**REQUEST FOR APPROVAL**

This research project would better prepare me for my long-term goal of going into English in a STEM-heavy world. I understand parts of the debate, but do not fully understand the implications it’ll have as it plays out, particularly for other colleges that receive a bulk of their funding from the federal government. I would like to respectfully request approval of this research project.