Improving Children's Understanding of Formalisms through Interacting with Multimedia

Abstract.

Theoretical framework – Cognitive Interactivity

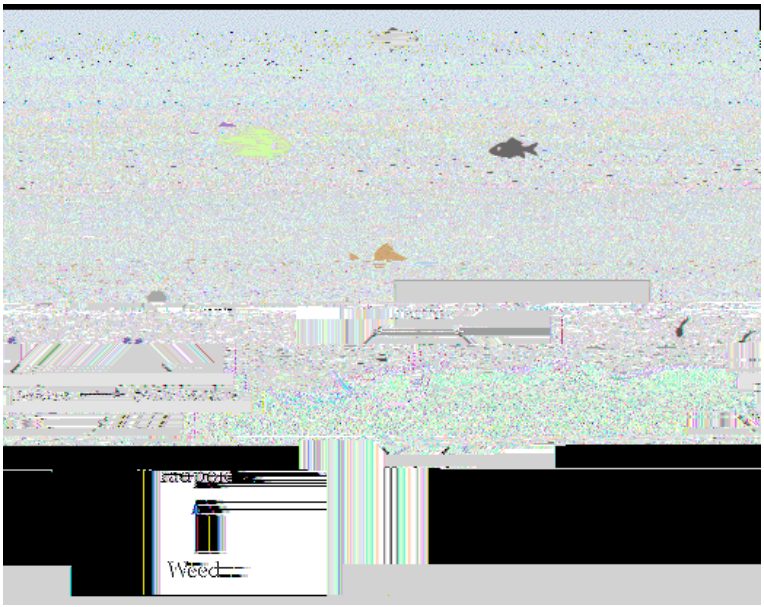
Operationalising cognitive offloading in relation to the learning process

Figure 2.

Designing the software prototype: Implementing our ideas about computational offloading

Module 1: PondWorld Simulation

Module 2 IntroWeb


Weed

Module 3: LinkWeb

Figure 6.

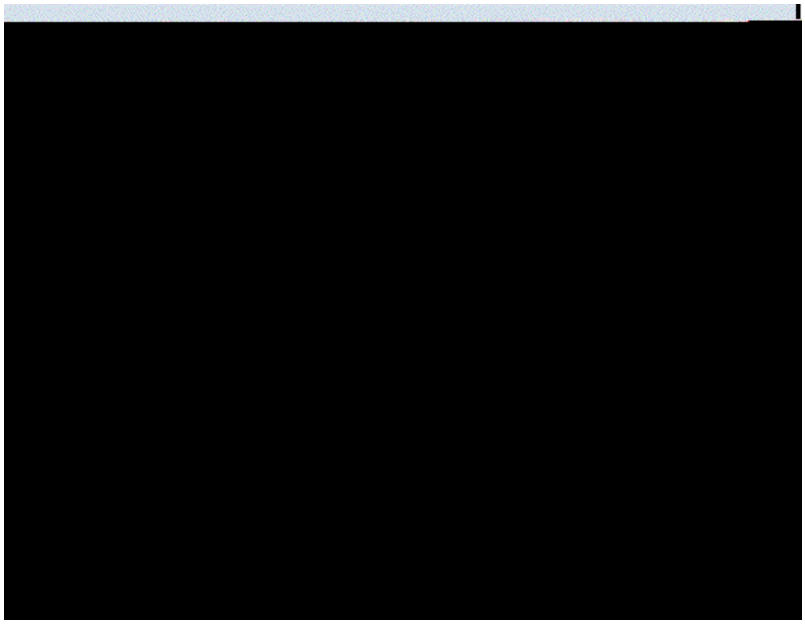


Figure 7

Module	Computational offloading	Form of MM interactivity	Problem Solving Activity	Learning Process

Pre- and post-tests to assess learning

Quantitative analysis of pre- and post-test

Qualitative analysis of learning and reasoning processes

Interacting with PondWorld: the ‘aha’ learning experience

LinkWeb

Children who did not perform well in both pre and post tests

Discussion

Summary

Acknowledgements

References

30,

if