

Evaluation and Critique Descriptors that are needed to Inform AIS Buyers about different AIS Capabilities



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What should be evaluated?

- System Capabilities
- Training Effectiveness
- Transfer of Training to on-job performance

Evaluating System Performance

- Campbell (2014) identified three functional attributes that make up all Adaptive Training Systems: **Observe, Assess, and Respond**

– Observe

- What type of data does the system capture?
- Granularity of the data?
- Content and Format of data output?

– Assess

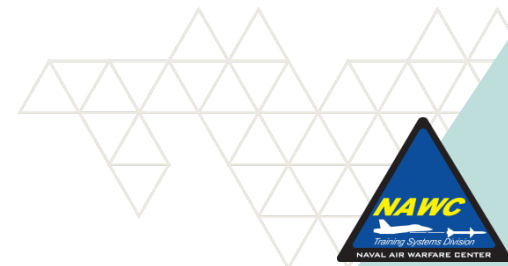
- How does the system assess student performance?

– Respond

- What type of feedback and what kind of Adaptations occur?

Evaluating Training Effectiveness

- One methodology for evaluating training effectiveness is **Kirkpatrick's Four Levels of Training Evaluation Model** (Kirkpatrick & Kirkpatrick, 2006)
- **Level 1: Reaction**
 - Evaluation of student subjective reactions to the training (likes or dislikes of the training system)
- **Level 2: Learning**
 - Assessment of how well the students learn the instructional content
 - Pretest/Posttest Design
 - Effect size: Cohen's *d*



Evaluating Transfer of Training

- **Level 3: Behavior**

- Evaluation to determine how much of what was learned can be applied on the job.
- “near-transfer” of learning: how much job performance/behaviors changed

- **Level 4: Results**

- Assessment of the overall impact the training had on the business or organization.

Additional Evaluation Considerations

- System development costs
- System modification costs

Closing Remarks

- Adaptive training has many potential benefits that evaluation should illuminate
 - Improve performance
 - Decrease training time
 - Reduce training cost