

Relevant findings from “Creative learning environments in education – A systematic literature review” which support the efficacy of KIT’s Wardrobes Adventure in Learning

Report extracts posted in italics, KIT’s commentary/analysis highlighted in yellow.

Full report:

<http://www.sciencedirect.com/science/article/pii/S187118711200051X>

Need to sustain legacy of one-off ‘critical event’

Of these 32 [studies included in review], 19 studies were reporting on a ‘critical event’, i.e. a project or experience which is in some way ‘special’ or different from everyday practice, in order to create or enhance some of the conditions for pupil creativity. This needs to be borne in mind when applying these findings to work with children and young people in general, as there is reasonable evidence (e.g. Burgess and Addison, 2007, Hall et al., 2007, Halsey et al., 2006 and Troman et al., 2007) that the lessons from such ‘critical events’ do not readily become incorporated into everyday practice once the special project has finished. However, there is evidence across research sites ranging from early years classes through secondary schools, higher education and adult learning in several European countries that creative learning initiatives generally conform to the structure of a critical event; passing through well-defined stages of conceptualisation, preparation and planning, divergence, convergence, consolidation, and celebration.

The sustained nature of Wardrobes - building a relationship spread out across several weeks, rather than a one off event, mitigates the fact that one-off critical events can have limited legacy. In Wardrobes, the critical event of the Professor’s office appearing in the school is the introduction to a sustained project which, importantly, is then further sustained through the Professor’s website and focussed teacher CPD sessions as KIT seeks to leave a legacy of on-going creative environments in the classroom.

Reimagining of spaces: from secret offices erupting in school spaces to support learning:

There is reasonable evidence across a number of studies that the space within a classroom or workshop should be capable of being used flexibly to promote pupils’ creativity (Addison et al., 2010, Bancroft et al., 2008 and Jeffrey, 2006).

Wardrobes will create a secret space: a bizarre Professor’s office, which appears unexpectedly and re-imagines the school space as hidden HQ of a secret organisation.

Another important feature of the visual environment to stimulate pupils’ creativity is displays of work in progress (Addison et al., 2010).

Wardrobes does this by checking in at regular intervals, with characters and teachers feeding back on their ideas both in live classroom sessions and digitally via email

In the classroom there is reasonable evidence that, in order to stimulate creative responses from pupils, activities need an element of novelty (Gkolia et al., 2009 and Rutland and Barlex, 2008)."

Wardrobes disrupts normal school life and plunges pupils into 3 weeks of adventure as they become members of an organisation helping travellers through time. Their membership of this organisation continues after the project has concluded through Professor Memo's website.

New and Exciting Activities + Real World Context

In a study of an urban Education Action Zone (EAZ) with three 11-16 secondary schools and 12 primary schools, [Gkolia et al. \(2009\)](#) found that new and exciting school activities were significant in motivating pupils. In their study of five projects for socially excluded young people, [Halsey et al. \(2006\)](#) identify the importance of the 'authenticity' of the task - it should be set within as real a context as possible and be self-evidently worthwhile - whilst in the context of secondary D&T education [Rutland and Barlex \(2008\)](#) point to the need for interesting, motivating and relevant projects with exciting starting points and stimulus materials in order to develop and open the pupils' minds. Such findings are perhaps self-evident; few would expect that old, boring or meaningless tasks would be effective in developing creative skills. However, there appears to be more research evidence about the role of the learner in relation to the task than the nature of the task itself.

The importance of authenticity of the task is outlined in some of these reports: Wardrobes is an adventure which is presented as reality: erupting into the daily life of the school and treated as reality by all teachers. KIT works hard to ensure that while the adventure is fantastical, it is plausible and that the internal 'rules' of the narrative world are maintained, with moments of magic carefully planned and well-resourced in order to support the authenticity of events.

Evidence of impact of play-led, and games-based approaches:

The role of play in early years pedagogy is well documented, however there is reasonable evidence that bringing more 'playful' or 'games-based' approaches into classrooms at all ages can support the development of creative skills ([Cremin et al., 2006](#), [Cumming, 2007](#), [European Commission, 2009](#), [Halsey et al., 2006](#), [Jindal-Snape et al., 2011](#) and [Miller et al., 2010](#)). [Cremin et al. \(2006\)](#)

Wardrobes uses subtly embedded game mechanics in that pupils must complete specific tasks in order to 'unlock' the next chapter of the story (which is broadly similar to unlocking the next level of a game).

Reasons for extended nature of Wardrobes Adventure:

In their collaborative, video-based study of three early years settings, [Burnard et al. \(2006\)](#) found that young children needed sufficient time for immersion in an activity in order to realise creative outcomes, whilst for [Halsey et al. \(2006\)](#), the most successful NESTA-funded projects for disaffected young people allowed them to work at their own pace without pressure. [Jeffrey \(2006\)](#), reporting on the European Commission-funded Creative Learning and Student Perspectives (CLASP) project, recommends special arrangements for extended time periods for creative activities, and notes the increased interest and commitment that time can give to the value of creative learning.

Wardrobes takes place over several sessions over several weeks: this allows time for the greatest possible immersion in the world of the adventure and greatest-possible emotional connection to the characters in the story (which in turn enhances pupils' motivation to help those characters) and unlock all 'chapters' of the story.

Journeying beyond classroom & Extra-Curricular impact:

The importance of extra-curricular activities and time spent outside the normal constraints of the classroom is further emphasised in the European Commission survey, which identified these as creativity-enhancing factors which are reported as being fostered in schools to a high degree.

The finale of Wardrobes, where the time traveller is summoned to appear out of the ether (and a magical bookcase) by pupils' stories takes place beyond the classroom in a community library.

Impact of improved relationship between teachers and pupils:

[Menter \(2010\)](#) also emphasises the need for flexibility in the pedagogic relationship, to enable teachers to alter their practice to accommodate the directions pupils may wish to take a project. For [Jeffrey \(2006\)](#), commenting on practice across Europe, this ability to act spontaneously and change plans is part of teachers' modelling of creative learning. Dialogue appears to be key to the pedagogical relationship. [Gandini et al. \(2005\)](#) observed in Reggio Emilia schools that regularly scheduled conversation between children and teachers serves as a framework to support children's work. Regularly practiced dialogue can support and sustain a culture and community that thinks together, whilst the most favourable situation for creativity seems to be interpersonal exchange, with negotiation of conflict and comparison of ideas and actions being the decisive elements ([Gandini et al., 2005](#)).

Wardrobes trains teachers in advance of the project to maximise impact and also encourages them to "go on the adventure" alongside pupils - recasting themselves as members of the same team on the adventure. The adventure also builds on the 'plausible ignorance' of teachers, who are no longer the experts imparting knowledge: this new mystery has come from outside of the classroom, so the teacher, while still acting as a guide, apparently knows as much as the pupils.

Impact of working outside of the classroom - ie Libraries.

There is reasonable evidence ([Burgess and Addison, 2007](#), [European Commission, 2009](#), [Halsey et al., 2006](#), [Kendall et al., 2007](#) and [Rutland and Barlex, 2008](#)) to suggest that taking children and young people out of school to work in environments such as museums and galleries enhances their creative skills.

Again, Wardrobes builds on this with its finale set in a community library.

Impact of involvement of outside agencies

There is strong evidence from nine studies that involvement with outside agencies, including the local business community, the wider sporting and Arts community, and other community organisations can significantly contribute to a creative learning environment ([Burgess and Addison, 2007](#), [Cumming, 2007](#), [Gkolia et al., 2009](#), [Grainger et al., 2005](#), [Hall et al., 2007](#), [Halsey et al., 2006](#), [Jeffrey, 2006](#), [Robson and Jaaniste, 2010](#) and [Sharp et al., 2008](#)). Such organisations can embody and exemplify innovative practice through their organisational management and business operations, whilst the involvement of artists and other creative professionals can be a significant feature of a creative environment.

KIT is an outside agency embodying innovative practice, bringing that practice into schools and training teachers in order to leave lasting change.