An Examination of Online Discussions in Higher Education: Leveraging Technology to Increase Learner Engagement and Collaboration

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Despite the popularity of online discussion forums, many do not achieve the intended transfer of knowledge.

• Research question
• Literature Review
• Theoretical Framework
• Research Methodology
• Conclusions and Recommendations
Research Questions

• **Q1.** Does the inclusion of audio technology, specifically VoiceThread, affect the transfer of knowledge?

• **Q2.** Does the inclusion of audio technology, specifically VoiceThread, affect learner engagement?

• **Q3.** Does the inclusion of audio technology, specifically VoiceThread, affect learner collaboration?
Literature Review

• Evolution of the online learning environment
• Quality
• Role of technology
Theoretical Framework

• Edward Deming’s Plan, Do, Check, Act (PDCA) Cycle

Plan: The identification of a clear goal for which the cycle is applied.

Do: The plan is implemented.

Check: The outcomes are evaluated to determine if intent was met.

Act: Continue to monitor and test process; adjust as needed.
Research Methodology

• Independent variable:
  • Discussion forums with enhanced audio/visual applications
  • Discussion forums without enhanced audio/visual applications

• Dependent variable: Engagement of online learners
• Causal-effect relationship
• Pre-test/post-test – Quasi-experimental design
• Measure: Grades of participation in discussion forums
Conclusions and Recommendations

• VoiceThread is AWESOME! When used properly, and in the right conditions, it can improve learner engagement and collaboration in aviation and aerospace education.
QUESTIONS?