Video: Does video improve the transfer of knowledge?

Summary:

In this cross-section of populations and purposes, video does improve the transferring of knowledge in the settings described; however, only at slight levels with certain populations. When video (multimedia) is used for demonstrations on a college exam it is overwhelmingly welcomed. However, in a traditional classroom setting, live instruction tends to be more motivating than any other method of delivery.

In the area of short-term memory, both live and power point instructions were affective.

Reference	
Thompson, D. E., Brooks, K., & Lizarraga, E. S. (2003). Perceived Transfer of Learning: from Distance Education classroom to the workplace. *Assessment & Evaluation in Higher Education*, *28*, 539-547.	
Population 18 students with the following criteria. First and second year cohorts: Completed all the HRD courses; had the same workplace supervisor throughout the program; consented to be interviewed; consented to having their supervisors interviewed; were between 25-60 years of age; had 5-40 years of work experience	
Purpose/Questions	**Findings**
To explore students' and supervisor's perceptions of knowledge transfer from classroom to workplace. The specific courses were: communication in HRD (active listening and non-verbal communication), theory and principles of team building (group problem solving), theory and principles in leadership (employee motivation theory), theory and principles in adult education (adult learning theory and motivation), skills and strategies in HRD (training and development), theory and principles in research/evaluation (training needs assessment) and strategies in professional development (career development theory).	The individual and the organization benefited by this ability to transfer knowledge and skills from the learning environment back to the working environment.
Reference	

Schultze-Modgau, S., Zielinksi, T., & Lochner, J. (2004). Web-based, virtual course units as a didactic concept for medical teaching. *Medical Teacher 26*, 336-342.	
Population Students of dentistry in their 3rd to 5th year of study.	
Purpose/Questions How does online testing compare with traditional methods? Researchers used avi, swf, mpeg files, in addition to pdfs, along with graphics and animation. A multimedia multiple choice exam was created.	**Findings** The study found that 75% of students found the multimedia online exam to be superior to traditional testing methods. Web assessments might be superior in some cases.
Reference Carrell, L. J., & Menzel K.E. (2001) Variations in learning, motivation, and perceived immediacy between live and distance education classrooms. *Communication Education*, *50*, 230-240.	
Population **Study 1** 120 lower division undergraduate communications students at a small Midwestern university. They were randomly assigned to three groups: live classroom, video, and audio with PowerPoint display. **Study 2** 49 undergraduate students enrolled in communications at a small Midwestern university. They were randomly assigned to three groups: live classroom, video, and audio with PowerPoint display.	
Purpose/Questions **Study 1** RQ1: Will state motivation vary based on lecture delivery type? RQ2: Will perceived teacher immediacy vary based on lecture delivery type? RQ3: Will a student's perceived learning vary based on lecture delivery type? RQ4: Will a student's actual	**Findings** **Study 1** RQ1: No statistical significance between delivery methods. RQ2: Perceptions of teacher immediacy varied across the treatments. Immediacy was highest for live lectures and lowest for PowerPoint. RQ3: Perceived cognitive learning did not vary significantly across the three treatments. RQ4: Recall was highest in the live setting but not significantly.

learning vary based on lecture delivery type? RQ5: Will a student's learning (perceived and/or actual) vary based on the interaction of lecture delivery type and student cognitive style? **Study 2** RQ1: Will state motivation vary based on lecture delivery type? RQ2: Will perceived teacher immediacy vary based on lecture delivery type? RQ3: Will a student's perceived learning vary based on lecture delivery type? RQ4: Will a student's actual learning vary based on lecture delivery type? RQ5: Will a student's learning (perceived and/or actual) vary based on the interaction of lecture delivery type and student cognitive style?	RQ5: There was no significant difference in cognitive style. **Study 2** RQ1: Motivation was highest in the live setting, followed by PowerPoint and video. RQ2: Highest was the live setting, but not significantly so. RQ3: Perceived cognitive learning was highest in the live setting, followed by PowerPoint and video. RQ4: Short term recall was highest in PowerPoint, followed by live and then video. RQ5: There were no significant differences for cognitive styles. Implications: Video is probably less effective in motivation than live settings or PowerPoint.
Reference Miller, J. S., Stanley, I., & Moore, K. (2004). Videotaped Exercise Instruction: A randomized controlled trial in musculoskeletal physiotherapy. *Physiotherapy Theory and Practice, 20*, 145-154.	
Population Patients with Low Back Pain (LBP) were 385 and Shoulder Pain (SP) were 165.	
Purpose/Questions	**Findings**
To compare the effectiveness of videotape with face to face instruction for two common musculoskeletal conditions. There were three groups. Two were provided with instructional videotapes, one featuring the	Patients in the videotape groups were prescribed more exercises and were more skilled in performing them than were the face to face group. In terms of clinical progress, instruction by videotape was no more effective than face to face.

treating physiotherapist, the other an anonymous physiotherapist; the third group was instructed via face to face methods.	