Improving Children's Understanding of Formalisms through Interacting with Multimedia

Abstract.

Theoretical framework – Cognitive Interactivity

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Operationalising cognitive offloading in relation to the learning process

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Figure 2.

Designing the software prototype: Implementing our ideas about computational offloading

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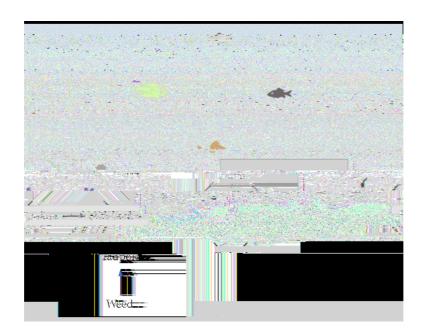
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Module 1: PondWorld Simulation

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Module 2 IntroWeb





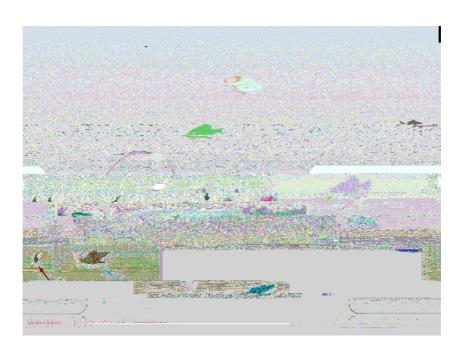


Figure 6.

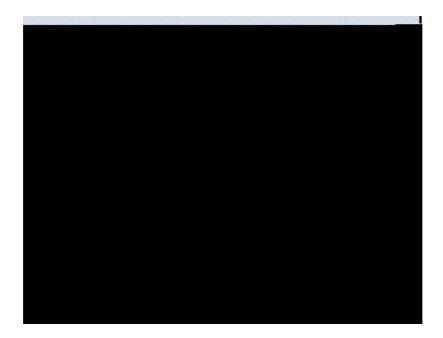


Figure 7

Computational offloading	Form of MM interactivity	Problem Solving Activity	Learning Process
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Pre- and post-tests to assess learning

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Quantitative analysis of pre- and post-test					
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Quantative analy	ysis of learning and	i reasoning proces	ses		
Interacting with Po	ndWorld: the 'aha' l	earning experience			
S		C 1			

LinkWeb

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Children who did n	ot perform well in	n both pre and post t	ests
Children who did n	ot perform well in	n both pre and post t	ests
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Children who did n	ot perform well in	n both pre and post t	ests

Discussion

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Summary

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Acknowledgements

References

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