



UNITED STATES MILITARY ACADEMY
WEST POINT

Assessing Regional Knowledge during Study Abroad

Assessment of Regional Knowledge (ARK) 1.0 Pilot



Dr. Jeff Watson, Chair Linguistics and Language Acquisition

jeffrey.watson@usma.edu

Dr. Adam Kalkstein, Chair, Regional Expertise

adam.kalkstein@usma.edu



Agenda

- Study Abroad Outcomes
- Regional Knowledge Framework
 - ❖ Region – Culture – Language
- Assessment of Regional Knowledge (ARK) 1.0
- Pilot Study
 - ❖ Method
 - ❖ Analysis & Discussion
- Breakout Sessions
 - ❖ by region - analyze topics
 - ❖ What topical areas are important for a dynamic regional test to cover?



Presentation Goals

- ❖ To share cadet performance data from the pilot version of a regional knowledge test and language proficiency tests administered before and after a semester abroad.
- ❖ To elicit feedback from workshop participants on the format and content of the pilot version of the test.



Study Abroad Environment

SA provides a highly contextualized learning environment with virtually limitless access to native speech communities, authentic sociocultural behaviors, and identity-destabilizing experiences (Kinging, 2008)

SA participants interact with this environment in ways unique to their own interests, motivations, and awarenesses and teach them “to think, feel, and act in accordance with the values, ideologies, and traditions” of their target community (Duff, 2008)

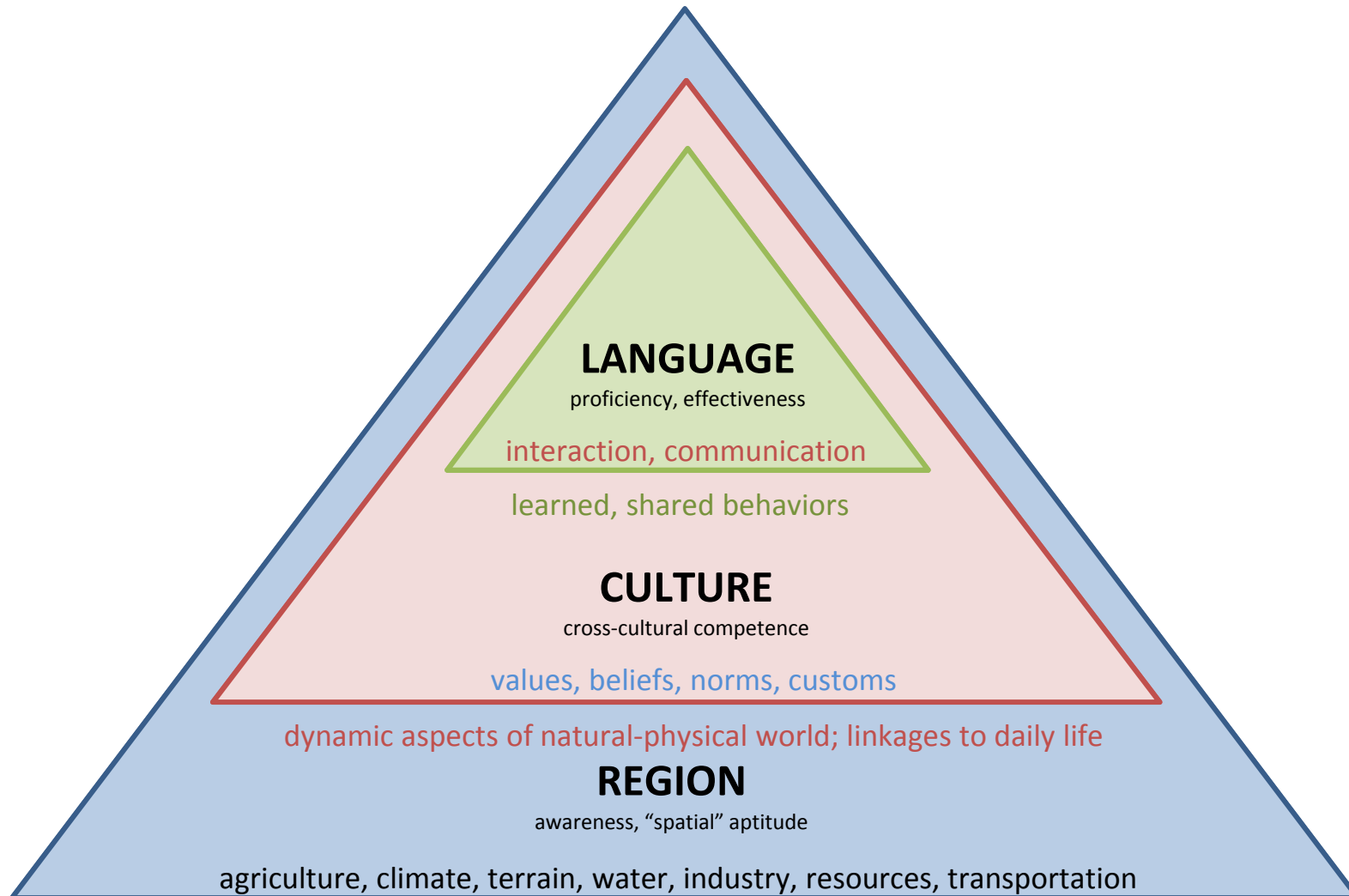


Study Abroad Outcomes

- ❖ are complex, multidimensional, interrelated
- ❖ involve social interaction and the degree in which SA participants involve themselves in it
- ❖ typically “contextualized within particular routine activities” (Duff, 2008)
- ❖ involve development of language proficiency, cross-cultural competence, and regional awareness



Regional Knowledge Framework





Pilot Study: Method

- ❖ N=240
- ❖ Semester Abroad Program (SAP) Participants: 2010-2014:
 - one semester abroad
 - 5 regions: 17 countries: 7 languages
 - language study mandatory
 - little systematic instruction on cultural/regional issues outside of language courses
 - pre- and post-immersion testing: language proficiency, cross-cultural competence, and regional awareness
- ❖ Male: 81% (194); Female: 19% (46)
- ❖ Lodging with host families or in dormitories
- ❖ Pre-test/Post-test experimental design



Assessment of Regional Knowledge (ARK) 1.0

- 50-item multiple-choice test of regional knowledge
 - ❖ Tests regional literacy = cultural literacy + regional-physical-spatial awareness
 - ❖ Administered online
 - ❖ Five regional versions
 - China
 - Eastern Europe
 - Western Europe
 - Latin America
 - Middle East



Pilot Study: Analysis

Descriptive Statistics

Region		Pre-test	Post-test
China	Mean	339.93	367.03
	N	44	44
	STD	49.47	41.98
Eastern Europe	Mean	338.57	381.79
	N	28	28
	STD	53.04	58.12
Latin America	Mean	330.00	344.72
	N	36	36
	STD	50.37	43.65
Middle East	Mean	340.69	355.69
	N	42	42
	STD	39.00	47.18
Western Europe	Mean	280.23	308.07
	N	88	88
	STD	59.44	47.53
All regions	Mean	316.33	341.59
	N	238	238
	STD	58.98	54.46



Pilot Study: Analysis

REGION	paired samples t-test	Cohen's d
China	$t(43) = -4.26, p < .001$	$d = -0.59$
Eastern Europe	$t(27) = -3.49, p = .002$	$d = -0.78$
Western Europe	$t(87) = -6.08, p < .001$	$d = -0.52$
Latin America	$t(35) = -1.69, p = .100$	$d = -0.31$
Middle East	$t(41) = -2.28, p = .003$	$d = -0.35$
ALL Regions	$t(237) = -8.16, p < .001$	$d = -0.45$

Findings:

- ❖ Pre- and post-immersion testing shows statistically significant differences on most regional ARKs (all except Latin America).
- ❖ T-test and Cohen's d shows no statistically significant difference on Latin America ARK.
- ❖ Cohen's d shows small effect size for Latin America and Middle East ARKs:
 - Cohen's d supports the non-significant t-test for LA test
 - Cohen's d does not support the significant t-test result for ME and Overall test data



Pilot Study: Analysis

Spearman's Correlations					
Assessment Gains		ARK	Listening	Reading	Speaking
ARK	rho	1.000	.046	.164*	-.068
	Sig. (2-tailed)		.482	.011	.304
Listening	rho		1.000	.396**	.261**
	Sig. (2-tailed)			.000	.000
Reading	rho			1.000	.297**
	Sig. (2-tailed)				.000
Speaking	rho				1.000
	Sig. (2-tailed)				

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

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



Pilot study: Discussion

- ❖ Despite the lack of systematic instruction abroad on geography or culture, student gains are observable through testing.
- ❖ The lack of correlation between gains on the language tests and gains on the ARK might indicate that regional literacy is being gained outside of language classes.
- ❖ Why is the Latin America test not showing a statistically significant pre- to post-immersion difference?
- ❖ Are these topics the right topics to be testing for a short-term SA experience where some of these topics will not be systematically taught?
 - ❖ Item analyses will show strong or weak items and topics.



Breakout Sessions: Agenda

- ❖ Break into five groups according to the five regions of the ARK: China, Eastern Europe, Western Europe, Latin America, Middle East
- ❖ Review the sample test items from the ARK and discuss the topical areas referred to in the questions (e.g., culture, history, geography, etc.)
- ❖ Discuss other topical areas that should be included in an assessment of regional knowledge for a similar population under similar SA conditions.



Implications for the Future

- ❖ Identify weak items and/or irrelevant topics to improve the ARK.
 - ❖ Perform item analyses.
 - ❖ Gather feedback from academic and USG communities.

- ❖ Investigate where regional literacy is being gained abroad.
 - ❖ What role does socialization play?
 - ❖ How can we better promote regional literacy gains abroad?

- ❖ Create a computer-adaptive test format with item banks based on relevant topics and regional knowledge levels.

- ❖ Elicit intellectual investment from USMA stakeholders and other USG institutions to build a 'living' test, scalable to various user levels and needs.



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