

## Personal Assistant for Life Long Learning (PAL3)

2014-present

PAL3 is a system for delivering engaging and accessible education via tablets. It is designed to provide on-the-job training and support lifelong learning and ongoing assessment.

The system features a library of curated training resources containing custom content and pre-existing tutoring systems, tutorial videos and web pages. PAL3 helps learners navigate learning resources through:

- An embodied pedagogical agent that acts as a guide
- A persistent learning record to track what students have done, their level of mastery, and what they need to achieve
- A library of educational resources that can include customized intelligent tutoring systems as well as traditional educational materials such as webpages and videos
- A recommendation system that suggests library resources for a student based on their learning record
- Game-like mechanisms that create engagement (such as leaderboards and new capabilities that can be unlocked through persistent usage)
- Allowing students to find and suggest new content, which is then vetted by instructors.

A customizable interactive agent, "Pal" is designed specifically to engage and motivate via amusing animations and dialog with students through natural language processing (voice and text).

The initial PAL3 prototype addresses knowledge decay and retention as sailors move from one schoolhouse to another. The PAL3 platform can integrate with military education, training and career management systems and serve as a guide to many different types of learning experiences designed to meet learners where they are and help them get where they need to go. This project is a collaboration between ICT, Arizona State University and the University of Memphis and is funded by the Office of Naval Research.

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At the University of Southern California Institute for Creative Technologies leaders in artificial intelligence, graphics, virtual reality and narrative advance low-cost immersive techniques and technologies to solve problems facing service members, students and society.