

# The Knowledge Check Strategy and E-learning

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This poster provides information about the Knowledge Check learning strategy. It presents the results from a study done to determine the impact of knowledge checks on student learning and perceptions and provides tips on how to effectively integrate knowledge checks into e-learning.



## What is Knowledge Check (KC)?

Knowledge checks are questions that can be incorporated into a narrated presentation to serve as a means of directing a learner's attention to critical aspects of the lesson being covered.

## Study Overview:

To determine if the presence of KCs in narrated presentations would impact student learning and perceptions

## Methods:

The design of the study was simple:

- Independent variable: the presence of KCs
- Dependent variable: test scores on a post test

## Procedures:

- Online course was developed and presented via the Blackboard 9.0
- Course split into 2 groups: Experimental and Control Groups
- The following table provides more details about the study:

	Experimental Group (n=141)	Control Group (n=143)
Narrated Presentation	Yes (with KC questions)	Yes (without KC questions)
Post Test**	Yes	Yes
Survey***	No	Yes

\*\*Post Test used to assess students learning  
\*\*\*Survey used to assess student perception

## Results and Conclusions:

### Impact on Learning

- In general students exposed to KCs performed better on average than those who were not
- No significant impact on learning ( $p = .061$ )
- Serves to improve interactivity during a lesson

### Student Perception

#### ADVANTAGES

- Helps to emphasize key points
- Keeps lectures engaging and interactive
- Serves well as a Self-assessment/Review tool

#### DISADVANTAGES

- Could prove to be time-consuming and distracting to students during the review of a previously viewed presentation

## Suggested Guidelines for creating Knowledge Checks:

- Questions should be aligned to the learning objectives of the narrated presentation
- Questions are typically:
  - At the knowledge and comprehension level
  - Multiple choice and un-scored
- Questions should not be identical to test questions
- Detailed feedback should be provided
- Pay attention to question placement place knowledge questions after:
  - A given number of slides
  - Content topic or learning objective is covered

### Tools used to create Knowledge Checks:



Adobe Captivate



Elluminate Live



Adobe Presenter



TechSmith Camtasia



Articulate Presenter