Contents lists available at SciVerse ScienceDirect

Thinking Skills and Creativity



journal homepage: http://www.elsevier.com/locate/tsc

Creative learning environments in education—A systematic literature review

Dan Davies^{a,*}, Divya Jindal-Snape^b, Chris Collier^a, Rebecca Digby^a, Penny Hay^a, Alan Howe^a

^a Centre for Research in Early Scientific Learning, Bath Spa University, United Kingdom ^b University of Dundee, United Kingdom

ARTICLE INFO

Article history: Received 14 December 2011 Received in revised form 17 May 2012 Accepted 18 July 2012 Available online 31 July 2012

Keywords: Systematic review Learning environment Creative skills Pedagogy Professional development

ABSTRACT

This paper reports on a systematic review of 210 pieces of educational research, policy and professional literature relating to creative environments for learning in schools, commissioned by Learning and Teaching Scotland (LTS). Despite the volume of academic literature in this field, the team of six reviewers found comparatively few empirical studies published in the period 2005–2011 providing findings addressing the review objectives. There was, however a reasonable weight of research evidence to support the importance of the following factors in supporting creative skills development in children and young people: flexible use of space and time; availability of appropriate materials; working outside the classroom/school; 'playful' or 'games-bases' approaches with a degree of learner autonomy; respectful relationships between teachers and learners; opportunities for peer collaboration; partnerships with outside agencies; awareness of learners' needs; and nonprescriptive planning. The review also found evidence for impact of creative environments on pupil attainment and the development of teacher professionalism. LTS intend to use the review as a basis for recommendations to Scottish schools in promoting creativity within Curriculum for Excellence. However, the findings of the review and methodological gaps in the reviewed studies have implications for policy, practice and research internationally. © 2012 Elsevier Ltd. All rights reserved.

1. Introduction and background

In March 2011, the Scottish Government curriculum agency Learning and Teaching Scotland (LTS, now Education Scotland) commissioned a review of 'evidence identifying the most effective learning environments and conditions which promote creative skills development in children and young people' (LTS, 2011). In this context, 'learning environment' was taken to extend beyond the physical architecture of the space in which learning takes place (Dudek, 2000) to encompass psychosocial and pedagogical features (Fraser & Fisher, 1982; Roth, 2000); and should include the influence of places and people outside the school. Similarly, the phrase 'creative skills' was to be interpreted broadly within the review, particularly since it is not well-represented in the literature. Thus, creative thought processes (Mumford, Mobley, Uhlman, Reiter-Palmon, & Doares, 1991), creative problem-solving skills (Williamson, 2011), creative thinking (Torrance, 1977), creative learning (Jeffrey, 2006) and possibility thinking (Craft, 2000) could all fall under the general heading of 'creative skills', acknowledging that such skills have both cognitive and practical elements.

This is not the first literature review of creativity in education; for example Loveless (2002, 2007) undertook a literature review in creativity, new technologies and learning, whilst Banaji and Burn (2006) and Banaji, Burn, and Buckingham (2010)



^{*} Corresponding author. Tel.: +44 1225875675; fax: +44 1225875499. *E-mail address*: d.davies@bathspa.ac.uk (D. Davies).

^{1871-1871/\$ -} see front matter © 2012 Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.tsc.2012.07.004

have reviewed a range of literature from which nine 'rhetorics' of creativity emerged: creative genius; democratic and political creativity; ubiquitous creativity; creativity for social good; creativity as economic imperative; play and creativity; creativity and cognition; the creative affordances of technology; and the creative classroom. The Scottish Executive Education Department (SEED, 2006) produced an overview of some key national policy developments and other initiatives across the UK promoting creativity in education. More recently, Creativity, Culture and Education (CCE – formerly Creative Partnerships) have produced a series of literature reviews on different aspects of creativity and education (Bragg, 2010; Fleming, 2010; Jewitt, 2008; Jones, 2009; Menter, 2010; O'Connor, 2010; Thomson, 2010). The differences between our literature review and those referred to above are that we have used a recognised systematic methodology (EPPI-Centre, 2007); we have reviewed studies published since 2005 in order to add to previous reviews rather than replicate them; and have only included literature based on empirical research, so that any policy recommendations arising from the review are supported not only by powerful ideas but by evidence from practice.

The policy background to this review dates back to the influential *All Our Futures* report (NACCCE, 1999) and its Scottish equivalent *Creativity in Education* (SCEAG, 2001). In Scotland, *Curriculum for Excellence* (2004) is built around four capacities, one of which – successful learners – includes the encouragement to 'think creatively and independently'. The publication of a revised *Action Plan for Education and the Arts, Culture and Creativity* demonstrates strong Scottish Government support to '... develop a shared vision for creativity and its role in learning and teaching in the context of *Curriculum for Excellence*, highlighting the importance of the creative skills of children and young people, and the characteristics which should be promoted by creative learning and teaching in the arts and culture, and across the curriculum' (Scottish Parliament, 2010, p. 6). A survey of evidence from inspections of pre-school centres, primary and secondary schools and community learning and development (CLD) in Scotland by HMIE (2006) recommended a synthesis of elements of good practice in promoting creativity. In England, OfSTED (2010), in a survey of inspection findings from 44 schools: two nursery schools, 22 primary schools, 19 secondary schools and a special school, identified a similar set of characteristics of effective creative teaching. Although not explicitly empirical research – so not included within the reviewed literature – the characteristics of a pedagogical learning environment emerging from inspection evidence provided a useful background framework against which we could compare our emerging findings.

2. Methodology

Our approach to the research was that of *systematic review* (EPPI-Centre, 2007; Thomas & Harden, 2008), in order to establish a reliable evidence base for recommendations to schools, teachers and CPD providers. Systematic review has been defined as: "a scientific process governed by a set of explicit and demanding rules oriented towards demonstrating comprehensiveness, immunity from bias, and transparency and accountability of technique and execution" (Dixon-Woods, 2011, p. 332). The approach has been criticised as taking a reductionist perspective on research evidence, potentially leading to limited findings (MacLure, 2005), though the recent trend towards including robust qualitative – in addition to quantitative – studies (Higgins & Green, 2009) has gone some way towards addressing this perceived narrowness of scope. In our review, most of the studies used predominantly qualitative data, so the systematic processes for assessing weight of evidence did not unduly restrict our findings.

The review was driven by the following research questions, based on the four objectives specified by LTS:

- 1. What evidence in the literature is there for identifying key characteristics of the environments and conditions that are most effective in promoting creative skills development in children and young people?
- 2. What evidence in the literature is there for the impact of creative school learning environments on the educational development of children and young people, taking into account gender and cultural or socio-economic contexts?
- 3. What evidence in the literature is there for identifying specific roles of teachers which promote creative skills development in pupils?
- 4. What evidence in the literature is there for ways in which teachers can best be supported to develop the skills and confidence to facilitate creative learning environments?

To ensure that the review was systematic, we carried out the following steps, as recommended by EPPI-Centre (2007) and illustrated diagrammatically in Fig. 1:

- 1. Scoping the review: we started by developing explicit criteria for specifying which studies would be included in the review (Table 1).
- Searching for studies: each member of the research team set out to identify relevant studies in particular types of literature (see Table 2) using a prescribed set of search terms agreed with LTS. All 210 studies found using this method (Appendix A) were recorded on a grid with summary judgements made against each of the selection criteria.
- 3. Screening studies: each piece of literature was screened against the inclusion criteria (Appendix B). This helped to avoid hidden bias, by having clear consistent rules about which studies were being used to answer the above research questions. By appraising each study against the same criteria and recording the results, the basis for the review's conclusions was made transparent. We met as a team to review all the decisions and re-distribute the literature under the four research questions.

Download English Version:

https://daneshyari.com/en/article/6852196

Download Persian Version:

https://daneshyari.com/article/6852196

Daneshyari.com