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Title	A comparison of the problem-based learning process in a video-triggered and a paper-triggered case
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IMHSE
Institute of Medical and Health Sciences Education

A comparison of the problem-based learning process in a video-triggered and a paper-triggered case

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Video case

-more realistic
-avoid depersonalization
-easy to use

Possible problems

-Will junior medical students focus on history taking and physical examination in the video?

-Will they be distracted from the problem-solving?

Methods

-eleven second year medical students
-one facilitator

-2x2 hr: one paper case (knee degeneration)
-2x2 hr: one video case (lumbar spine degeneration)

-sessions recorded
-transcribed

Methods

-coding: 5 stages of critical thinking (Kamin et al. 2001, 2003)

problem identification
problem description
problem exploration
applicability
integration
miscellaneous

} Will junior medical students focus on these 2 stages?

Results

	Triggers	Paper	Video
Stages of critical thinking	Problem Identification	3.74% (16)	12.30% (45)
	Problem Description	21.73% (93)	9.29% (34)
	Problem Exploration	43.93% (188)	51.64% (189)
	Integration	10.05% (6)	11.75% (11)
	Applicability	1.40% (43)	3.01% (43)

(Chan et al., in press)

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25.47% 21.59%

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55.38

66.40%

Conclusion

-students are not distracted into spending more time in problem identification and description in video-triggered PBL case

Chan LK, Lu J, Ip MSM, Yip ALM. (in press). Effects of video triggers on the PBL process. In Bridges S, McGrath C, Whitehill T (editors): Researching problem-based learning in clinical education: The next generation. Springer. p. 163-175.

Paper-based or Video-based Triggers for Medical PBL: Perspectives from Medical Education and Learning Sciences

Jingyan Lu, Lap Ki Chan

May 24th, University's SRT Forum Sciences of Learning

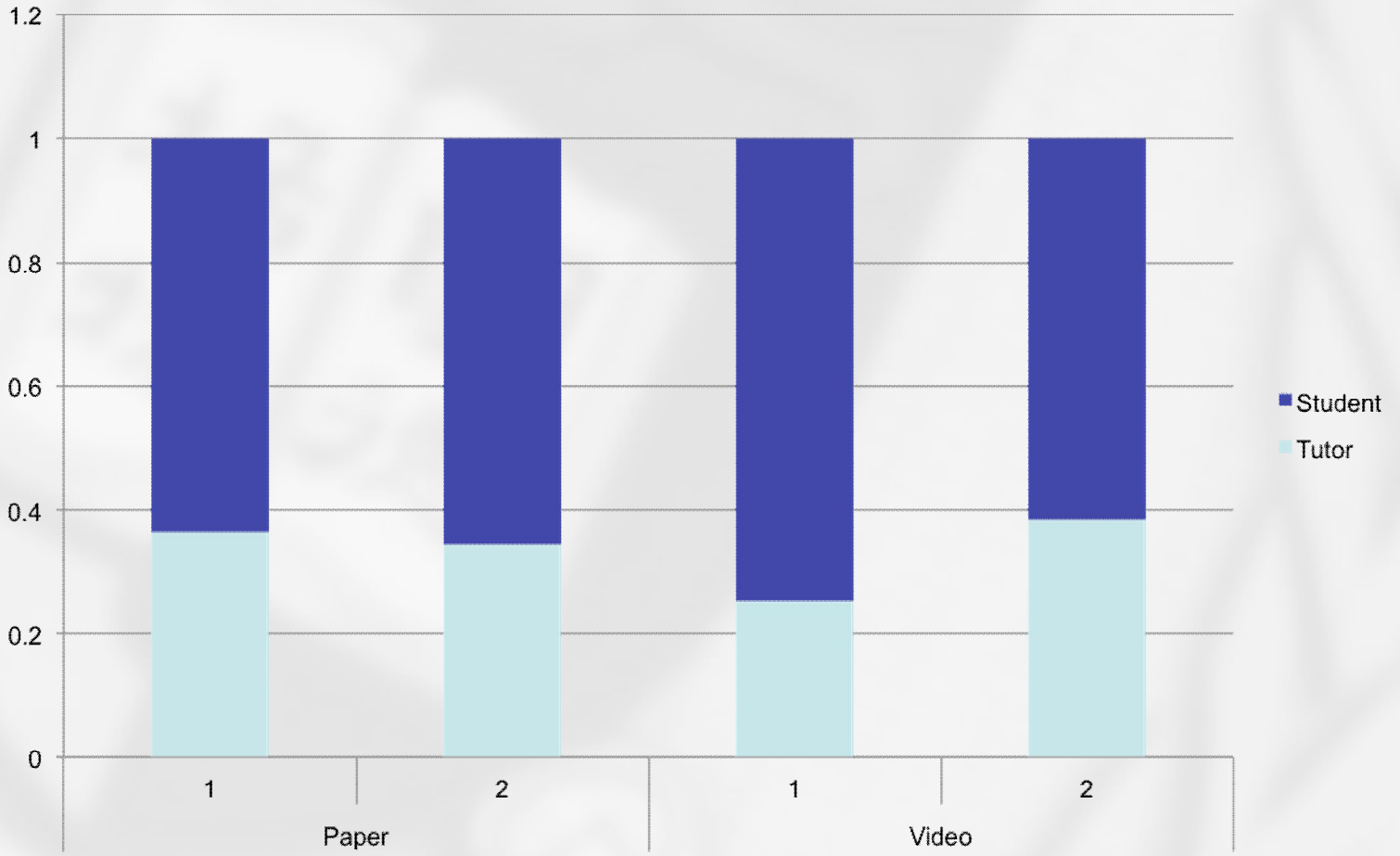
Implication of the study

Taking scientific perspectives of learning understanding the synergy of teaching, learning and technology

How do we measure learning

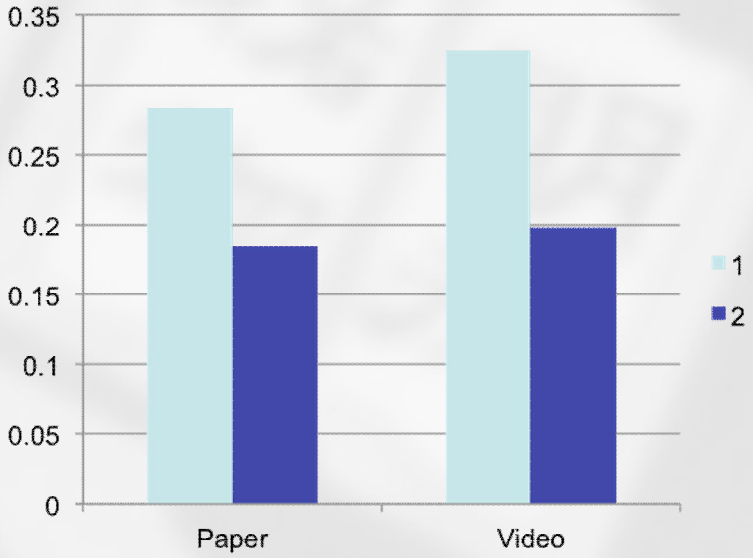
- PBL perspectives (Holistic perspective)
  - 5 stages of Critical thinking in PBL
- Argumentation (students pursuing for knowledge)
  - Questioning
  - Show different opinions
  - Proving theories with evidence and explanations
- Scaffolding

Tutorial discourse

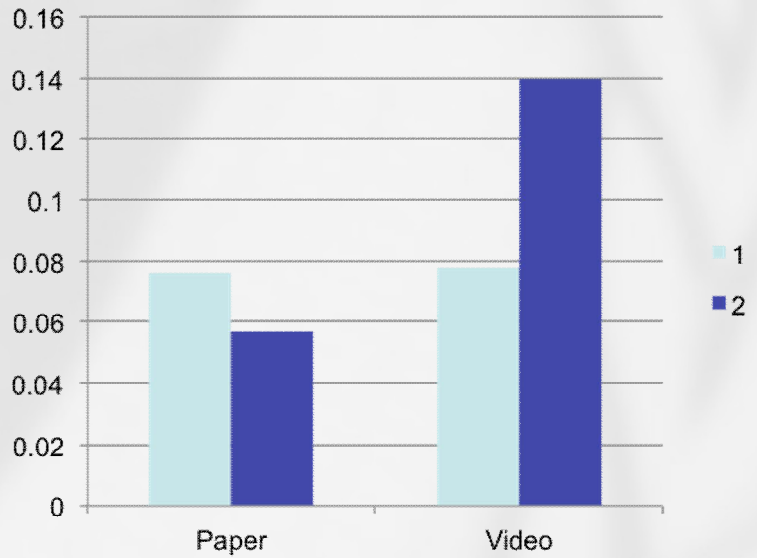


Questions asked

By tutor

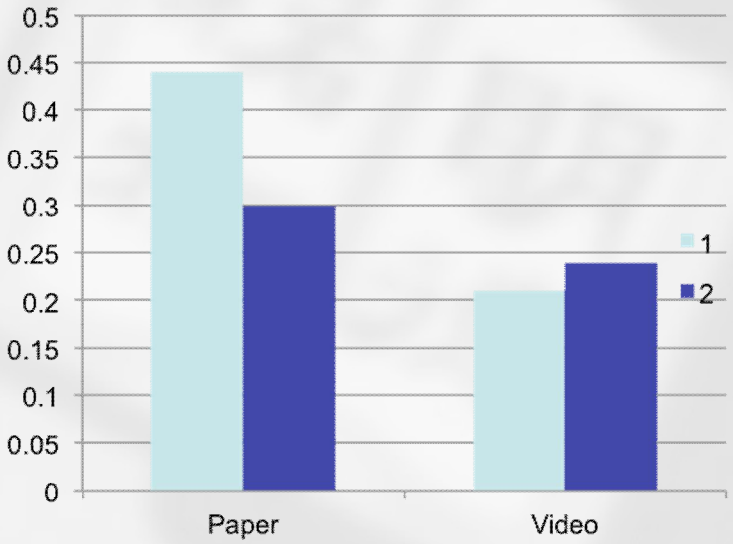


By students

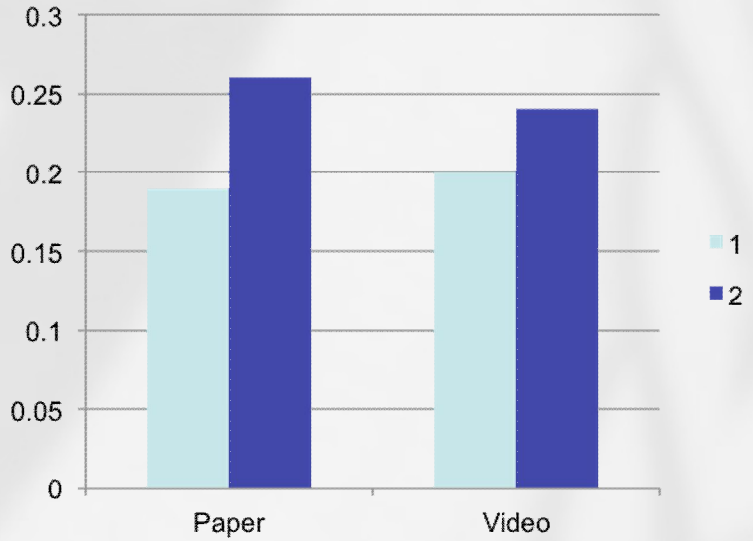


Argumentation process

Justification



Claim



How can we promote better learning and teaching

- How to facilitate critical thinking during PBL
- How to develop argumentative reasoning?
- What to scaffold
  - Content knowledge
  - Reasoning
  - Communication?
- How to scaffold

Thank you!

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