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NORTH AND SOUTH



**creative classrooms:**

Imaginative and Innovative Teaching in Ireland

# **Creative Classrooms**

## Insights From Imaginative And Innovative Teaching In Ireland

(CCIT-Ireland)

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# Part 1

## INTRODUCTION





## 1.1 Background and context

In a bid to develop a more competitive and dynamic Europe, creativity and innovation are receiving increased attention and emphasis in both industry and education sectors (Cachia, Ferrari, Ala-Mutka, & Punie, 2010; Ferrari, Cachia & Punie, 2009; Gibson, 2005). Both learners and workers are expected to 'apply what they learn in new and creative ways, so as to ensure continued productivity, economic growth and social welfare' (Tanggaard, 2011, p. 219). However, as buzz words of these times, *creativity* and *innovation* are criticized by Davies (2006, p. 40) as being misconstrued and misunderstood. Creativity, in particular, has many conflicting definitions, especially in an educational context where it means different things to different people (Cachia, Ferrari, Ala-Mutka, & Punie, 2010, p.19). Gardner (1993) argues that there are at least seven forms of cognition or intelligence and that each form of intelligence holds, within itself, its own form of creativity. Therefore, individuals can develop their creative potential according to their personality and the options and constraints within which they are operating (ibid). While this could be considered a 'relatively minimal definition' (Tanggaard, 2011, p. 220), it is also an indication of how the creative process can lead to 'novel outcomes or action' (Tanggaard, 2011, p. 220; Sternberg, 2006).

In today's changing world, the need for new knowledge at both individual and societal levels is continuous, and hence the drive for creativity is remorseless (Davies, 2006, p. 41). In the context of education, current European policies consider the fostering of creativity and innovation as a means of strengthening the 'innovative capacity and the development of a creative and knowledge-intensive economy and society' (Cachia et al., 2010, p. 9). A recent European study, *Creativity and Innovation in Education and Training in the EU27* (ICEAC)<sup>1</sup> (2008-2010) conceptualizes creativity as a transversal and cross-curricular skill or an ability to make unforeseen connections and to generate new and appropriate ideas. (Cachia et al., 2010; Ferrari et al., 2009). In particular, it considers the inter-relatedness of creativity and innovation (cf. Ferrari et al., 2009). In addition to a broad body of literature, it draws on the work of Craft (2004, 2005) who proposes that an important distinction be made between 1) teaching for *creativity*; and 2) *teaching creatively* where the relationship is an integral one because 'the former is inherent in the latter and the former often leads directly to the latter' (Jeffrey & Craft, 2004, p. 14).

For Tanggaard (2011, p. 220), teaching for *creativity* involves enabling students to take risks in their learning through experimentation. *Teaching creatively*, on the other hand, is considered more embedded in the 'characteristics of teaching itself' and therefore 'is seen as a potentially creative and improvised activity' (Tanggaard, 2011, p. 220). It is also argued that creativity can be developed in everyone and that teachers and educational actors have the power to unlock the creative potential in learners (Cachia et al, 2010; Ferrari et al, 2009). However, there is also a claim that teachers who are 'themselves creative' are the ones who 'create the best conditions for enabling pupils or students to become creative' (Tanggaard, 2011, p. 220; Ferrari et al, 2009).

The ICEAC study (2008-2010) describes *creative learning* as 'any learning which involves understanding and new awareness, which allows the learner to go beyond notional acquisition, and focuses on thinking skills. It is based on learner empowerment and centeredness' (Ferrari et al, 2009 p. iii). In other words, it is the opposite of the reproductive experience (ibid). Innovation on the other hand refers to the 'application of such a process or product in order to benefit a domain or field - in this case, teaching' (Ferrari et al, 2009 p. iii). Therefore, *innovative teaching* can be considered to include the pedagogies and approaches that a teacher uses to unlock the creative potential of the learners (ibid). Consequently, Ferrari and her colleagues argue that 'creative learning requires innovative teaching' (Ferrari et al, 2009 p. iii). Broadly, across European schools the ICEAC study finds that there is huge potential for creative learning and innovative teaching. However, it also identifies five key areas that need to be addressed in order to better support the factors that enable learners to be more creative: namely, *curricula, pedagogies and assessment, teacher training, ICT and digital media, and educational culture and leadership* (Cachia et al, 2010, p. 9 & p. 52).

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<sup>1</sup> <http://is.jrc.ec.europa.eu/pages/EAP/iceac.html>

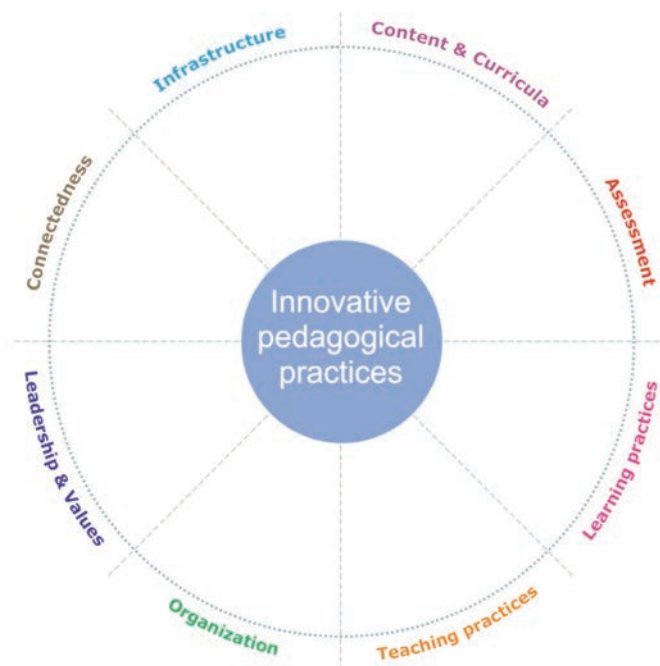


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Further research conducted on behalf of the European Commission - *Up-scaling Creative Classrooms in Europe*<sup>2</sup> (Scale CCR, 2011-2013) aims to build on knowledge gained from the ICEAC study (2008-2010) in order to better develop the concept of 'Creative Classrooms' so that innovation may be scaled-up across European educational settings. Here, 'Creative Classrooms' are conceptualized as 'innovative learning environments that fully embed the potential of ICT to innovate and modernize learning and teaching practices' (Bocconi, Kampylis, & Punie, 2012, p. 7). In the SCALE CCR Project (2011-2013), the term 'creative' refers to the innovation of learning and teaching practices through technologies that support, among other areas, collaboration, active learning and personalization. Thomas and Seely-Brown (2011) describe this as 'a new culture of learning' that both motivates and challenges learners. The term 'classrooms' is understood in its widest sense to include formal, informal and non-formal settings (Bocconi, Kampylis, & Punie, 2012, p. 7). The SCALE CCR Project (2011-2013) is therefore an inquiry into how creativity and innovation can be encouraged, sustained and up-scaled in European education settings as a result of the affordances of digital technologies today. This is especially important when it is widely accepted that 'children's learning contexts are changing in our schools and that technology is playing a part in the types of teaching and learning practices and pedagogies that are emerging' (Galvin, 2009, p. 19). Consequently, this would suggest that a 'one size fits all' model should not apply (cf. Kampylis, Law, Punie, Bocconi, Brečko, Han, Looi & Miyake, 2013). Instead, existing pedagogical and organizational frameworks should be altered to accommodate more collaboration and creativity if teachers and educators are to become 'shapers and re-shapers of school and classroom innovations – in all its adaptive and technological aspects' (Galvin, 2005, pp.144-145).

The 'holistic and systemic nature' of these learning environments, their 'intended learning outcomes' and their 'pedagogical, technological, and organizational characteristics that favour innovation' (Bocconi, Kampylis, & Punie, 2012, p. 8) are emphasised in a Mapping Framework (Figure 1) that was proposed during one of the stages of the SCALE CCR Project (2011-2013). This SCALE CCR Mapping Framework consists of 'eight encompassing and interconnected key dimensions' (Figure 1) that aim to capture the essential nature of these learning ecosystems': namely, *Content and Curricula*; *Assessment*; *Learning Practices*; *Teaching Practices*; *Organisation*; *Leadership and Values*; *Connectedness and Infrastructure*. At the centre lies *innovative pedagogical practices*.



**Figure 1:** SCALE CCR Mapping Framework: *Key dimensions of Creative Classrooms*<sup>3</sup>

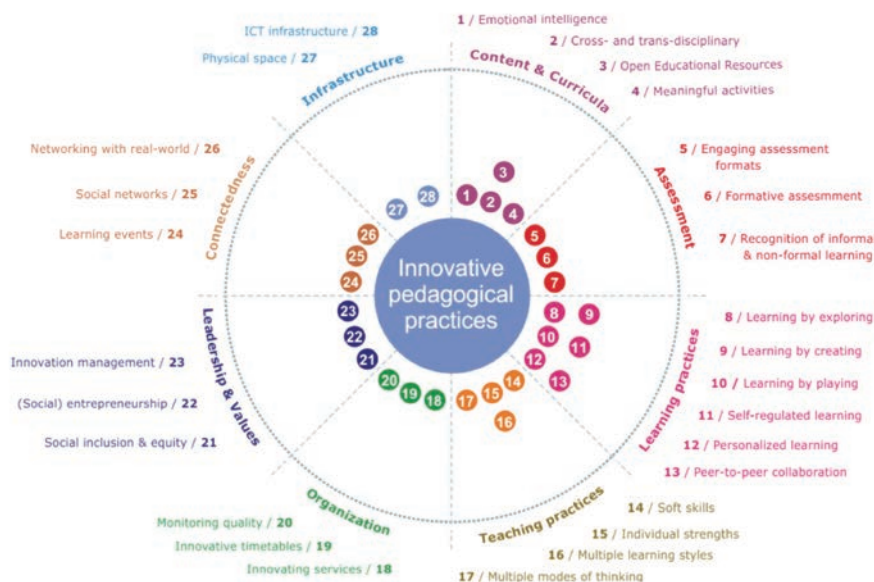
<sup>2</sup> <http://is.jrc.ec.europa.eu/pages/EAP/SCALECCR.html>

<sup>3</sup> cf. Bocconi, Kampylis, & Punie, 2012

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In addition, the SCALE CCR Mapping Framework includes a more detailed set of reference parameters or 'building blocks' (Figure 2) that aim to capture significant changes in *what* we learn, *how* we learn, *where* we learn and *when* we learn' (cf. Bocconi, Kampylis, & Punie, 2012, p. 12) so as to achieve 'educational transformation for a digital world' (Bocconi, Kampylis, & Punie, 2012, p. 12; Redecker, C., Leis, M., Leendertse, M., Punie, Y., Gijbers, G., Kirschner, P., Stoyanov, S., Hoogveld, B., 2011).



**Figure 2:** SCALE CCR Mapping Framework: *References Parameters of Creative Classrooms*<sup>4</sup>

In theory, the SCALE CCR Project (2011-2013) proposes that this Mapping Framework makes it possible to identify and map the nature and detail of 'Creative Classrooms' within specific education settings (Bocconi, Kampylis, & Punie, 2012). In Ireland, our small-scale research project – *Creative Classrooms: Insights from Imaginative and Innovative Teaching in Ireland* (CCIT) broadly aimed to explore how teachers and school leaders perceive Creative Classrooms in Irish primary and post primary classrooms, north and south. Therefore, the SCALE CCR Mapping Framework provided an interesting starting point for our discussions and research around creativity in classrooms.

## 1.2 Scope of the report

The research project 'Creative Classrooms: Insights from Imaginative and Innovative Teaching in Ireland' (CCIT) broadly aimed to:

- identify, investigate and case-report the nature and detail of teaching and learning activities within a number of *Creative Classrooms*, north and south; and
- contribute to developing a better international understanding of the issue of creativity in the classroom and so to a more complete definition of the creative classroom itself and the learning experiences this affords.

In turn, this informed our research questions:

- How do teachers and school leaders perceive the nature of *Creative Classrooms* and their defining pedagogies?

<sup>4</sup>cf. Bocconi, Kampylis, & Punie, 2012

(Note: The CCIT-Ireland study drew upon this version of the Mapping Framework)

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- What is the role of intangibles in these pedagogies and how do they impact on the inter-relationships between pedagogy, technology, school infrastructure and systemic innovative practice?
- What are the complexities of mapping creative classroom pedagogies?

The CCIT-Ireland project references and draws upon understandings of the creative classroom currently being developed for DG Education and Culture by the JRC-IPTS Information Society Unit Seville and EUN Schoolnet, Brussels around how trans-sectoral creative classroom practices can be scaled-up in a sustainable and meaningful manner. Our intention was to make a contribution to this work by identifying and case-capturing good creative pedagogy practice in Ireland, north and south.

## 1.3 Organisation of the report

The report is in five parts.

Following the introduction that draws on some current literature to contextualize the research, there is an outline of the research methodology and data collection methods used in this project. After that, we present our findings, first from a primary perspective (north and south) and then from a post primary perspective (north and south). This section details the dataset and considers some of the early results from the interviews and classroom observations. These findings are then discussed from a more analytical perspective, with particular reflection on the three research questions. This is followed by some concluding comments.

## Appendices:

Appendix 1: A & B: Interview Questions – principals/school leaders and teachers.

Appendix 2: Collective sample of *Creative Classrooms* in action – link to YouTube video.

# Part 2

## METHODOLOGY





## 2.1 Methodology, data collection methods, coding and analysis

The CCIT-Ireland research project aimed to make a contribution to the discourse around creativity in classrooms by identifying and case-capturing good creative pedagogical practice in Ireland, north and south. The overall approach used to report the findings of this research project follows accepted models and practices taken in case studies (Bassey, 1999; Simons, 2009). Data were collected in the following ways:

**Desk research** for identifying, selecting and analysing the cases: This covered a broad range of materials for example school websites, blogs, Twitter feeds, promotional literature, images and video clips.

**Consultations** on the perceptions of *Creative Classrooms* from the participants of workshops<sup>5</sup> and presentations given during the project time:

- SCoTENS Conference<sup>6</sup>, 28-29th November 2013, Sligo – (2 conference workshops);
- Media and Learning Conference<sup>7</sup>, December 2013, Brussels (conference presentation);
- ESAI Conference<sup>8</sup>, 10-12 April 2014 (conference presentation).

Each event brought valuable contributions that informed our understanding on the concept of *Creative Classrooms* and guided our research.

### Fieldwork in schools:

- **Interviews** with teachers and school leaders – 3 class teachers and 1 school leader in each case. Interviews were conducted in a semi-structured manner, to encourage the respondents to speak freely, within a range of questions (Appendix 1). The advantage of this approach over the unstructured interview approach lies in ease of analysis at a later stage (Bell, 2005, p. 159). Interview questions were open-ended and designed to explore themes that had emerged from the three key research questions outlined earlier. Open-ended questions were used to enable the researcher to probe more deeply and uncover a deeper reflection of the research issue (Cohen, Manion, & Morrison 2007, pp. 357-8). While there were slight differences between the questions asked of teachers and those asked of school leaders, a connected overlap afforded the researchers to uncover the unique perspective that each participant could offer. This approach was found to be appropriate in eliciting information relevant to this research.
- **Interviews** lasted between twenty and thirty minutes and were recorded using a voice recorder, as agreed by the interviewees. One participant declined to be recorded so field notes were taken instead. Permission was also granted by interviewees to transcribe the recorded interviews and to use citations and quotations – suitably anonymised (*cf.* Table 1) – from interview data as an integral part of the research report. Once tabulated, coding was completed using a design frame (developed as part of the literature and methodology reading), and a data analysis package namely *Nvivo 10<sup>9</sup>* (Windows Version). Analysis presented here is based on the perceptions of *Creative Classrooms* that emerged from teachers and school leaders, north and south, that emerged during the research project.
- **Observations** in 11 schools - 6 primary schools (3 north, 3 south) and 5 post primary schools (2 north and 3 south) - 3 classes per school were observed for existing classroom activities within each educational setting. Non-participation observation was used to 'gain a comprehensive picture of the site' (Simons, 2009, p. 55). Consequently, this afforded the researchers a 'sense of the setting which cannot be obtained solely by speaking with people' (Simons, 2009, p. 55). Field notes and photographs of creative teaching and learning out-turns were taken during this time. No photographs were taken that could potentially identify the school, the interview participants, or the students.

<sup>5</sup> <https://docs.google.com/document/d/1UJTEQM-oKwSRtzP7N6NJulmISitoUASQi9nH5Enld30/edit>

<sup>6</sup> [http://scotens.org/wp-content/uploads/SCoTENS\\_programmeFINAL.pdf](http://scotens.org/wp-content/uploads/SCoTENS_programmeFINAL.pdf)

<sup>7</sup> [http://media-and-learning.eu/files/pdf/media-and-learning-2013\\_programme.pdf](http://media-and-learning.eu/files/pdf/media-and-learning-2013_programme.pdf)

<sup>8</sup> <http://www.esai.ie/sites/default/files/documents/conference-34/2014/ESAI-programme-2014-final.pdf>

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<b>Primary North Principals (PNP)</b> School A: PNP A School B: PNP B School C: PNP C	<b>Primary South Principals (PSP)</b> School A: PSP A School B: PSP B School C: PSP C
<b>Primary North Teachers (PNT)</b> School A: PNT A1, A2, A3 School B: PNT B1, B2, B3 School C: PNT C1, C2, C3	<b>Primary South Teachers (PST)</b> School A: PST A1, A2, A3 School B: PST B1, B2, B3 School C: PST C1, C2, C3
<b>Post Primary North Principals (PPNP)</b> School A: PPNP A School B: PPNP B	<b>Post Primary South Principals (PPSP)</b> School A: PPSP A School B: PPSP B School C: PPSP C
<b>Post Primary North Teachers (PPNT)</b> School A: PPNT A1, A2, A3 School B: PPNT B1, B2, B3	<b>Post Primary South Teachers (PPST)</b> School A: PPST A1, A2, A3 School B: PPST B1, B2, B3 School C: PPST C1, C2, C3

**Table 1:** Interview participants – anonymised

<sup>9</sup> [http://www.qsrinternational.com/products\\_nvivo.aspx](http://www.qsrinternational.com/products_nvivo.aspx)

# Part 3

## FINDINGS







## 3.1 Case Report 1: Primary Schools - North

### PRINCIPALS' PERSPECTIVES (Data set: 3 Interviews)

For each of the principals interviewed in the northern primary setting, creative teaching was perceived to be about helping children to take '*risks in their learning*' (PNP A, B, C) so that they may '*have a go*' (PNP B). In turn, it was held that this facilitates children in '*making choices and being prepared to explore different ways of competing tasks*' (PNP C) rather than being '*overly dependent on the teacher taking the lead*' (PNP B). Across each of the interviews a key message was that '*teaching today is all about helping children to learn and problem-solve for themselves and that a creative teacher allows children to do that*' (PNP C).

When asked to provide examples of creative classroom activities, each of the principals described activities conducted at the Foundation and Key Stage 1 level of the school. In particular, play-based learning featured strongly. Here it emerged that '*foundation and early years teachers by the very requirements of the early years curriculum have to be creative teachers*' (PNP C). This was further explained in terms of how these teachers '*appreciate open-ended tasks and accept that the process of learning is much more important than end products*' (PNP C). Another principal added that in his/her particular school these teachers '*are better at introducing creative themes into the curriculum*' (PNP B). However, for teachers working at Key Stage 2 level there was a perception that '*some teachers think unless the children have their head in a book they are not working*' (PNP B).

Enablers of *Creative Classrooms*, for all of the principals interviewed, revolve around making a shift in practices and in mindset from a more traditional approach that places a heavy emphasis on '*tests and entry into post primary*' (PNP B) towards one that is about '*making children life-long learners and encouraging them to find joy in learning*' (PNP C). A '*supportive principal*' was identified as a key driver of this process (PNP A) which '*is not just about money*' to provide the required resources but about having '*trust*' in teachers and finding alternative solutions in other resources such as parents who are '*part of our school life*' and '*enrich our school curriculum*' (PNP C).

Involving parents was discussed as being a valuable way to support the creative process in schools. However, principals also acknowledged that this '*requires a big time commitment and good communication skills*' (PNP C). This has implications when teachers and principals are required to '*justify*' what is taught because with '*an active curriculum, it is often harder to demonstrate learning development and progress*' (PNP C). Consequently, principals interviewed all believed that more time for professional development to give teachers '*more confidence in themselves as professionals*' (PNP C), reduced curricular content and better autonomy over resources would greatly enhance the creative process in schools (PNP, A, B, C).

### TEACHERS' PERSPECTIVES (Data Set: 9 Interviews)

For many of the teachers interviewed in the northern primary setting, creative teaching is about children being actively involved in their learning and taking initiative in their own work while working alongside the teacher. Creative teaching was therefore perceived to be a '*busy classroom with interested children following stimulating activities created by the teacher*' (PNT B1). '*Tapping into the interests of the children and really getting them excited about what they are learning*' was considered to be an essential component of the creative classroom (PNT B3). Consequently, a '*creative teacher doesn't rely on tests to make judgements about children's learning but is well informed about how children learn and what makes them tick*' (PNT C1).

When asked to describe some examples of creative classroom activities, a number of teachers referred to taking a more thematic approach to learning, for example, through stories, the outside environment or by bringing the world *'into the classroom'* (PNT A3). In many cases, this type of approach involves parents who will share their expertise with the children – *'real life learning from real people that the children know in their community'* (PNT C3). In addition, the importance of play-based learning, while emphasised, was reported to be used mostly with younger classes (PNT B1).

Enabling the creative classroom was therefore found by many of teachers in the northern primary setting to require a lot of resourcing and support so as to provide *'quality material'* (PNT A2) and so that the school could get involved in *'extra activities'* (PNT A3). In addition, resourcing and support was discussed in terms of providing opportunities for teachers to work together, for example, *'having team meetings with colleagues can really help spark ideas – we try to plan in teams so we can support each other and share resources'* (PNT C2).

It is clear from interviews in the northern primary setting that many teachers are keen to make teaching and learning as interesting as possible for the children. Nevertheless, constraints around time emerged very strongly across many of the interview sites as being a key impediment to this process. In particular, curriculum overload was noted as a frustration to the point where for one teacher *'it would be easier to just teach from a text book, but then you realise the children would be bored to tears'* (PNT C1). In addition, *'the worry about having enough evidence to demonstrate pupil learning'* (PNT C2) is a concern highlighted by one teacher who says *'I sometimes panic and think 'we haven't written that down'* (PNT C2). Consequently, if they were given the opportunity to make changes some teachers interviewed said they would remove the *'emphasis on assessment'* that *'puts the fear of God into teachers and the expectation of reaching this level and meeting this and that target'* (PNT C3). As one teacher put it *'give me the time to do my job and trust me as a teacher'* (PNT C2).

## 3.2 Case Report 2: Primary Schools - South

### PRINCIPALS' PERSPECTIVES (Data set: 3 Interviews)

Each principal interviewed in the southern primary setting found it challenging to *'define'* creativity in a school setting. Mostly they described it in terms of something intangible that could be *'interpreted in lots of different ways'* (PSP B). For one principal, it involves *'doing the best you can with very limited resources'* (PSP A) and, for another, it is about going *'above and beyond the norm'* to develop an atmosphere in which children are interested in their learning (PSP C). Creating such an atmosphere means that *'all of the children don't necessarily have to be doing the same thing at the same time'* rather their working spaces and activities should be varied, and scaffolded by the teacher (PSP B).

The perception of *Creative Classrooms* was further illustrated through examples of activities described by the principals interviewed. What emerged was a genuine belief in seeking opportunities to make learning really relevant to the children's lives. For example, project work was cited as a way of engaging children in topics that they enjoy and also of enabling them to work together collaboratively. Support from the local community was perceived here to be very important as it can *'involve as many people as possible'* (PSP A). Digital technology in particular was discussed by all of the principals as one way forward and because it *'seems to fit the model of the creative classroom'* (PSP B) by offering opportunities to develop new skills through activities such as *'Mystery Skype'* (PSP A), eTwinning<sup>10</sup> (PSP B) or literacy and movies/animations (PSP C) in active, engaging and authentic ways. In turn, activities of this nature could be posted online via a blog or podcast and shared with *'a much wider audience'* (PSP A).

Technology thus emerged as a theme that is perceived by principals to be strongly linked to the development of children's creativity. Furthermore, it was highlighted as an important tool to

<sup>10</sup> <http://www.etwinning.net/en/pub/index.htm>

<sup>11</sup> <http://www.theinsidelane.net/edchatie>

<sup>12</sup> [http://www.leargas.ie/programme\\_main.php?prog\\_code=7018](http://www.leargas.ie/programme_main.php?prog_code=7018)

enhance teacher continuous professional development (CPD), albeit informally, through, for example networking on Twitter in a community setting such as #edchatie<sup>11</sup> (PSP A) or via the Comenius<sup>12</sup> programme that enables teachers across Europe to exchange projects and meet face-to-face with the children know in their community' (PNT C3). In addition, the importance of play-based learning, while emphasised, was reported to be used mostly with younger classes (PNT B1). Creating an 'atmosphere where teachers are not afraid to take risks' (PSP B) is therefore also perceived to be an important aspect of enabling creativity. Providing supportive leadership was considered by all of the principals interviewed to be a key factor here. A supportive leader was held to be not only someone who supports creative ideas, but someone who supports growing a culture of creativity and collaboration across a school (PSP C).

A whole-school approach to encouraging creativity emerged strongly from those interviewed in all of the primary south schools. However, each of the principals identified a number of barriers to developing this ethos. For one principal, encouraging a continued effort towards creativity without simultaneously introducing the feeling that *'every teacher has to do it, but that they feel comfortable doing it'* is a challenge (PSP C). Therefore, the enthusiasm can *'slowly trail off'* if that *'supportive environment'* is not there (PSP C). In addition, school constraints, such as overloaded curriculum, limited funding / infrastructure / resources, restricted time to experiment and an over-focus on standardised testing emerged as a serious concern for principals interviewed. Consequently, *'trust in the teachers'* (PSP B) and their ability to work within and around these constraints, as well as allowances being made for greater flexibility by policy-makers is required (PSP A, B, C).

## TEACHERS' PERSPECTIVES (Data set: 9 Interviews)

Teachers that were interviewed in the primary south sites broadly perceived creativity in classrooms as *'going above and beyond a textbook... to reach as many children as possible'* (PST A1) through *'a wide range of methodologies'* (PST A3). Creativity was described in terms of *'thinking outside the box'* (PST A1, A2, A3, B2) where even though it can be quite *'messy'* (PST B1), it is also *'free flowing... as opposed to a very rigid style'* (PST B3). For one teacher, it must involve teachers who *'plan creatively, integrate creatively and differentiate creatively'*; the children themselves who should be *'provided with a space'* within which they can be creative; and the school that is *'creative across the board so as to stimulate learning and where a child will feel interested and engaged'* (PST C1).

Teachers offered many examples of how they encourage creativity in the classroom. In particular, a thematic approach to teaching and learning emerged as a very positive approach, enabling children to make connections between subject areas and bringing learning to life in really meaningful ways. For example, one teacher described how young children learned all about plants and animals by using the local environment, taking and uploading photographs, planting seeds and developing related stories through art work (PST A1). Another lesson, observed during fieldwork, saw children captivated by the arrival of 'Henri Matisse' (teacher in role, PST A3) who taught them all about shape and colour. ICT was cited as an important form of encouraging creativity because it can provide an *'audience'* beyond the classroom for the children and *'there is critical feedback which should be a key part of the creative process'* (PST C1).

Teachers were broadly very positive towards the affordances of more creative approaches. Throughout the interviews the importance of 'hands on' activities that engage and inspire children emerged strongly and this was observed in all classes. In particular, at the junior end of the school, Aistear<sup>13</sup> - the Early Childhood Curriculum Framework - is considered an excellent example of how creativity can be fostered within the context of play and teachers interviewed said that they would like it extended to older children. At the middle and senior ends of the school, group project work that really challenges the children emerged strongly, for example the affordances of learning through STEM (Science, Technology, Engineering & Maths)-related subjects. It was held that problem-solving activities

<sup>13</sup> [http://www.ncca.ie/en/Curriculum\\_and\\_Assessment/Early\\_Childhood\\_and\\_Primary\\_Education/Early\\_Childhood\\_Education/Framework\\_for\\_early\\_learning/](http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Early_Childhood_Education/Framework_for_early_learning/)

could be contextualised in a real-life setting and again enable children to make connections across subject areas and share their work via Skype or a school website etc. In addition, the importance of sharing teaching ideas within the profession was also raised by those interviewed. For one participant, *'when you talk to like-minded people who might be working on a similar topic you get ideas and you try to build on that'* (PST A1).

Encouraging creativity in a classroom is considered hugely beneficial and essential, according to the teachers interviewed in the primary south schools. Nevertheless, for one participant, it is difficult *'to make every lesson amazing'* (PST B2). In many cases, the constraints identified by teachers are similar to those identified by the principals (space, time, funding/resources/infrastructure, standardised testing). However, for some teachers the lack of motivation by colleagues was also identified as a potential barrier to sustaining the momentum around creativity in the classroom because of a perceived expectation *'that every year should be different and revitalised'* (PST C1). Teachers, therefore, reiterated the need for flexibility and support by policy-makers, parents and school leaders so that they may better develop creative teaching and learning practices within and beyond their school.

### 3.3 Case Report 3: Post Primary Schools - North

#### SCHOOL LEADERS' PERSPECTIVES (Data set: 2 Interviews)

Across the interviews, school leaders described creative teaching as using *'practices that make the pupils think'* (PPNP A). It was consistently described as an approach that involves pupils in their learning and focuses on developing their skills. Leaders perceived creative teaching as involving a move away from traditional didactic approaches and taking a risk with new approaches.

Asked to provide examples of creative practice in their schools, leaders across the interviews described approaches used to make links between classroom learning and the outside world. They highlighted collaborative approaches engaging learners in project work, giving presentations to peers, peer teaching and peer assessment. ICT and drama in education were mentioned by all as means of supporting collaboration among learners.

Leaders consistently highlighted the key role management played in fostering a culture where creative approaches to teaching and learning are promoted. Across the interviews, leaders emphasised the need to encourage and support teachers in developing and using creative approaches. It was consistently acknowledged that CPD for teachers would encourage and enable them to use more creative approaches.

Principals unanimously highlighted the exam system as the greatest impediment to promoting creative approaches as it forced teachers to restrict their practice and teach to the exam. It was acknowledged that changes in the examination specifications for some subjects to focus more on learners' skills have helped to promote and support more creative approaches. Where pupils have been rewarded for skill use and not just content knowledge, for example, in Biology, Maths and History exams, there has been a positive effect on the teaching and learning approaches used.

#### TEACHERS' PERSPECTIVES (Data set: 6 Interviews)

All teachers highlighted that creative teaching focuses on learning rather than on teaching. Consistent mention was made of how it stimulates learners to become actively involved in their learning and develops their problem solving and decision making skills. All teachers agreed it can involve lots of interaction and collaboration but one highlighted that it can also involve working alone with the

emphasis being on personal engagement with the content (PPNT A1). It was consistently mentioned that creative teaching positively impacts on relationships between the teacher and the learners which, in turn, leads to better learning.

It was generally acknowledged that the revised curriculum with its focus of development of skills has allowed teachers more flexibility to use creative approaches. Describing some creative approaches used in their schools, teachers focused on approaches and activities which encouraged learner involvement and independence. The emphasis was on the use of inquiry-led learning through research-based tasks with, for example, mobile phones and apps being used to support the research.

Examples of creative practice given centred around collaboration and on learning from peers. One teacher described how she uses digital tool called Edmodo<sup>14</sup> to help form an on-line learning community involving teacher and pupils and parents in order to foster personalised support and learning (PPNT A1). Another used shared folders so learners could access and read/listen to one another's work (PPNT B1). Another described how she set up dedicated rooms where learners could come together to work on projects outside of timetabled lessons (PPNT A3).

Teachers focused on the necessity of creating a school and classroom environment which was supportive of a creative approach. One teacher highlighted the importance of the school management in encouraging and supporting teachers' efforts to use creative approaches (PPNT A1). Another spoke of how good relationships between teacher and pupils helped to support and encourage creative approaches (PPNT A3). *'The kids have to feel valued and trusted in your class to be creative ...'* (PPNT B1). Another explained how the classroom context could be prepared for creative approaches by having rules in place so that there are boundaries that everyone is aware of and understands (PPNT A2). It was generally held that there needs to be good classroom management and a plan *'so that children have a very clear idea of success criteria and what they are expected to do at the end...'* (PPNT B2).

Across the interviews, teachers proposed that a change in the way learners are examined would help foster more creative teaching in schools. Currently, *'by necessity the teacher is forced to pull back and teach towards the exam'* (PPNT B3) Teachers consistently proposed an alternative exam that would encourage and support individual outcomes. However, it was proposed that any change would need to be accompanied by a curriculum which was less prescriptive in order to allow teachers time to use creative approaches. As one teacher put it *'I couldn't possibly teach like that all the time – things to cover and assessment deadlines affect what you do'* (PPNT B1). Time was consistently mentioned as a potential impediment or enabler of creative approaches; a majority expressed a desire for longer class periods because creative approaches need more time. It was also generally acknowledged that creative approaches need careful planning and resourcing and that this takes time.

CPD was consistently mentioned as a means of building teachers' competence and confidence in the use of creative approaches. Twitter was proposed for CPD and for sharing and accessing resources with one teacher saying that *'resources found on Twitter are better than 22 years of INSET'* (PPNT A1) It was also proposed that outstanding creative teaching be showcased to enable teachers to see theory in practice (PPNT B3)

## 3.4 Case Report 4: Post Primary Schools – South

### SCHOOL LEADERS' PERSPECTIVES (Data set: 3 Interviews)

Across the interviews post primary school leaders from southern Ireland described creative teaching as being active and dynamic. They highlighted the active involvement of learners and described creative teaching as *'a very constructivist element of education'* (PPSP A) where there is *'an active*

<sup>14</sup> <https://www.edmodo.com/>



*engagement going on'* (PPSP C) aiming at *'opening up their enquiring minds'* (PPSP B). Creative teaching was characterised by the use of a variety of methodologies to maximise learner engagement with the content. Collaboration was consistently mentioned and leaders spoke of a *'hum of engagement'* (PPSP A) and *'a productive noise'* (PPSP C) as the learners and the teacher interact with one another. Evident across the interviews was that creative teaching is used because *'you want the children thinking, and not you doing the thinking for them'* (PPSP B) so *'getting away from the teacher as font of all knowledge and moving into this idea of the student engagement is every bit as important as the instruction they're getting'* (PPSP A).

Principals agreed that there is currently a move from a *'didactic model into a more constructivist, structuralist approach'* (PPSP A) across the subject areas. Instructional Leadership and Assessment for Learning (AfL) strategies are consistently mentioned as means of promoting a more creative approach. They gave examples of learners' independence being fostered through use of collaborative work, project work, student presentations, science practicals and electronic student portfolios. Use of technology is seen as an important support to these. All of the principals highlighted an increased effort to make greater links between the subject content and its real world application especially in science, maths, English and art lessons. This is achieved through use of the Internet, through practical activities and by inviting guest speakers.

Teacher confidence was highlighted by all principals as fundamental to the use of creative approaches. They emphasised that teachers need to know that they can try something new without fear of failing. As one principal put it *'Not being afraid. I suppose having it within the staff that it's better to try something even if you fail'* (PPSP B). To this end, all principals highlighted the necessity of managerial support in enabling teachers to feel supported in using creative approaches in their classes.

Continuing professional development (CPD) for teachers in the use of creative approaches was consistently mentioned as integral to building teacher confidence and competence. All principals expressed a preference for peer-led CPD over externally facilitated CPD. They spoke of peer-facilitated workshops, professional dialogue and sharing of ideas and resources. They consistently expressed the need for additional resources to facilitate this.

Trust was unanimously cited as an enabler for creativity by all principals: trust between management and staff and also between teachers and learners. They spoke of the need for teachers to be able to trust that management will support their use of creative approaches. They held that the teacher needs to be able to trust that learners will be receptive to new approaches and will be well behaved enough to allow their implementation. They added that learners need to be able to trust that the new approaches *'will have a proper effect and that it will have a benefit to them'* (PPSP A).

Large classes in small classrooms were consistently cited as impediments to creative approaches. It was generally held that creative approaches with collaboration to the fore need space, or as one principal put it: *'There needs to be extensions done around the place. Space allows more creativity'* (PPSP B). Principals also highlighted the *'insularity of the classrooms'* (PPSP C) where teachers worked in isolation from peers as an impediment to creative approaches.

## TEACHERS' PERSPECTIVES (Data set: 9 Interviews)

All teachers described creative teaching as learner-centred approaches which encourage active, involved learning and engage learners in tasks *'getting them thinking, figuring it out'* (PPST C1) The collaborative aspect of creative approaches was emphasised with all teachers highlighting that active approaches enable learners to learn from one another. *'So it's not just teacher, it's student-student interactions instead of student-teacher. So they're learning from one another'* (PPST A3).

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Teachers characterised creative teaching by the variety of resources and approaches used to enhance learning. It was consistently described as *'finding a way to engage the students by any means necessary'* (PPST B1) because *'... nothing works for everybody all the time so it needs to vary'* (PPST C2). There was consistent mention of embracing different styles of learning and different talents by *'allowing the students to learn in a way which suits them and ... embracing them as a whole person in their learning'* (PPST B3). Creative teaching was agreed by teachers to be motivational, as an approach used to *'gain the attention and the interest of the students and make them want to learn'* (PPST B1). There was consistent mention of moving beyond the text book and making connections with life outside the classroom, of enabling learners to see the real-world applicability of their learning.

Teachers described creative approaches used in their schools as being visually attractive. They consistently mentioned the importance of colour, pictures, posters, film and video to engage and motivate learners. The emphasis was on encouraging learners to organise and present their learning by a variety of means, including through visual organisers, posters and video.

Across the interviews Assessment for Learning (AfL) and Instructional Leadership strategies were referred to when discussing creative approaches to teaching and learning in their schools. Particular strategies mentioned were sharing intended learning outcomes, *think-pair-share*, *no hands up* approach, *show me* boards, *traffic light cups*, *mini whiteboards*, *peer-correcting* and *peer-assessment*.

ICT was highlighted by all as a very important support in the use of creative approaches. It's strength was in allowing connections to be made with the world outside the classroom, supporting a visual approach, learner presentations, and collaboration, for example through use of Edmodo. iPads had been introduced in each of the teachers' schools and one teacher's words sums up what all had to say about them: *'I think iPads will be huge. You know they'll really help with the active methodologies and the creative methodologies...'* (PPST A2).

Teachers consistently mentioned the need for a supportive school environment to encourage teachers to use creative approaches. Across the interviews teachers held that this type of environment started with the school management and spread among teachers. Some teachers also spoke about the need for parental understanding and support for creative approaches. As one teacher put it: *'Support from management and colleagues and parents .... an understanding of the benefit of that type of teaching and learning'* (PPST C1).

Evident across the interviews was the need for more teacher collaboration to learn from one another and to share ideas and resources. Teachers highlighted the lack of time available during the school day to collaborate with peers. In addition, they spoke of the lack of time available to plan for creative approaches and to create appropriate resources as it was generally accepted that *'it takes much more time and effort to plan for those ways of teaching'* (PPST B3). There was a strong desire expressed among younger teachers for opportunities for peer observation, as one teacher expressed it: *'Peer observation ... just by talking to them I can get ideas, so I can only imagine how observing them would help me.... how much we would learn from each other'* (PPST B1). Across the interviews teachers suggested that time for collaboration and observation needed to be timetabled in.

Teachers consistently cited the exam structure as being an impediment to creative approaches as they were under pressure to prepare learners for the exam. It was generally held that longer class periods of 50 minutes or an hour would better facilitate the use of creative approaches. Good classroom management was highlighted as being fundamental *'because without that, creative approaches could turn into chaos'* (PPST B3).





# Part 4

## DISCUSSION





## 4.1 Perceptions of *Creative Classrooms* and their defining pedagogies

Across Europe there is a growing understanding of the importance of developing creative and innovative practices in teaching and learning to maximise learner involvement (cf. Cachia et al., 2010; Galvin, 2009; Gibson, 2005). Indeed, many European projects offer excellent examples of creative practices and their defining pedagogies (Galvin, 2009). A central common feature of these projects is the affordance of motivating opportunities for learners to become actively involved in their learning. During fieldwork on the CCIT-Ireland project, teachers and school leaders consistently demonstrated their support for teaching and learning approaches that motivate learners to become active in their learning and to critically think for themselves. Across each of the settings, at both primary and post primary levels, this process was perceived to be facilitated by a supportive and well-scaffolded learning environment. However, creating such a learning ethos was not perceived to be straightforward. Primary and post primary teachers and school leaders, in both northern and southern settings, voiced their concerns about how current assessment procedures can undermine efforts to foster creative approaches to teaching and learning in schools. They expressed a concern that current assessment procedures are unfit for purpose and measure only certain aspects of a pupil's ability to learn. Those working in post primary schools, across both settings, cautioned against the backwash effect of their examination systems which encourages teachers to teach to the exam. There was unanimous agreement, across the sectors and settings, that adjustments to current assessment procedures are required to reflect a more holistic approach to learning. This would encourage and support the use of creative and innovative approaches to enabling children to learn and express their learning in different ways. This resonates with Tanggard's conclusion that 'tests do not in themselves act as barriers to creativity, but the nature of the test material, the types and content of tests or examinations, are extremely important to the ultimate impact of the learning process' (2011, pp. 230-231).

## 4.2 The role of intangibles and their impact on the inter-relationships between pedagogy, technology, school infrastructure and systemic innovative practice

A number of those from northern and southern primary sectors made reference to how intangible creativity is in supporting pedagogy and practice. For some, this is because they recognize creativity 'without being able to define it' (Ferrari et al. 2009, p. 5). For others, it is difficult to separate out the elements of creativity when it is perceived to be an integral part of a holistic approach (PST C1). Nevertheless, what emerged across the primary settings, is that creativity is perceived to add considerable value to teaching and learning when it is well organized in a '*free flowing*' way (PST B3). Across the post primary settings, creativity was defined in terms so closely allied to active learning as to be synonymous with it. In common with their primary colleagues, those working in post primary schools perceived creativity to be a vital element in a holistic approach to learning. However, it was strongly suggested that creativity in post primary schools is not common to all classrooms.

It was held by leaders and teachers, across both sectors, that use of ICT to support creative approaches was dependent on having good infrastructures at both a system-level and a school-level. Those working in the primary sector in southern Ireland showed considerable awareness of the possibilities that ICT offer to foster creative approaches. They made reference to free tools and platforms such as Skype in the Classroom<sup>15</sup>, Kidblog<sup>16</sup> and Animoto for Education<sup>17</sup> because of the creative opportunities that they offered to engage learners in their learning. However, it emerged that a willingness to use them was frequently thwarted by uneven or unreliable broadband connections. So the potential that ICT offered for primary leaders and teachers in southern Ireland was entwined with and tempered by the fear of possible failure and disappointment. Although post primary colleagues

<sup>15</sup> <https://education.skype.com/>

<sup>16</sup> <http://kidblog.org/home/>

<sup>17</sup> <https://animoto.com/education/classroom>

from southern Ireland did not generally express the same broad knowledge of the potential of ICT in their classes, they too made mention of the limitations of unreliable broadband connections. This was not the case with northern colleagues across the primary and post primary sectors who enjoy a good level of infrastructure, embedded now for some time, allowing them to seamlessly incorporate technology into teaching and learning. Consequently, colleagues from the northern setting could take for granted that technology would support creative approaches whereas southern colleagues expressed a cautious apprehension.

### 4.3 The complexities of mapping *Creative Classroom* pedagogies

The CCIT-Ireland study began following our discussions on the Mapping Framework proposed by the the SCALE CCR Project (2011-2013) and some discourses around creativity in education (Cachia, Ferrari, Ala-Mutka, & Punie 2010; Ferrari, Cachia & Punie, 2009; Gibson, 2005). The Mapping Framework prompted us to reflect on creativity from a classroom practitioner perspective by considering key dimensions such as *content and curriculum*, *assessment*, *teaching practices* and *learning practices* (Figure 1). It also encouraged us to explore creativity from an organisational or whole-school perspective by focusing on *organisation*, *leadership and values*, *connectedness*, and *infrastructure* (Figure 1). In our discussions with school leaders and teachers, several of the dimensions were touched upon and the interconnectedness of the key dimensions became very clear. It emerged, from discussions with leaders and teachers, that issues relating to *connectedness* and *infrastructure*, for example, had a direct impact on teaching and learning practices and consequent impacts on *content* and *assessment*. A subsequent revisiting of the framework revealed its usefulness in mapping a more holistic approach to *Creative Classrooms* and thus in supporting a school to identify where its strengths lie and the areas to which it needs to pay particular attention.

When applying the framework to identify creativity in action in class settings, many of the building blocks from the key dimensions of *teaching and learning practices* emerged strongly with particular reference to more hands-on activities that enable 'learning by exploring', 'learning by creating', and 'learning by playing' (Figure 2) in primary settings and 'learning by exploring' and 'peer to peer collaboration' in post primary settings (ibid) From the *content and curricula* dimension 'meaningful activities' were also evident across the sectors, as was 'networking with the real world' from the *connectedness* dimension. However, while the importance of leadership emerged strongly from our interviews across all jurisdictions, some of the key dimensions, relating to *organisation and leadership and values*, for example, 'innovation management' and 'innovating services' (Figure 2), were less strongly evident at a particular given time. In addition, issues, such as the importance of 'trust in teachers' and encouragement to 'take risks in teaching and learning', which emerged from the interviews as being key factors for supporting creativity, do not explicitly feature in the framework. This highlights the difficulty of mapping creativity in classes and raises questions about whether it is possible to effectively represent all the elements involved in a framework format.

# Part 5

## INCLUDING COMMENTS





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Reflecting the emphasis on creativity and innovation in education across Europe (Cachia et al., 2010; Ferrari et al., 2009; Gibson, 2005) school teachers and leaders in northern and southern Ireland hold creative approaches to be very important in fostering active, involved learning. Those interviewed showed much enthusiasm and willingness to incorporate these approaches in their schools and classrooms. However, it was clear that developing and expanding creative approaches was not without difficulties and would not happen without a whole-school approach. Both leaders and teachers, from across the sectors and jurisdictions, held that it needed to be led and supported by school management who made explicit the benefits to be gained by both teachers and their learners. To this end, participants strongly believed creative approaches motivate and engage learners to work independently. In addition these approaches enable learners to see the real life applicability of their learning, as well as developing transferable skills.

Teachers and leaders across the sectors were clear that fostering creative approaches was contingent upon changes in assessment. Those interviewed at post primary levels highlighted the difficulty of promoting a creative classroom in the current exam system. They were adamant that assessment needs to reflect the type of creative learning approaches being advocated and used. It needs to focus on skill development and on application of learning. Coupled with this, teachers across the sectors highlighted the necessity of having curricula that were less loaded and which emphasized quality over quantity.

Another important enabler that was discussed, particularly by those from the southern jurisdiction, was the necessity of having reliable ICT infrastructure. Teachers and leaders showed great awareness and enthusiasm for what they could do to promote creative approaches if they weren't distracted by the uncertainty of unreliable digital technologies and broadband.

Consistent mention was made during interviews of the need for CPD to support and encourage creative approaches. This included traditional approaches to CPD but focused much more strongly on the need for peer-led CPD. To this end teachers, in particular, emphasized how much increased opportunities for peer observation, professional dialogue, team planning and resource sharing would help. The possibility and power of using social media for CPD was also highlighted.

Describing *Creative Classrooms* can be difficult, and adequately mapping all the elements that underpin them may not be feasible. This research indicates that leaders and teachers, across Ireland, are enthusiastic about incorporating and expanding the use of creative approaches in their schools and classrooms. However, change will be difficult without adequate resourcing, CPD and adjustments to current curricula and forms of assessment.



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## APPENDIX 1[A]

### CCIT-Ireland: INTERVIEW QUESTIONS – PRINCIPALS / SCHOOL LEADERS

Interviewee \_\_\_\_\_ Venue \_\_\_\_\_ Date \_\_\_\_\_

1	What does creative teaching look like in your opinion?
2	Can you give me specific examples of creative approaches/pedagogies in your school?
3	What are the enablers for creative approaches to teaching?
4	What are the impediments to using creative approaches to teaching?
5	In an ideal world, what would encourage / support an increase in the creative approach?

## APPENDIX 1[B]

### CCIT-Ireland: INTERVIEW QUESTIONS – TEACHERS

Interviewee \_\_\_\_\_ Venue \_\_\_\_\_ Date \_\_\_\_\_

1	What does creative teaching look like?
2	Can you give me specific examples of creative approaches/pedagogies in your practice?
3	What are the enablers for creative approaches to teaching?
4	What are the impediments to using creative approaches to teaching?
5	In an ideal world, what would encourage / support an increase in the creative approach?

## APPENDIX 2

### COLLECTIVE SAMPLE OF CREATIVE CLASSROOMS IN ACTION



Screen Shot Of A Video That Brings Together Some Of The Work Samples Collected

To View Please Visit: [Http://youtu.be/8\\_Xk8snagqi](http://youtu.be/8_Xk8snagqi)



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