

***An Examination of Proficiency Outcomes of U.S. Students of Russian in Immersion Learning Experiences at the School-to-College, Junior-Year Abroad, and NSEP-Flagship-Levels: Predicting Gains and Accounting for Variation***

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**The Interagency Language Roundtable  
Plenary**

**January 20, 2006**

**The Foreign Service Institute**

**George P. Shultz National Foreign Affairs Training Center**



**Dr. Dan E. Davidson**

**American Councils for International Education**

**Bryn Mawr College**



# American Council of Teachers of Russian/ACTR American Councils for International Education



**ACTR, a division of American Councils, is a national professional membership association for teachers of Russian at all levels. ACTR fosters contacts and exchange of ideas among Russian specialists from around the world through publications, programs, and conferences; develops and maintains opportunities for Americans to study Russian language, literature, area studies, linguistics, and teaching methods within Russia, Eastern Europe, and Eurasia.**

**American Councils designs and implements academic exchange, professional training, distance learning, curriculum and test development, technical assistance, consulting, research and evaluation services in international education on behalf of governments, foundations, development banks.**

# Validation of Study Abroad?

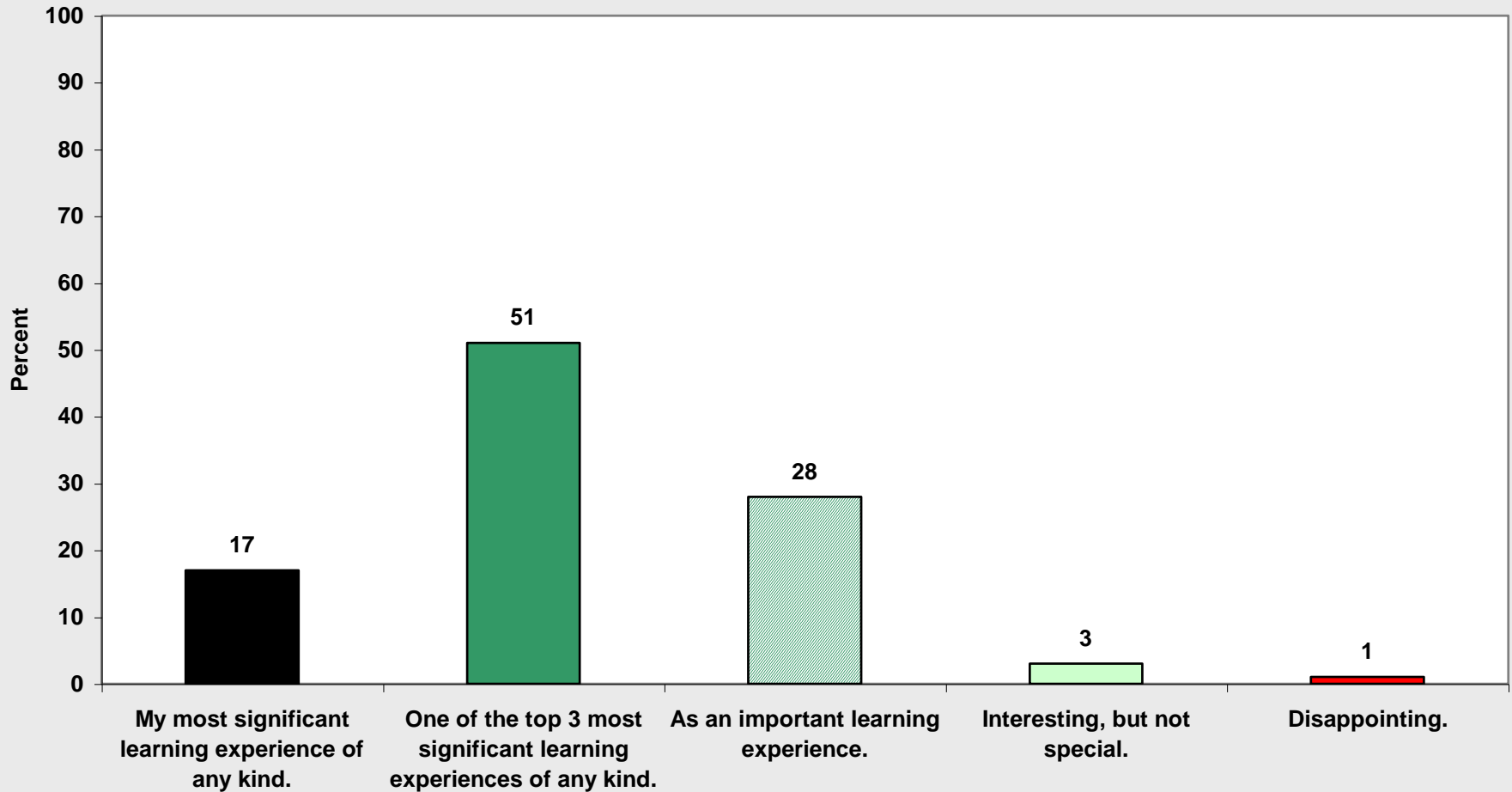
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**Study abroad programs can change people and their (mono-cultural) habits of mind, and shape new ways of viewing the world and one's role in it.**

**ACTR 25 Year Alumni Survey (USEd/IRS): 68% of 750 respondents: SA first or one of 3 most significant educational experiences in their lifetime. (RLJ, 2005)**

# Looking back on your educational training, how would you evaluate your study abroad experience?

American Councils' Outbound Alumni Survey (N=701)



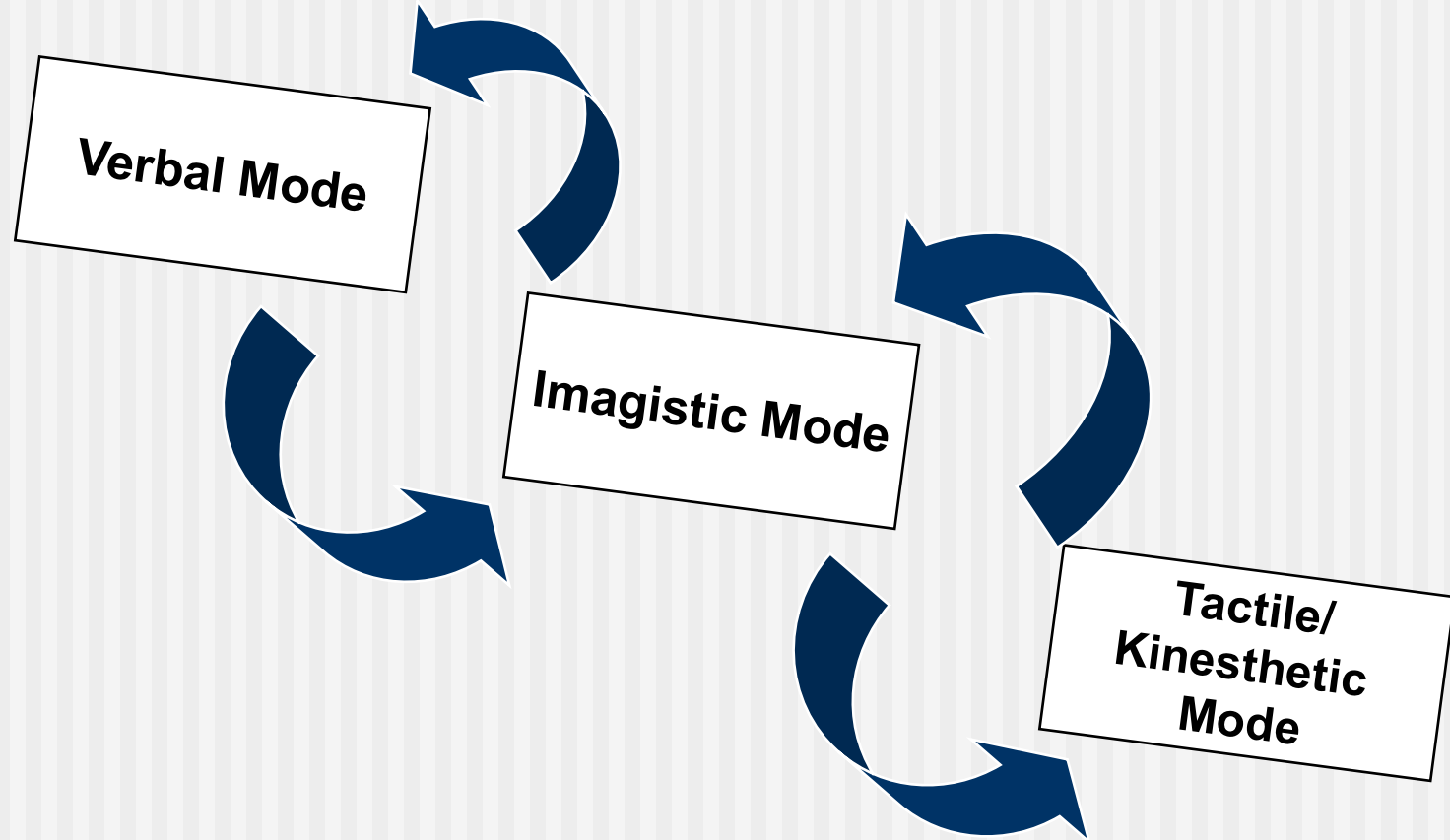
# L-2 Learner Response to SA/C-2

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- “Study abroad students often report that their trip changed them deeply by challenging all that they know and believe about the world and themselves.”  
(Pellegrino, 2005)

# Levels of Representational Structure for Cognitive Tasks

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# Levels of Representational Structure for Cognitive Tasks

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**“Thinking is not only a matter of cognitive mapping. Thinking is the process of moving information from mode to mode and back again. Each level has its focus, magnifications, and constraints. Existing mental structures, hierarchy memberships, set relations, and histories may be transformed and new knowledge may be generated.”**

**Vekker, “Thinking and the Intellect,” Mental Processes, Vol. 2. Leningrad State University Press, 1976.**

# New meanings, new contexts...

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- The L-2 learner “strives to speak, write, and understand those who use a different semiotic system, ..to predict text from context, and context from text.” “Besides everyday conversation, these social processes include the production and critical interpretation of cultural values, attitudes, and beliefs.” Kramsch, 2002
- By their everyday acts of meaning, people act out the social structure, affirming their own statuses and roles, and establishing and transmitting the shared systems of value and of knowledge. M.A.K. Halliday, 1978



# What does it mean to know a language?

## Social Language, Speech Genre

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**Slavic tradition has defined “language” as a larger concept that included culture (Shpet, Bakhtin, Vygotsky).**

**A Slavic elaboration on shaping a multi-cultural identity through membership in a speech community, current and historic:**

***Dialogism* applies to individual words and utterances, but also to the language system as a whole, which is embedded with the products of a continuing generalized collective dialogue with “other” users of the language. “To know a language, you must also “know” the general collective dialogue.” (“Inner Form of the Word,” Shpet, 1927.)**

# “Dialogical Overtones”

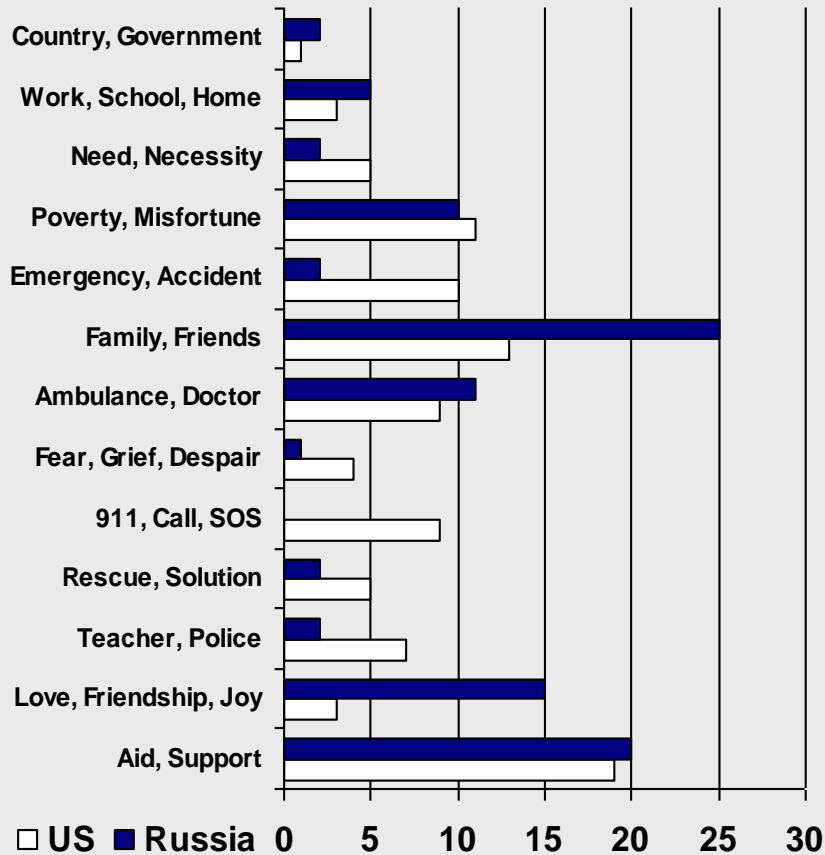
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**“A word is always half someone else’s. It has to be populated, adjusted, before it is yours. Words carry the scent of other voices.” Shpet, 1927**

**“Much of what we loosely refer to as a word’s “connotations” may in fact be the “stylistic aura” resulting from the word’s usual generic context. Typical contexts seem to “adhere to words.” (Bakhtin, SG, 87).**

**“After all, when we speak, we do not select the words we use from a dictionary. Rather we take them from other utterances that are kindred to ours in genre.” (Bakhtin, SG 87, ‘79).**

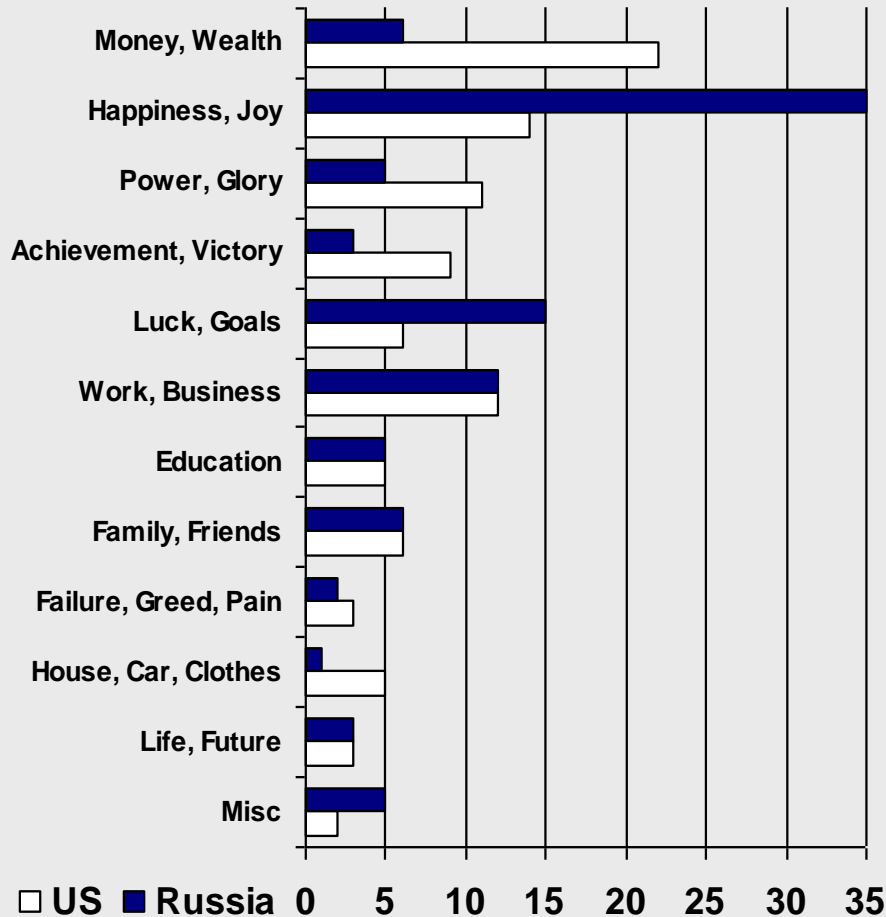
# From *The Subjective Worlds of Russian and American Youth: Help/Помощь*



N = 1617 US, 1583 Rus

- **Russians associate help with meeting their emotional needs and see help as based strongly on positive ties and attitudes, including love and understanding as a source of joy and hope.**
- **Americans focus more on the type of action-oriented assistance provided in emergencies. They link help to feelings of grief and fear.**
- **Both groups address problems of society such as hunger and poverty, but only the Americans think of help as providing solutions.**
- **Both groups consider family and friends as important in providing and receiving help, but only the Americans consider their own individual need for help and think in terms of asking for help.**

# From *The Subjective Worlds of Russian and American Youth: Success/Успех*



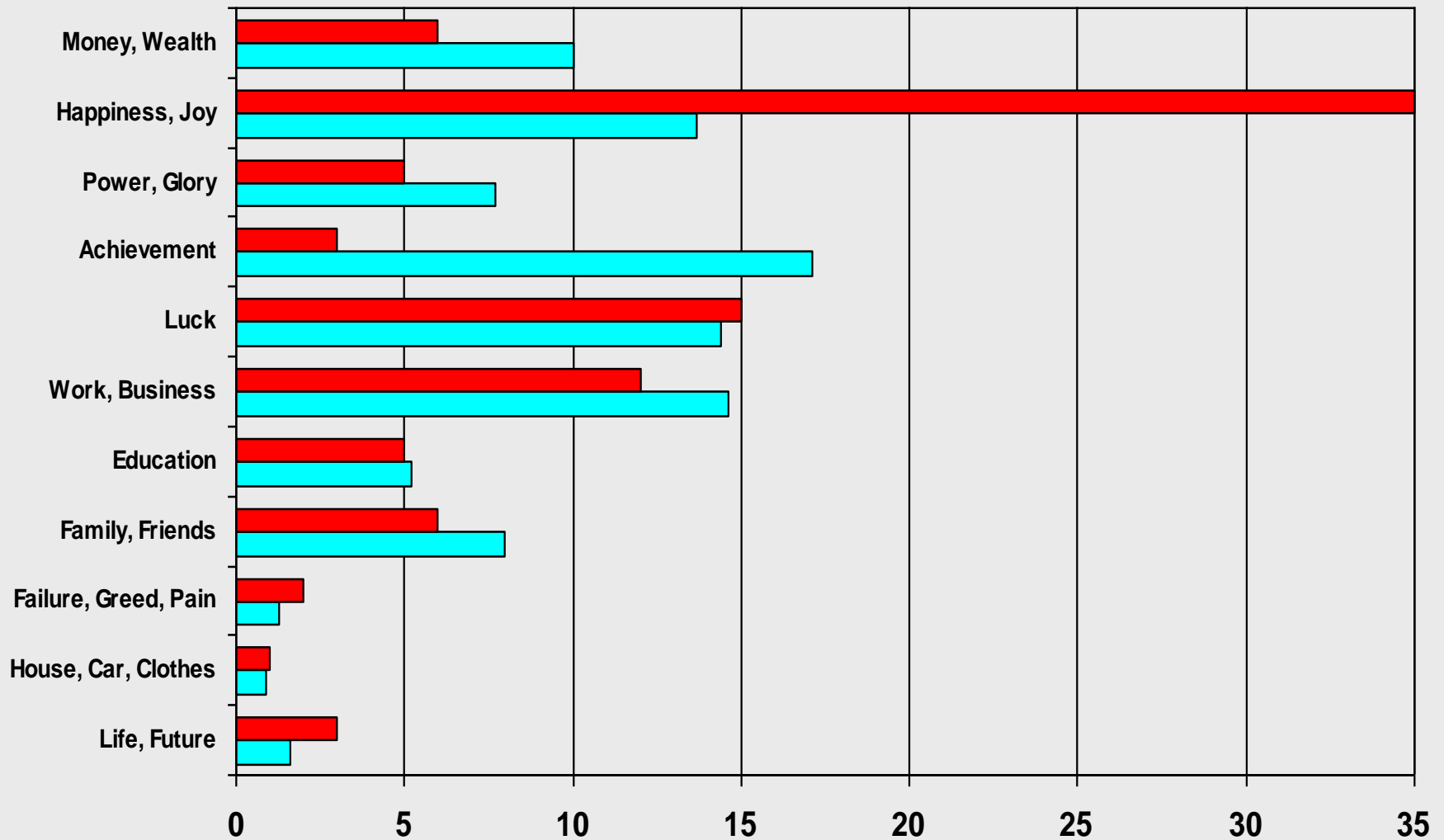
- **The most important indicators of success for Americans are money and material possessions, as well as power. Success to Americans is a matter of business, achievements, and personal performance.**
- **Russians think of success as joy, happiness, love, well-being, and satisfaction. Work and labor are also sources of success. Russians view success somewhat fatalistically and as a matter of luck.**
- **These differences in perspectives reflect social experiences between the two systems, one which glorifies business and entrepreneurial skills and one which glorifies work.**

# Bilingual/Bicultural Personality\*

(\*Leontiev, Karaulov, 1996)

- The Bilingual Speaker is not two monolinguals entrapped in one body, (Grosjean, 1985)
- A person with two linguistic systems and a single underlying (expanded) conceptual frame, characterized by a dynamic, bi-directional transfer, and conceptual blending. (Kecskes, 2000)
- A “multi-competent” speaker (Cook, 1992), social-semiotic model (Kramsch, 2002)

# Pre- and Post-Immersion Associations of Russian Exchangees: Success/Успех



Post-immersion N: 2524  
Pre-immersion N: 1555

■ Post-immersion ■ Pre-immersion

# Partial List of Academic Affiliations of Accepted Students, ACTR Outbound Programs, 1976-2005

Bryn Mawr College  
University of Maryland - College Park  
University of Iowa  
Grinnell College  
University of Northern Iowa  
Northwestern University  
University of Wisconsin  
George Washington University  
Harvard University  
American University  
Yale University  
University of Pennsylvania  
Georgetown University  
George Mason University  
Reed College  
Amherst College  
University of Michigan  
University of California - Berkeley  
Columbia University  
University of Virginia

Indiana University  
Pomona College  
James Madison University  
Wesleyan University  
Swarthmore College  
Brown University  
University of Texas - Austin  
Ohio State University  
Portland State University  
University of Illinois at Urbana-Champaign  
University of Oregon  
University of Chicago  
University of North Carolina - Chapel Hill  
University of Nebraska - Lincoln  
Haverford College  
University of Vermont  
Princeton University  
Cornell University  
Trinity University

Smith College  
Stanford University  
Texas A&M University  
University of Washington  
Clemson University  
Macalester College  
Tufts University  
University of California - Los Angeles  
Barnard College  
University of Kentucky  
University of New Mexico  
University of Pittsburgh  
University of Kansas  
Johns Hopkins University SAIS  
University of South Carolina  
Connecticut College  
Luther College  
New York University  
University of California - San Diego

# The ACTR Student Records Database

## Frequencies

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### Age at the time of the exchange

*October 2005*

Valid cases	3453
Mean Age	22.7612
Median Age	22.0000
Mode Age	21.00



# Student Characteristics 1992-2005

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<b>Age</b>	Range 18-32	Mean 21.91 years
<b>Gender</b>	Female 62.7%	Male 37.3%
<b>Major</b>	Russian 33.1%	Double major w/ Russian 29.4%
	Humanities 23.9%	Area Studies 12.5%;
<b>Degree</b>	72.9% still undergrads; 27.1% BA or MA	
<b>High School Russian</b>	24.7% studied Russian in high school	
<b>Non- Slavic Languages</b>	no languages – 18.1%; 1 language – 48.2%;	
	2 languages – 23.9%; 3 languages – 7.2%	

# Student Characteristics 1992-2005

**Financial Aid**                      37.4% Receive Financial Aid from ACT

## **Principal Host Institutions for Language Study in Russia**

Russian State Pedagogical University (Herzen)

Moscow International University

Moscow State University

St. Petersburg State University

Vladimir Pedagogical Institute (CORA)

## **And the Russophone world:**

Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, Ukraine, Belarus

Tuva, Tatarstan, Yakutiya, Bashkortostan, Chuvashia, etc.

# **Typical Speaking Proficiency Levels after 4 and 6 Semesters of College Russian (N = 708)**

**(prior to study abroad)**

<i>Proficiency Code and Level</i>	<b>After Four Semesters (N = 242) (Mean 3.57; S.D. 1.75)</b>	<b>After Six Semesters (N=466) (Mean 3.95; S.D. 1.64)</b>
1 Novice	3.3 %	1.1 %
2 Novice High	13.2 %	9.9 %
3 Intern. Low	<b>26.0 %</b>	<b>22.6 %</b>
4 Intern. Mid	<b>39.7 %</b>	<b>42.9 %</b>
5 Intern. High	12.4 %	17.0 %
6 Advanced	4.1 %	6.0 %
7 Adv. High	.8 %	.2 %

# Reading Proficiency Levels Attained after 4 or 6 Semesters of College Russian (N = 1255)

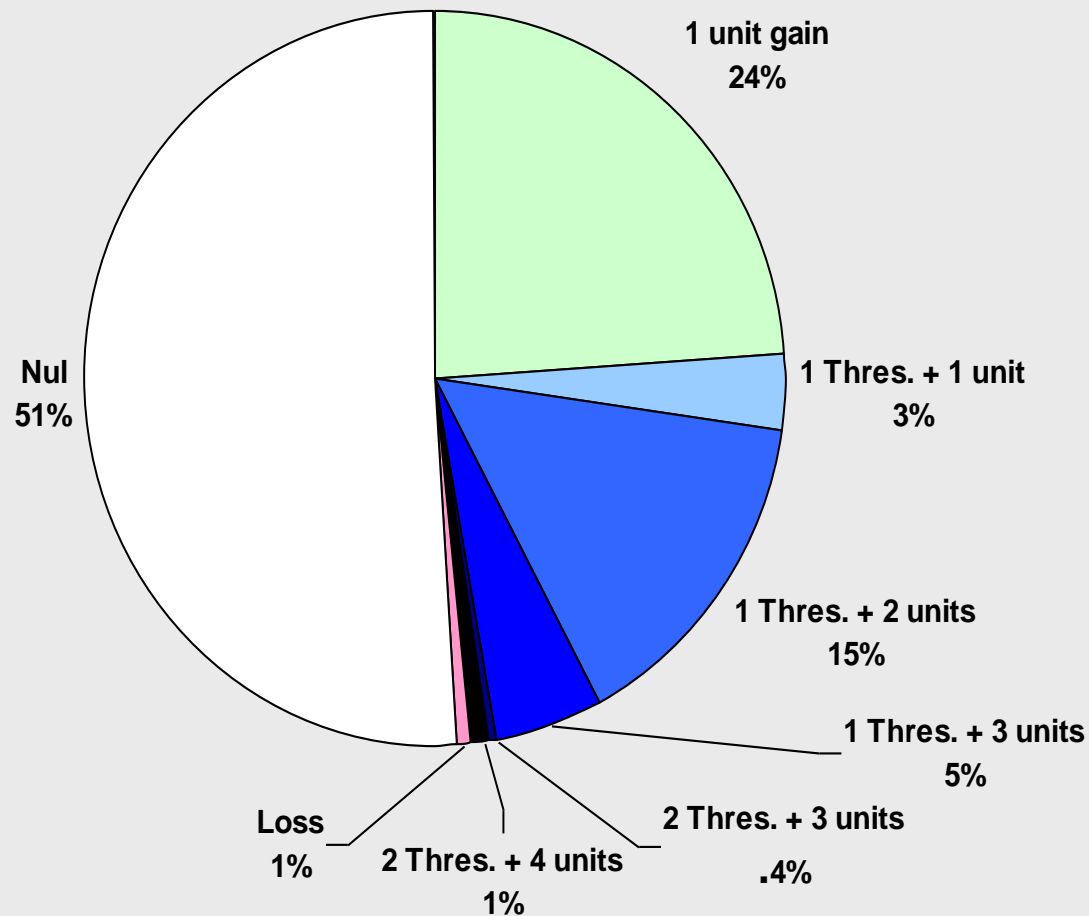
<i>Proficiency Code and Level</i>	<b>After Four Semesters (N = 481) (Mean 5.23; S.D. 1.71)</b>	<b>After Six Semesters (N=774) (Mean: 5.55; S.D. 2.09)</b>
3 Interm. Low	11.6	16.4
4 Interm. (1)*	23.0	18.1
5 Interm. High	<b>50.7</b>	<b>43.7</b>
6 Advanced.(2)	9.6	<b>13.6</b>
7 Adv. High	2.1	2.7
8 Superior (3)	2.9	5.4

# Listening Proficiency Levels Attained after 4 or 6 Semesters of College Russian (N = 1024)

<i>Proficiency Code</i>	<b>After Four Semesters (N = 325) (Mean 4.17; S.D. 0.75)</b>	<b>After Six Semesters (N=699) (Mean 4.24; S.D. 0.91)</b>
3 Interm. Low	<b>72.0%</b>	24.6 %
4 Interm. Mid (1)	17.3 %	<b>63.5 %</b>
5 Interm. High	6.3 %	8.8 %
6 Advanced (2)	1.4 %	1.4 %
7 Adv. High	.3 %	1.1 %
8 Superior (3)	.3 %	.4 %

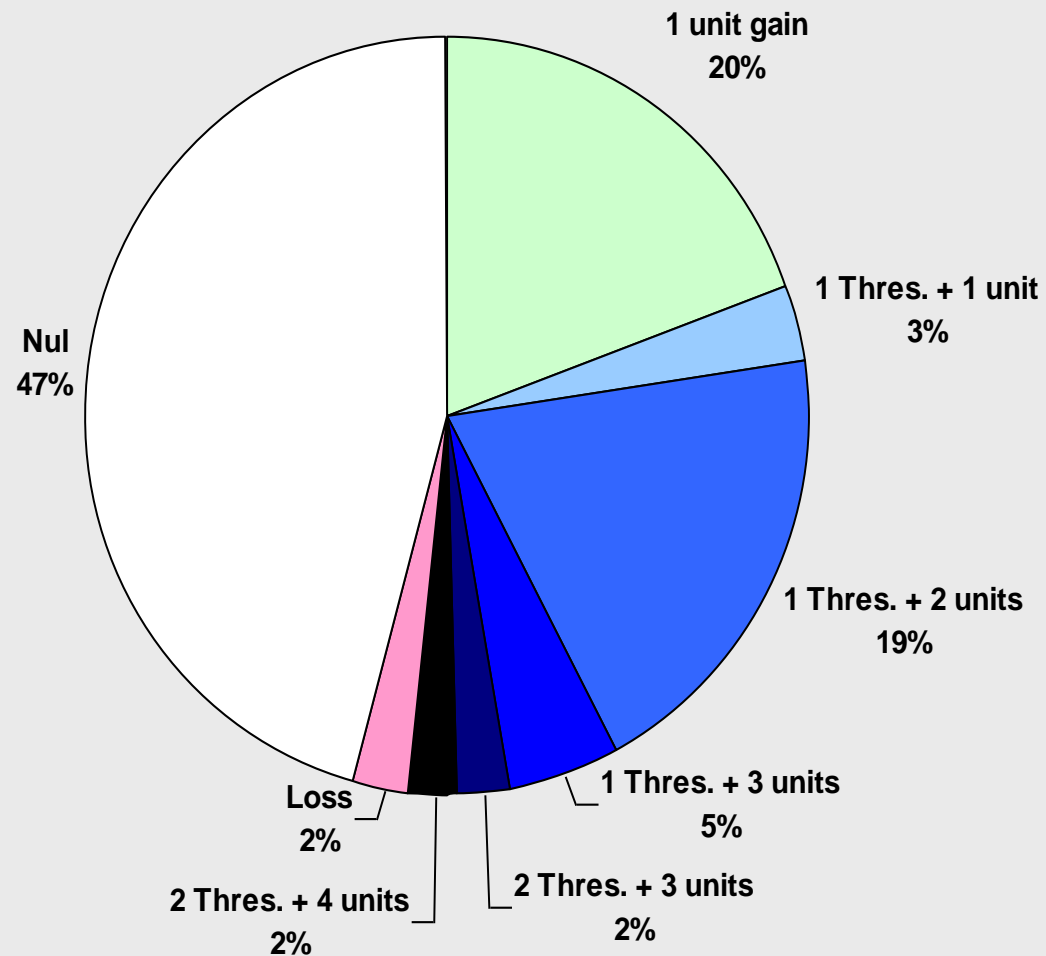
# Pre- to Post- Program Change in Listening Proficiency Scores for Summer Students

Chart Date: October 19, 2005, N=505



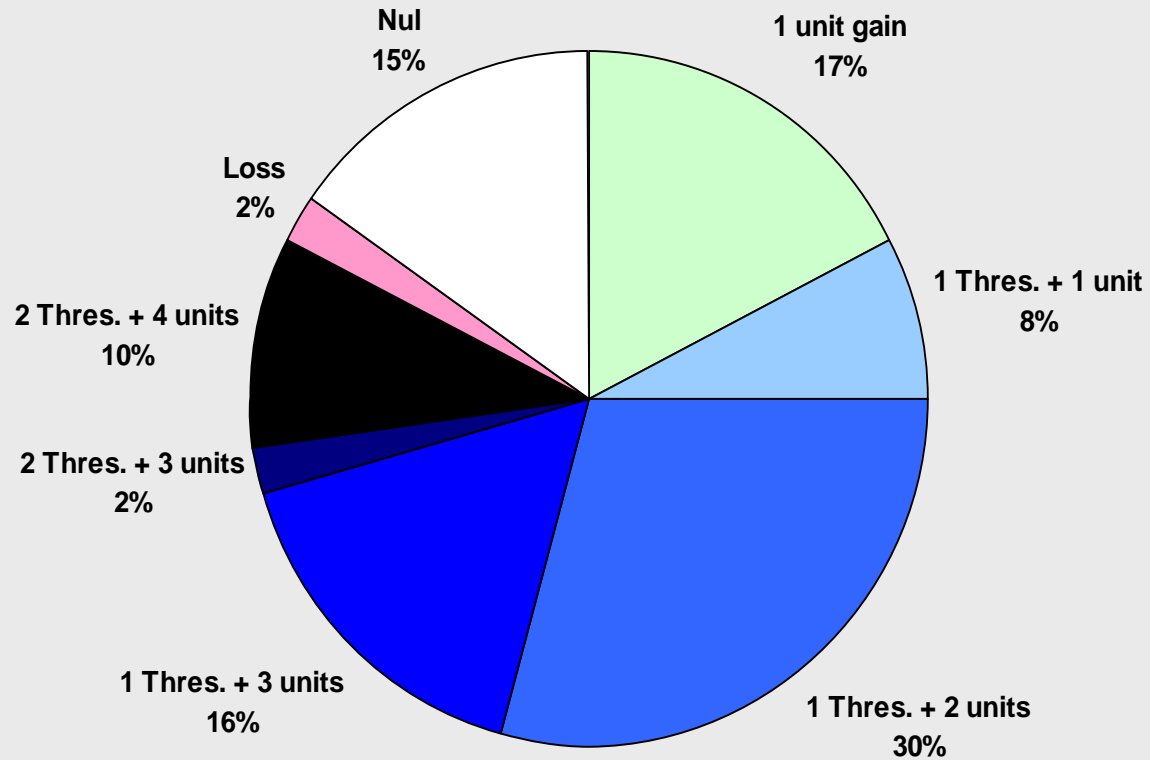
# Pre- to Post- Program Change in Listening Proficiency Scores for Semester Students

Chart Date: October 19, 2005, N=1392



# Pre- to Post- Program Change in Listening Proficiency Scores for Academic Year Students

Chart Date: October 19, 2005, N=92

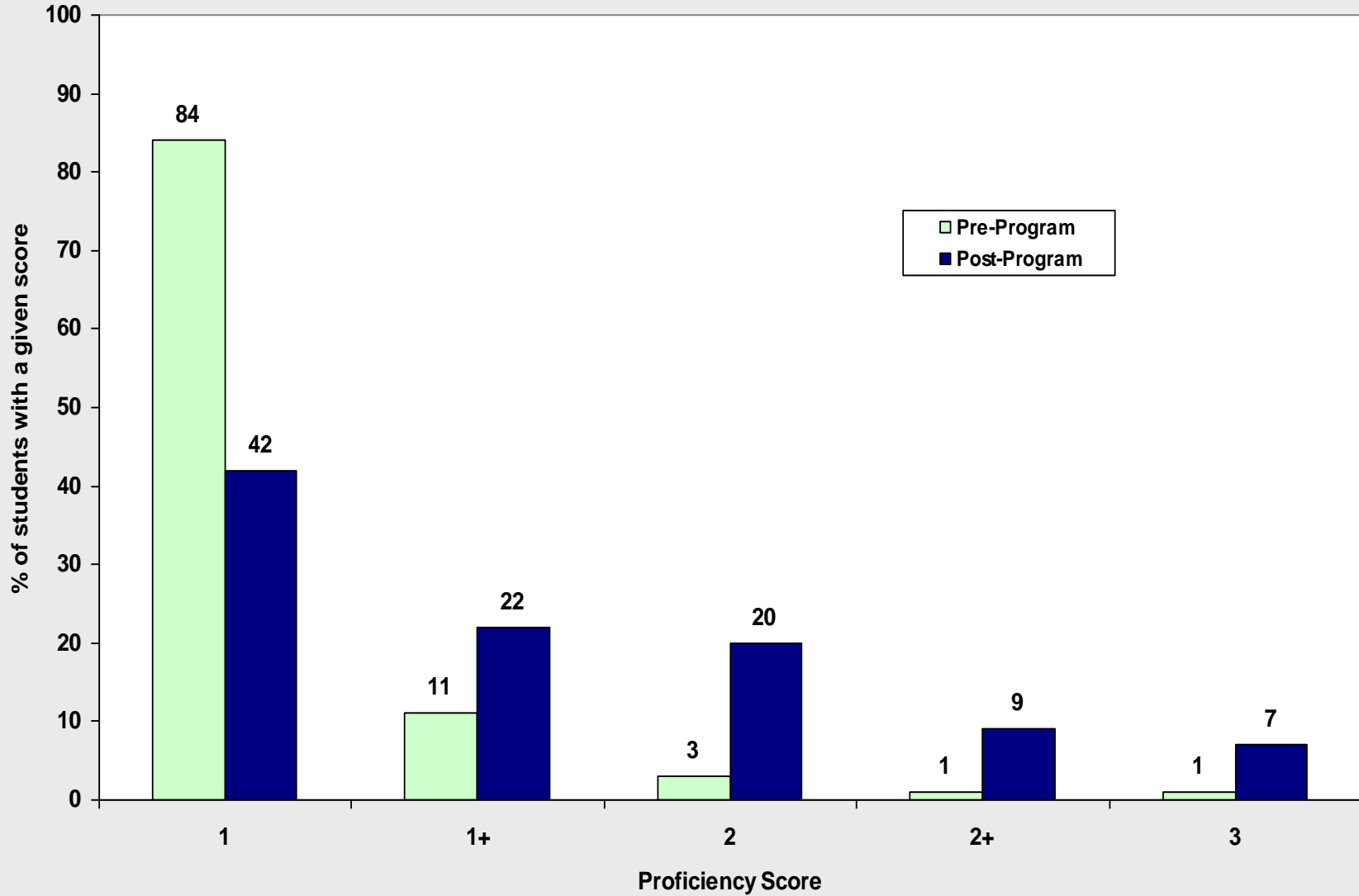




# Comparison of Pre- and Post- Program Listening Proficiency Scores

Semester Students Through October 2005

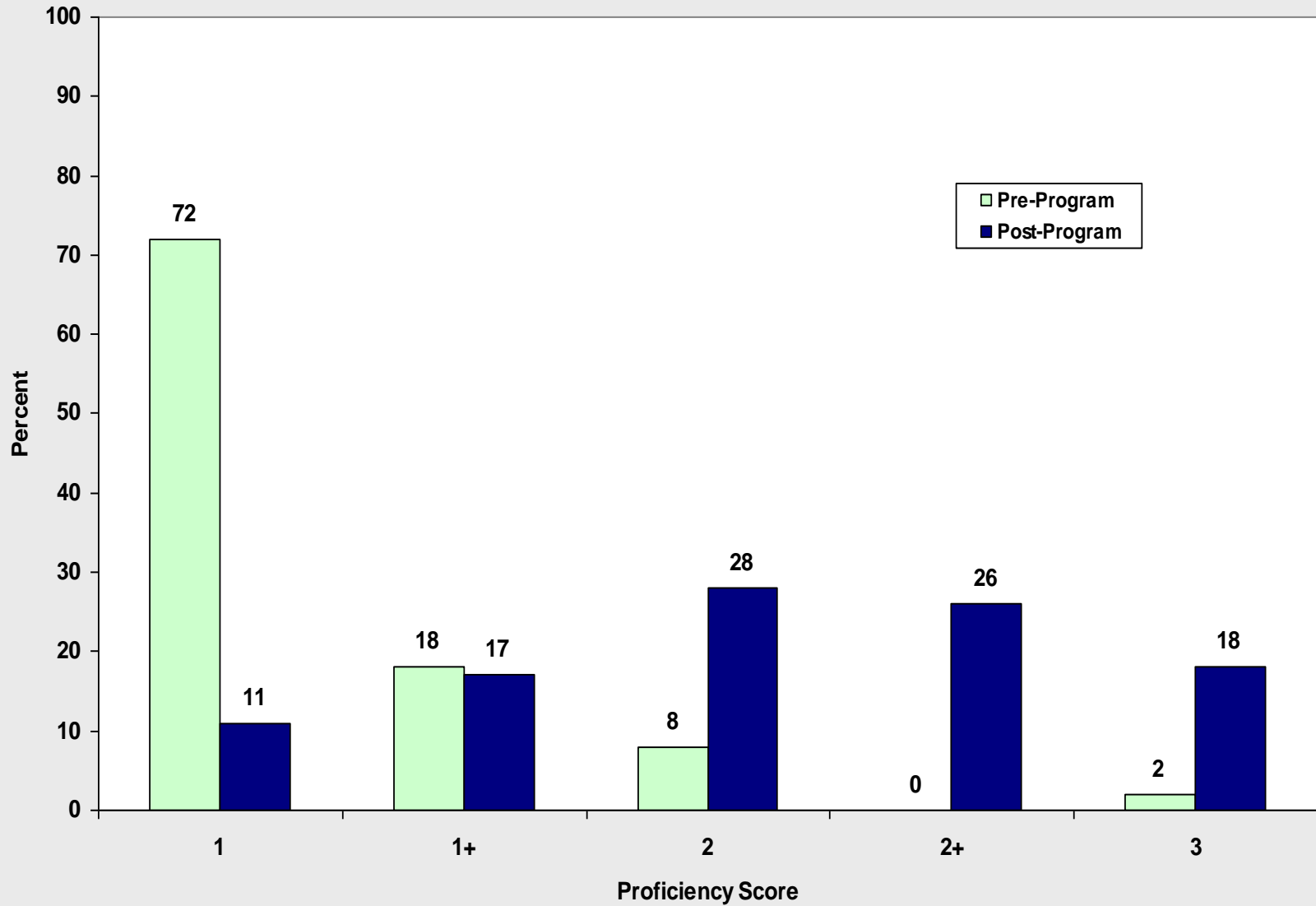
N=1392



# Comparison of Pre- and Post-Program Listening Proficiency Scores

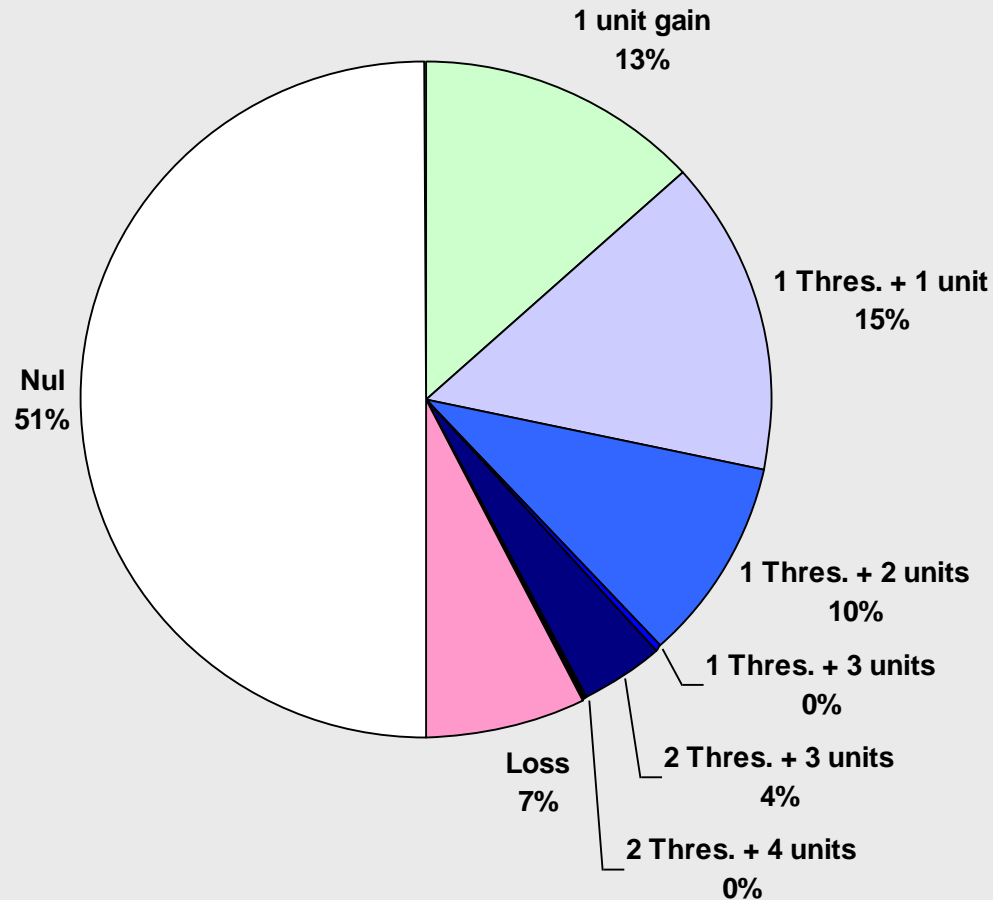
Academic Year Students Through October 2005

N=92



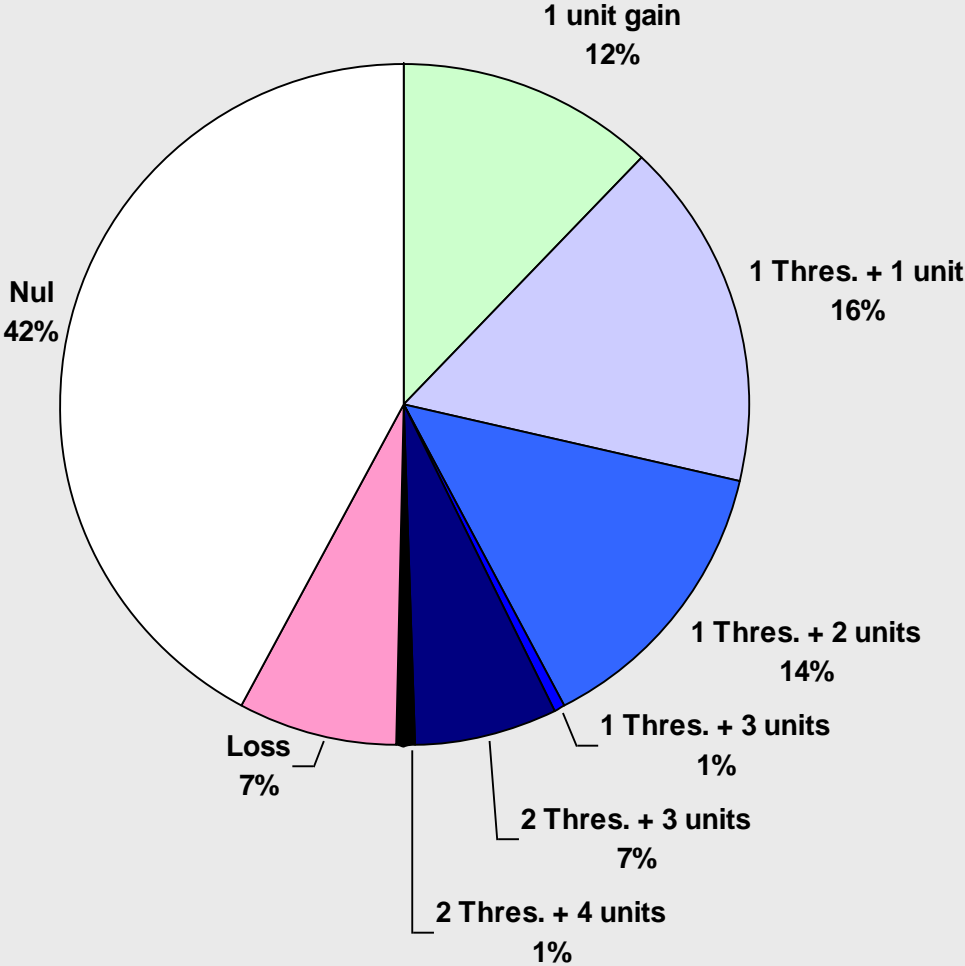
# Pre- to Post- Program Change in Reading Proficiency Scores for Summer Students

Chart Date: October 17, 2005, N= 799



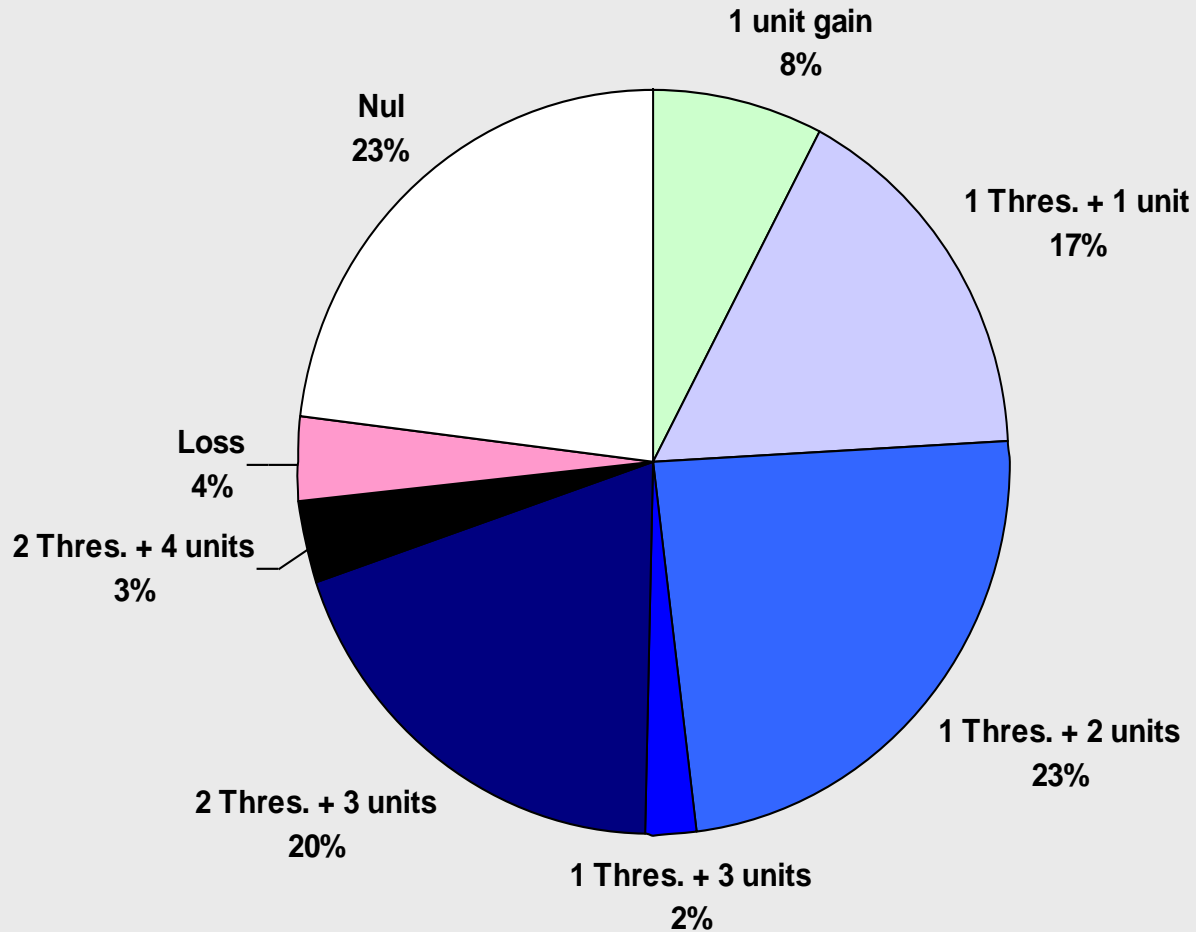
# Pre- to Post- Program Change in Reading Proficiency Scores for Semester Students

Chart Date: October 17, 2005, N=1803



# Pre- to Post- Program Change in Reading Proficiency Scores for Academic Year Students

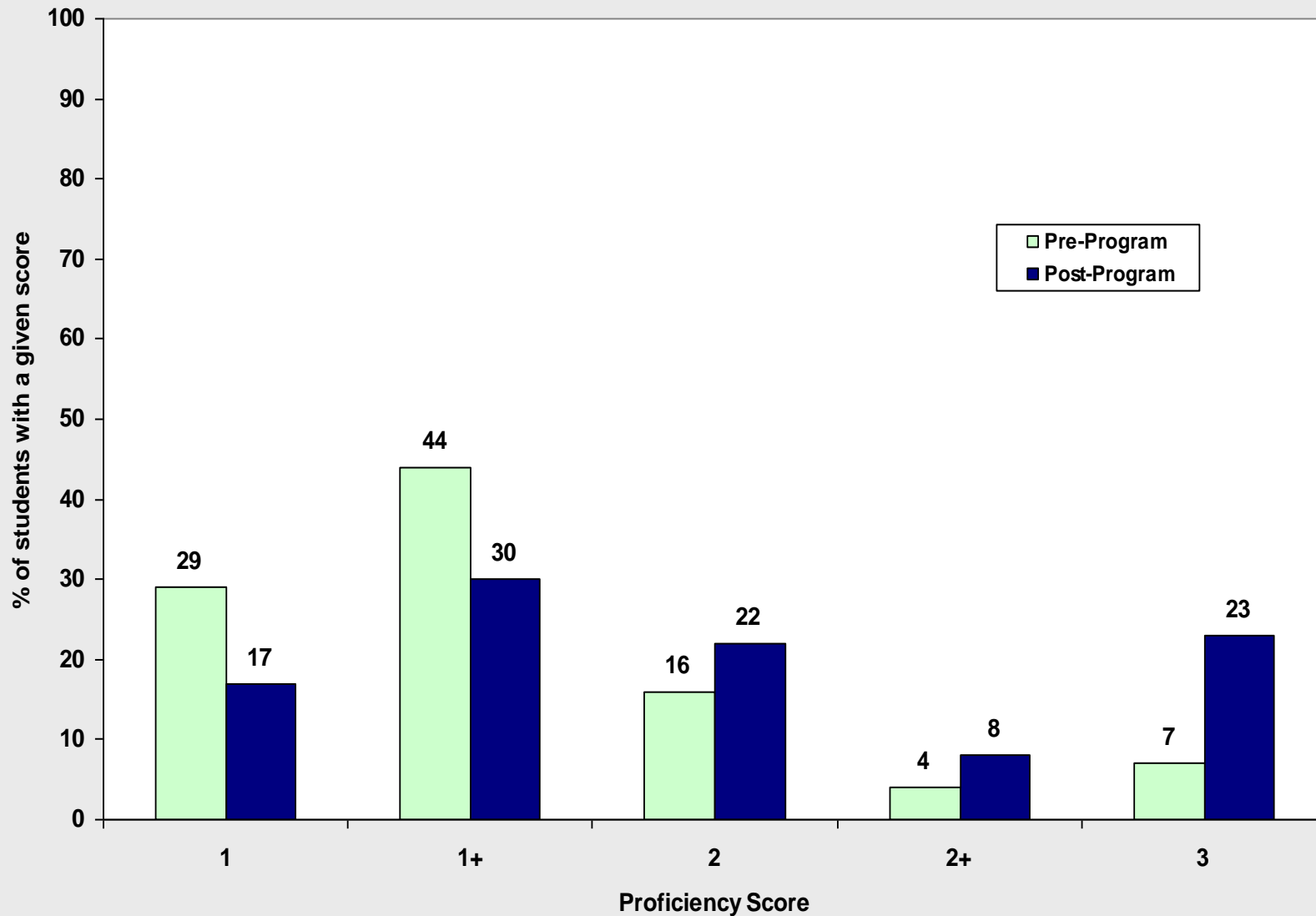
Chart Date: October 17, 2005, N=235



# Comparison of Pre- and Post-Program Reading Proficiency Scores

Semester Students Through October 2005

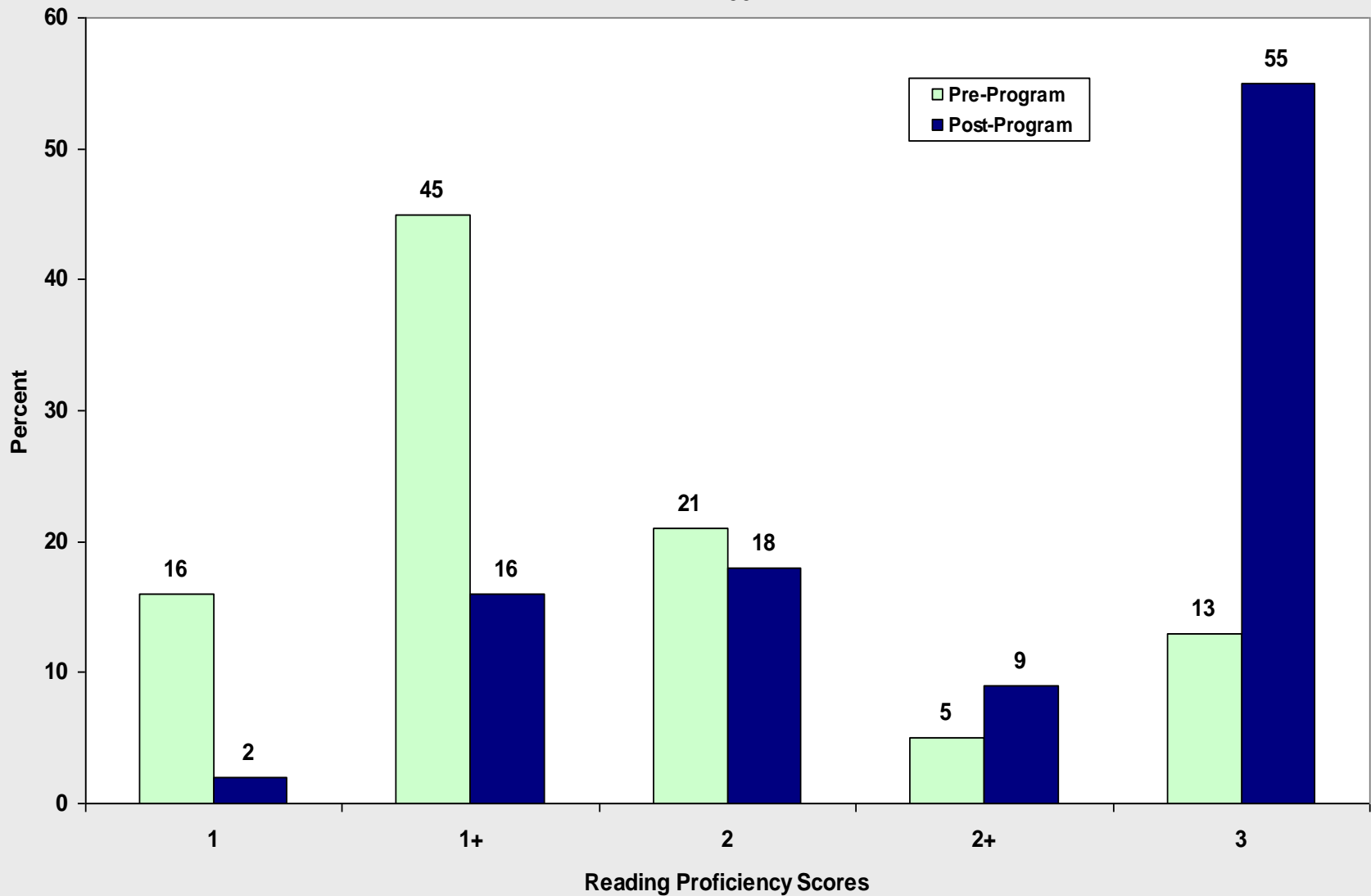
N=1803



# Comparison of Pre- and Post-Program Reading Proficiency Scores

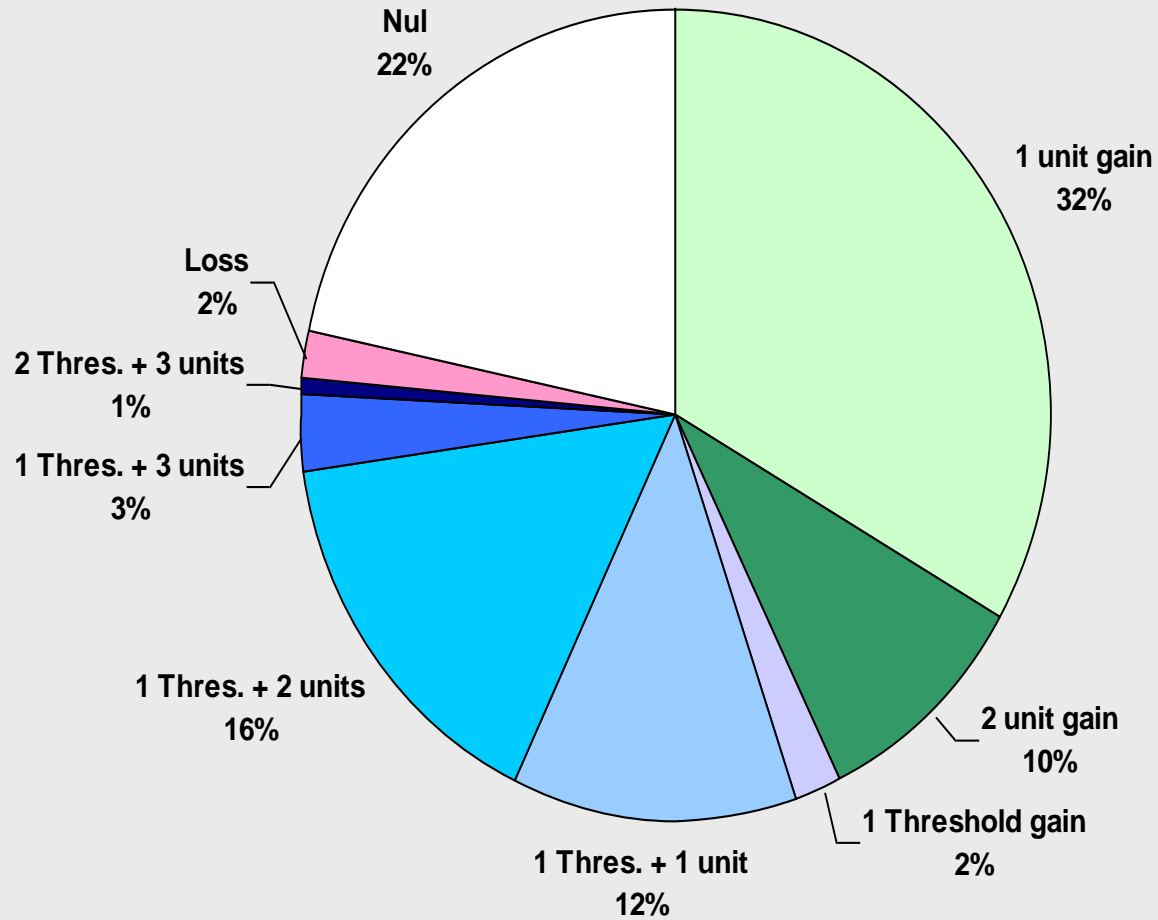
Academic Year Students Through October 2005

N=235



# Pre- to Post- Program Change in Oral Proficiency Scores for Semester Students

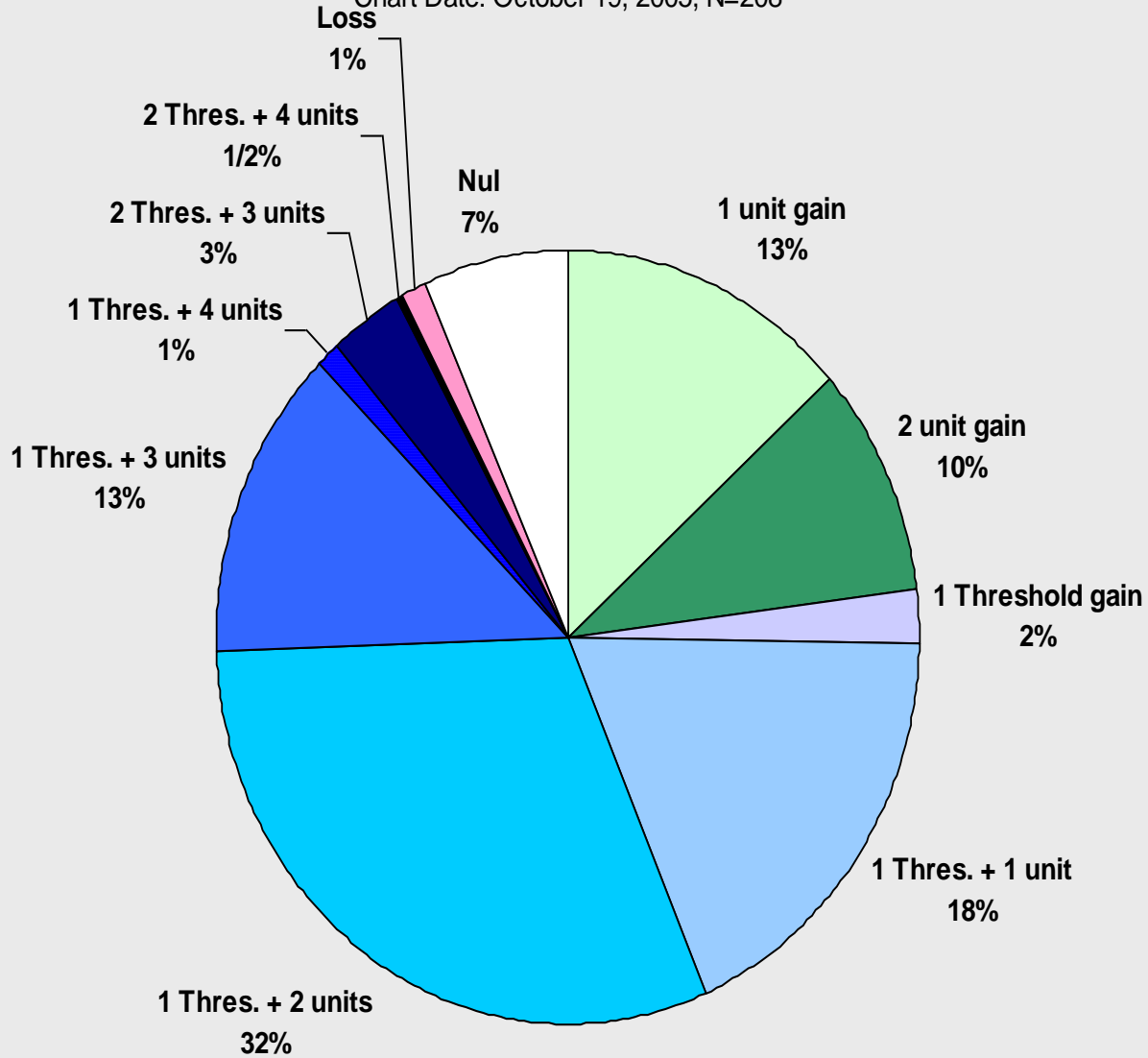
Chart Date: October 19, 2005 (N=1407)





# Pre- to Post- Program Change in Oral Proficiency Scores for Academic Year Students

Chart Date: October 19, 2005, N=208



# Mean Pre- to Post-Program Gains by Program Duration and Skill

American Councils for International Education: ACTR/ACCELS

Chart Date: October 18, 2005

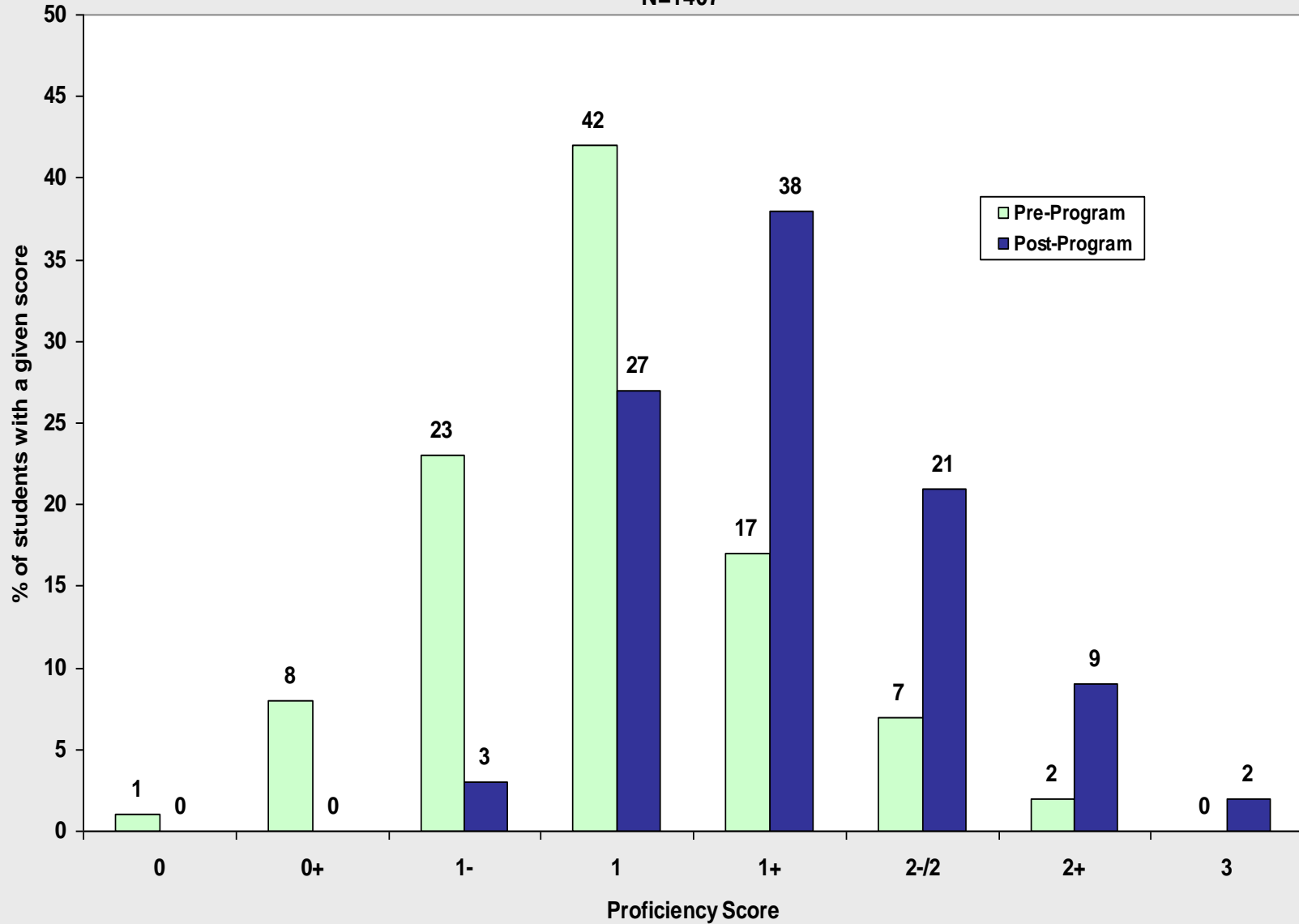
	Pre- Program	Post- Program	Change	Pre- Program	Post- Program	Change	Pre- Program	Post- Program	Change
<b>READING</b>	Summer (N=799)			Semester (N=1803)			Academic Year (N=235)		
Profic. Level	1+	1+		1+	2-		1+	2+	
Description	IH	IH		IH	AL		IH	AH	
Means*	6.7	7.8	+1.1 units	6.9	8.4	+1.5 units	7.6	10.7	+ 3.1 units
SD	2.2	2.8		2.3	3		2.6	2.8	
<b>ORAL</b>	TEST NOT ADMINISTERED			Semester (N=1407)			Academic Year (N=208)		
Profic. Level				1	1+		1	2-	
Description				IM	IH		IM	AL	
Means*				5.1	6.8	+1.7 units	5.2	8.3	+3.1 units
SD				1.8	2		2.1	2.4	
<b>LISTENING</b>	Summer (N=505)			Semester (N=1392)			Academic Year (N=92)		
Profic. Level	1	1+		1	1+		1	2	
Description	IM	IH		IM	IH		IM	AM	
Means*	5.2	6.5	+1.3 units	5.4	7	+1.6 units	5.7	9	+3.3 units
SD	0.9	2		1.2	2.4		1.6	2.6	

It is not possible to take a mean of proficiency scores recorded in the form of 1+, 2-, 2+, etc. Therefore equivalent whole numbers were assigned to each proficiency level. A 1 was assigned to the proficiency level of 0, a 2 to the proficiency level of 0+, etc. up to a 14 for a proficiency level of 3+. The means were based on the score equivalent for the levels. For example, since the equivalent whole number assigned to a proficiency score of 1+ was 6, a mean of 6.7 indicates a proficiency between 1+ and 2-. All means were rounded down to the nearest proficiency level that student had completely mastered. Lastly, a move from 1 to 1+ is a 1 unit move. Two units credit was given for threshold jumps from 0+ to 1-, 1+ to 2-, and 2+ to 3-.

# Comparison of Pre- and Post-Program Oral Proficiency Scores

Semester Students Through October 2005

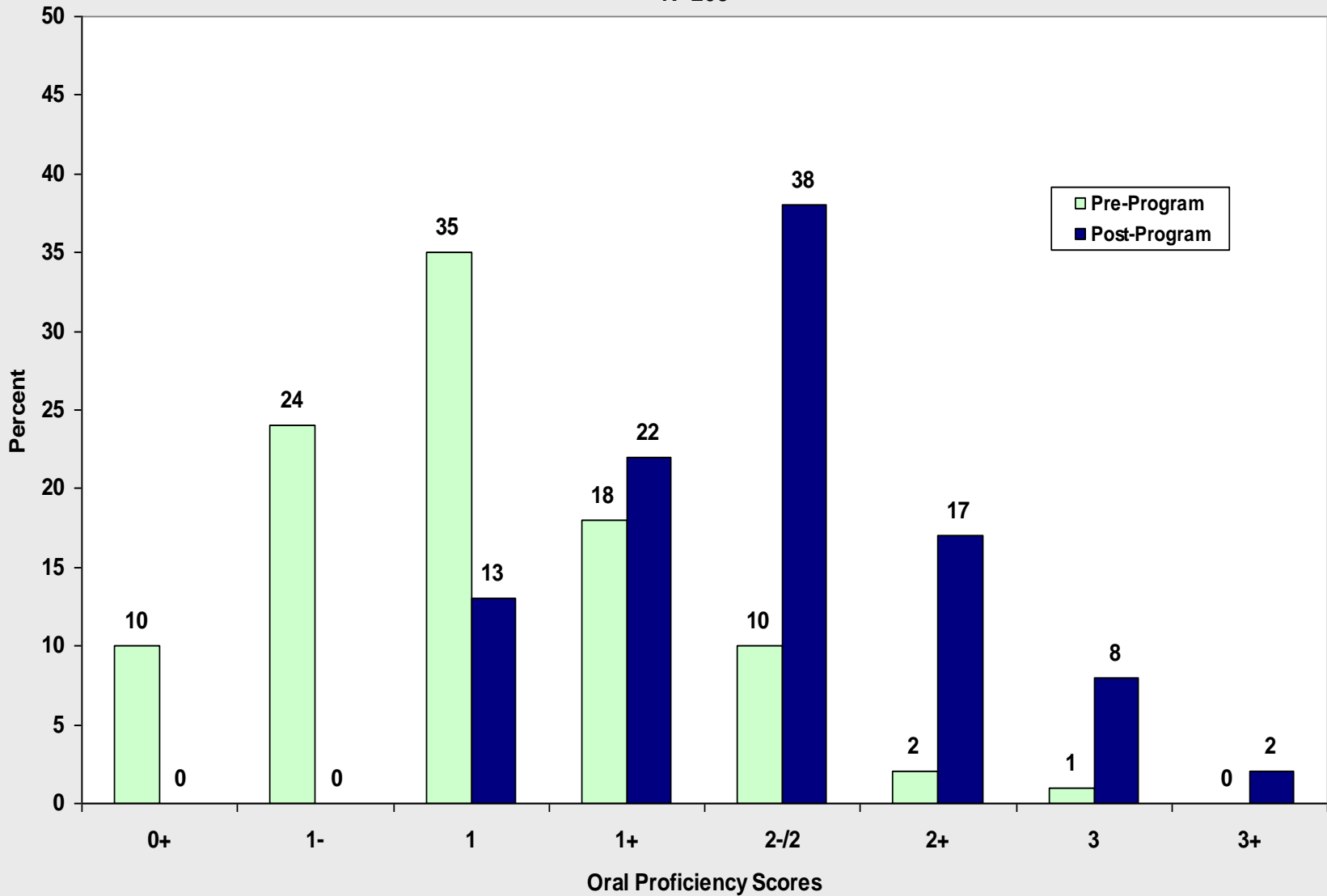
N=1407



# Comparison of Pre- and Post-Program Oral Proficiency Scores

Academic Year Students Through October 2005

N=208



# Oral Proficiency Attainment

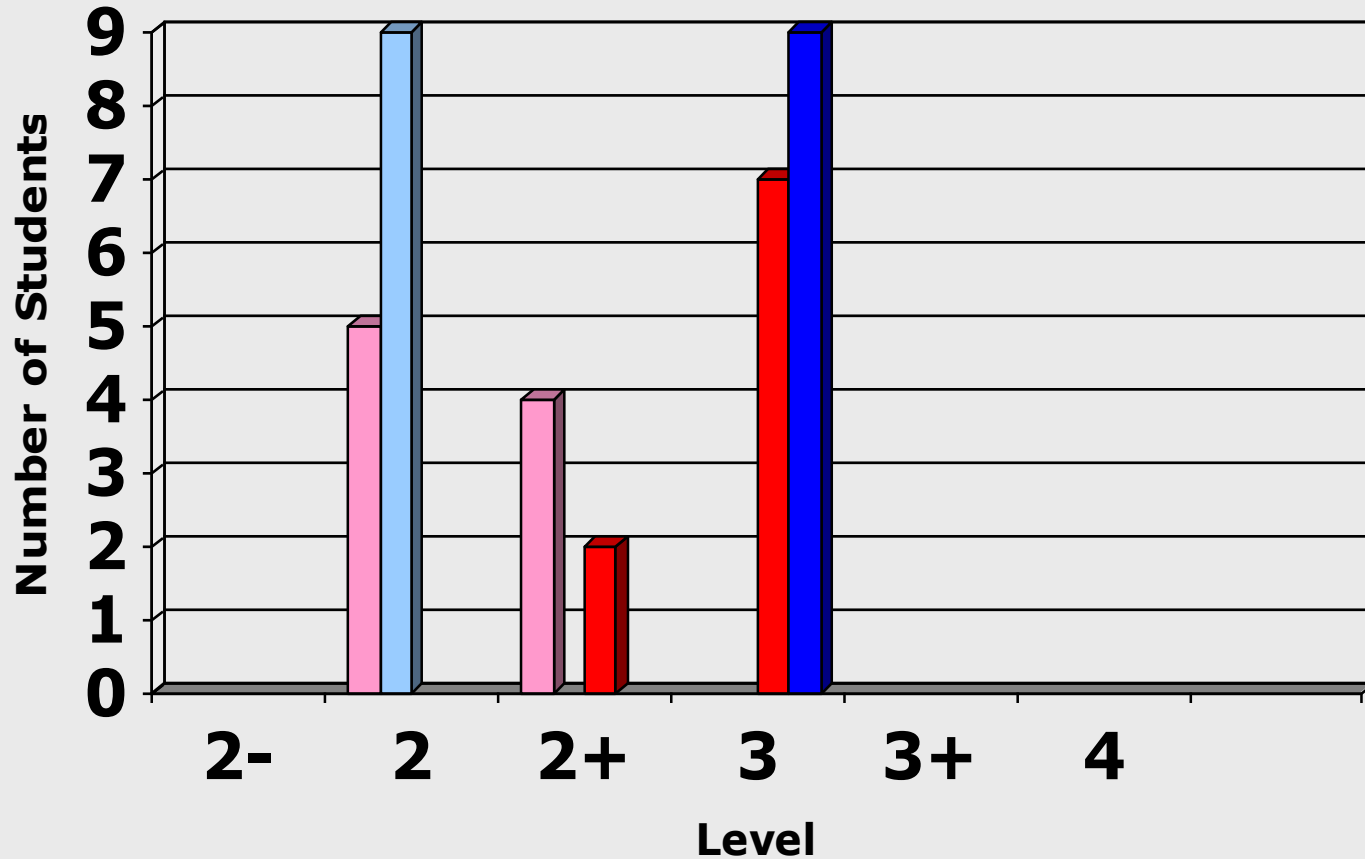
American Councils for International Education: ACTR/ACCELS

Chart Compiled: October 19, 2005

Pre-Program Level	Post-Program Oral Proficiency Level	Duration of Program	
		Semester (N=1,278)	9 Month, Two-Semester (N=178)
	<b>Nul Gain</b>	<b>4%</b>	<b>0%</b>
1-	1	47%	14%
1-	1+	42%	35%
1-	2-/2	6%	47%
1-	2+	1%	4%
1-	3	0%	0%
1-	3+	0%	0%
	<b>Nul Gain</b>	<b>25%</b>	<b>9%</b>
1	1+	48%	21%
1	2-/2	23%	52%
1	2+	4%	17%
1	3	0%	1%
1	3+	0%	0%
	<b>Nul Gain</b>	<b>40%</b>	<b>8%</b>
1+	2-/2	38%	42%
1+	2+	20%	39%
1+	3	2%	11%
1+	3+	0%	0%
	<b>Nul Gain</b>	<b>55%</b>	<b>38%</b>
2-/2	2+	38%	31%
2-/2	3	7%	31%
2-/2	3+	0%	0%
	<b>Nul Gain</b>	<b>53%</b>	<b>50%</b>
2+	3	47%	50%
2+	3+	0%	0%
	<b>Nul Gain</b>	<b>75%</b>	<b>33%</b>
3	3+	25%	67%

Note: These data *do not* include flagship students in the 9 month column

# Pre- and Post-Program **Speaking** Levels of Flagship Students. Comparison of US/EU Ratings



# Reading Proficiency Attainment

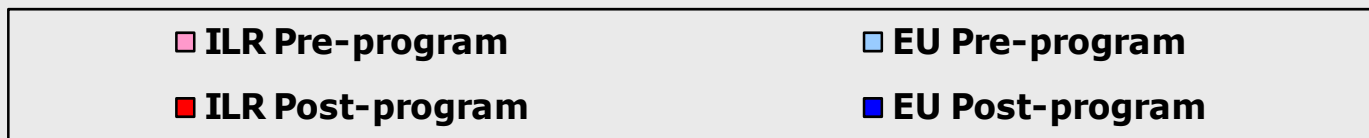
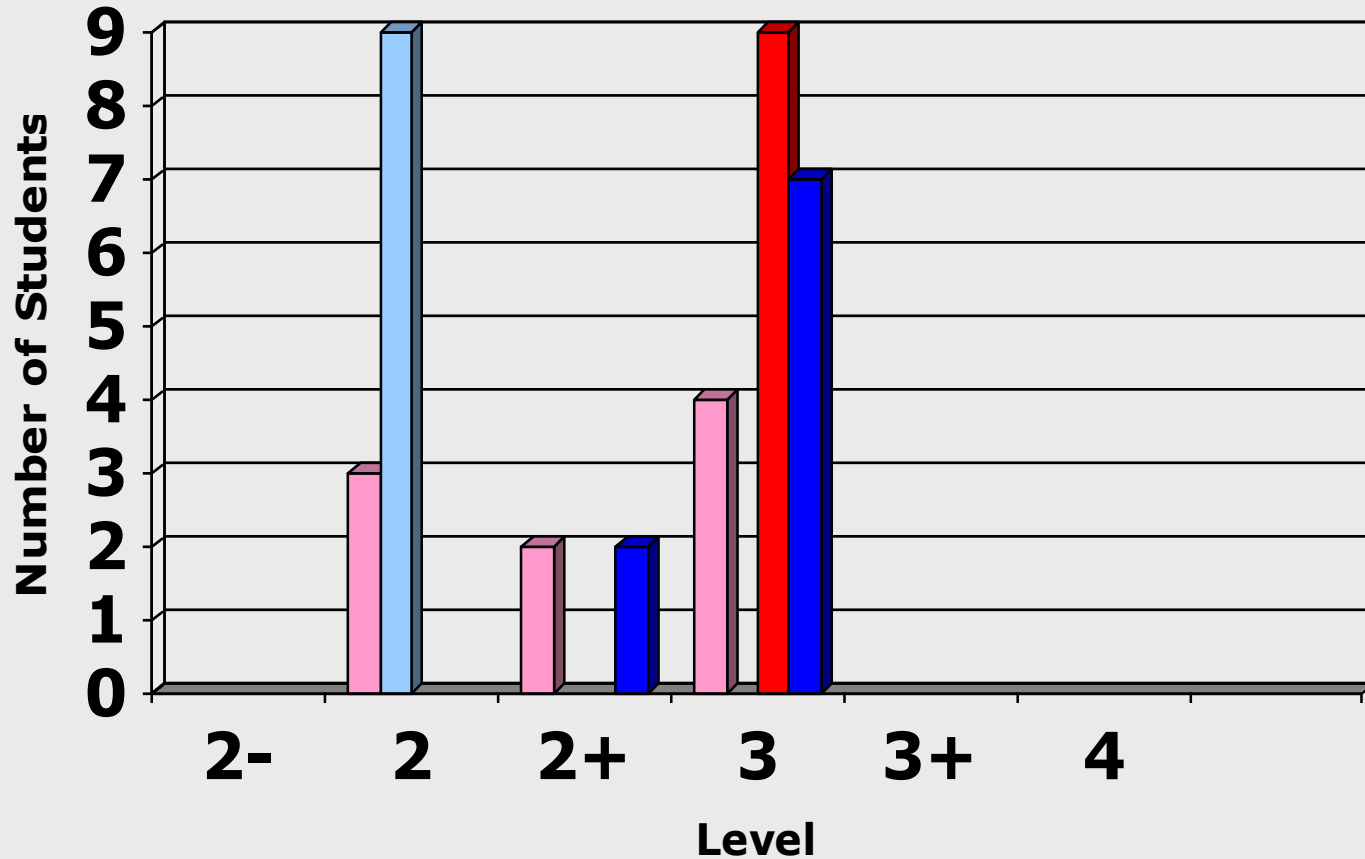
American Councils for International Education: ACTR/ACCELS

Chart Date: October 19, 2005

Pre-Program Reading Proficiency Level	Post-Program Reading Proficiency Level	Duration of Program		
		Summer (N=744)	Semester (N= 1,669)	9 Month, Two-Semester (N=197)
1	Nul Gain	44%	50%	8%
	1+	44%	34%	37%
	2	9%	10%	19%
	2+	1%	3%	14%
	3	2%	3%	22%
1+	Nul Gain	62%	45%	20%
	2	26%	32%	28%
	2+	4%	8%	9%
	3	8%	15%	43%
2	Nul Gain	49%	41%	13%
	2+	10%	15%	8%
	3	41%	44%	79%
2+	Nul Gain	38%	38%	30%
	3	62%	62%	70%

Note: These data *do not* include flagship students in the 9 month column.

# Pre- and Post-Program **Reading** Levels of Flagship Students. Comparison of US/EU Ratings





# Main Components of the Russian Flagship Program

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- *Formal Learning*
  - Language course work in small groups
  - Individual presentations (written and oral) on specialization area
  - Professional Course Work with native students to support knowledge/professional discourse development
  - Individual Language Tutors
- *Internships*
- *Discussion groups*
- *Homestays*
- *Integrated cultural program (bi-weekly, tied to thematic units of the Flagship course)*
- *On-going evaluation (testing, site visits, teacher/tutor reports, portfolio development, self-evaluation)*
- *Bi-weekly Language Utilization Reports (time-place, function)*

# Formal Training: Spring Semester

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Language Courses	Hours per week
<b><i>Group work:</i></b>	
■ Reading beyond the lines: literature and press	2
■ Mass-media: current social issues	2
■ Contemporary norms of spoken Russian	1
■ Words and meanings	2
■ Oral communication	2
■ Russian structure	2
■ Advanced composition	1
■ Language and Culture: IT	4
<b>■ <i>Individual Program:</i></b>	
■ Internships (1 full day per week plus some afternoons/eve.)	
■ Language tutorials	4

# Current / Recent Internship Placements

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- Department of Economic Georgraphy (RGPU)
- Likhachev International Humanitarian Fund
- Center for NGO Development
- Hermitage Museum- architectural archeology
- Environmental Rights Center "Bellona"
- Center "Strategiya" (SPB Think Tank)
- ASPRYAL/SPB
- Ernst & Young
- The Civil Society Fund, Eu. Int. University
- Leningrad Regional Press Service Center
- Magazine "Art & Times"
- City Hospital #2. Endocrinology Division.

# L-2 Use Outside of Class and Home Data from Advanced Level (Fall '04)

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- *Mean Frequencies of L-2 Use by Activity*

■ Tutorials	3.59	hrs/week
■ Internship	12.90	
■ Transit/shopping	2.96	
■ Friends	7.92	
■ Cultural events	2.65	
■ TV/Radio	4.66	
■ Press	1.64	
■ Academic reading	3.67	
■ Leisure reading	2.75	
■ Other	1.01	
■ Valid 55/Missing 0/	<i>Mean Total 43.6364 hrs/week</i>	

# Summary of Factors Affecting Gains on Three Language Modalities

<b>Gender</b>	2.04	-	-	-	2.84
<b>Age</b>	-4.25	-	-	-	-
<b>HS Russian</b>	-1.68	-	2.03	2.23	1.72
<b>College Russian</b>	-	-	-	-	-
<b>Slavic Languages</b>	-1.60*	*	-	1.48	1.99
<b>Non-Slavic Languages</b>	*	*	-	1.48	1.96
<b>Previous Immersion</b>	2.23	-	-	-	-
<b>Major</b>	-	-	-	2.13	-
<b>Program Date</b>	-	-	-3.55	-3.93	-

*Note:* Numbers are t-statistics from “good” models.

\* See Ginsberg 1992 for detailed data and analysis.

# Summary of Factors Affecting Gains on Three Language Modalities

<b>MLAT3</b>	4.45	*	-	-	-
<b>MLAT4</b>	*	*	-	-	-
<b>MLAT5</b>	-	-	-	-	-
<b>MLATSF</b>	-	6.73	-	-	-
<b>QualGram</b>	-	-	-	-	-
<b>QualRead</b>	*	3.40	-	-	-
<b>QualGen</b>	*	-	2.00	2.16	2.60
<b>ETSL1</b>	-16.50	1.66	-	-	-
<b>ETSR1</b>	7.80	8.98	2.48	2.40	-
<b>OPI1</b>	-	-	-9.04	-9.72	-

Note: Numbers are t-statistics from “good” models.  
\* See Ginsberg 1992 for detailed data and analysis.

# Three Additional Predictors (Golonka)

Means

Variable	Null	Gain	High	<u>P</u>
Qualifying Grammar Test	53.5	66.9	61	.097
Percentage of Errors	13	9.6	5.8	.012
Self-Corrected Errors	3.7	6.2	9.8	.023
Sentence Repair	.7	2	5.2	.005
Number of Types	109	123	176	.002
Number of Tokens	296	313	588	.001

**Model Strength = 59.9%**

**Canonical Correlation = .774**

# Beyond SA 101: Operational recommendations

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- 1. Meta-cognitive preparation of Learners: self-managed learning; incl. “identity competence” (Pelligrino, 2005)**
- 2. On-site faculty development training, e.g. student-centered forms of teaching**
- 3. Hybrid program development overseas of “supported” and “unsheltered” activities**
- 4. Professional oversight in the mechanism for selection and monitoring of internships and host families**



# **Policy Recommendation: Study abroad should be the norm in US education.**

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- Motivational/dev. role in K-12
- Integrative role JYA (Advanced)
- “Pathway” to Professional (Flagship)
- Essential for faculty development at all levels
- 45% entering freshmen claim intent to study abroad; annually only 1-2% actually do. (ACE, 2003).
- EU goal is 10% mobility/currently 8%
- Lincoln Commission: 1 million by 2016.

## Policy recommendations, cont.

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- Do not overestimate the impact of short-term SA programs in producing measureable gains. Much of the increase in US SA in recent years based on short stays.
- Base-levels of proficiency during SA have very significant effects on L-2/C-2 integration, utilization, learning
- Long-term SA (9-12 months) contributes substantially to acquisition at high-levels of proficiency for a range of learners.

# Oral Proficiency Gain by Program Year (in percent)

Program Year	Loss	Nul Gain	w/in Threshold	1 Threshold	1+ Threshold	2 Thresholds
1994	4.30%	13%	43.50%	30.40%	0	8.70%
1995	3.20%	46%	33.30%	17.50%	0	0
1996	0	38.70%	30.60%	25.80%	1.60%	3.20%
1997	0	18.20%	42.90%	39%	0	0
1998	0	8.50%	52.10%	38%	1.40%	0
			Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Ordinal by Ordinal Kendall's tau-b N of Valid Cases = 296			0.148	0.047	3.148	0.002

Asymp. Std. Error not assuming the null hypothesis.

Approx. T using the asymptotic standard error assuming the null hypothesis.

# Regression Model Summary: Gain in a Single Skill (2005) (N = 3220)

**a Predictors of Gain in 2005:**

**p < .05**

<b>Pre Reading Test</b>	<b>.000</b>
<b><i>Program Duration</i></b>	<b>.000</b>
<b>H/S Russian in high school?</b>	<b>.062</b>
<b>Initial levels of oral</b>	<b>.000</b>
<b>listening</b>	<b>.020</b>
<b>reading</b>	<b>.000</b>
<b>Age at time of SA</b>	<b>.013</b>
<b>Qualifying Grammar Score</b>	<b>.000</b>

*but,*

<b>Gender</b>	<b>.654</b>
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**R = .590, R Square .348, Adjusted R Square .346**

# ANOVA (b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1208619.971	8	151077.496	217.583	.000(a)
	Residual	2264955.854	3262	694.346		
	Total	3473575.825	3270			

a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile

b Dependent Variable: **Max gain across four measures**

# Regression Model Summary: Mean Gains across multiple skills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518(a)	.268	.266	21.63755

**a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile**

# ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	559502.684	8	69937.835	149.381	.000(a)
	Residual	1527214.978	3262	468.184		
	Total	2086717.662	3270			

**a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile**

**b Dependent Variable: Mean gain across four measures**

# Regression Model Summary: Oral Proficiency Gain

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.557(a)	.311	.309	14.89582

**a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile**



# ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	326374.541	8	40796.818	183.864	.000(a)
	Residual	723790.654	3262	221.886		
	Total	1050165.195	3270			

**a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile**

**b Dependent Variable: Gain Oral percentile**

# Regression Model Summary

## Listening Comprehension

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415(a)	.173	.171	17.52975

**a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile**

# ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	209067.314	8	26133.414	85.044	.000(a)
	Residual	1002387.470	3262	307.292		
	Total	1211454.784	3270			

a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile

b Dependent Variable: **Gain Listening percentile**

# Regression Model Summary: Reading Comprehension Gain

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.375(a)	.141	.139	22.57213

**a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile**

# ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	272166.880	8	34020.860	66.773	.000(a)
	Residual	1661991.722	3262	509.501		
	Total	1934158.602	3270			

a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile

b Dependent Variable: **Gain Reading percentile**

# Regression Model Summary: Reading Comprehension Gain

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.430(a)	.185	.183	23.00493

a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile

# ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	390647.340	8	48830.917	92.268	.000(a)
	Residual	1726338.027	3262	529.227		
	Total	2116985.367	3270			

a Predictors: (Constant), Pre Reading Test percentile, Program Duration (Summer = 7 weeks, Semester = 15 weeks, AY=34 weeks), Gender, Did the student study Russian in high school?, Pre Oral percentile, Pre Listening percentile, Age at the time of the exchange, Pre Reading Level percentile

b Dependent Variable: **Gain Reading Test percentile**

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