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## Analogy into the World: Cuing Learning in Everyday Life using Narrative Film

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Robert G. Morrison & Chad Eric Bergman<sup>‡</sup>

#### **Abstract**

We present a theory of instruction using narrative films and video learning modules to cue learners to remember key concepts as they are analogically reminded of the story by events in their everyday lives. Retrieval: A Journey into Memory, a film and video learning module about human memory is discussed as one example.



#### Introduction

- A central issue in education is to find ways to encourage long-term retention and transfer of newly learned information.
- For most of human history, story has been used to teach people new information in a way that is engaging and can result in knowledge integration (Green, 2004; Green, 2003).
- Film is a particularly effective vehicle to tell stories because of its rich sensory experience and potential for emotional impact (eg. Champoux, 1999; Green & Brock, 2000; Polichak & Gerrig, 2002).

#### Theory

- Stories provide rich surface and structural cues to both past and future experience via the process of analogical reasoning (Holyoak & Thagard, 1995).
- A story used during instruction can act as a source analog to past stories or schemas encountered or developed by the learner as well as act as a target analog for source stories encountered at a later time.
- This process of analogical reminding can result in integration of new learning within existing knowledge structures.

  Learning

# Past Experience Story Inferences Future Experience Inferences Concepts

 Likewise analogical reminding at a later time can result in helpful inferences from the instructional story and associated new concepts to a new analogous situation (Wharton, Holyoak & Lange, 1996) and appropriate to students current needs and priorities (Spellman & Holyoak, 1996).

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### Application

- RETRIEVAL (Bergman & Morrison, 2005) is a two component video intended for use in introductory and cognitive psychology classes to introduce several basic principles of human memory.
- In the RETRIEVAL Film Nick Breckenridge recalls an important conversation he had with his daughter Amber. Her mysterious disappearance leaves an emptiness which Nick tries to fill with memories of their life together. As he reflects on their past and plans for his future, Nick's memory progressively changes. Thus the film demonstrates a number of memory phenomeon including the variety and types of retrieval cues, source confusion, false memory and the power of schemas in memory.
- In the RETRIEVAL Learning Module noted memory experts-Robert Bjork (UCLA), Elizabeth Loftus (UC Irvine), and Daniel Schacter (Harvard University)-expand on themes in the film, discussing possible character motivations and linking this to current memory research from both cognitive psychology and cognitive neuroscience. Scenes from the RETRIEVAL Film are used in the learning module to illustrate points that the experts make as well as to provide rich media associations between new learning material and the story.

#### Summary

RETRIEVAL introduces the topic of memory in a psychology class using an engaging story that students can relate to while encouraging long-term retention and knowledge integration of key memory concepts via the process of analogical reminding.