

Getting to Advanced: Challenging High School Heritage Language Learners to Step Outside Their Comfort Zone

Dr. Svetlana Abramova
Dr. Eduardo Viana da Silva
Dr. Michele Anciaux Aoki,
Dr. Bridget Yaden,

University of Washington
STARTALK Program



Learning Targets

- I can identify at least two ideas for how to support Advanced language proficiency of heritage speakers through a content class with focus on STEM.
- I can develop at least two new teaching techniques for the personalization of language programs to attend to the needs of a diverse group of students.
- I can describe at least one practical example of how to organize an elective project in collaboration with tech professionals.

UW STARTALK Program - Brief Introduction

- Summer program funded by STARTALK
- Students: Russian and Portuguese Program for heritage speakers with focus on STEM -- Science, Technology, Engineering, and Mathematics
- Teachers: 6-credit methodology course, observation and microteaching in the student program
- TLE article - March/April 2018, pp. 33-36



Video Overview

<https://vimeo.com/280982470>



Getting students to Advanced through STEM

Advance students' proficiency in a variety of registers and topics:

Formal register- interviews with business professionals, academics

Variety of topics-space travel, flight, cyber security, robotics

Increase their linguistic **confidence**:

STEM curriculum

Project-Based Learning through electives

Presentations to community

Proficiency Assessment/Seal of Biliteracy



Working with Heritage Language Learners*

- Provide authentic and meaningful input to the HL
- Engage learners in making real-world language use
- Target specific aspects of grammar
- Attend to HL learners' affective and social needs
- Differentiate instruction

*Principles shared by Dr. Maria Carreira, National Heritage Language Center

Sample Lesson (Learning) Plans

STUDENT PROGRAM LEARNING PLAN



Space Race Date: 07/13/2016

Grade Range of Learners: 9-12

Total Number of Minutes: 60

Targeted Performance Level: Adv. L.-M.

LEARNING GOALS

What Can-Do statement(s) from the curriculum template does this lesson address?

4. I can discuss with partners problems and challenges of space exploration in the past, future and present.--
Interpersonal Communication

15. I can read an articles about how technology has changed in the past years. – Interpretive Reading

18. I can deliver short presentations on some particular events of space exploration in a formal style. –
Presentational Speaking

6. I can understand other students' presentations on topics related to space exploration and take some notes.—
Interpretive Listening

Main curriculum: Connections to Museum of Flight

Visit the Museum

View and research museum artifacts and exhibits

Pre-teach vocabulary and content in class

Complete simulations at the Museum learning centers:

- Challenger Learning Center: “Voyage to Mars”
- Aviation Learning Center: “Pilot for a Day”

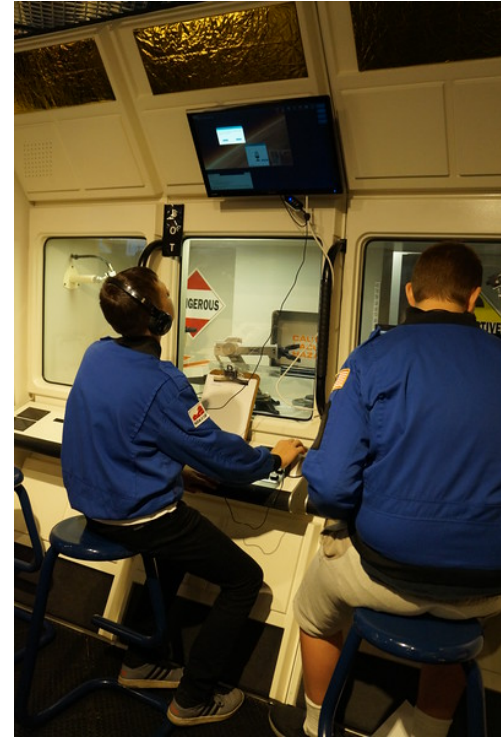
Return to the Museum for Astronomy Day

- Present project findings in Russian in real-life setting
- Tell the community about the program



Mission to Mars

- Hands-on: Following instructions in the target language during the simulation;
- Working in teams: Space Crew -- Mission Control communication;
- Post-activities reflection.



Activities: Working in Teams: Space Crew -- Mission Control Communication



Aviation Learning Center at the Museum of Flight

- Labs at the Museum of Flight;
- Filling-out a flight plan in Russian;
- Conducting a pre-flight check;
- Post-activities reflection.



Activities: Working on Navigation and Wind Tunnel Labs at the Museum of Flight



Personalizing through Translanguaging Tables

- Added in 2017 with the Portuguese program to allow students an opportunity to receive individualized attention from the instructors and to work on their specific language needs.
- Small group time towards the end of the day
- Heritage speakers of Portuguese worked mostly on their writing skills
- Spanish speakers focused on their pronunciation and speaking skills
- Students and instructors used Portuguese, Spanish, and English as needed.
- Allowed us to hone in on the diverse language background of students in this class.



Electives = Project-Based Learning (PBL)

- Give students the freedom to choose a topic of interest for the group.
- Encourage students to establish their roles from the beginning of the project.
- Adjust the pace of the project as needed
- Provide constructive feedback from instructors, peers, and professionals (presentation practice).



Elective projects: engagement and autonomy

● GEOGRAPHIC INFORMATION SYSTEMS (GIS)

- Manage, organize, and manipulate spatial data
- Perform spatial investigation
- Visualize spatial data



DIGITAL STORYTELLING

- Choose a topic of interest
- Gather and select materials
- Prepare a script
- Discuss the scenes, act
- Edit the video



Elective Projects

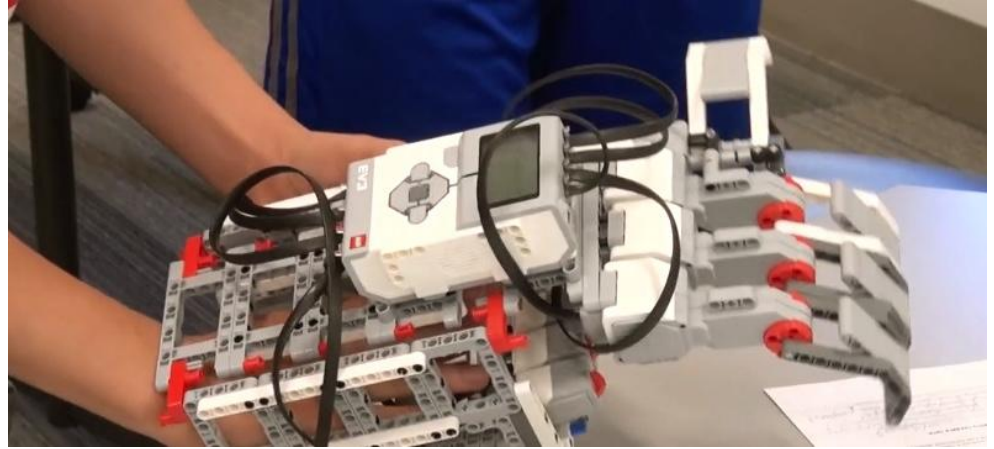
Program Module (from 2012):

- STEM-based morning classes
- Afternoon Elective Project

Variety of Projects:

LEGO Robotics “Mars investigation with LEGO-robotics”, Biology, Linguistics,

Translation, Historical project “Russia in the 20th Century”



Focus on Research and Hands-on Learning

At the end of the program Student Research Projects Conference

Translation Project



Cell Biology Research Project

Students

- Formulate a hypothesis;
- Conduct experiments to test it, and collect data;
- Discuss scientific materials and results of experiments;
- Analyze data to accept or reject hypothesis;
- Present their findings at the Student Research Project Conference.



Student Research Project Conference

Present orally their research findings in front of their classmates, parents, teachers, and experts;

Answer Questions after presentation;

Get feedback from Russian-speaking experts from the community.



Strategies for PBL in Heritage Language Classes

- Provide enough time for students to bond
- Familiarize students with the Global Competence Matrix*
- Promote a collaborative and positive atmosphere (more collaboration, less competition)
- Take advantage of the individual strengths
- Support self-directed learning as well



* <https://asiasociety.org/education/what-global-competence>

Building Teacher Capacity - STEM micro lessons



Video samples:

<https://www.youtube.com/watch?v=IGnnqpBbzCo&feature=youtu.be>

Teachers completing UW STARTALK methods course prepare 15-minute micro-teaching stations on STEM topics.

Students rotate through each station, teachers get feedback from coaches and instructors.

Personalizing learning through online preparation

- 4 weeks of an asynchronous online course before f2f
- Portuguese language classes focusing on aviation, the solar system, and space explorations.
- Focussed on linguistics aspects through the use of podcasts from COERLL – The Center for Open Educational Resources and Language – University of Texas at Austin
- Divided into two sections:
 - One track for heritage Portuguese Speakers
 - One track for heritage Spanish speakers and L2 speakers

Online course features

- Focus on writing tasks for Portuguese speaking students.
- Focus on speaking activities for Spanish speaking students.
- The course relies on a variety of activities: readings with voice recordings, comprehension questions, mini-lessons for Spanish speakers, recording of text passages, dialogues, and other activities; participation in forums, use of podcasts, videos, and writing tasks.

Personalize through motivation and recognition

- We provided students free access to proficiency assessment (AAPPL) that they could use for credit for proficiency and/or the Seal of Biliteracy
- Celebrate their growth in proficiency

Before and After Assessment Results

Interpersonal Listening and Speaking

(AAPPL - ACTFL Assessment of Performance toward Proficiency)

Students	Pre-Program (<i>after online program</i>)	End of Program
Heritage Portuguese Speakers	6 Advanced 1 Intermediate High 1 Intermediate Mid	5 Advanced 1 Intermediate High
Spanish Speakers (Heritage and L2)	1 Intermediate Mid 4 Intermediate Low 3 Novice High	2 Intermediate High 4 Intermediate Mid 2 Intermediate Low

Before and After Assessment Results

Interpretive Reading

(AAPPL - ACTFL Assessment of Performance toward Proficiency)

Students	Pre-Program (<i>after online program</i>)	End of Program
Heritage Portuguese Speakers	6 Advanced 2 Intermediate High	7 Advanced 1 Intermediate Mid
Spanish Speakers (Heritage and L2)	2 Intermediate Mid 2 Intermediate Low 1 Novice High 2 Novice Mid	5 Advanced 3 Intermediate High

Before and After Assessment Results

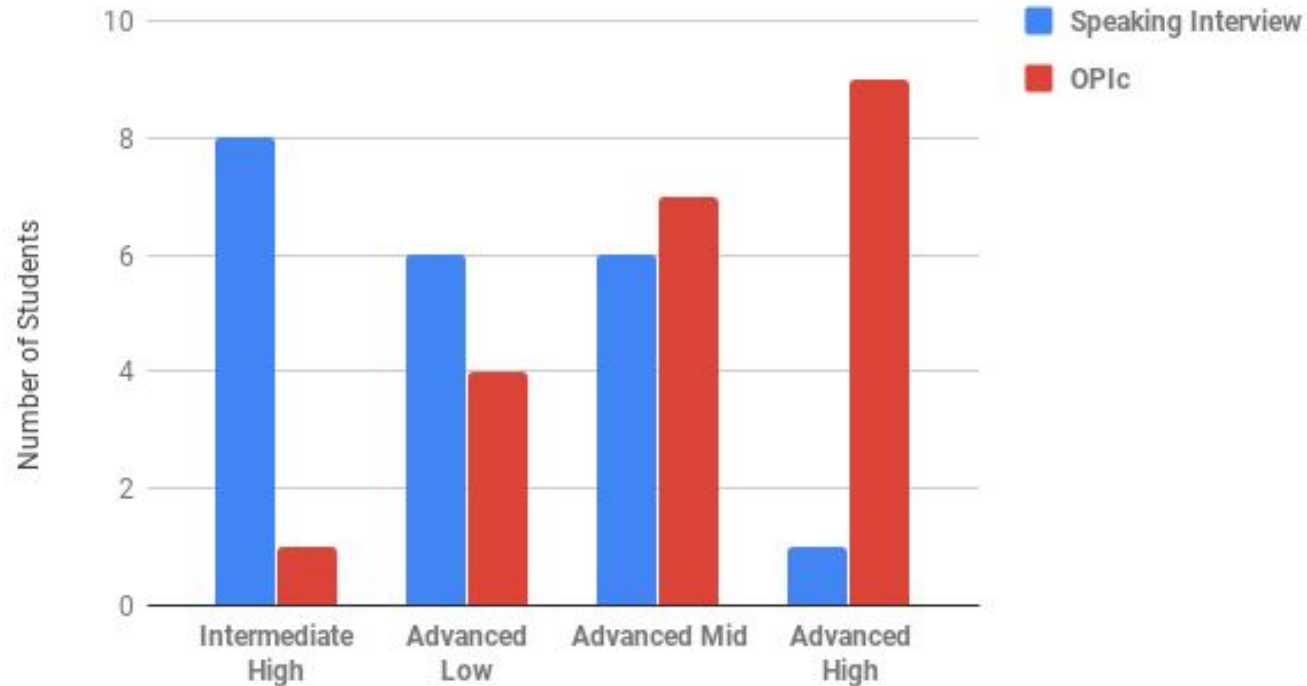
Presentational Writing

(AAPPL - ACTFL Assessment of Performance toward Proficiency)

Students	Pre-Program (<i>after online program</i>)	End of Program
Heritage Portuguese Speakers	1 Advanced 4 Intermediate High 3 Intermediate Mid	4 Advanced 1 Intermediate High 3 Intermediate Mid
Spanish Speakers (Heritage and L2)	1 Intermediate Mid 4 Novice High 2 Novice Mid	1 Advanced 1 Intermediate High 4 Intermediate Mid 1 Novice High

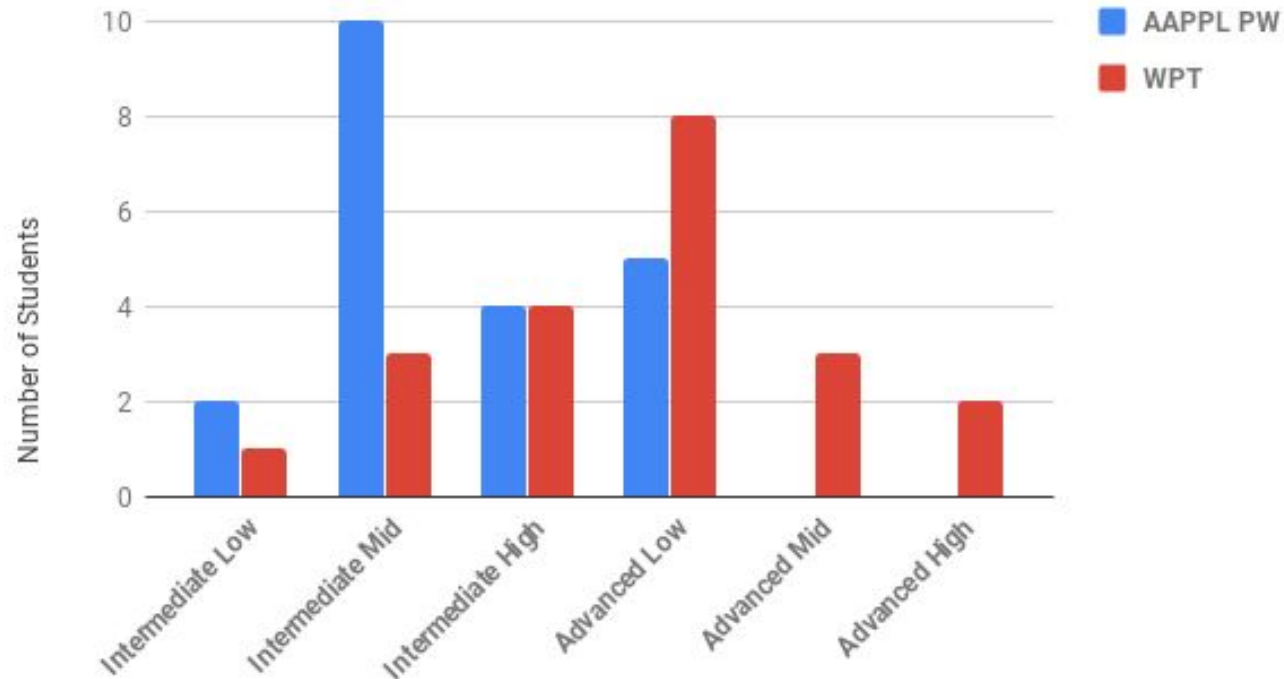
UW Russian Startalk 2018: Speaking

Student Speaking Ratings



UW Russian Startalk 2018: Writing

Student Writing Ratings



Thank you!