The Intersection of Language and Culture in Study Abroad: Assessment and Analysis of Study Abroad Outcomes

Jeff R. Watson
U.S. Military Academy

Richard Wolfel
U.S. Military Academy

The interconnectedness of language and culture in a study abroad environment has long been discussed in study abroad research circles. While some researchers see the relationship as complementary (Kasper & Omori, 2010; Selmeski, 2007), others go further to point out a more complex interrelationship (Kramsch, 2003; Silverstein, 2004; Watson, 2010). In the field of study abroad outcomes, researchers from various disciplines have explored this relationship by looking at gains in sociolinguistic & pragmatic competence (DuFon & Churchhill, 2006; Kinginger & Farrell, 2004) as well as intercultural competence (Deardorff, 2006; Schauer, 2009; Watson *et al.*, 2013). Still others are beginning to look at this relationship from a Second Language Socialization (SLS) perspective (Allen & Herron, 2003; Wang, 2010).

Using data from an academic semester abroad program, this study explores this relationship by looking at both the gains in language proficiency and intercultural competence after a semester abroad as well as their relationship to several socialization aspects of the during-immersion experience. The basic research question is: Is there a relationship between socialization aspects during study abroad (e.g., amount of time spent interacting with host families/native speakers, time spent speaking English, time spent participating in cultural activities) and gains in language proficiency and intercultural competence? This article will first provide an overview of relevant research on language proficiency and intercultural competence as outcomes of study abroad and then discuss the link between language and culture during study abroad from a Second Language Socialization perspective. Once this framework has been laid, we will move on to discuss the findings and analysis of the current study.

Language and Culture as Outcomes of Study Abroad

Language proficiency remains one of the most common outcomes of study abroad. The acquisition of linguistic abilities predominantly in the modalities of speaking, listening, and reading continues to be the focus of many assessment initiatives for study abroad programs (Churchill & DuFon, 2006). Gains in these modalities are influenced by variables such as length of immersion (Brecht *et al.*, 1995; Davidson, 2010), lodging type (Rivers, 1998; Schmidt-Rinehard & Knight, 2004]), amount of social interaction (Magnan & Back, 2007) and individual differences (Kinginger, 2011; Hunley, 2010).

Intercultural competence (IC) has also emerged in recent years as an important outcome of study abroad (Deardorff, 2006; Watson et al., 2013). While numerous definitions exist, for the purposes of study abroad, intercultural competence might best be defined using a quote from Hammer. who defined IC as "the capacity to generate perceptions and adapt behavior to cultural context" (2004: 2). Intercultural competence is seen as three dimensional, including a body of knowledge to be learned, such as basic facts about a specific place and understanding cultural norms and taboos. It also includes a set of skills, such as flexibility, language and negotiation skills, among others. Finally, the third dimension is a set of attitudinal attributes which allow someone to successfully engage with people from another culture. This includes empathy, self-efficacy and tolerating ambiguity as examples of a long list of attitudinal traits that help someone successfully navigate a foreign culture.

Several studies have looked into intercultural gains as a result of study abroad experiences. The edited volume by Vande Berg, et al. (2012), provides an extensive review of the learning issues surrounding the study abroad experience, including discussions of assessment, pre and post seminars and directed interventions. Several of the contributors, especially Engle and Engle (2012) to this volume have seen a growth in intercultural competence as a result of the study abroad experience. Vande Berg and Paige (2009), have shown how assessment can be used not only to simply measure gains in intercultural competence, but also to provide feedback and evolve the program.

Apart from the descriptive discussions of IC improvement during study abroad, several studies have reported specific, empirical gains during the study abroad experience. Engle and Engle (2004: 230) reported that over fifty percent of their study abroad subjects saw a substantial gain on the Intercultural Development Inventory (IDI), a proprietary survey that measures IC using the Developmental Model of Intercultural Sensitivity (DMIS) scale (Hammer et al., 2003; Hammer, 2009). Such observations are also seen in a study by Jackson (2008). In her study, students showed consistent improvement, using the IDI, throughout their experience abroad. Finally, Medina-López-Portillo (2004: 185) assessed that over two-thirds of the students in the semester long program saw a significant jump in their IDI scores, moving from one level of the DMIS to the next level.

The Link between Language & Culture

Although defining these two concepts and their relationship has been described as an "extraordinarily difficult and elusive task," (Kasper & Omori, 2010: 457), most researchers agree that it is this link that seems to make study abroad so rewarding an experience. But what is this link? Kramsch (1998) states that "language expresses, embodies, and symbolizes cultural reality" (YEAR: 3) and goes on to point out that while language can be considered a discrete system of signs, these signs are meaningful only in a cultural context. Language also plays a crucial role in creating one's cultural identity (Aveni, 2005) both as an individual (Joseph, 2004) and in unity with a shared national identity (Oakes, 2001). Language makes human interaction and cooperation possible and thus plays a role in the genesis of a society (Watson, 2010). As such, it also remains an intricate part of the "cultural fabric" within which language is "shaped and meanings are produced." (Duranti, 2009: 1).

From the standpoint of study abroad, defining the concepts, however, is not enough. The variables affecting the gains students make in the areas of language and culture are practically "infinite" (Wang, 2010: 57). On one hand, study abroad provides a highly contextualized learning environment with virtually limitless access to native speech communities, authentic sociocultural behaviors, and identity-destabilizing experiences (Kinginger, 2008). On the other hand, study abroad participants interact with this environment in ways unique to their own interests, motivations, and awareness. These varying interactions within this environment play an important role in socializing study abroad participants and teach them "to think, feel, and act in accordance with the values, ideologies, and traditions" of their target community (Duff, 2007: 311).

Language Socialization during Study Abroad

As suggested by Wang (2010), a language socialization perspective may provide the needed complexity for better assessing the multidimensional gains during study abroad. According to Duff, second language socialization "refers to the process by which novices or newcomers in a community or culture gain communicative competence, membership, and legitimacy" in their target community (2008: 310). This multidimensional process involves both language (communicative competence) as well as sociocultural aspects such as the "adoption" of appropriate identities and ideologies "associated with the target group and its normative practices" (2008: 310). At the heart of this process lies social interaction and the degree to which study abroad participants involve themselves in it. Duff further points out that such social interaction is "contextualized within particular routine activities" and involves gaining "knowledge of the values, practices, identities, and stances of the target group" (2008: 311).

A SLS perspective in study abroad research seems to imply the need for more comprehensive and integrated assessment of study abroad outcomes. In general, most SLS studies in study abroad have focused on qualitative analysis of language and culture learning experiences abroad. However, we believe that evidence of socialization might also be gleaned from looking at existing quantitative assessments such as measures of language proficiency and intercultural competence as well as the more qualitative self-report assessments of the social interaction and "routine activities" mentioned by Duff. This study takes such an approach to study abroad assessment and then investigates the statistical relationships between the language proficiency, intercultural competence, and socialization variables.

Method

Population

For this study, assessment data was analyzed from 279 participants in the academic semester abroad program (SAP) over five semesters from Spring 2011 through Spring 2013. 225 participants were male; 54 were female. As a requirement, all participants must complete a minimum of two years of college foreign language courses (or equivalent) before going abroad.

Semester Abroad Languages & Locations

Participants in the semester abroad program travel each year to 32 host institutions in 22 cities

and 15 countries around the world (See Appendix A). Languages studied include Modern Standard Arabic, Mandarin Chinese, Russian, French, German, Spanish, and Portuguese. As a requirement, the majority of classes taken abroad are taught in the target language. 176 participants lived in a dormitory or apartment environment; 103 lived with host families.

Pre- and Post-Immersion Awareness-Raising and Assessment

As suggested in study abroad research (Cohen *et al.*, 2005; Einbeck, 2002), all study abroad participants completed three hours of pre-departure orientation and awareness-raising activities in the areas of language and culture shock, shifting cultural perspectives, and the importance of self-initiative and willingness to interact. Additionally, all participants completed a pre-departure background survey, three language proficiency tests, and a survey of intercultural competence (See Table 1). Upon their return, all participants took part in several reintegration seminars and focus groups and took a similar battery of assessments with the addition of a post-immersion survey to measure several socialization elements of the study abroad experience (see Table 3). The scores from these assessments serve as the basis for our data analysis.

Table 1. Pre- and post-SAP Assessments

<table>
<tr><th>Pre-departure background survey</th><th>Language Proficiency Assessments</th><th>Intercultural Competence Assessment</th></tr>
<tr><td>Online self-report survey to capture demographic and academic history.</td><td rowspan="3">Defense Language Proficiency Test (DLPT): a standardized computer-based test of listening and reading proficiency developed by the Defense Language Institute and administered at Department of Defense Education Centers around the world. Ratings are based on the Interagency Language Roundtable proficiency scale
ACTFL Oral Proficiency Interview (OPI): an official OPI - administered telephonically by Language Testing International and rated by certified ACTFL raters</td><td rowspan="3">Intercultural Development Inventory: a commercial computer-based survey using a Likert scale to measure the intercultural attitudes and mindset of its test takers. Uses a proprietary algorithm to places test takers on a continuum of the Developmental Model of Intercultural Sensitivity (DMIS) developed by M. Hammer (Hammer et al., 2003; Hammer 2009).</td></tr>
<tr><th>Post-immersion socialization survey</th></tr>
<tr><td>Online self-report survey to capture data on learning strategies used during study abroad, lodging perceptions (homestay vs. dormstay), and time-on-task data in the areas of:
amount of English spoken
time spent conversing in the target language
time spent participating in cultural activities</td></tr>
</table>

Data Analysis

Scores from all assessments were collected and organized in multivariable databases using Microsoft Excel and the Statistical Program for Social Sciences (SPSS; v.20). Due to the wide range of languages in the study, languages were grouped into two categories for analysis. Languages deemed more "difficult"[1] for American learners by the Defense Language Institute (Arabic, Chinese, Russian)

[1] The Defense Language Institute defines "difficulty" by how long it takes a typical American adult learner in its intensive language courses to reach operational proficiency (Level 2 on the ILR scale).

were grouped into one category; less difficult languages (French, German, Portuguese, Spanish) into another.

Language Gain

Similar to findings in other studies (Brecht et al., 1995; Davidson, 2010; Watson et al., 2013), an average increase of one step along the proficiency scale in pre- and post-immersion language gain after one semester abroad is evident in all modalities (see Appendix B). Following the example of similar studies (Brecht et al., 1995; Magnan & Back, 2007; Watson et al., 2013) statistically significant and meaningful improvement in observed language gain between pre- and post-immersion scores was demonstrated using both Wilcoxon Signed Ranks and Cohen's effect size statistics (see Table 2).

Table 2. Statistical significance testing for language gain

	Group 1: Arabic, Chinese, Russian		Group 2: French, German, Portuguese, Spanish	
	Wilcoxon Ranks	**Cohen's *d***	**Wilcoxon Ranks**	**Cohen's *d***
Listening	Z=-6.88, *p*=.001	*d*=-0.64 (med-large)	Z=-8.20, *p*=.001	*d*=-1.29 (large)
Reading	Z=-7.76, *p*=.001	*d*=-0.89 (large)	Z=-7.53, *p*=.001	*d*=-1.00 (large)
Speaking	Z=-8.52, *p*=.001	*d*=-0.97 (large)	Z=-8.24, *p*=.001	*d*=-1.09 (large)

Gains in Intercultural Competence

Also similar to other studies (Watson et al., 2013, Engle & Engle, 2004; Jackson, 2008), gains in intercultural competence (IC) using the IDI (described above) were also evident across languages and statistically significant. On average, IC gains averaged 5.5 in group 1 languages (N=98) and 3.9 in group 2 languages (N=79)[2]. In contrast to ordinal language scores, IDI interval data were normally distributed and deemed statistically significant using standard t-tests (Group 1: M=5.53, SD=12.11, t(95)=4.47, p=.001, Cohen's *d* = .917 (large); Group 2: M= 3.85, SD=12.10, t(78)=2.83, p=.006), Cohen's *d* = .640 (medium).

Socialization Variables

Based on self-report data from a pre-departure background survey and a post-immersion socialization survey, four socialization variables were analyzed (See Table 3).

[2] Total N for IDI test-takers was 177. 104 participants did not take the IDI either pre- or post-immersion and were therefore excluded from analysis.

Table 3. Socialization Variables

Socialization Variables	Group 1 Average	Group 2 Average
Lodging type: whether participants lived in a dorm environment or with a host family	Dormstay: 104 (74.3%) Homestay: 36 (25.7%)	Dormstay: 72 (51.8%) Homestay: 67 (48.2%)
Percentage of English used: what percentage of time on average did participants use their native language during study abroad (inverse relationship with gains expected)	41%	28%
Time spent in TL conversation: how many hours per week on average participants spent having conversations in their target language (TL) outside of class	17.9 hrs./week	33.6 hrs./week
Participation in Cultural Activities: how many hours per week on average participants spent in cultural activities outside of class (e.g., tours, excursions, attending sporting events, clubs, etc.)	13.6 hrs./week	18.1 hrs./week

Correlations

Correlation statistics were used to investigate the relationships between the language and culture variables. Since the language tests involve ordinal scales and the IDI involves an interval scale as well as non-normally distributed scores, Spearman's ranked correlation coefficients were calculated between the language tests, the IDI, and the socialization variables (see Table 4) with the exception of correlations with the categorical lodging variable for which Mann-Whitney U was used (See Table 5). For Group 1, other than the expected correlations between listening, reading, and speaking gains, statistically significant relationships were observed between gains in Listening and Amount of English used ($r_s[67]=-.295$, $p=.02$), gains in Intercultural Competence and Time Spent in Cultural Activities ($r_s[50]=.386$, $p=.01$), Amount of English used and Time Spent in Conversation in the TL ($r_s[67]=.363$, $p=.001$) as well as between Time Spent in Conversation in the TL and Time Spent in Cultural Activities ($r_s[67]=.257$, $p=.04$). For Group 2, statistically significant relationships were only observed between gains in Listening and Time spent in Cultural Activities ($r_s[68]=.311$, $p=.01$) and Time spent in Conversation in the TL and Time spent in Cultural Activities ($r_s[69]=.508$, $p=.001$).

Table 4. Correlations

			Listening Gain	Reading Gain	Speaking Gain	ICC Gain	Amount of English used	Average hours of TL Conversation	Average hours of Cultural Activities
Listening Gain	r	Group 1	**1.00**	**.416****	**.329****	-0.11	**-.295***	0.17	0.04
		Group 2		**.301****	0.06	0.15	0.00	0.06	**.311****
Reading Gain	r	Group 1		**1.00**	**.287****	0.06	-0.08	0.08	0.07
		Group 2			**.188***	0.20	0.21	0.04	-0.02
Speaking Gain	r	Group 1			**1.00**	-0.13	**-.388****	-0.04	-0.21
		Group 2				-0.02	-0.06	0.05	-0.06
IC Gain	r	Group 1				**1.00**	0.16	0.22	**.386****
		Group 2					-0.06	-0.02	0.07
Amount of English used	r	Group 1					**1.00**	**-.363****	0.01
		Group 2						-0.24	-0.12
Average hours of TL Conversation	r	Group 1						**1.00**	**.257***
		Group 2							**.508****
Average hours of Cultural Activities	r	Group 1							**1.00**
		Group 2							

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

For the lodging variable, Mann-Whitney U was used to compare differences in results for dormstay vs. homestay participants (See Table 5). For Group 1, participants living with host families, on average, outperformed those living in a dormitory for all three language tests but only to a statistically significant degree for listening (U=1232, p=.002) and reading (U=1434, p=.037). Homestay participants also reported speaking less English while abroad and spending more time in conversation and in cultural activities than those living in a dormitory. These differences were statistically significant only for the amount of English used (U=340.5, p=.021). For Group 2, homestay participants also outperformed dormstay participants on all language tests but no statistical significance was noted. A similar trend was noted for English use, conversation, and cultural activities.

Table 5. Lodging Analysis

GROUP 1		N	Mean Rank	Sum of Ranks	Mann-Whitney	p
Listening Gain	Dormstay	103	63.96	6588.00	1232	**0.002**
	Homestay	36	87.28	3142.00		
Reading Gain	Dormstay	103	65.92	6790.00	1434	**0.037**
	Homestay	36	81.67	2940.00		
Speaking Gain	Dormstay	103	65.68	6765.00	1409	0.081
	Homestay	34	79.06	2688.00		
ICC Gain	Dormstay	70	48.11	3367.50	882.5	0.821
	Homestay	26	49.56	1288.50		
Amount of English used	Dormstay	43	38.08	1637.50	340.5	**0.021**
	Homestay	24	26.69	640.50		
Average hours of TL Conversation	Dormstay	43	31.14	1339.00	393	0.105
	Homestay	24	39.13	939.00		
Average hours of Cultural Activities	Dormstay	43	33.24	1429.50	483.5	0.669
	Homestay	24	35.35	848.50		

GROUP 2		N	Mean Rank	Sum of Ranks	Mann-Whitney	p
Listening Gain	Dormstay	63	57.21	3604.00	1588	0.06
	Homestay	62	68.89	4271.00		
Reading Gain	Dormstay	63	59.30	3736.00	1720	0.233
	Homestay	62	66.76	4139.00		
Speaking Gain	Dormstay	63	57.80	3641.50	1625.5	0.166
	Homestay	60	66.41	3984.50		
ICC Gain	Dormstay	44	40.22	1769.50	760.5	0.925
	Homestay	35	39.73	1390.50		
Amount of English used	Dormstay	35	35.91	1257.00	583	0.7
	Homestay	34	34.06	1158.00		
Average hours of TL Conversation	Dormstay	35	38.67	1353.50	466.5	0.122
	Homestay	34	31.22	1061.50		
Average hours of Cultural Activities	Dormstay	35	31.87	1115.50	485.5	0.185
	Homestay	34	38.22	1299.50		

Discussion

In this dataset, it is interesting to note that, on average, statistically significant positive gains were noted in all pre- and post-immersion tests. Only around 5% of participants experienced a negative gain in one of the three modalities (but never in more). This most likely can be explained by test/performance variability as the pre- and post-tests are similar but not exactly the same. However, in case of the IDI, 27% of participants (primarily from the AY 2012 cohort) scored lower on the post-test than on the pre-test (N=47 of 175). This could be the result of reverse culture shock as participants took the IDI immediately upon return. This cohort also had the highest pre-departure developmental orientation compared to other semesters. Both of these observations (decline in scores and higher starting scores) lead us to believe that this group was a statistical outlier. However, more research is needed to determine the actual reason for the decline.

In the correlation studies, it was expected that there would be correlations between the three language tests and these findings are in line with the test developers' reports of test validity and reliability. We were surprised, however, to see that there was little to no statistical correlation between gains on the language tests and gains in intercultural competence on the IDI. On one hand, this seems to contradict the thought that language proficiency (real or perceived) encourages more language contact (i.e., higher-quality interaction) which then leads to better cultural understanding (Churchill & DuFon 2006). On the other hand, this can just as easily be explained by the relatively short duration of the one semester abroad and the limited (yet typical) proficiency gains of our students. As Magnan & Back (2007) point out, participants in a one-semester study abroad experience may be coming home right at the point they have gained enough proficiency to start building truly meaningful relationships within the target community.

Many of the other data pertaining to language contact also yielded some expected and unexpected results. The amount of English used while abroad was expected to show an inverse relationship with gains in Speaking proficiency. While a moderate correlation was found in Group 1 languages, there was no correlation for Group 2 languages. Interestingly, a similar moderate correlation was observed between amount of English spoken and amount of time spent in conversation with native speakers in Group 1 languages but not in Group 2. For Group 1 languages, these findings seem to support findings from previous studies (Magnan & Back, 2007) that show that encouraging English-speakers to band together to ease transition into the target community and combat language/culture shock while abroad may not be conducive to foreign language proficiency. For Group 2 languages, however, such a relationship was not observed. Does this mean that English plays a different role in the target communities of Group 2 languages? For Group 1 languages, a moderate correlation was also observed between amount of time spent in cultural activities and gains in intercultural competence. This seems to support the idea that interacting with native speakers in cultural contexts plays a role in the cultural awareness the participants gain while abroad. Unfortunately, we were surprised that this correlation was not observed for Group 2 languages. On a more positive note, a statistically significant correlation was observed for both language groups between time spent in conversation with native speakers and time spent in cultural activities. While this was an expected result, it does seem to support the idea that there is a link between cultural activities and speaking practice opportunities in the target language.

In the lodging studies, it was interesting to note that homestay participants outperformed dormstay participants on all three language tests for both language groups. The difference between these groups, however, was statistically significant only for Group 1 in Listening and Reading. For Group 2 languages, there was no statistical difference between the two lodging types on the language tests. Furthermore, there was no statistical difference between groups in terms of gains in intercultural competence on the IDI. In terms of language contact, homestay participants reporting using less English while spending more time in TL conservation and in cultural activities. While this is an interesting finding, the difference between groups was statistically significant only for amount of English spoken in Group 1 languages.

Implications for Future Study

Many of the most interesting areas for future study involve the differences in findings between the two language groups. While Group 1 and Group 2 share some trends in the data, some of the differences beg further investigation. Specifically, the difference between groups in the area of Amount of English used abroad and its correlation to Listening and Speaking Gain. Given the roles that listening and speaking proficiencies play in communicative competence, their link here is not surprising. However, why would the amount of English used abroad seem to affect students of languages deemed more different from English (Group 1) than those deemed less different (Group 2)? In the future, data analysis of the datasets of individual languages may bring to light answers to this question. This also holds true for why there appears to be a relationship between the amount of weekly cultural activities and Listening Gain in Group 2 only and the amount of weekly cultural activities and gains in Intercultural Competence for Group 1 languages only.

The differences mentioned in the previous paragraph also support the need observed in study abroad literature (Churchill & DuFon, 2006, Kinginger, 2009, Wang, 2010) for studies that specifically explore the socialization variables for individual study abroad experiences. What specific cultural activities play a role in increasing intercultural competence or listening proficiency? What kind of TL conversations take place in a homestay vs. a dormstay environment? Furthermore, instead of looking only at the type of lodging involved, student perception of their lodging might be just as important. As mentioned also in Watson, Siska, & Wolfel (2013), socialization variables such as gains in cultural literacy and regional awareness warrant further investigation as well. In what way(s) does time spent in cultural activities or in TL conversation affect cultural literacy vs. intercultural competence? Does the lodging type (or student perception of it) affect how much students learn about their target culture?

Implications for Study Abroad Program Development

First and foremost, the findings in this study fully support the calls for more evidence-based decision-making in the area of study abroad program development. Learning gains in an study abroad environment do not happen by accident nor do they happen in some magical way that can't be explicated to some degree. Pre- and post-immersion training, assessment and data analysis are invaluable tools for investigating study abroad gains and the language socialization variables involved in those gains.

Furthermore, the findings of this quantitative study suggest, as confirmed in other studies (Kinginger, 2013), that qualitative and/or ethnographic studies will be just as important for fully understanding the socialization variables at work and how study abroad program developers can leverage these processes to promote learning gains.

Some evidence-based leveraging activities which are implied by this study and would be further improved by future studies include the following:

1. pre-departure assessment analysis to "match" students with a lodging situation or institution abroad most conducive to their strengths
2. teaching strategies pre-departure for increasing language contact during cultural activities or when navigating daily life in a host family or dormitory environment
3. improving during-immersion progress checks that encourage reflection and continue to promote the importance of language contact and cultural sensitivity
4. working with host institutions to provide/encourage structured language contact opportunities outside of class such as community service, peer coaching, travel or family activities, along with reflection exercises that can be used for mentoring, reinforcement of program goals, and benefit analysis.
5. Using student performance data to assess the effectiveness of study abroad host institutions and improve goal alignment with home program

In conclusion, this study takes one more step in investigating the relationship between the study abroad outcomes of language proficiency and intercultural competence from a second language socialization standpoint. While the socialization variables in this study will continue to play a role in these outcomes, further study is needed to better understand them and to identify additional variables that contribute to the multidimensional gains during study abroad. The data in this study further confirm previous findings that study abroad involves the complex interaction of multiple social and personal variables that will require an equally complex and integrated system of quantitative and qualitative assessment as well as study abroad programs dedicated to these goals in order to shape and promote the best study abroad environment possible.

References

Allen, H. W., & Herron, C. (2003). A mixed-methodology investigation of the linguistic and affective outcomes of summer study abroad. *Foreign Language Annals*, *36*(3), 370-85.

Aveni, V. A. P. (2005). *Study abroad and second language use: Constructing the self*. Cambridge University Press.

Brecht, R., Davidson, D., & Ginsberg, R. (1995). Predictors of foreign language gain during study abroad. In B. F. Freed (Ed.), *Second language acquisition in a study abroad conte*xt. Amsterdam/Philadelphia: John Benjamins, 37–66.

Cohen, A. D., Paige, R. M., Shively, R. L., Emert, H., & Hoff, J. (2005). Maximizing study abroad through language and culture strategies: Research on students, study abroad program professionals, and language instructors. *Final Report to the International Research and Studies Program, Office of International Education, DOE*. Minneapolis, MN: Center for Advanced Research on Language Acquisition, University of Minnesota.

Churchill, E. & DuFon, M. A. (2006). Evolving threads in study abroad research. In M. A. DuFon & E. Churchill (eds.) *Language Learners in Study Abroad Contexts*. Clevedon: Multilingual Matters, 1-27.

Davidson, D. (2010). Study abroad: When, how long, and with what results? New data from the Russian front. *Foreign Language Annals*, *43*(1), 6–26.

Deardorff, D. K. (2006). Assessing intercultural competence in study abroad students. In Byram, M., & Feng, A. (Eds). *Living and studying abroad: Research and practice* (Vol. 12). Multilingual Matters, 232-56.

Defense Language Institute (n.d.). "DLIFLC.edu - Languages at DLI." *DLIFLC.edu - Languages at DLI*. Retrieved June 3, 2013 from http://www.dliflc.edu/contentpage.aspx?id=444.

DuFon, M. A., & Churchill, E. (2006). *Language learners in study abroad contexts* (Vol. 15). Channel View Books.

Duff, P. A. (2007). Second language socialization as sociocultural theory: Insights and issues. *Language Teaching*, *40*(4), 309-19.

Duranti, A. (Ed.). (2009). *Linguistic anthropology: A reader, 2nd Edition* . Wiley-Blackwell.

Einbeck, K. (2002). Using literature to promote cultural fluency in study abroad programs. *Die Unterrichtspraxis/Teaching German.* 35(1): 59-67.

Engle, L. & Engle, J. (2004). Assessing language acquisition and intercultural sensitivity development in relation to study abroad program design. *Frontiers: The Interdisciplinary Journal of Study Abroad 10*, 219-36.

Engle, L. & Engle, J. (2013). Beyond immersion: The AUCP experiment in holistic intervention. In

M. Vande Berg, R. M. Paige, & K. Lou (Eds.). *Student Learning Abroad: What Our Students are Learning, What They're Not, and What We Can Do About It.* Sterling, VA: Stylus, 284-307.

Hammer, M. R. (2004). Assessment of the impact of the AFS study abroad experience. Retrieved August 9, 2011, from http://www.idiinventory.com/pdf/afs_study.pdf

Hammer, M. R. (2009). The Intercultural Development Inventory (IDI): An approach for assessing and building intercultural competence. In Michael Moodian (ed.) *Contemporary Leadership and Intercultural Competence*. Thousand Oaks, CA: Sage, 203-218.

Hammer, M. R., Bennett, M. J. & Wiseman, R. (2003). The Intercultural Development Inventory: A measure of intercultural sensitivity. In R. M. Paige (Guest Editor), Special issue on the Intercultural Development Inventory. *International Journal of Intercultural Relations, 27*, 421-443.

Hunley, H. A. (2010). Students' functioning while studying abroad: The impact of psychological distress and loneliness. *International Journal of Intercultural Relations*, *34*(4), 386-92.

Jackson, J. (2008). *Language, identity, and study abroad: Sociocultural perspectives*. London: Equinox.

Joseph, J. E. (2004). *Language and identity*. Basingstoke: Palgrave Macmillan.

Kasper, G., & Omori, M. (2010). Language and culture. In McKay, S. L., & Hornberger, N. H. (eds.) *Sociolinguistics and Language Education*. Clevedon: Multilingual Matters, 455-491.

Kinginger, C., & Farrell, K. (2004). Assessing development of meta-pragmatic awareness in study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 10, 19–42.

Kinginger, C. (2008). Language learning in study abroad: Case studies of Americans in France. *The Modern Language Journal*, *92*(s1), 1-124.

Kinginger, C. (2009). *Language learning and study abroad: A critical reading of research*. Basingstoke,, UK: Palgrave Macmillan.

Kinginger, C. (2011). Enhancing language learning in study abroad. *Annual review of applied linguistics*, *31*(1), 58-73.

Kinginger, C. (2013). Identity and language learning in study abroad. *Foreign Language Annals*, *46*(3), 339-358.

Kramsch, C. J. (1998). *Language and culture*. Oxford University Press.

Kramsch, C. (Ed.). (2003). *Language acquisition and language socialization: Ecological perspectives*. Continuum.

Kruse, J., & Brubaker, C. (2007). Successful study abroad: Tips for student preparation, immersion, and postprocessing. *Teaching German, 40*, 147–52.

Magnan, S. S., & Back, M. (2007). Social interaction and linguistic gain during study abroad. *Foreign Language Annals*, *40*(1), 43-61.

Marx, H., & Moss, D. M. (2011). Please mind the culture gap: Intercultural development during a teacher education study abroad program. *Journal of Teacher Education*, *62*(1), 35-47.

Medina-López-Portillo, A. (2004). Intercultural learning assessment: The link between program duration and the development of intercultural sensitivity. *Frontiers: The Interdisciplinary Journal of Study Abroad*, *10*, 179-200.

Moore, L. C. (2008). Language socialization and second/foreign language and multilingual education in non-Western settings. *Encyclopedia of language and education*, *8*, 175-185.

Oakes, L. (2001). *Language and national identity: Comparing France and Sweden*. John Benjamins Publishing.

Patterson, P. K. (2006). *Effect of study abroad on intercultural sensitivity* (Doctoral dissertation, University of Missouri).

Rivers, W. P. (1998). Is being there enough? The effects of homestay placements on language gain

during study abroad. *Foreign Language Annals, 31*, 492–500.

Schauer, G. (2009). *Interlanguage pragmatic development: The study abroad context*. Continuum.

Schmidt-Rinehart, B., & Knight, S. (2004). The homestay component of study abroad: Three perspectives. *Foreign Language Annals, 37*, 254–262.

Selmeski, B. (2007). *Military cross-cultural competence: Core concepts and individual development.* Royal Military College of Canada Centre for Security, Armed Forces and Society Occasional Paper Series. 1.

Silverstein, M. (2004). "Cultural" Concepts and the Language-Culture Nexus. *Current Anthropology*, *45*(5), 621-52.

Taguchi, N. (2008). Cognition, language contact, and the development of pragmatic comprehension in a study-abroad context. *Language Learning*, *58*(1), 33-71.

Vande Berg, M. & Paige, R.M. (2009). Applying Theory and Research: The Evolution of Intercultural

Competence in U.S. Study Abroad. In Deardoff, Darla, ed. *The Sage Handbook of Intercultural Competence*. Los Angeles: Sage, 419-37.

Vande Berg, M., Paige, R. M., & Lou, K. (Eds.) (2012). *Student learning abroad: What our students are learning, what they're not, and what we can do about it.* Sterling, VA: Stylus.

Wang, C. (2010). Toward a second language socialization perspective: Issues in study abroad research. *Foreign Language Annals*, *43*(1), 50-63.

Watson-Gegeo, K. A., & Nielsen, S. (2003). Language socialization in SLA. In Doughty, C. J., & Long, M. H. (eds.) *The Handbook of Second Language Acquisition*. Oxford, UK: John Wiley & Sons, 155-177.

Watson-Gegeo, K. A., & Nielsen, S. (2003). Language socialization in SLA. In Doughty, C. J., & Long, M. H. (eds.) *The Handbook of Second Language Acquisition*. Oxford, UK: John Wiley & Sons, 155-177.

Watson-Gegeo, K. A. (2004). Mind, language, and epistemology: Toward a language socialization paradigm for SLA. *The Modern Language Journal*, *88*(3), 331-50.

Watson, J. R. (2010). Language and culture training: Separate paths? *Military Review*, March-April 2010, 93-97.

Watson, J. R., Siska, P., & Wolfel, R. L. (2013). Assessing gains in language proficiency, cross-cultural competence, and regional awareness during study abroad: A preliminary study. *Foreign Language Annals*, *46*(1), 62-79.

Zielinski, B. A. Z. (2007). Study abroad length of program influence on cross-cultural adaptability. Unpublished Master's Thesis, Virginia Polytechnic Institute and State University

Zuengler, J., & Cole, K. (2005). Language socialization and second language learning. In E. Hinkel (ed.) *Handbook of Research in Second Language Teaching and Learning*, Mahwah, NJ: Lawrence Erlbaum, 301-16.

Appendix A: Semester Abroad Locations

1. ARABIC: Morocco, Oman, Jordan, Cairo
2. CHINESE: Beijing, Taiwan, Jilin
3. RUSSIAN: Voronezh, Kiev, Odessa
4. FRENCH: Paris, Lille, St. Cyr, Lyon
5. GERMAN: Munich, Hamburg, Austria
6. SPANISH: Zaragoza, Mexico City, Granada
7. PORTUGUESE: Rio de Janeiro, Portugal

Appendix B: Pre- and Post-SAP Gains in Listening, Reading, & Speaking Proficiency

		Post-SAP Listening - Group 1 languages							
		.0	0+	1	1+	2	2+	3	**Total**
Pre-SAP Listening (ILR Scale) - Arabic, Chinese, Russian	0	21 (28%)	36 (48%)	7 (9.3%)	11 (14.7%)	0	0	0	75
	0+	7 (15.9%)	17 (38.6%)	6 (13.6%)	7 (15.9%)	6 (13.6%)	1 (2.3%)	0	44
	1	1 (11.1%)	1 (11.1%)	1 (11.1%)	5 (55.6%)	0	0	1 (11.1%)	9
	1+	0	0	0	2 (40%)	2 (40%)	1 (20%)	0	5
	2	0	0	0	0	0	2 (100%)	0	2
	2+	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	4 (100%)	4
	Total	29 (20.9%)	54 (38.8%)	14 (10.1%)	25 (18.0%)	8 (5.8%)	4 (2.8%)	5 (3.6%)	139

		Post-SAP Listening - Group 2 languages						
		0+	1	1+	2	2+	3	**Total**
Pre-SAP Listening - French, German, Portuguese, Spanish	0+	2 (11.8%)	2 (11.8%)	5 (29.4%)	6 (35.3%)	2 (11.8%)	0	17
	1	0	3 (8.8%)	5 (29.4%)	5 (29.4%)	4 (11.8%)	1 (2.9%)	34
	1+	0	0	5 (11.4%)	23 (52.3%)	10 (22.7%)	6 (13.6%)	44
	2	0	0	0	12 (54.5%)	3 (13.6%)	7 (31.8%)	22
	2+	0	0	1 (16.7%)	0	2 (33.3%)	3 (50%)	6
	3	0	0	0	0	0	2 (100%)	2
	Total	2 (1.6%)	5 (4%)	24 (19.2%)	54 (43.2%)	21 (16.8%)	19 (15.2%)	125

		Post-SAP Reading - Group 1 languages							
		0	0+	1	1+	2	2+	3	**Total**
Pre-SAP Reading (ILR Scale) - Arabic, Chinese, Russian	0	18 (24.7%)	26 (35.6%)	13 (17.8%)	12 (16.4%)	4 (5.5%)	0	0	73
	0+	6 (12%)	17 (34%)	14 (28%)	9 (18%)	4 (8%)	0	0	50
	1	0	0	2 (22.2%)	5 (55.6%)	2 (22%)	0	0	9
	1+	0	0	0	0	1 (33.3%)	2 (66.7%)	0	3
	2	0	0	0	0	0	2 (100%)	0	2
	2+	0	0	0	0	0	1 (100%)	0	1
	3	0	0	0	0	0	1 (100%)	0	1
	Total	24	43	29	26	11	6	0	139

		Post-SAP Reading - Group 2 languages							Total
		0	0+	1	1+	2	2+	3	
Pre-SAP Reading (ILR Scale) - French, German, Portuguese, Spanish	0	0	0	0	0	1 (100%)	0	0	1
	0+	0	0	1 (11.1%)	5 (55.6%)	2 (22.2%)	1 (11.1%)	0	9
	1	0	0	3 (8.6%)	10 (28.6%)	12 (34.3%)	9 (25.7%)	1 (2.9%)	35
	1+	0	0	0	5 (15.6%)	18 (56.2%)	7 (21.9%)	2 (6.2%)	32
	2	0	0	0	1 (3.3%)	13 (43.3%)	10 (33.3%)	6 (20%)	30
	2+	0	0	0	0	3 (21.4%)	7 (50%)	4 (28.6%)	14
	3	0	0	0	0	1 (25%)	0	3 (75%)	4
	Total	**0**	**0**	4	21	50	34	16	125

		Post-SAP Speaking (OPI) - Group 1 Languages									Total
		NL	NM	NH	IL	IM	IH	AL	AH	S	
Pre-SAP Speaking (ACTFL Scale) - Arabic, Chinese, Russian	NL	0	0	0	0	1 (100%)	0	0	0	0	1
	NM	0	0	1 (33.3%)	1 (33.3%)	1 (33.3%)	0	0	0	0	3
	NH	2 (2.6%)	0	4 (5.2%)	36 (46.8%)	21 (27.3%)	13 (16.9%)	1 (1.3%)	0	0	77
	IL	1 (2.9%)	0	1 (2.9%)	12 (34.3%)	9 (25.7%)	10 (28.6%)	2 (5.7%)	0	0	35
	IM	0	0	0	0	2 (18.2%)	3 (27.3%)	5 (45.5%)	1	0	11
	IH	0	0	0	0	1 (33.3%)	1 (33.3%)	1 33.3%)	0	0	3
	AL	0	0	0	0	0	0	1 (50%)	1 (50%)	0	2
	AH	0	0	0	0	0	0	1 (25%)	1 (25%)	2 (50%)	4
	S	0	0	0	0	0	0	0	0	1 (100%)	1
	Total	3	0	6	49	35	27	11	3	3	137

		Post-SAP Speaking (OPI) - Group 2 Languages									Total
		NL	NM	NH	IL	IM	IH	AL	AM	S	
Pre-SAP Speaking (ACTFL Scale) - French, German, Portuguese, Spanish	NL	0	0	0	0	1 (100%)	0	0	0	0	1
	NM	0	0	0	0	0	0	0	0	0	0
	NH	0	0	0	4 (44.4%)	4 (44.4%)	1 (11.1%)	0	0	0	9
	IL	0	0	0	7 (16.3%)	11 (25.6%)	21 (48.8%)	4 (9.3%)	0	0	43
	IM	0	0	0	3 (6%)	7 (14%)	22 (44%)	17 (34%)	1 (2%)	0	50
	IH	0	0	0	0	0	3 (25%)	9 (75%)	0	0	12
	AL	0	0	0	0	0	0	3 (75%)	1 (25%)	0	4
	AH	0	0	0	1 (33.3%)	0	0	1 (33.3%)	1 (33.3%)	0	3
	S	0	0	0	0	0	0	0	0	1 (100%)	1
	Total	0	0	0	15	23	47	34	3	1	123