

# **Combatting Culture Shock**

## **A Cross-Platform Resource for Sojourners**

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BIS 3400

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### **Abstract**

This paper is intended to be a supplement to my BIS Senior Capstone project. The project in question is a cross-platform friendly website that provides Weber State University German Exchange Program students with resources to help guide them through their time abroad. Content is organized into sections: Pre-Departure, In-Country, and Post-Study Abroad. Information dealing with culture shock as well as other stressors that come with studying abroad are highlighted. This paper includes a literary analysis of previous studies regarding cultural shock, and information on the production and further implications of the creative project.

*Keywords:* study abroad, culture shock, sojourners, intercultural competence, cross-platform development, platform-agnostic, Agile methodology, Bulma framework

### **Study Abroad: Is it worth it? A look at current study abroad program practices**

Studying abroad, according to the annual “Open Doors” report, is an increasingly popular part of a student’s college experience. The US Department of Homeland Security reported that “The Open Doors Report for the 2017-18 academic year showed that for the third consecutive year, more than one million international students studied in the United States”. A record high 1.09 million students made a significant financial impact on the United States in 2018, contributing \$42.4 billion to the U.S. economy. The number of students studying abroad has grown steadily over the last 25 years. The Institute of International Education estimates that about 10.9 percent of all undergraduates (including community college students), and 16 percent of all students enrolled in baccalaureate programs, study abroad at some point during their degree program (Redden, 2019). This increase is likely influenced by an increasing number of companies looking to hire candidates who have cross-cultural experience under their belts:

The ‘Employability and Study Abroad’ survey revealed over a third (41 percent) of employers surveyed would consider offering a higher salary to a job candidate who has studied abroad. Nearly a third (29 percent) of employers surveyed consider whether a student has studied abroad when hiring graduates, and nearly a quarter (23 percent) said they are more likely to hire a recent graduate that has lived or traveled abroad over another candidate with equal academic qualification (Im, 2018).

### **Literature Review**

#### **The Methods Behind The Madness: Analysis of Study Abroad Aids**

Despite time spent abroad being so highly desired, spending time in a different culture does not guarantee that you will acquire cross-cultural skills. While there are desirable outcomes to having international students, research has shown that international students more often than not struggle with culture shock as they move to and live in a new country (Hendrickson, Rosen, & Aune, 2011; Hotta & Ting-Toomey, 2013). This paper uses Pedersen’s

definition of culture shock: “the process of initial adjustment to an unfamiliar environment” (Presbitero, 2016, p. 28).

This idea for a capstone project focuses on culture shock came to me after studying abroad myself in Bayreuth, Germany. My time abroad taught me that the standard models of culture shock do not apply to everyone. Each person’s experience is unique; However, culture shock is more than common than one might think, and can make or break a person’s time abroad. The exchange I was part of was organized by Weber State University, but it is still being improved with every student sent abroad. The program already include some resources for students, but I found that from start to finish, there were things that I did not know about that could have eased many of the stressors I encountered during the exchange.

Before I was part of the BIS program, I had attempted to create a study abroad resource mobile application as part of the OUR research fellows program and my research mentor, Dr. Kacy Peckenpaugh. After collecting data during my own study abroad trip I developed and published an app to the Apple and Google Play stores, but with the spread of the COVID-19 pandemic, study abroad programs were canceled. This gave me the chance to do further research and the software I had used to design and deploy the app was fairly expensive and as I took more classes in Web Design and Computer Science from Weber State I recognized that a website would be cheaper and easier to develop while retaining the software as my own intellectual property. A website, when developed correctly, can be used on many devices, not just smartphones, and that gives it a greater reach.

I was drawn to a creative project for my BIS capstone because I recognized the need for easily accessible resources for students studying abroad. I also am part of the Weber State Office of Undergraduate Research (OUR) research fellowship, so I was lucky to be awarded a research grant which I used to gather data in Germany for this exact purpose. I want to help students who complete the Bayreuth exchange be better prepared for the challenges of

acclimating to a new culture, and life outside Utah. I gathered resources that were available to me during my exchange, as well as things that could have helped me, but I did not have access to.

The end product of this creative project is a cross-platform friendly dynamic website with resources for students in order to help them combat culture shock and maximize their experiences abroad. The website is live, meaning it is online and ready for use by the next round of Weber State students who will be embarking on the Bayreuth exchange next year; the site is integrated with the Canvas LMS so that students can communicate with their WSU German professors and complete regular check-ins and assignments in order to show how well they are handling their time abroad. The product is tailored specifically for the Weber State University exchange with the University of Bayreuth, Germany. If the site proves itself as a good resource for exchange students, I would like to pitch it as a resource to be implemented for more university sponsored exchange programs. With my graduation imminent, this is a great project for combining all of my academic and professional interests. I had to come up with a project that would cohesively incorporate my Integrated Studies foci of Computer Science, Web Design, and Psychology. I'm completing two undergraduate degrees at Weber, one is my BIS and the other is a BA in German.

Upon graduation, I intend to enter the STEM field and work on the globalization and localization of technology. Our modern world requires that organizations make sure their products are applicable between different cultures, countries, and economies. My competency in German and my BIS in technology and psychology will help me further develop software for multicultural uses and improve the user experience of sites that have a global reach. Making technology easily accessible across cultures is something important to me thanks to my time abroad. I have first-hand experience as a student who has studied abroad, and I know how essential it is to have easy access to resources vital to the exchange program. International students have been the focus of many cross-cultural studies, given the continuing rise of

internationalization and globalization in the higher education sector (Seeber, Cattaneo, Huisman, & Paleari, 2016). I struggled with figuring out the bureaucracies of registering residency in a new country, registering for classes, and understanding my place in a culture not entirely like my own.

Although my specific experiences abroad are unique, experiencing culture shock is not. As cross-cultural adjustment theory (Gullahorn & Gullahorn, 1963) explains that culture shock isn't like the mumps. You get it repeatedly. Suffering from culture shock and then learning how to cope in a new culture takes time and energy (Hannigan, 1988, p. 91). Many researchers studying intercultural experiences have come up with models to illustrate the path to adjustment when assimilating to a new culture. The most referenced models are the U-Curve Model, the W-curve model, and the ABC model. The U-curve model is the earliest and most recognized of the culture shock models. As indicated in Figure 1, below,

the adjustment of the expatriate and the accompanying family takes place over a period of time and comprises four phases, which include the initial period of assignment also termed the honeymoon phase, which is followed by culture shock, adjustment, and finally, the mastery phase. The honeymoon phase is characterized by feelings of excitement and curiosity, which is quickly followed by feelings of frustration and disillusionment as the reality of the relocation sets in. During the third stage, adaptation occurs and individuals learn how to behave in the new culture. The final stage, mastery, is where adjustment takes place on an incremental basis, thereby improving functioning in the new culture. (Trompetter et al., 2019)

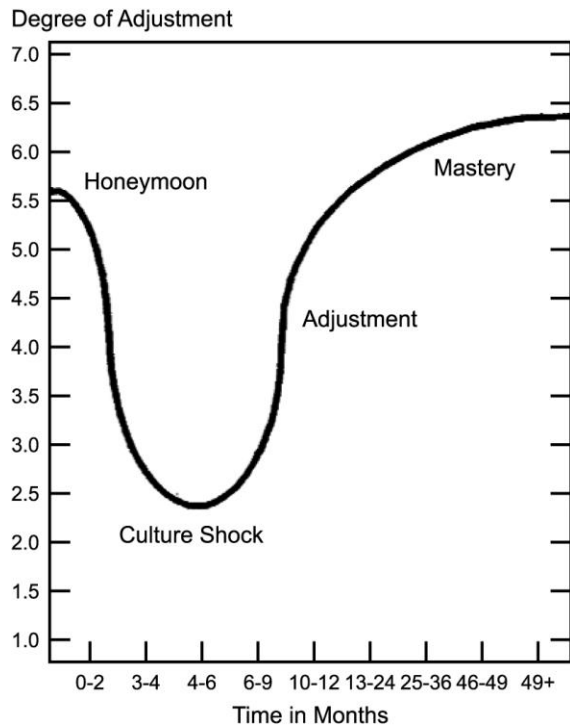


Figure 1: The U-curve of cross-cultural adjustment, Black and Mendenhall, 1991

While the U-curve has been widely accepted by those studying sojourner experiences, further research has indicated that it may not be the most accurate model anymore. In 2008, Brown and Holloway proved that the initial stage of the sojourn was not characterized by feelings of excitement, as suggested by the U-Curve model (and its successors), although such feelings were present, they were overwhelmed by negative symptoms more commonly associated with culture shock (p.2). The honeymoon phase was not as enjoyable as first defined. Rather, many students, myself included, who live abroad for the first time can find the experience extremely overwhelming. It is important to understand why this transition can be so hard for some individuals. Many students who go abroad are relatively young; This time abroad can be life-changing, and while that can be good for character, it can also be fairly stressful. The move to a new environment is cited as one of the most traumatic events in a person's life, and in most sojourners some degree of culture shock is inevitable (Hamburg and Adams 1967).

Following the U-curve comes the W-curve proposed by Gullahorn and Gullahorn (1963) which illustrates the ups and downs of culture shock. This model does a good job of showing how the cultural adjustment process is not linear, but this can still begin with a honeymoon phase, even if it may be brief. The W shape represents the fluctuation of travelers' emotions when adapting to a new culture, and then when re-adapting to their home culture (Grothe, 2020). While both the U-Curve and W-Curve models are useful, one of the most comprehensive models explaining culture shock is the ABC model developed by Ward, Bochner and Furnham (2001). Presbitero (2016) describes the ABC model as the following:

The ABC model explains major theoretical approaches to sojourner's adjustment and focuses on affective, behavioral and cognitive processes. The affective process of culture shock is viewed to be rooted from the stresses associated with moving to an unknown and unfamiliar location. The behavioral process, on the other hand, focuses on the difficulties associated with adjusting to a new cultural environment when there is a lack of culturally relevant skill sets. Lastly, cognitive process focuses on psychological mechanisms involving both self-perception (i.e., social identity development) and other-perception (i.e., intergroup relations processes) (p. 29).



Theory	Conceptual Framework	Theoretical premise	Factors affecting adjustment	Intervention guidelines
Stress and Coping (Affect)	Cross-cultural travelers need to develop coping strategies to deal with stress	Life changes are inherently stressful	Adjustment factors involving both personal (e.g. life change, personality) and situational (e.g. social support)	Training people to develop stress management skills
Culture Learning (Behavior)	Cross-cultural travelers need to learn culturally relevant social skills to survive and thrive in their new settings	Social interaction is a mutually organized and skilled performance	Culture-specific variables such as: knowledge about a new culture, language or communication competence, cultural distance	Preparation, orientation and culture learning, especially behavioral-based social skill training
Social Identification (Cognition)	Cross-cultural transition may involve changes in cultural identity and inter-group relations	Identity is a fundamental issue for the cross-cultural travelers	Cognitive variables such as: knowledge of the host culture, mutual attitude between hosts and sojourners, cultural similarity, cultural identity	Enhancing self-esteem, overcoming barriers to inter-group harmony, emphasizing intergroup similarities

Table 1: Adapted from Zhou et. al. 2008

The ABC model not only illustrates the many variations in experiencing culture shock, but also leads into how to combat it:

It was found that stress was at its most intense at the beginning of the stay, a stage marked by the experience of the symptoms of culture shock that according to various models of adjustment characterize the second stage. Feelings of excitement were experienced in relation to different aspects of students' new life, but these were far

outweighed by the more negative mood states of anxiety, depression, loneliness and stress. Symptoms attributed to mental ill-health triggered by the academic sojourn were experienced by nearly all interviewees, reinforcing the link often made between the move to a new environment and psychological, emotional and physical disturbance (Brown & Holloway, 2008 p.25).

This idea makes sense when viewed from a psychological context, and take a person’s basic needs into account. Maslow’s Hierarchy of Needs is a great model for illustrating this concept.



Figure 2: Abraham Maslow's Hierarchy of Needs (Hopper, 2020)

In his 1943 paper, Maslow introduced the concept of “The Hierarchy of Needs,” a theory he expressed in the form of a five-tiered pyramid. The five tiers represent hierarchical human needs. Human needs lower down in the hierarchy need to be satisfied for humans to even care about needs higher up in the hierarchy (Rajan, 2020). If a student studying abroad does not feel comfortable in their place of residence, or is worried about how to get food from the grocery store because things are organized differently than how they are in the U.S., there is no way

that they can consider building connections in a new country, or developing nuanced habits to blend in with the host culture.

In order to prevent students from encountering a situation that alarms them and restricts them from actually learning much from their host culture, higher institutions need to be more proactive in preparing and aiding students in their study abroad ventures.

First, higher educational institutions should have adequate programs to help new international students manage culture shock. While new student orientation programs and some counseling support may be available, higher education institutions should be more proactive in ensuring that these programs and services reach those who are most in need. Oftentimes, those who experience culture shock are overwhelmed by their new cultural environment, thus limiting their engagement and participation in university programs and services. Hence, a more proactive stance has to be taken to reach out to those students experiencing high levels of culture shock (Presbitero, 2016, p.36).

Students who are not prepared for life abroad can actually enter the experience with a mindset that prohibits the development of cross-cultural competence. Embarking on a study abroad program with a set of inaccurate beliefs seems likely due to the fact that the vast majority of U.S. students receive no formal pre-departure orientation (Berdan, Goodman, & Taylor, 2013) and such training, when it does exist, ranges widely from semester-long classes to brief seminars, podcasts, online documents, or student handbooks. Unless students are exposed to high quality intercultural interventions or informal intercultural mentoring (for example, by study abroad returnees), their inaccurate beliefs about the intercultural adjustment process may never be challenged, since these beliefs appear to be fairly stable throughout students' college careers (Goldstein & Kim, 2006, p.187).

This is where preparatory tools like a website specifically designed for aiding students through the experience of culture shock can be useful. Many institutions have implemented some type of program, whether it be required pre-departure classes such as the ones held at the University of Minnesota, or heavily structured programs that are designed to guide students in the right direction such as the American University Center of Provence programs in Aix-en-Provence and Marseille, France.

### **Project Breakdown**

After analyzing a plethora of articles and studies given to me by my Psychology and German capstone advisors I decided on a website, filled with activities based on many that had success in others' studies in order to best serve WSU exchange students. The website is split into four sections: Pre-Departure, In-Country, Culture Shock, and Additional Resources.

The Pre-Departure section guides students towards their departure, with activities adapted from the University of Minnesota's *Maximizing Study Abroad Student Guide* to prepare the student as well as get as much nitty-gritty paperwork out of the way ahead of time. The In-Country section will give structure to the students' first week in Bayreuth and help them get the necessary registration steps completed in the correct order. Much of the content of the In-Country section is built around the exchange program requirements, and aims to clarify things for the students. Things get easier for students after they have begun to settle in, so the rest of the In-Country section will help students with handling psychological stressors, getting more involved both at the university and throughout the city, and with also budgeting. The Culture Shock section is primarily dedicated to giving students structures to fall back on when they are overwhelmed by what they are experiencing. It will contain articles for debriefing on the idea of culture shock, a familiarity plan activity, and a weekly journal to keep their Weber State professors aware of their experiences. The last section, Resources, will contain resources such as access to counseling in Bayreuth, an ESN buddy to help build their first relationships in the

city, and connections to previous program alumni, MSA book, and the Foreign Students office in Bayreuth.

This project is specifically tailored to the WSU Bayreuth exchange, so the target audience is those students who are and will be completing the exchange program. The website will be the interface for students, with links to the assignments within the Canvas LMS. The instructors, the German program professors who will be advising the students, will use Canvas to complete grading and feedback for the students. I will be integrating the two sites by embedding the website landing page into the Canvas LMS course. Integrating it with Canvas LMS makes it more user-friendly for professors who desire ease of access when it comes to assignment submission and grading. As students finish their exchanges, I hope to gather survey data to assess how effective this website tool is for the exchange program.

### **User Experience**

I decided to use Bulma, an open-source CSS framework, for the style and design of the website. Bulma is great for creating a streamlined look and an easy-to-understand user interface. The website is designed with user-friendly principles in mind. It is platform-agnostic, meaning it can be used on devices with different screen sizes and operating systems, i.e. Windows, Linux, Android phone, Apple devices. It uses legible and web-friendly fonts, consistent design between pages, and has simple and logical page navigation. It is very important that this tool (website) is as user-friendly as possible. The higher the cognitive load is and the less intuitive the navigation is, the more likely it is that users will leave the website and search for alternatives (Marcia Herrmann Design, 2021). According to Krug's first law of usability, the web-page should be obvious and self-explanatory (Friedman, 2008). The website has a relatively simple layout because I am not trying to sell the user anything other than clear instructions. Each section of the site is cut into a chronological timeline to help students understand the order in which they should do things in order to make their lives easier.

However, despite the importance of a visually appealing layout, the usability of the site is the ultimate goal. Usability and the utility, not the visual design, determine the success or failure of a website. Since the visitor of the page is the only person who clicks the mouse and therefore decides everything, user-centric design has become a standard approach for successful and profit-oriented web design (Friedman, 2008). I designed this site using the Agile methodology. In computer science when a team develops a project it is key that the final product, and everything that goes into it, is built with the customers' needs in mind. Agile methodology uses a circular diagram to illustrate its iterative approach.



Figure 4: Agile Methodology (NVISIA, 2020)

Dr. Kacy Peckenpaugh, the Bayreuth Exchange coordinator, also serves as the fourth advisor on my capstone project. In this instance, Dr. Peckenpaugh is the client. The students are the users that she wants this product for. I have met with Kacy weekly throughout the semester to design the activities and decide on the resources that will be used in and for this site. Many cycles of this project have been built and improved upon. Once we are able to get

feedback from users, the site will be assessed and further developed so that it is as optimized as possible for the Bayreuth exchange program.

### **Further Development**

While I am satisfied with the end product of this capstone project, there will always be room for improvement. With time, I would like to turn this site into a database-backed website that stores the student submissions and allows grading through an admin dashboard, but that type of development would take a lot of time for an individual developer. Cutting Canvas out of the picture would require a self-developed LMS (Learning Management System) which would require fairly in-depth development. Using Canvas allows me to get a product live quicker, and with it live right this moment I can collect data and judge its usability sooner. Sometimes it is not worth reinventing the wheel when there is software out there that already satisfies the project needs.

I could have also created this project entirely in Canvas, but they have very limited site design options. Creating an external website and embedding it allows me to have better control of the site design while still using Canvas for its grading software. This site integrates concepts of Web Design, Computer Science, Psychology, and German in an effective way. Not only will this site be useful for Weber State's Bayreuth exchange, but it serves as an example of how my interdisciplinary degree relates to the professional world.

### **Conclusion**

In an ever-increasingly globalized world, technology is spearheading the process. "The coronavirus pandemic has led to a surge in virtual work across companies, with many or even all employees working from home for an extended period of time. One of the key unintended consequences of this widespread switch to virtual work is the impact on the relationships and interpersonal networks within organizations." (Levin & Kurtzberg, 2020). My undergraduate

degrees will come to a close before this pandemic does. It is getting harder to imagine society returning to exactly how we functioned before, but that does not need to be a bad thing. "The introduction of technology in meetings offers new perspectives on, amongst others, communication and language, human perception and social interaction." (Reidsma et. al., 2007, p.133).

With the knowledge I have gained through my studies at Weber State, I intend to be at the forefront of usability of global technology. My cross-cultural experiences, technical expertise, and competency in a foreign language will be key traits that global firms will be in need of if they are to survive and thrive in a global economy. Projects like this study abroad website will become commonplace and intercultural communication and competence are going to become even more necessary if we are to continue to develop technologies, relations, and environmental protections.

Intercultural competence is defined as the ability to develop targeted knowledge, skills and attitudes that lead to visible behavior and communication that are both effective and appropriate in intercultural interactions (Deardorff, 2006). Projects like this website will become everyday tools as we become more intertwined with different cultures and their ideals, which might not be the same as ours. Technology is often touted as the solution to all of our problems, and that is not necessarily the case, but it can be a useful tool for conveying the information that will be key in societal shifts even just within our lifetime, let alone following that.

I hope this project serves as a base for more study abroad programs implementing structures that will help their students develop cross-cultural competence, and maximize their study abroad experiences. I intend to continue in this field of research, and I believe that this site will not only be useful to the Bayreuth exchange students, but to those who will interact with these students both in Germany and once they return. The goal of intercultural relations and



competence is to bridge the divide between different cultures and societies. If this site can contribute to that in even the tiniest bit, then it has served its purpose.

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