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Slowmation

Garry F. Hoban

University of Wollongong, garry_hoban@uow.edu.au

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Abstract

A "slowmation" (abbreviated from "slow animation") is a simplified way for university or school students to design and make a stop-motion animation that is played at 2 frames/s providing a slow-moving image that is narrated to explain a science concept (Hoban 2005). It is an innovative way for students to learn science because they engage with a concept in many different ways when creating a slowmation by (i) reading text/ images and making summary notes, (ii) creating a storyboard to plan the explanation, (iii) making or using existing models, (iv) taking digital still photos of models as they are manually moved, and (v) using technology to integrate different modes that make up the final animation.

Keywords

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Disciplines

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Slowmation

Garry Hoban*

Faculty of Education, University of Wollongong, Wollongong, NSW, Australia

Synonyms

Multimodal; Representation; Slow animation; Stop-motion animation

A “slowmation” (abbreviated from “slow animation”) is a simplified way for university or school students to design and make a stop-motion animation that is played slowly at 2 frames/s to explain a science concept (Hoban 2005). It is an innovative way for students to learn science because they engage with a concept in many different ways when creating a slowmation by (i) reading text/images and making summary notes, (ii) creating a storyboard to plan the explanation, (iii) making or using existing models, (iv) taking digital still photos of models as they are manually moved, and (iv) using technology to integrate different modes that make up the final animation.

The explanation can be enhanced with narration, text, or music and is an engaging way to learn because students conduct research and use their own technology to design a sequence of representations culminating in the slowmation, which is a multimodal digital representation (Hoban et al. 2011). The process is very accessible because students use widely available technology such as a digital still camera, a tripod, and any free movie-making computer software.

Through creating a slowmation, students make a sequence of representations as a cumulative semiotic progression and their learning is influenced by their prior knowledge, the affordances of the representations created, and the social interactions involved (Hoban and Nielsen 2012). Free examples, instructions, and resources can be found at www.slowmation.com.

Cross-References

Educational Reconstruction
Modeling and Visualization
Multimodal Representations and Learning Science
Representations and Learning in Science

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*Email: ghoban@uow.edu.au

*Email: garry_hoban@uow.edu.au