Effects of Peer-learning on Students’ Linguistic Development in Russian

PROJECT DIRECTOR AND PRINCIPLE INVESTIGATOR:
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FUNDING LEVEL REQUESTED: Phase II

DURATION OF FUNDING PERIOD: Two years
II. RESEARCH PROJECT

1. STUDY PURPOSE & RESEARCH OBJECTIVES
As economic and political climates change, so does the list of critical languages. Russian, however, has remained on this list since the Cold War, and the need for Russian shows no sign of weakening. The sheer number of Russian primary and secondary speakers approaches 255 million according to the *Ethnologue* (2010). The economic power and strategic location of countries where Russian is spoken (not just Russia, but also former Soviet Republics) guarantee this language a solid position within the US foreign language education system.

Despite the dire need for proficient speakers of Russian in many sectors in the United States, a typical post-secondary Russian language program produces speakers with no higher than Intermediate High proficiency level based on the ACTFL\(^1\) proficiency scale, or 1+ based on the ILR\(^2\) scale (Carroll 1967a, 1967b).\(^3\) Rifkin (2005) attributes this “ceiling effect” to the insufficient number of instructional hours. The Foreign Service Institute estimates that a native English speaker requires a minimum of 720 hours of instruction to achieve the Advanced level of proficiency in Russian, and at least 1320 hours to reach the Superior level (Omaggio-Hadley, 2001). At the same time, a typical four-year undergraduate program offers only 420 hours of instruction in Russian. While a dramatic increase of instructional hours across post-secondary institutions is too costly and generally unfeasible, individual programs can and should make every effort to optimize Russian language instruction and to push for higher linguistic gains. How can this be achieved without committing teaching faculty to working longer hours or asking students to complete mundane exercises? Peer-learning offers a cost-efficient and engaging product-oriented solution.

The proposed project has a threefold purpose: 1) to increase the amount of time students engage in meaningful one-on-one communication through peer-interaction; 2) to explore the learning potential of peer-to-peer interaction; and 3) to develop new assessment tools based on corpus analysis of speech patterns observed in peer-to-peer interaction.

The study addresses the following research questions:

1) Does peer-to-peer interaction positively affect students’ acquisition of Russian? Of particular interest is their functional ability, that is the ability to engage in conversation and sustain interaction by asking questions, to describe and narrate, and to perform typical speech acts (i.e., apologies, requests, compliments, thanks, etc.)

2) What linguistic domains are affected the most by peer-learning – i.e., phonology, morphology, syntax, or pragmatics?

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\(^1\) ACTFL – The American Council on the Teaching of Foreign Languages

\(^2\) ILR - the Interagency Language Roundtable

\(^3\) More recent data show higher gains of Advanced Mid (Swender, 2003), however the author interviewed only 7 graduates – too small a number to render her findings conclusive. Data that seem more realistic, although somewhat disconcerting, come from Thompson’s study (1996) who gathered empirical evidence on proficiency levels attainable within the context of academic Russian language programs. Upon four-skill ACTFL proficiency testing of 56 students, Thompson concludes that there is “no exact correspondence between levels of study and levels of proficiency in speaking, reading, listening, and writing” (p. 60).
3) Does peer-learning affect learners’ metalinguistic awareness?

4) Does discourse produced during peer-to-peer interaction offer sufficient evidence for assessing students’ linguistic development? Can discourse-based assessment replace regular classroom tests? What rubrics will be used for such assessment?

5) How do students respond to peer-interaction and how do they evaluate peer-learning? Does peer-learning help create a community of practice?

2. PREVIOUS RESEARCH RESULTS
The role of interaction has received considerable attention in second language acquisition (SLA) research (Gass 1997; Long 1996; Pica 1994), and with the advent of interactionist theory, interaction is once again on the scholarly agenda (e.g., Samuda & Bygate 2008). Most of the studies, however, have focused on interaction between learners and native speakers, and have generally neglected peer-interaction. This study intends to close this gap. Furthermore, no study to date has examined learners’ development in Russian as a second language, which makes the proposed project especially timely and significant.

Empirical studies show that learners benefit from interacting with native speakers: having to make their messages more comprehensible, learners gradually restructure their interlanguage toward greater accuracy and complexity (Gass et al. 1998). Interaction with native speakers offers a cushioning scaffolding that helps learners practice their newly acquired linguistic knowledge and extend it to higher levels. Explicit correction, recasts, clarification requests, metalinguistic feedback, elicitation, and repetition – behaviors typically occurring during interaction - have been implicated in helping learners’ linguistic development (Lyster & Ranta 1997). Linguistic features that have been noted to be affected by interaction are usually those of higher-level morphosyntactic forms – e.g., questions (Gascoigne 2004).

Given that most empirical evidence has come from languages such as English and Spanish, with data being collected in laboratory settings in which native speakers interacted with learners (c.f., Mackey, 2007; Gass et al. 2011), it is not clear whether the findings are applicable to peer-interaction when learners interact with one another using Russian as a means of communication. This study intends to examine whether findings of the laboratory research on interaction can be applied to peer-learning. To this end, the study will analyze and measure learning outcomes of peer interaction. A learner corpus will be created to measure individual linguistic development over the period of one year, with an interim assessment after one semester.

Research undertaken within the interactionist paradigm does not explore the issue of assessment. This study is going to compare learners’ performance on regular tests with their linguistic output during peer-to-peer interaction. A set of assessment rubrics will be developed in order to conclude whether the learner extended discourse offers sufficient and reliable basis for assessment. The study will also make recommendations about the timelines for such assessment – i.e., whether one semester of data is sufficient to detect any significant development in learner interlanguage. This is particularly important, given the reported inadequacies of the ACTFL scale to register small gains, especially within pragmatics (Norris 2006; with respect to Russian data - Shardakova 2005). Another serious limitation of the ACTFL OPI testing is its high cost – a single academic OPI costs $134.

Outside of foreign language teaching, the efficiency of peer-learning has been identified for co-construction of knowledge (cf., science Tessier 2004, writing Youngs & Green, 2001). It has been
shown that peer-learning is effective, because it increases the students’ mastery of conceptual understanding and problem solving, and provides additional practice, especially when large classes may not offer enough personal attention to students (Rodriguez-Sabater: 534).

3. STUDY SIGNIFICANCE AND IMPACT

*Impact on undergraduate teaching*

The project aims to significantly invigorate the Russian language classroom at the undergraduate level. Courses that will participate in this project will include SLAV-R 201, SLAV-R 202, SLAV-R 301, SLAV-R 302.

With the current maximum enrollment for Russian language courses set at 20, it is virtually impossible to engage students in meaningful L2 communication and to provide feedback. Consequently, even though we embrace a communicative approach to Russian language teaching, we do not offer students enough learning opportunities for practicing various functions in their second language. Short adjacent question-answer pairs remain the predominant form of classroom communication with a few exceptions of slightly more extended discourse when students are asked to retell a story or describe something. Clearly, advanced level of proficiency will remain unattainable unless learners are given substantial time to speak. For instance, *the 2012 ACTFL Proficiency Guidelines* describe an Advanced level speaker is an individual capable of consistently producing paragraph-length discourse, narrating and describing in all time frames:

> Speakers at the Advanced level engage in conversation in a clearly participatory manner in order to communicate information on autobiographical topics, as well as topics of community, national, or international interest. The topics are handled concretely by means of narration and description in the major time frames of past, present, and future. The language of Advanced level speakers is abundant, the oral paragraph being the measure of Advanced level length and discourse. Advanced level speakers have sufficient control of basic structures and generic vocabulary to be understood by native speakers of the language, including those unaccustomed to non-native speech. (*ACTFL Proficiency Guidelines*, 2012: p.4)

The proposed project will provide students with the much-needed time for communicating in the second language within the Russian curriculum, without borrowing time from students’ other pursuits. This goal will be achieved mainly through the restructuring of homework assignments: a portion of the daily workbook exercises will be replaced by students’ self-recordings, for which they will be asked to prepare short narrations or descriptions on a given topic; they will then engage in a discussion of the topic with their peers. To ensure that students get sufficient positive input, they will be provided with model speech samples recorded both by the instructor, graduate students, and upper-level classmates. Students will be asked to prepare self-recordings once a week with ensuing 15 minute peer-to-peer discussions.

Participating students will be enrolled at two levels – second-year Russian and third-year Russian. The second-year Russian students will prepare self-recordings, while the third-year Russian students will be responsible for providing feedback to their second-year peers, and for leading the discussions.
Both groups of students will be pushed toward higher levels of proficiency – they will be instructed on how to produce target-like narrations and descriptions; similarly, they will be trained in appropriate interactive strategies – e.g., opening and closing a conversation, asking for clarifications, asking questions, making requests, etc. which will be followed by extended interactions with peers.

Another important aspect of this project is the creation of a community of practice that will integrate instructor, graduate students, and participating undergraduates.

*Impact on graduate teaching/learning*

The study will have a significant effect on the two graduate students participating in this project. Not only will they gain experience with experimental studies, they will also reflect on teaching practices and methodologies, which should help them develop their professional identities both as researchers and teachers.

*Impact on assessment*

As the field of foreign language teaching evolves, so do the methods of assessment. Nowadays, alternative assessment, based on authentic tasks which demonstrate learners’ ability to accomplish communication goals, receives particular prominence. After all, the very purpose of our teaching is to help students communicate meaningfully in a second language.

This project will develop an assessment tool to evaluate students’ ability to produce extended monologic and dialogic discourse. To this end, a learner corpus will be created and analyzed, and assessment rubrics will be suggested. To establish reliability of the new assessment tool, it will be compared with the ACTFL OPI.

In addition, a separate questionnaire will be developed and distributed among participating students in order to find out the perceived benefits of peer-learning. Of particular interest will be whether learners perceived the feedback provided by their peers as reliable. It will also be important to find out whether learners have become more confident L2 speakers.

4. OUTCOMES FROM THE WORK AND HOW THEY WILL CONTRIBUTE TO THE ASSESSMENT OF STUDENT LEARNING AT INDIANA UNIVERSITY, WHETHER THAT BE WITHIN A COURSE, A CURRICULUM, A PROGRAM, OR INSTITUTIONALLY

One of the study’s priorities is to devise new assessment tools which would allow for the evaluation of students’ linguistic progress based on actual communication, that is, on the extended monologic and dialogic discourse that students will produce over the course of an academic year. Traditional pencil-and-paper tests, though easy to administer and check, do not fairly represent students’ functional ability. Having embraced a communicative approach, it is necessary to implement new assessment techniques appropriate to the language we are trying to teach. These new assessment techniques will be piloted in four Russian language courses – SLAV-R 201/202 and SLAV-R 301/302. Give adequate technological support, this assessment might be further implemented within the entire five-year Russian language curriculum and, potentially, in other language classes. Other Slavic languages will be the most
appropriate extension of this assessment, given structural linguistic similarities. However, discourse-based assessment – with suggestions for scoring various discursive features - is equally applicable across all foreign languages.

5. RESEARCH METHODOLOGY, DATA COLLECTION AND ANALYSIS

This is a cross-sectional experimental study with two treatment groups and two control groups additionally divided based on learners’ linguistic proficiency levels.

Pre- and post-testing will be carried out through oral proficiency interviews as outlined in the ACTFL proficiency guidelines and through a written grammar-and-vocabulary test. T-test for independent means will be performed to compare linguistic development of the treatment groups with the control groups.

Qualitative analysis of speech samples will also be performed. To this end, samples of monologic and dialogic second language discourse will be collected through video-taping. The speech samples will be then transcribed and coded for various linguistic features, including phonological, morphological, syntactic, discursive, and related to pragmatics.

Finally, students will complete a self-assessment questionnaire, which will be statistically analyzed.

2. MEASURING THE PROJECT SUCCESS

There are several indications of the success of this project, both objective and subjective. Among the objective indicators are: empirical evidence of students’ linguistic development, creation of a new assessment instrument based on extended discourse, and development of model speech samples that can be reused in classrooms. Two graduate students will learn how to undertake experimental study, and will prepare academic reports in the form of conference presentations and a journal article.

Among the subjective indicators is: learners’ comfort in using Russian for communication. Last but not least, the collaboration of students from different levels and courses will help create a community of practice, which is essential to the Slavic Department’s mission.

3. DISSEMINATION OF RESULTS

The study results will be presented at the Slavic and foreign language professional conferences – AATSEEL and ACTFL. The project will yield at least one academic publication. Results will also be presented at pertinent IU forums, including presentations at the SOTL event series.

4. REFLECTIVE TEACHING PRACTICE

This project is inspired by reflective teaching and will serve to further our conscious engagement with teaching.

III. BUDGET NARRATIVE
The proposed budget is relatively modest for a project of this scope. We make effective use of IU CITL and other units’ resources. Director of the project is a certified ACTFL OPI tester for Russian, and she will be conducting OPIs for the assessment. The costs are primarily data collection and conference travel related. We would also like to allocate funds for an external reviewer of the project – Dr. Karen Evans-Romaine, Flagship Director at UWM. We also hope to procure some additional funding for conference travel from the Slavic Department, which usually grants an annual $200 to a graduate student who is presenting at a national conference. The principle investigator is not seeking funds for herself, the purpose of this grant is to support graduate students participating in this project.

1. DATA COLLECTION AND ANALYSIS/GRADUATE ASSISTANTS

An estimated pool of 20 participants per semester will generate approximately 35 hours of video-recordings, which will be further transcribed and analyzed. Based on professional estimate\(^4\), an hour-long tape takes between 4 to 8 hours to transcribe, depending on the quality of recording. Second-language (L2) speech is usually more difficult to understand, however, the L2 pace at the Intermediate proficiency level is considerably slower, so we estimate the ratio to be 1:2.5. Therefore, transcription of the data will take about 88 hours.

Another 75 hours will be needed to code and enter the data in an SPSS database for further statistical analysis. We build this estimate on the following calculation: self-recorded speech samples (narratives and descriptions) will generate about 23,000 words. Interactive exercises will produce about the same amount of words – 22,000 words. These will comprise about 9,000 sentences; each sentence should take about 2 minutes of parsing, coding, and entering into the database.

Transcription, coding, and data-entering will amount to 163 158 hours. An employment of a graduate student at $13/hr will total $2,120.00 per semester. A year-long data collection (needed to produce statistically significant numbers) will cost $4,240.00

2. RESEARCH RELATED TRAVEL/CONFERENCE PRESENTATIONS

We would like to request funds to cover costs of two graduate students’ registration fees and travel expenses for the following conference we are planning to attend at the end of 2012 year.

- AATSEEL – American Association of Teachers of Slavic and East European Languages - January 2012 at Boston, MA (student registration fee $55)

Total $110 in registration fees and $400 in air-fair.

3. COLLABORATIONS WITH OTHER INSTITUTIONS, EXTERNAL SPECIALIST AND CONSULTANTS

We would like to invite an external reviewer – Dr. Karen Evans-Romaine, Flagship Director at UWM. We are seeking a honorarium of $250.

IV. RESEARCH PLAN AND TIMELINE

<table>
<thead>
<tr>
<th>Time</th>
<th>Project Stage</th>
<th>Task Description</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2012</td>
<td>INITIAL STAGE – PREPARATION</td>
<td>RESEARCH:</td>
<td>Shardakova, Madsen, Doludenko</td>
</tr>
</tbody>
</table>
|            | • Project detailed articulation both for research & teaching | • Develop tentative assessment rubrics for students’ extensive discourse  
|            | • Arranging for technological support with CITL | • Develop written proficiency test to be administered pre- and post-program 
|            |                                    | • Develop questionnaire for students’ self-reflection  
|            |                                    | • Develop questionnaire for graduate teaching assistants’ self-reflection  
<p>|            |                                    | TEACHING:                                                                        |                       |
|            |                                    | • Select topics for self-recordings for the fall 2012 semester (12-13 topics)   |                       |
|            |                                    | • Write up scripts for video-prompts and model speech samples                    |                       |
|            |                                    | (narrations; descriptions; interviewing, etc.) - 12-13 prompts and 12-13 samples |                       |
|            |                                    | • Video tape prompts and speech samples                                           |                       |
|            |                                    | TECHNOLOGY:                                                                      |                       |
|            |                                    | • Arrange for students’ accounts with CITL for video-conferencing and recording  |                       |
|            |                                    | • Arrange for technical support – i.e. webcams with recording possibility         |                       |
| Fall 2012  | STAGE ONE – LAUNCHING THE PROJECT  | RESEARCH:                                                                        | Shardakova, Doludenko, Madsen |
|            |                                    | • Data collection                                                                 |                       |
|            |                                    | • Data transcription                                                             |                       |
|            |                                    | • Data coding                                                                    |                       |
|            |                                    | • Tentative analysis of data                                                    |                       |
|            |                                    | TEACHING:                                                                        |                       |
|            |                                    | • Recruit participants from 2\textsuperscript{nd} and 3\textsuperscript{rd}-year Russian courses |                       |
|            |                                    | • Offer on-line instruction for participants when needed                          |                       |
|            |                                    | • Provide scaffolding to participants                                            |                       |
| Winter 2012| STAGE TWO – PRELIMINARY RESULTS; PREPARATION FOR SECOND ROUND | RESEARCH:                                                                        | Shardakova, Doludenko, Madsen |
|            |                                    | • Carry out preliminary data analysis to evaluate participants’ L2 development   |                       |
|            |                                    | • Work out assessment rubrics based on participants’ extended discourse         |                       |
|            |                                    | TEACHING:                                                                        |                       |
|            |                                    | • Select topics for self-recordings for the spring 2013 semester (12-13 topics) |                       |
|            |                                    | • Write up scripts for video-prompts and model speech samples                    |                       |
|            |                                    | (narrations; descriptions; interviewing, etc.) - 12-13 prompts and 12-13 samples |                       |
|            |                                    | • Video tape prompts and speech samples                                           |                       |
|            |                                    | TECHNOLOGY:                                                                      |                       |
|            |                                    | • Arrange for students’ accounts with CITL for video-conferencing and recording  |                       |
|            |                                    | • Arrange for technical support – i.e. webcams with recording                    |                       |</p>
<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Stage / Cycle</th>
<th>Research</th>
<th>Teaching</th>
<th>Dissemination</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Spring</td>
<td>Stage Three</td>
<td>- Explore possibilities for optimizing technical support – video recording</td>
<td>- Recruiting participants from 2nd and 3rd-year Russian courses</td>
<td>- Present the project at a professional conference (Midwest at OSU; the Northeast Conference)</td>
<td>Shardakova Doludenko Madsen</td>
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<td></td>
<td>Repeated Measures</td>
<td>- Continue data collection, transcription, and coding</td>
<td>- Offer on-line instruction for participants when needed</td>
<td>- Engage local high schools</td>
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<td></td>
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<td>- Develop learner corpus</td>
<td>- Provide scaffolding to participants</td>
<td>- Present at the SOTL event series</td>
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<tr>
<td>2013 Summer</td>
<td>Cycle One Final</td>
<td>- Carry out quantitative and qualitative data analysis to evaluate participants’ L2 development</td>
<td>- Comprise an instructional video-course including prompts, model samples, students’ recordings, and feedback</td>
<td>- Present results at professional forums (ACTFL, AATSEEL, NCOLCTL)</td>
<td>Shardakova Doludenko Madsen</td>
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<tr>
<td></td>
<td>Stage One</td>
<td>- Develop assessment tool for evaluating students’ progress based on extended discourse</td>
<td>- Video-tape feedback</td>
<td>- If technology permits, engage local schools</td>
<td></td>
</tr>
<tr>
<td>2013–2014 Fall</td>
<td>Cycle Two – Stage One</td>
<td>- Continue developing database of the learner language</td>
<td>- Recruit new participants</td>
<td>- Present results at professional forums (ACTFL, AATSEEL, NCOLCTL)</td>
<td>Shardakova New grad students</td>
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<td></td>
<td>Testing the Assessment Tool</td>
<td>- Refine assessment tool</td>
<td>- Ensure smooth operation by providing scaffolding and instruction when needed</td>
<td>- If technology permits, engage local schools</td>
<td></td>
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<tr>
<td></td>
<td>Expanding Research/Teaching</td>
<td>- Develop additional research agendas based on this project</td>
<td>- Test assessment tool</td>
<td>- Present at the SOTL event series</td>
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<td></td>
<td>Engaging more graduate students for research</td>
<td>- Develop written proficiency test to be administered pre- and post-program for new proficiency levels</td>
<td>- Develop materials for other proficiency levels – e.g., 1st-year Russian, 4th-year Russian</td>
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BIBLIOGRAPHY


