

Comparing Technology-Based Adaptive Learning with Traditional Training Methods

Design of the SWIFT Adaptive Technology was based on years of international research into Artificial Intelligence and Intelligent Tutoring Systems. One system that SWIFT was modeled after, Sherlock, was created by the United States Air Force to train mechanics for F-15 fighter planes. Sherlock was an Adaptive Learning Environment that functioned much like a one-on-one tutor. Pre and posttests were used to evaluate the effectiveness of 20 hours of use of the Sherlock system against 20 hours of traditional on-the-job training, with the following results:

| Training Method | Pre-training score | Post-training score | Improvement |
|------------------------------------|--------------------|---------------------|-------------|
| 20 Hours Technology-Based Training | 57% | 79% | 39% |
| 20 Hours Traditional Training | 53% | 59% | 10% |

