Topic: OSD08-CR2

Alelo TLT, LLC

Second Language Sustainment Training with the Tactical Language and Culture Training System

The DoD has over 40,000 positions requiring foreign language skills, and is able to fill less than 30% of these positions with personnel having the required level of proficiency. Military members who receive language training tend to lose their skills over time. The Adaptive Refresher Trainer (ART) is a Web-based adaptive language-learning tool that automatically assesses each learner's language skills, and generates a personalized refresher-training program to maintain skills and quickly regain proficiency. Alelo develops advanced learning products that help people learn to communicate when it counts. We use speech and artificial intelligence technology in simulated conversations with native speakers. Our goal is to transition this technology into Government language, regional expertise, and culture (LREC) programs to reduce training costs and protect investments in training.

Technology Category Alignment:

Information Collection/Management
Human Systems
Personalized Assessment, Education, and Training
Human Aspects of Operations in Military Environments
System Interfaces & Cognitive Processes

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SYSCOM: ONR

Contract: N00014-11-C-0462

Department of the Navy SBIR/STTR Transition Program

STATEMENT A. Approved for public release; distribution is unlimited. ONR Approval # 43-2203-16

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Second Language Sustainment Training with the Tactical Language and Culture Training System Alelo TLT, LLC

WHO

SYSCOM: ONR

Sponsoring Program: OSD P&R

Transition Target: Defense Language Institute Foreign Language Center (DLIFLC)

TPOC: Dr. Ray Perez ray.perez@navy.mil

Other transition opportunities: Marine Corps Training and Education Command (TECOM) Navy Center for Language, Regional Expertise and Culture (CLERC)



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WHAT

Operational Need and Improvement: The DoD has over 40,000 positions requiring foreign language skills. Military members who receive language training tend to lose their skills over time. The Adaptive Refresher Trainer (ART) is a Web-based adaptive language-learning tool that automatically assesses each learner's language skills, and generates a personalized refresher-training program to maintain skills and quickly regain proficiency.

Specifications Required: The system should provide US military with new capabilities to support secondary language retention in non-Western languages, reducing the need for extensive retraining and expanding the number of personnel with high quality language skills in both productive abilities (speech, writing) and receptive abilities (listening comprehension, reading).

Technology Developed: The Adaptive Refresher Trainer (ART) is a Web-based adaptive language-learning tool that automatically assesses each learner's language skills, and generates a personalized refresher-training program to maintain skills and quickly regain proficiency. It uses speech and artificial intelligence technology in simulated conversations with native speakers. The system automatically measures learner communicative competence and detects learner mistakes. It uses this to generate feedback and selects refresher training modules for the learner to focus on.

Warfighter Value: Warfighters can use this product at any time to retain their language skills and maintain eligibility for foreign language proficiency pay, without taking time away from work to attend language class. ART can also be used as a supplemental practice tool to achieve higher levels of language proficiency more rapidly.

WHEN Contract Number: N00014-11-C-0462 Ending on: August 15, 2017

Milestone	Risk Level	Measure of Success	Ending TRL	Date
Trial with Virtual Virginia Online School	N/A	System test with users in operational conditions	7	September 2015
Full integration with HTML5 and Learning Management System	Low	Full system test with users in operational conditions	8	February 2018

HOW

Projected Business Model: We are setting up a server for delivering our content in the cloud, and will provide usage as a service. We are licensing the platform to content developers, along with tools for creating content that runs on the platform. We also plan to offer training and consulting services to organizations interested in developing their own content using our technology.

Company Objectives: Alelo's objective is to develop this technology into an interoperable platform called Enskill that we can license to publishers, content developers, and major educational institutions. We concluded our first major sale of an Enskill-based product incorporating this technology to Laureate Education, a multinational online learning provider, in August 2016.

Potential Commercial Applications: The technology has broad application in commercial on-line language programs. Our contract with Laureate Education is an example.

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