The development of a model of creative space and its potential for transfer from non-formal to formal education

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Abstract
Creativity has been emerging as a key concept in educational policies since the mid-1990s, with many Western countries restructuring their education systems to embrace innovative approaches likely to stimulate creative and critical thinking. But despite current intentions of putting more emphasis on creativity in education policies worldwide, there is still a relative dearth of viable models which capture the complexity of creativity and the conditions for its successful infusion into formal school environments. The push for creativity is in direct conflict with the results-driven/competitive performance-oriented culture which continues to dominate formal education systems. The authors of this article argue that incorporating creativity into mainstream education is a complex task and is best tackled by taking a systematic and multifaceted approach. They present a multidimensional model designed to help educators in tackling the challenges of the promotion of creativity. Their model encompasses three distinct yet interrelated dimensions of a *creative space* – physical, social-emotional and critical. The authors use the metaphor of space to refer to the interplay of the three identified dimensions. Drawing on confluence approaches to the theorisation of creativity, this paper exemplifies the development of a model before the background of a growing trend of systems theories. The aim of the model is to be helpful in systematising creativity by offering parameters – derived from the evaluation of an example offered by a non-formal educational environment – for the development of creative environments within mainstream secondary schools.

Keywords
creative space; multidimensional model; non-formal education; formal education; confluence approach; systems theories; framework analysis

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Introduction

More than half a century ago, Joy Paul Guilford argued that "a creative act is an instance of learning" (Guilford 1950, p. 446), thus offering grounds for affirming that the promotion of creativity has a rightful place in educational policies and practice. Over the last few decades, the quest for creativity and the symbiotic relationship between creativity and learning has been the subject of much scrutiny both within and outside of the educational field (Suh et al. 2012; De Jonge et al. 2012). Much of the focus of this discourse has been on the importance of a creative environment for learning (Zimmerman 2014; Chappell and Craft 2011; Warner and Myers 2009; Jankowska and Atlay 2008; Sagan 2008). Creativity has been emerging as a key concept in educational policies since the mid-1990s, with many Western countries restructuring their education systems to embrace innovative approaches likely to stimulate creative and critical thinking (Craft 2005; Feldman and Benjamin 2006; Shaheen 2010). This pattern is also emerging in Ireland, where the second-level curriculum[1] is currently undergoing major reform as a result of recent educational policy developments which advocate a need to foster students' critical and creative thinking (NCCA 2012).

While in many countries the promotion of creativity has become a salient feature of government educational policy documents and declarations of intent, its translation into practice is often less apparent than the rhetoric would suggest (Lin 2011; Newton and Newton 2014). The push for creativity is in direct conflict with the results-driven/performance-oriented culture which continues to dominate formal education systems (Burnard and White 2008; Craft 2010; Newton and Newton 2014).While fostering creativity requires a shift away from knowledge acquisition and assessment-driven agendas, the continuing emphasis on these elements tends to sway educators towards traditional teaching methods and away from the type of innovative approaches likely to stimulate creative, critical thinking (Troman et al. 2007; Besançon and Lubart 2008). The failure to address this tension within educational policy, coupled with limited resources within schools and a lack of specific measures and appropriate support structures to accompany policy, make the promotion of creativity a real challenge for educators.

[1] In Ireland, second-level education is provided by three different types of post-primary schools. That is, secondary, vocational, community and comprehensive schools. Second-level education consists of a three-year junior cycle followed by a two-year or three-year senior cycle depending on whether an optional Transition Year is taken following the Junior Certificate examination. Students usually begin the junior cycle at age 12. The senior cycle caters for students in the 15- to 18-year age group.

This paper seeks to address this challenge by offering a multidimensional model of creativity designed to support schools in the task of transforming policy into practice. Our model recognises creativity as a multidimensional concept – attempts to embed it in practice must be cognisant of the complexity involved. The dimensions concern physical, social-emotional and critical aspects of creativity. Physical aspects include physical space (the layout and organisation of the space); social-emotional aspects include the establishment of a safe, supportive atmosphere (e.g. encouraging and valuing student voice); and critical aspects concern the development of metacognitive skills (e.g. encouraging self-monitoring and experimentation with ideas). However, s*pace* is a concept which lends itself to be read not only in physical but also in metaphorical terms. It encompasses physical architecture/surroundings, climate, atmosphere, attitudes, relations and experiences. In our view, the term *creative space* therefore best captures the multidimensionality of creativity.

Our model draws on confluence approaches[2] to the theorisation of creativity (Lin 2011) and presents its development before the background of a growing trend of systems theories. Systems theories conceptualise creativity as a complex system emerging from the interplay of different components and "take a very broad and often quite qualitative contextual view of creativity" (Kozbelt et al. 2010, p. 38). Mihaly Csikszentmihalyi's (1999) systems model is particularly apt as, unlike other theorists, Csikszentmihalyi places particular emphasis on the environment and shifts the focus from "What is creativity?" to "Where is creativity?" (Kozbelt et al. 2010). We argue that the provision of a creative space in schools is a small but significant step towards the promotion of creativity in education.

While concepts of creativity offer a generic theorisation of creativity, our development of a model aims to offer a more concrete framework for the infusion of creativity into educational contexts – both formal and non-formal ones – and therefore holds the potential of bridging the gap between theory and practice. In particular, we suggest that schools could benefit from a model derived from non-formal education. While both non-formal and formal education present intentional and systematic (Etling 1993; Romi and Schmida 2009) approaches to teaching and learning and therefore feature some commonalities in terms of planning instructional activities, non-formal education tends to have a more learner-centred orientation (rather than being curriculum-focused) and places greater emphasis on "the unique needs of students (or unique situation)" (Etling 1993, p. 72). In addition, the less directive and more flexible roles of non-formal educators may also offer examples for

[2] A confluence approach regards creative thinking or creativity as being formed by a convergence of several tributary (or confluent) factors.

democratising educational practices in formal learning environments. A straightforward replication in schools of the educational creative environment found in the non-formal educational environment we describe in this paper may of course be somewhat aspirational. Nevertheless, we argue that the principles which inform it and its characteristics can offer a model for a gradual modification of educational practices in the formal education sector.

Fighting Words creative writing centre: an example of creative space in the non-formal sector

We developed our model based on data gathered as part of a larger evaluation study (Lorenzi and White 2013) of a creative writing centre. *Fighting Words* is a Dublin-based, non-profit, self-funded, independent arts organisation which provides free mentoring in creative writing to participants of all ages, in particular, young people and disadvantaged youth. Founded by well-known Irish writer Roddy Doyle[3] in 2009, *Fighting Words* operates in close partnership with schools in Ireland. It works predominantly with students from the greater Dublin area, particularly with schools based on the Northside and inner city neighbourhoods where social disadvantage is prevalent.[4]

The *Fighting Words* creative writing model consists of three phases. During the first phase, participants create characters and develop dialogue in response to a scenario-based role play. Consistent with suggestions put forward by Chrysanthi Gkolia et al. (2009) and Marion Rutland and David Barlex (2008), the prompt is powerful and encourages students to experiment with ideas**.** The scenarios invariably originate from experiences students can readily identify with (Halsey et al. 2006). For instance, two friends want to go to a concert. One of the friends wins tickets and the other assumes that the friend will bring him/her. However, the friend decides to bring someone else. Students role-play the situation and a tutor types the conversation as it unfolds. The students' words are projected onto a screen in real time. The group then creates a story around this scenario. All students' ideas appear on the screen and the story develops gradually through a democratic editorial process led by the tutor. This phase offers students opportunities for working collaboratively with their peers (Dillon et al. 2007; Rutland and Barlex 2008) but also allows for the type of dialogue and

[3] Roddy Doyle is an award-winning Irish writer of novels, plays and screenplays who writes for adults and for children. His homepage is http://www.roddydoyle.ie/ [accessed 4 October 2016].
[4] For more information about the *Fighting Words* centre, see http://www.fightingwords.ie/ [accessed 29 September 2016].

interpersonal exchange which sparks creativity (Gandini et al. 2005). At a suitably dramatic moment in the development of the collective story, the group input ends and the second phase begins. Participants now move to the adjacent room to continue the story individually. In the final phase, the students reconvene and read their stories aloud.

Fighting Words is an example of a creative space in the non-formal education sector. Providers of non-formal education are free from the restrictions which plague the performance-driven formal sector and enjoy greater freedom in terms of design and delivery of programmes and choice and location of environments. *Fighting Words* operates outside of formal institutional contexts, yet, thanks to its close connection to schools, *Fighting Words* represents an organisation with the potential to bridge the gap between formal and non-formal education. It is for this reason that we chose it as the environment for the analysis presented in this paper.

The model proposed here may help in systematising creativity by offering parameters for the development of creative environments within schools. While our model has been derived from and illustrated with reference to *Fighting Words*, we envisage that its relevance could extend beyond purpose-built non-formal creative writing centres. Unlike other models of creativity which have been generated entirely from theory and have been perceived by educators as top-down approaches for educational practice (Lin 2011), the grounding of our research in the *Fighting Words* approach provides exemplification from a lived experience of promoting creativity through the co-operation of formal and non-formal education providers.

Research methodology

The parent study

The follow-up research we report on in this paper was derived from a larger evaluation study commissioned by *Fighting Words*. The primary purpose of that larger study (Lorenzi and White 2013) was to evaluate the compatibility of the *Fighting Words* creative processes with curricular developments in second-level education in Ireland. Without having had any prior connection with *Fighting Words,* we were given unlimited access to resources and stakeholders involved with the creative writing centre. At no point during the research process did the commissioning organisation exert pressure or influence the outcomes of our research.

The original evaluation was a large study which had investigated the perspectives of a range of key stakeholders. These were second-level students, teachers, school principals, Fighting *Words* tutors and founders and the Chief Executive Officer of the Irish National Council for Curriculum and Assessment (NCCA). Students included those who had experienced weekly contact with *Fighting Words* over an academic year, those who participated in a one-off workshop and those who continued attending *Fighting Words* (after their contact through school ended). The accessibility and the size of the stakeholder group dictated that we apply non-selective sampling. Questionnaires and semi-structured interviews were deemed the most suitable data collection methods. The questionnaires were designed to elicit the experiences and views of all the students (256), teachers (7) and tutors (41) involved in the project. While the questionnaires differed according to the target population, the questions were designed in a way which enabled, as far as possible, comparison of the responses. The questionnaires contained a mix of open-ended and closed questions to allow for the collection of both numeric and qualitative data. The questionnaires were designed to give a comprehensive range of responses to more than 20 questions relating to all aspects of the project.

After the questionnaires had been designed, questions for the semi-structured individual interviews were planned for each of the following stakeholders: the *Fighting Words* founders; the Chief Executive Officer of the Irish National Council for Curriculum and Assessment (NCCA); and principals of schools participating in the year-long project. These key stakeholders were selected because their understanding of both the *Fighting Words* model and developments in the second-level curriculum saw them well-placed to comment not only on the model itself but also on its potential translation to mainstream education. Interview questions were designed to give a comprehensive range of responses to all aspects of the project and to allow for triangulation with responses from questionnaires.

Data collection was carried out over twelve months. A total of 163 out of 304 stakeholders responded, giving a response rate of 54.3 per cent. Additional data were obtained from field notes we compiled during site visits to the premises. Over the period of a year, we studied the premises, attended workshops and events, and spoke with staff, tutors, teachers and students. We also attended a training workshop for volunteer tutors to observe how training was conducted and how the ethos of the organisation was presented. Given the large number of volunteer tutors working for the organisation[5], we felt this to be an important

[5] At the time of our study, there were 41 volunteers out of a selection of over 500.

consideration. Observations of the physical space, the teaching methodologies and the interaction of students, tutors and teachers were recorded and stored as field data.

Focusing on creative space: our follow-up research, using framework analysis

An initial characterisation of creative spaces had emerged as an unexpected outcome of the original research. This outcome appeared to warrant further exploration, particularly with a view to strengthening our argument for the potential of *Fighting Words* to provide a rich example for the infusion of creativity into formal educational environments. However, the initial characterisation was sketchy and unstructured and we felt that revisiting the data more closely might yield further useful information to systematise the characterisation of creative spaces.

For the follow-up study reported on in this paper, we narrowed our focus on the emerging model of creative space and its transferability from a non-formal to a formal educational context. The data analysis approach we took for this study is consistent with the principles of framework analysis. Aashish Srivastava and Bruce Thomson (2009) describe framework analysis as a qualitative method of research which has specific questions, a pre-designed sample and some a priori issues identified prior to the start of the data analysis. They add that while "framework analysis may generate theories", its main purpose is to "describe and interpret what is happening in a particular setting" (ibid, p. 73). According to Jane Ritchie and Liz Spencer (1994), who developed this qualitative research method, framework analysis is flexible in that it allows the user to either collect all the data and *then* analyse them or do data analysis *during* the collection process. Maylor Archer et al. (2005) emphasise that framework analysis allows keeping in close contact with the data, since it is a dynamic and generative framework which allows change or addition or amendment throughout the process. This flexible approach to data analysis was important in our research, where the original framework was provided by the original study which indicated that creativity is a multidimensional concept. Through a closer textual analysis of interviews, questionnaire and researcher generated observations, we examined the specific characteristics of a creative space and their interconnection.

Analysis and discussion of findings

Three main outcomes emerged from our follow-up study: (1) a multidimensional concept of creative space; (2) a more specific characterisation of a creative space; and (3) the

identification of challenges to and parameters for a potential transfer of the model from non-formal to formal educational contexts.

The development of a model of creative space

Traditionally, there are primarily two categories of creativity: "everyday creativity (also called 'little-c'), which can be found in nearly all people, and eminent creativity (also called 'Big-C'), which is reserved for the great" (Kaufmann and Beghetto 2009, p. 1). Much of the discourse on creativity in education has been driven by the concept of ordinary or "little c" creativity – problem-solving and agency of individuals in everyday life – (Craft 2001a; Craft 2003) and the perception that the ordinary person can be creative (Craft 2001b; NACCCE 1999; Seltzer and Bentley 1999).

Perhaps a more useful conceptual framework is the concept of "mini-c" creativity – the type of creativity demonstrated by individuals engaged in the process of learning – put forward by Ronald Beghetto and James Kaufmann (2007, 2009). Mini-c creativity aligns more closely with Guildford's original observation on the relationship between learning and creativity and thus with our purpose here. Another concept which also contributed to the theoretical background of our model is Vlad Petre Glăveanu's (2013) "five A" framework of actor, action, artefact, audience and affordances.[6] We consider this a useful framework appropriate to the concept of creativity in education as it recognises the creativity inherent in the learning process and includes creative expression at several levels. It therefore offers the potential to encapsulate creativity across all domains on the little-c/Big-C continuum. Our model is thus underpinned by the concept of "mini-c" creativity and Glăveanu's (2013) "five A" framework.

A creative space in educational terms should foster development; it should be stimulating and dynamic and generate a fertile environment for the emergence of unexpected and divergent outcomes (Wild 2011). In this section we identify the characteristics of a creative space captured by the data gathered during our evaluation study of *Fighting Words* (Lorenzi and White 2013). Our findings indicate that the *Fighting Words* model entails three distinct dimensions of creative space – a physical dimension, a social-emotional dimension and a critical dimension. Our analysis of the data in our follow-up study has resulted in a refinement of the characteristics and their connotations in relation to each dimension.

[6] Affordances are possibilities of action.

In this paper we refer to a *model* of creative space. The *model* is intended as an example generated from both theory and practice (rather than from theory alone) and is to be understood as a general framework for infusion of creativity into both non-formal and formal educational environments, albeit originally generated from the analysis of a non-formal educational environment.

Other researchers have spoken of *creative space* in multidimensional terms. Stefania Bocconi et al. (2012) suggest that a creative classroom comprises eight dimensions. They describe the interplay between the dimensions as an eco-system and see creative classrooms as complex organisms constantly evolving. Maja Jankowska and Mark Atlay (2008) present creative spaces as possessing specific physical characteristics, generating different relationships between teachers and students and eliciting co-operation, creative thinking and reflection. Dan Davies et al. (2013) describe creative learning environments as possessing psychosocial and pedagogical features in addition to the physical architecture of the space. In analogous terms to Rupert Wegerif's (2011) theorisation of dialogic space, a *creative space* is a dynamic rather than a static interplay of the above mentioned dimensions and is highly dependent of the situational context. Glăveanu's (2013) five-A framework also puts forward a multifaceted notion of creativity. Glăveanu introduces the concept of affordances (action possibilities) to emphasise the role of the physical environment. Other authors (Warner and Myers 2009; Dul et al. 2011; Starke 2012) also indicate that promoters of creativity need to pay attention to physical space. Janetta Mitchell McCoy and Gary Evans (2002) posit that creativity research has emphasised personal characteristics and has not focused sufficiently on the effect of physical environment on creativity.

In order to develop a model of creative space which could bridge the gap between theory and practice and offer practitioners – in both non-formal and formal education sectors – a guide for generating an environment conducive to the emergence of creativity, we took a three-step approach. First, we considered those data collected in the course of the parent study which highlighted the emergence of a characterisation of creative space. Second, we reviewed the literature on the topic of creative spaces. This allowed us to generate a more refined framework for analysis of our data. Finally, we returned to the data with the refined framework, which enabled us to identify the interconnection between the various dimensions of creative space and to add detail to their characterisation. The interplay among the dimensions as it emerged from our analysis is illustrated in Figure 1.

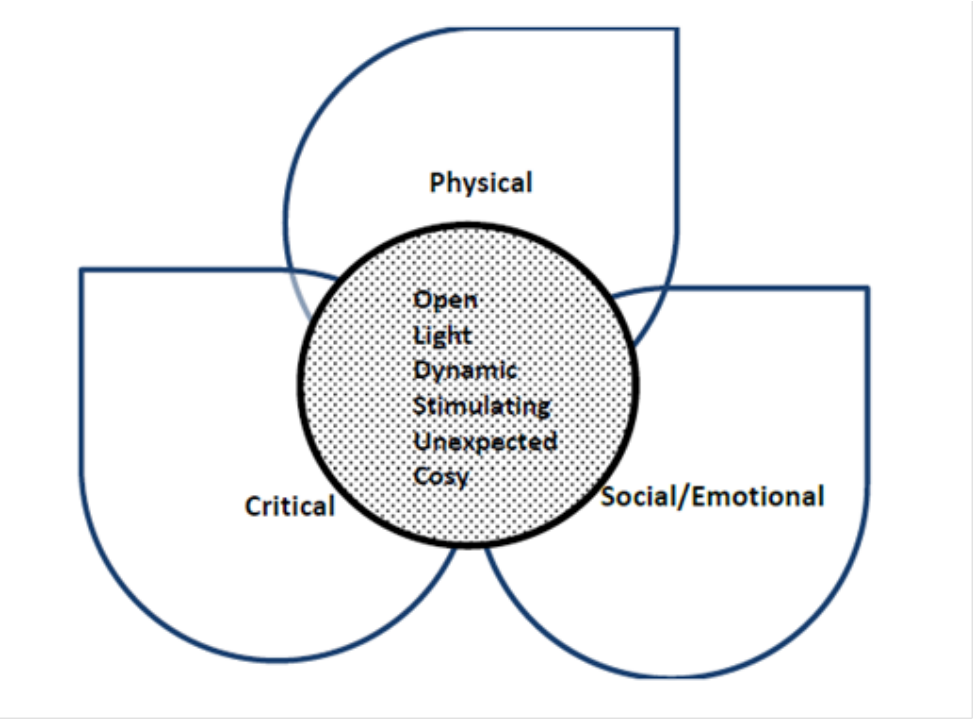

Figure 1 A multidimensional model of creative space

To explain the interplay illustrated in Figure 1, the next section discusses how the characteristics are specified across different dimensions. For instance, creative spaces should be characterised as *open* and *light* in physical, social-emotional and critical terms. The same goes for the other four characteristics we identified: *dynamic, stimulating, unexpected* and *cosy*.

The characterisation of our model of creative space

In this section we discuss the characteristics of a creative space as they emerged from our study. We examine the characteristics in the context of each dimension. These characteristics emerged when we applied the refined framework, referred to above, to data obtained from field notes, interview transcripts and questionnaire responses. As the purpose was to establish interconnections between the dimensions, we deliberately chose terms which could be applied equally across all dimensions. The process of characterisation required careful choice of language as the terms chosen had to be broad enough to reflect the core characteristics and precise enough to capture the nuances dictated by each dimension. Terms which recurred in the text of the interviews and responses to questionnaires and researchers' field notes were

selected. These were *open, light, dynamic, stimulating, unexpected* and *cosy*. A description of these characteristics and how they manifest in *Fighting Words* now follows.

Open and light

Fighting Words is a bright, open, welcoming space. The furniture is gaily coloured, but economical, leaving the space uncluttered. The main rooms present specific sensory features. Bright pink curtains replace doors and are rarely used to isolate one room from the other, thus leaving the space open most of the time. Access to the main room is through a bookcase which opens like a door. The minimal use of physical barriers and flexible seating arrangements allow ease of movement between work areas and smooth transitions between activities. The space is brightly lit and natural light floods in from the large patio door leading to a courtyard. The addition of the courtyard as an outside space extends the sense of openness and fluidity evident inside the building. The combination of these factors generates a perception of the space as *open* and *light*.

Our data indicate that the physical environment of *Fighting Words* is conducive to creativity. Participants saw the configuration of space and the open bright décor as important, and commented that these features create a relaxed ambience different from that found in formal school environments. Our findings from the data which highlight this include references to *Fighting Words* premises as "an alternative space to school", a "physical space that allows relaxing" (tutors and teachers), and as a place where "there's no desks … the organisation of the space is different" (CEO NCCA).

A number of authors (Addison et al. 2010; Jeffrey 2006) suggest that openness should characterise the creative space and that classrooms which allow flexible use of space and ease of movement promote pupils' creativity. According to Vea Vecchi (2010), the sensory qualities in learning environments such as light, colour and sound are important influences on young people's perceptions of their creative ability. Openness, brightness and minimal use of physical barriers are also highlighted by Jankowska and Atlay (2008), who refer to what they call the C-space (Creativity space) as "clean, nicely furnished/decorated … [and which] doesn't feel like a classroom" and add that "the space influences creative thinking" (p. 275). Elsewhere, Scott Warner and Kerri Myers (2009) speak of lighting, colour, decorations, resources, sensory variables and room configurations as contributing factors to generating an environment conducive to creativity and, in accordance with Nancy van Note Chism (2002), argue that room design influences the social context, the student-teacher relationship and the

overall effectiveness of the instructional design. Some of the features of the physical environment described here are rather different from those found in formal school environments, however, Giulio Jacucci and Ina Wagner (2007) acknowledge the potential of classrooms to become creative spaces in which materials such as technologies and art objects expand collaborative communication and promote new ideas.

Further analysis of the data revealed that the *open* and *light* characteristics found in the physical space of *Fighting Words* are mirrored by a relaxed, supportive atmosphere and non-judgmental ethos. This social-emotional dimension was seen by participants as a crucial component of *Fighting Words* and as an important factor in promoting creativity. Most stakeholders referred to the relaxed and supportive atmosphere they had experienced in *Fighting Words*. The non-judgmental ethos was clearly perceived by all students, including one-off workshop attendees. This is evident in students' references to the sense of self-validation which they experienced by taking stories in individual directions ("I could have my say"), and the freedom they felt from not having to conform to rigidly set standards ("I learnt that no idea is bad or stupid"). Recurrently in the interviews, *Fighting Words* is described as a nurturing environment which supports without judging and in so doing creates a safe place in which to thrive both academically and personally.

The empowerment which results from supportiveness of the environment opens up a creative space where participants can experiment with ideas and express their views openly. Such a freer environment is also a more playful one where humour contributes – in critical terms – to the development of students' creative ability and also helps – in social-emotional terms – to foster relationships (Jindal-Snape et al. 2011; Miller et al. 2010). The flexible seating arrangements allow less formal interaction between participants and tutors, and this creates an atmosphere which suggests fewer boundaries and less specific limitations on what can or cannot be done. This blurring of boundaries allows references which may be considered unacceptable in a classroom to be embraced in this less restricted environment, as signalled by this tutor:

> In *Fighting Words* when we are given a group of kids to work with they are already excited and they're already out of their class environment … we get a great reaction because we can write a story and the character in it can let a big fart and *they don't do that in school so we already have them giggling and laughing*.

Creative spaces should be characterised as *light* in physical, social-emotional and critical terms. *Light* in the critical dimension recognises that creativity is enhanced when students are

given some control over their learning and are also supported in taking risks (Cremin et al. 2006; Burgess and Addison, 2007; Ewing 2011).

Light in terms of the social-emotional dimension manifests as humour and enjoyment and can enhance the teacher/student relationship (Cumming 2007). Bringing more "playful" or "games-based" approaches into classrooms at all ages can also support the development of creative skills (Cumming 2007; Cachia et al. 2009; Jindal-Snape et al. 2011). Students find in *Fighting Words* a nurturing space where praise has a profound effect on their performance. Tutors who are not seen by students as teachers and who do not act as teachers are the most frequently quoted factor in the establishment of an atmosphere different from that experienced in school. Mentorship alone does not seem to be a sufficiently differentiating characteristic to distinguish tutors from teachers, as it can be argued that teachers also fulfil that role to some extent. However, the constructive and advisory role assumed by tutors – which in *Fighting Words* is decoupled from the judgmental role associated with assessment – was reported by interviewees as being influential in the establishment of a supportive relationship with students. Freedom to think outside the box and confidence gained from seeing one's own ideas validated by other students, teachers and tutors emerge from our data as frequently mentioned benefits.

It is put forward in the literature that the infusion of creativity into education should aim to generate development in social-emotional terms. A supportive environment is needed for creativity to flourish (Zimmerman 2014). Creativity is enhanced when students are given some control over their learning and are also supported in taking risks (Cremin et al. 2006; Burgess and Addison 2007; Ewing 2011). Students should feel comfortable and their voice should be heard and acknowledged. To this end, Lynn Holaday (1997) suggests that coaching rather than judging is more likely to help students develop confidence in their creative ability. Jankowska and Atlay (2008) highlight the importance of atmosphere and suggest that in social-emotional terms, the atmosphere should be personal, less bookish and make students more likely to comment honestly. A non-judgmental ethos plays a significant role in the establishment of a supportive and safe environment for students, but also in the development of creativity, and in particular of "possibility thinking" (Craft 2001b), divergent thinking (Torrance 1972) and a dialogic space (Wegerif 2011). Beth Hennessey and Teresa Amabile (1987, p. 11) have asserted that intrinsic motivation is influenced greatly by situational or "state" factors in one's environment (e.g. school). The environment may affect one's motivation when engaged in a task (e.g. problem-solving), thus also pointing to the importance of the relations within the environment. Furthermore, the importance of a

relational space where individuals grow personally and relationally is highlighted by Shelley Day-Sclater (2003), Kerry Chappell and Anna Craft (2011), and Olivia Sagan (2008, p. 182), who speaks of a transitional space "as one in which the student, artwork and tutor 'play'" and where "risk-taking and co-construction of identity and ideas" are allowed.

Stimulating and cosy

As already mentioned, the physical environment of *Fighting Words* is comfortable and pleasant. Many aspects of its design are conducive to creative work. According to the literature, the visual environment may stimulate pupils' creativity when work in progress is on display (Addison et al. 2010). Extracts from students' work dotted around the room, rows of colourful bookcases and the courtyard as a thinking space are examples of how the physical space of *Fighting Words* can be stimulating. The outside space of the courtyard can only be accessed by participants, making it safe and cosy. According to the data, our respondents experienced *Fighting Words* as a stimulating, cosy environment which engages and motivates students and encourages expressivity. One school principal commented that students rather than the syllabus become the centre of the educational experience:

> It gives students an opportunity to express creatively something that reflects their own experience of life and that is not necessarily dictated by the curriculum …

In terms of expressivity, a number of stakeholders observed the value of *Fighting Words* in providing a platform for the student voice. Teachers commented that the space was crucial in "allowing students space and freedom to express themselves". According to the CEO of NCCA, voice is at the core of the initiative:

> *Fighting Words* to me is about voice. It's about giving students the tools to articulate views, opinions, ideas, concepts, questions – even if they're challenging … giving them the tools, giving them the space and giving them the confidence as well to find that voice.

The opportunity to be heard was identified as a significant factor in building participants' confidence and self-esteem. According to one principal,

> Their self-esteem has just blossomed; they hold their head up high and they're role models now to the other students.

Some of the findings indicate that the opportunity to have their voice heard was particularly significant for quiet students and students with mental health difficulties. One principal noted that the informal atmosphere stimulated students' participation and encouraged them to express their opinions:

> They were so eager to get up and talk and vocalise, and one girl, they were saying, never stopped talking, ye know, just talk, talk, talk, talk, talk. We're always saying "be quiet", "settle down" so I think that's a different type of dynamic.

Once students begin to articulate their thoughts and become aware that their opinions are being validated, they delve deeper, discover further ideas and start to contribute more, perhaps unleashing more than they realised they had to say. The fact that participants felt confident to express their views freely is indicative of the supportive, non-threatening and cosy atmosphere which prevailed.

In addition to the factors already discussed, the innovative methods used in the *Fighting Words* model are a further example of how a creative environment encompasses the social-emotional and critical dimensions associated with creativity. Our analysis of the data illustrates that the *Fighting Words* model develops creativity by encouraging expressivity, divergence and resourcefulness. The collaborative process used during the first phase of story writing is an example of how a "can do" attitude is generated. The shared responsibility for the initial development of the story stimulates ideas, and the group energy provides students with a strong starting point for their story. Interesting, motivating and relevant projects with exciting starting points and stimulus materials develop and open pupils' minds (Gkolia et al. 2009; Rutland and Barlex 2008). The collaborative beginning sidesteps the hurdle of starting, an obstacle commonly experienced by those embarking on a creative process. Roddy Doyle, being an established writer himself, considers this a vital strategy, remarking: "It's the blank page that terrifies people more than anything else." Opportunities for working collaboratively with peers (Burgess and Addison 2007; Dillon et al. 2007; Rutland and Barlex 2008) and interacting dialogically may spark creativity (Gandini et al. 2005).

The collaborative beginning also generates a sense of mutual support and respect. Students reported a sense of validation from seeing their shared story being typed and projected onto a screen. Doyle sees this as an essential confidence-building exercise which helps students recognise and trust their creative ability. The sense of ownership derived from this activity builds students' resilience and resourcefulness and initiates a creative process which, once started, is sustained mostly by the students alone. A further sense of validation

and mutual supportiveness is generated in the final phase of the creative writing process, as students respectfully listen to each other's versions of the story and express surprise at how remarkably different the stories have become.

A creative space should empower students to become autonomous agents who can think for themselves and have an analytical capacity which enables them to choose between alternative options while also considering the impact of those choices on others. The necessity of a critical dimension has been identified by Daria Loi and Patrick Dillon (2006, p. 364) who assert that "educational environments that claim to foster creativity must incorporate potential for analysis".

In the second phase of the model, students develop the story individually and are urged to take their own route in storytelling. Our data suggest that *Fighting Words* stimulated participants' creativity and instilled an appetite for creative thinking. Students experimented with ideas and were encouraged to continuously rework their writing to develop it. As a result, different, original and divergent endings emerged. Students were given full control over their stories and tutors encouraged students to articulate their ideas and use their imagination. One principal argues that this approach contrasts with formal education, where syllabi are constraining and consequently the imagination of a child is limited:

> They are reminded to regurgitate the facts, the facts, the facts and sometimes there isn't space for expression aside of the facts … generally they don't get the opportunity … it is very, very important and it's something that is not encouraged enough at second level and it's something that should be cherished.

The relationship with tutors appears to have been paramount in stimulating students' resourcefulness and resulted in students producing work they did not realise they were capable of creating. One student referred to "being surprised at my own ability", and another remarked: "I had a good story in my head and I did not know about it". Despite the excitement of being able to write their own stories, students reported also experiencing fatigue generated by the intensity of effort which any creative endeavour requires. They acknowledged that in "chiselling" their story they needed to develop perseverance, self-reliance and self-motivation. Responses from the key stakeholders suggest that the tutors' motivational role was paramount in "helping students to build self-reliance". This appears to tally with views expressed by the surveyed teachers, who remarked that students displayed behaviours and attitudes which indicated they had developed an understanding of deferred gratification and an ability to persevere with a course of action even when they encountered

challenges which they would previously have considered insurmountable. Principals attributed this increased resilience to participants' experience of seeing projects through to completion in *Fighting Words*.

Unexpected and dynamic

Many aspects of *Fighting Words* can be described as unexpected and dynamic. The unconventional use of the bookcase as a door repurposes it in dynamic and unexpected terms. A bookcase is normally static. The notion of an opening bookcase leading to a secret passage is a nod towards fictional worlds depicted in novels and films. The key for opening the door is not physical but metaphorical. A *Fighting Words* tutor (hidden from students' view) opens the door in response to a chorus of magical words chosen and uttered by students. The fact that the magical words are decided by the students, reinforces the power of words created by the students themselves. The *Fighting Words* Educational Co-ordinator emphasises the magical ambiance of the space:

> The building itself is quite magical and I think the space is an important part of what we do … We are lucky to have a magic door at *Fighting Words* and the magic door is a bookcase that opens up so when the kids are ready to go through they come up with a couple of magic words and the main part of the centre is a big bright space.

The element of surprise generated by the bookcase door creates a sense of anticipation and discovery. This sense of wonderment continues into the main room – a dynamic space which serves multiple purposes and encourages fluidity – and the courtyard – an outside space which is not, as might be expected, reserved for breaks from the work but also used as a place of work, a thinking space.

Conclusion

Our research identified specific challenges to the transferability of the *Fighting Words* model to formal education. In this paper, we have outlined a multi-dimensional model of creative space which, while generated from our analysis of data collected in a non-formal educational setting, offers potential for its transfer to formal education. We have argued that at the heart of the model is the interconnection of the three dimensions we have identified, namely the physical, social-emotional and critical dimensions. While the specification of the dimensions

may be dependent on the context in which the model is adopted, attention should be paid to all three dimensions. However, it is necessary to acknowledge that there are fundamental differences between non-formal and formal education. In particular, it must be recognised that formal educators may in practice operate in more restrictive conditions, subject for instance to curricular dictates, established roles, functions and organisational structures. From the evidence gathered in the course of our study, what has emerged as a common thread underpinning the three dimensions is *difference*. The need for different physical spaces, different types of social-emotional environments and relationships and different forms of thinking have been summed up by the stakeholders as "out-of-school experience". This seems to point to the impossibility of generating a creative environment within schools. Yet difference here is seen as something which can be brought inside schools by modifying current practices, policies, roles and attitudes rather than relegating creativity to environments physically, emotionally and critically located outside schools. We argue here that the model of creativity put forward in this paper is within reach of schools seeking to implement it, provided that there is an orchestrated effort among different stakeholders within the school. In this final section we summarise some of our findings in relation to the potential constraints to the translation of our model to formal educational contexts.

The physical environment

Our study has evidenced that the physical space is a contributory element to the generation of an environment which fosters creativity. The space comes to life through visual reminders of creativity both in the form of creative works produced by participants and established sources – examples of both "mini-C" and "Big-C creativity". These have been identified by participants as an important element in generating a stimulating environment where one is surrounded by creativity and prompted to partake. Features such as brightness, flexibility and openness have also been mentioned by participants as important aspects in generating a sense of freedom and openness. Such features have also been associated with absence of restrictions and possibility to interact in and use the space in imaginative ways. Schools can generate a physical creative space by *repurposing and/or reconfiguring space.* A dedicated room in the school can be repurposed specifically to promote creativity and may present architectural features reminiscent of *Fighting Words* building. However, if aiming for a more extensive infusion of creativity into schools, it may be more pragmatic to consider classrooms reconfigured as creative spaces. Such classrooms are then characterised by flexibility,

brightness and openness. The flexibility may allow for different use for different subjects and this may bring an element of surprise and variety to a room which is used by multiple teachers.

However, the physical environment is not in itself sufficient. Its interplay with the social-emotional and critical dimensions is also necessary.

School structures and roles

Most participants had concerns regarding the compatibility of the model with specific aspects of the second-level curriculum including: the necessity to associate summative assessment with the model, the unavailability of tutors to support students, and the unsuitability of the school environment to recreate an "out-of-school" experience. Some of these limitations have led to the suggestion that rather than translating the model in its entirety, it would be more achievable to consider the translation of the workshop approach adopted by *Fighting Words* into a teaching methodology which could be utilised by teachers. The reproduction of the social-emotional environment witnessed in *Fighting Words* is by no means straightforward. *Different types of relationships between teachers and students* are being advocated, but realistically this requires a shift in thinking both in terms of teachers' self-identity, role and responsibility and students' perceptions of the role teachers play in their learning. Issues of authority and equality in the classroom may be brought to surface when attempting to establish an environment denoted by a non-judgmental ethos and freedom of self-expression, elements often referred to by participants in this study as crucial for the establishment of a fertile environment for creativity. Furthermore, larger pupil-teacher ratio and teachers' dual role as mentors and assessors impact on one-to-one time and attention which mentorship requires and on the extent to which a more relaxed and informal type of relationship can be established. Nevertheless, the introduction of, for instance, team teaching along with a greater focus on nurturing mentoring relationships with students is not beyond the scope of schools. These measures should help towards consolidating the supportive/non-judgmental ethos which usually accompanies the type of relationships already enjoyed by teachers and students in extra-curricular activities. The example of extra-curricular activities is particularly pertinent because it illustrates a successful example of bringing the "out of school experience" into schools. Ideally behaviours and attitudes embraced and expressed in extra-curricular activities should permeate classroom interaction and the curriculum itself should cease to be a straight-jacket which restricts both focus and form of the interaction.

In this study a non-judgmental ethos has been identified as a catalyst in empowering students to 'have a voice' and in signalling that different perspectives are valued. The generative process of story-writing is of significance as it illustrates that even from a shared starting point, individuals can think and take their stories in remarkably different directions. Similarly, opportunities to think freely away from pre-determined directions or expected answers should underpin the interaction in the classroom if creativity is to be promoted. The thinking associated with learning in formal educational environments is often restricted to meeting assessment requirements. Yet the scope of formal education expands beyond satisfying assessment requirements, and consideration of the formation of students in a broader sense is within the remit of teachers. Forming autonomous thinkers who can experiment with ideas and take them in novel directions would not only benefit students but education in more general terms.

We hope that the limitations of this study can be addressed by future research. Some of the limitations of this research include the limited timeframe for conducting the study. The study would have benefited from more prolonged contact with schools and more in-depth contact with teachers and students. Prolonged contact with participants before and after their engagement time would have allowed us gather further data on participants' profile and offer more scope for analysis of how having experienced a creative space has impacted on their long-term development. It is always difficult to differentiate between changes which occur naturally during adolescence and the impact of external factors on shaping individuals who are undergoing a period of significant transitioning.

While the challenges and limitations discussed above are substantial, these could potentially be overcome if a gradual and systematic approach to the infusion of creativity into formal environment through the generation of creative spaces is adopted. The study has simply gone as far as proposing a model. A future study should investigate – with reference to the model – what is the current status of creativity in formal educational environments. It is envisaged that this type of study could further inform the development of the model of creative space, but also result in more specific guidelines for educators and educational managers to favour the infusion of creativity into schools.

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