

Winchester and Halterworth Creativity
Collaborative First Research Report:

Context, Knowledge, Agency, Pedagogies and Leadership for

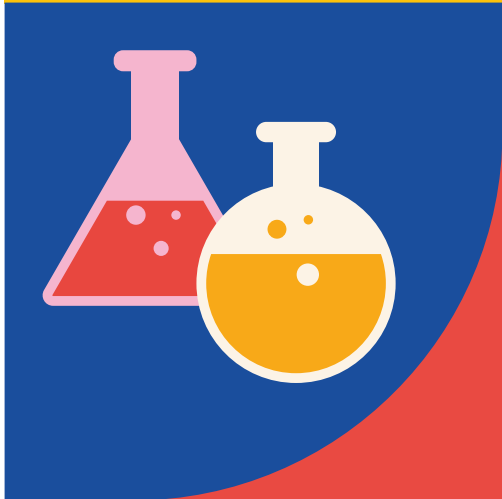
CREATIVITY

in Schools

PAUL T. SOWDEN, MARNIE SEYMOUR, FRANCES WARREN,
ELLEN SPENCER, SANDRA MANSFIELD AND CLARE MARTIN

University of Winchester, UK

Funded by Arts Council England



Context, Knowledge, Agency, Pedagogies and Leadership for

CREATIVITY

in Schools



Contact Information

Collaborative Research lead and corresponding report author: Professor Paul Sowden, paul.sowden@winchester.ac.uk

Creativity Collaborative Schools Lead: Mrs Nicola Wells, head@bartonfarm.uwinat.co.uk

To cite this report: Sowden, P. T., Seymour, M., Warren, F., Spencer, E., Mansfield, S., & Martin, C. (2023). *Winchester and Halterworth Creativity Collaborative First Research Report: Context, Knowledge, Agency, Pedagogies and Leadership for Creativity in Schools*.

Acknowledgements

We would like to thank all of the pupils, teachers and leaders at our collaborative's schools who have willingly participated in this project and shared their thoughts and experiences about creativity and the collaborative's work. We would particularly like to thank Jo Cottrell, outgoing Executive Leader for the University of Winchester Academy Trust for her passion and inspiring leadership of our collaborative up until

July 2023 and Lorraine Pattinson, for her fantastic support and enabling work as our Lead Creativity Champion.

We would like to thank Bronte Bailey, Creativity Champion, Gemma Williams, Project Teacher, and Dr Judy Waite, Visiting Specialist, for providing case examples of their work developing teaching for creativity in the classroom.

We are grateful to our board of expert advisors – Dr Stéphan Vincent-Lancrin, Deputy Head of Division & Senior Analyst, OECD; Bill Nicholl, University Senior Lecturer: Design & Technology Education, University of Cambridge; Professor Bill Lucas, Director of the Centre for Real World Learning, University of Winchester; Dr Garrett Jaegar, Evidence Specialist, LEGO Foundation; Jemima Frankel, Head of the January Challenge, 64 Million Artists; Emily Mace, Director of Engagement, Winchester Science Centre – for their role in helping to set us on a productive path.

Lastly, we are grateful to Arts Council England for funding this work and driving forward this national programme to embed teaching for creativity across the curriculum in schools.

CONTENTS

	Executive summary	1
1.	Our collaborative's context and partners	3
2.	Underpinning research context	4
3.	Project activities infrastructure	5
4.	Research approaches to collect evidence of the impact of project activities	6
5.	Workstream 1 – Context for Creativity: Understanding barriers and enablers of learning and teaching for creativity	7
6.	Workstream 2 – Knowledge for Creativity: Building children's and teachers' understanding of creativity	11
	Teaching for creativity case example 1: Year 1 Design & Technology, and Science – Gemma Williams, Orchard Infant School	16
7.	Workstream 3 – Agency for Creativity: How can we foster creative self-beliefs, including creativity as a learnable skill, in teachers & pupils	19
8.	Workstream 4 – Pedagogies for Creativity: Developing research guided partnership working and a mentoring programme to embed existing and develop new pedagogies to foster creative capacities and thinking across the curriculum	23
	Teaching for creativity case example 2: Year 1 English – Bronte Bailey, Stoneham Park Academy	26
9.	Workstream 5 – Leadership for Creativity: Developing effective leadership, governance & collaboration strategies to grow a climate for creativity	28
10.	Summary and next steps	32
	Teaching for creativity case example 3: A Visiting Specialist's perspective – Judy Waite, University of Winchester	33
	References	36



EXECUTIVE SUMMARY

Funded by Arts Council England, the University of Winchester, the University of Winchester Academy Trust, and a range of Hampshire infant, junior and primary schools led by Halterworth Primary School, are engaged in a three-year programme of work, to foster pupils' creativity in subjects drawn from across the curriculum. Overall, we aim to enrich children's life chances by developing them into confident & creative problem-solvers, engaging them through authentic, meaningful problems, embedded in their schools & lives.

Our programme comprises five interleaved streams of work: *Context*, *Knowledge*, *Agency*, *Pedagogies* and *Leadership* for creativity. Context for creativity focuses on identifying barriers and enablers of learning and teaching for creativity in our participating schools and their interaction with inequality & disadvantage. Knowledge for creativity focuses on building learners', teachers' and leaders' knowledge and understanding of creativity. Agency for creativity focuses on supporting learners and teachers to develop their creative self-efficacy. Pedagogies for creativity focuses on developing evidence-based pedagogies to foster creativity, working with teachers, and pre-service teachers undergoing initial teacher education. Finally, leadership for creativity focuses on effective leadership, governance, and collaboration strategies to grow a climate for creativity and sustainable change.

A key emphasis of our collaborative's work has been on creativity as a process that can be planned for and monitored, supported by a range of creative behaviours. This has led to the development of a framework that is being used across our schools to guide pedagogic approaches to teaching for creativity.

To collect evidence on the impact of our workstream activities, we are using a mixed-methods research approach comprising quantitative measures, focus groups, interviews, and teacher observation of creative outcomes in the classroom.

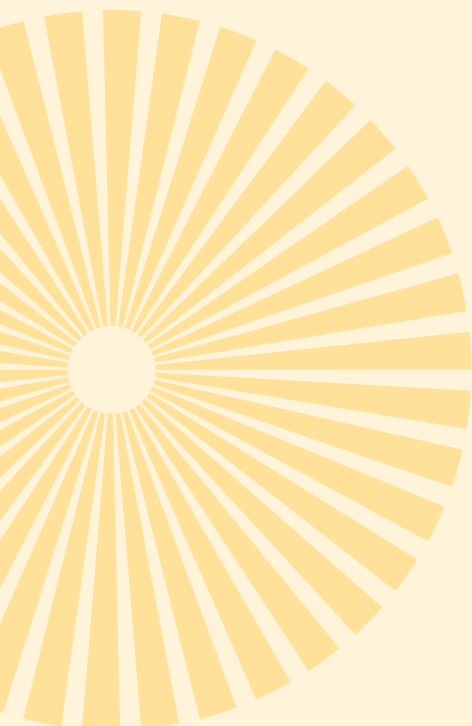
Key findings from data collected during the period from January 2022 – March 2023 include:

- For teachers, key requirements to support teaching for creativity were: (1) **adequate time** both within and outside the classroom to experiment, share and develop practice; (2) effective peer-to-peer support, mentoring and school leadership involvement to build confidence and **reduce fear** relating to teaching for creativity. In addition, school leaders emphasised the importance of developing a **whole school approach** to teaching for creativity. Consequently, teachers and leaders came together to enable them to work alongside each other on developing teaching for creativity, away from their everyday school context, and to increase **teacher agency**. Peer-to-peer observation opportunities between the collaboratives' teachers at different schools were also developed.





- Teachers started the project with a wide range of relevant knowledge and understanding about creativity, about teaching for creativity, about aspects of a creative thinking process and about a range of personal characteristics that might be important for creativity. However, this knowledge and understanding was often somewhat fragmented. Teachers' and pupils' **metacognitive knowledge** of creativity could be supported by an explicit framework of the **creative process** and its relationship to **creative habits**. For instance, an emphasis on process might increase the perceived importance of taking more time to pose questions and gather information before starting to generate creative ideas. Consequently, the Teacher Research Group and Project Research Team synthesised research on the creative process and a model of creative habits into a framework and **metacognitive tool** to support creative metacognition and guide teaching and learning for creativity.
- For teachers and pupils, the extent to which they believed creativity is a **learnable skill** was closely linked with their sense of **creative self-efficacy**. Teachers' sense of their own creativity developed across the first year of the project benefitting their teaching. However, while pupils were beginning to identify and describe creative processes in their own work, many teachers felt that pupils' sense of their own creativity was still developing. The findings suggested that further development of creative self-beliefs in both teachers and pupils is an important outcome. To support this, the Teacher Research Group have begun to operationalise the ways in which we might **assess creativity**, including self-assessment, to help develop recognition and identification of creative processes and products. By representing what creativity might look like in the classroom, the goal is to enable shared understanding and expectations that can be used to support children in developing their sense of their own creativity.
- Teachers found completing a **Teaching for Creativity Planning Template**, devised by the project team, useful to develop their implementation of a creative process in specific units of work. However, it added considerably to teachers' planning workload. Consequently, they worked on integrating planning of teaching for creativity into their respective school's planning templates, drawing on the Teaching for Creativity Metacognitive Tool and a set of prompting questions extracted from the original Teaching for Creativity Planning Template. This **integrated planning** approach has enabled teachers to more readily consider teaching for creativity alongside curriculum content.
- School leaders joined the project because they identified value in enabling children's creativity, helping them to build a range of **transferrable skills** and strengths, with opportunities to develop **deeper knowledge** and demonstrate learning in more varied ways. School leaders identified a range of **informal strategies** to support teacher agency with respect to teaching for creativity, such as showing their own enthusiasm for creative pedagogy by celebrating and publicly praising creative practises, giving staff 'permission' to try out new ideas in their classrooms whilst being accepting of mistakes and their role in refining practice, and working alongside teachers to problem solve in a collaborative, non-judgemental way. Leaders also identified the importance of **formal mechanisms**, such as integration with school improvement plans, subject action plans and performance management, to embed teaching for creativity across their schools. Going forwards, school leaders are prioritising strategic planning that focuses on how they can deepen and embed the work of the collaborative into the very fabric and **culture of practice** across their schools.



1.

OUR COLLABORATIVE'S CONTEXT AND PARTNERS

The University of Winchester is sponsor to the University of Winchester Academy Trust (UWinAT). The University of Winchester is the largest ITT (Initial Teacher Training) provider in the south of England, is rated Ofsted Outstanding, and has an established reputation for the delivery of high quality accredited and non-accredited professional development for teachers and school leaders at all stages of their careers.

UWinAT opened its first two schools in 2020, with three further schools joining the Trust later that year, including Halterworth Primary School, rated by Ofsted as Outstanding, and the lead school for this collaborative. At the heart of UWinAT is a commitment to providing an inspirational, creative curriculum in order to ensure that the learning

experiences for all of their children are positive and meaningful.

The first cohort of schools involved in our Creativity Collaborative included the five UWinAT schools and three additional partner schools. The second year of the project saw the on-boarding of six additional schools from across the Hampshire area. Our collaborative, therefore, encompasses schools from a wide range of contexts, with differences in size, and organisational structures. For instance, a very small, mixed-age primary school, through to a large primary school, which serves an area of significant deprivation. The collaborative profile also includes a mix of schools rated Ofsted Outstanding through to Requires Improvement.

The participating schools at the time of writing are:

- Halterworth Primary School: <https://www.halterworth.hants.sch.uk/>
- Awbridge Primary School: <https://www.awbridge.hants.sch.uk/>
- Wellow Primary School: <https://www.wellow.hants.sch.uk/>
- Stoneham Park Primary Academy: <https://www.stonehamparkacademy.co.uk/>
- Barton Farm Primary Academy: <https://bartonfarmacademy.co.uk/>
- Cupernham Junior School: <https://www.cupernhamjunior.com/>
- Valentine Primary School: <https://www.valentineprimary.co.uk/>
- Orchard Infant School: <https://www.orchard-inf.co.uk/>
- Orchard Junior School: <https://www.orchardjuniorschool.com/>
- South Baddesley CE Primary School: <https://www.southbaddesley.hants.sch.uk/>
- Romsey Primary School: <https://www.romseyprimary.co.uk/>
- Droxford Junior School: <https://www.droxfordjunior.co.uk/>



2.

UNDERPINNING RESEARCH CONTEXT

The starting point for our collaborative was a desire to enrich children's life chances through developing them & their teachers into confident & creative problem-solvers. We passionately believe that creativity is a force that enables our learners to develop capabilities that will facilitate them to build successful & rewarding lives, as members of communities in an ever-changing world. We further believe that creativity must not be limited to specific curriculum subjects & that success as a learner is not defined solely by traditional academic outcomes. As the first Durham Commission report (James *et al.*, 2019) argued, creative thinking needs to be deployed in all aspects of life for greater successes. In 2020-21, this was strongly demonstrated to our young learners by the drive & exploration of scientists & health professionals to meet the challenges presented by the COVID-19 pandemic for mental health, the provision of education, social equality, treatment & prevention of disease, & employment, amongst others. By aligning pedagogies of creativity with opportunities to work on authentic, challenging problems we seek to develop meaningful engagement in our learners.

Learning to work successfully on authentic problems requires building the capability to generate new ideas that meaningfully address the challenge at hand. This reflects a core definition of creative outcomes as both *original* and *effective* (Runco & Jaegar, 2012) that has guided our collaborative's work. Further, we recognise a creative process as one that has the *potential* for originality and effectiveness (Corrazza, 2016),

producing outcomes which may, or may not, be successful at a particular point in time, and we aim to foster this potential in our learners.

Creativity involves both general thinking strategies and behaviours that can be applied across domains or subjects, together with specific subject knowledge, strategies and techniques that are needed to work effectively within a subject area. Therefore, a key aspect of the approach taken in our collaborative has been on creativity as a process that can be systematically planned for and learned in different curriculum areas. A large body of research on the creative thinking process (Sowden, Pringle & Gabora, 2015) shows the importance of the mental capacities to combine and/or transform our knowledge and experiences in new ways to produce original ideas and to reflect on those ideas to refine them into effective outcomes. These capacities draw on associative and analytic thinking processes, and their interaction sits at the heart of creativity (Beatty & Kenett, 2023; Cogdell-Brooke, Sowden, Violante & Thompson, 2020; Pringle & Sowden, 2017a,b). Our pedagogic approaches are intended to enable these thinking processes, and a range of facilitating learner dispositions, by helping learners to build creativity supporting behaviours, often referred to as practices (Sawyer, 2013) or creative habits (Lucas & Spencer, 2017). These are embedded in specific subject contexts, which evidence suggests will be the most beneficial approach (Quigley & Stringer, 2021).

In order to drive our project activity, and support our aim of fostering

confident creative problem solvers, we developed five inter-woven foci or streams of work focused on *Context*, *Knowledge*, *Agency*, *Pedagogies* and *Leadership* for creativity. Each workstream is supported by a set of research approaches to measure the impact of our activities. These streams of work are intended to support change by:



Exploring the barriers and enablers of learning and teaching for creativity (**Workstream (WS1): Context for Creativity**)



Building pupils', teachers' and leaders' knowledge of the thinking processes and behaviours that support creativity (**WS2: Knowledge for creativity**)



Supporting learners and teachers to develop their own sense of creative agency (**WS3: Agency for Creativity**)



Developing and embedding new pedagogies to foster creative capacities & thinking across the curriculum, working with teachers and pre-service teachers in education (**WS4: Pedagogies for Creativity**)



Establishing effective leadership, governance & collaboration strategies to grow a climate for creativity and sustainable change (**WS5: Leadership for Creativity**)



3.

PROJECT ACTIVITIES
INFRASTRUCTURE

A driving principle underpinning the activities of our collaborative is that change needs to be systemic and multi-level. Consequently, our project activities have included working with pre-service teachers in education, in-service teachers, headteachers and school leaders, governors and, of course, pupils.

Whole day *Launch Conferences*, held as each of our two cohorts of schools joined the collaborative in March 2022 and January 2023, brought together school leaders, Creativity Collaborative project teachers and a range of experts on creative thinking and fostering creativity in education to learn about and discuss creativity, and to start to develop collaborative wide approaches to teaching for creativity. To extend this training to all teachers from our first cohort of schools we also held a cross-school INSET day in October 2022.

Learning and development was deepened through half-termly, day long, *Teacher Research Group* (TRG) meetings and *School Leadership Board* meetings. As the project has progressed, teachers and school leaders came together for some of these meetings to support a shared vision of teaching for creativity in our schools. These meetings have been supported by input from creativity research experts, and by specialist practitioners of teaching for creativity in different curriculum areas.

Supported by the above foundational activities, *Project Teachers* have tried out approaches to teaching for creativity. Initially, these were single class sessions but they built up to half-termly units in different curriculum areas. Teachers presented their work back to the TRG for discussion and reflection.

Further, to support Project Teachers in school, each was allocated a *Creativity Champion* to support them with planning and developing their teaching for creativity in their school context. The Creativity Champions are highly experienced teachers with a particular interest in teaching for creativity. In addition, *Visiting Specialists* in teaching for creativity in specific domains, such as creative writing, began to develop units of work with some of the project teachers.

An *Advisory Group* of experts helped to shape effective implementation of the collaborative's workstreams using best practice approaches and provided advice on gathering evidence of the impact of the project activities.

Finally, a *Teaching for Creativity* module for Initial Teacher Education students at the University of Winchester was developed and this included opportunities for the enrolled students to work in the collaborative schools with project teachers.

"A driving principle underpinning the activities of our collaborative is that change needs to be systemic and multi-level."



4.

RESEARCH APPROACHES TO COLLECT EVIDENCE OF THE IMPACT OF PROJECT ACTIVITIES

To assess the impact of our project activities we have deployed a range of research tools. Questionnaires were administered, and interviews and focus groups took place, when each cohort of schools joined the collaborative. These are being repeated part-way through and at the end of the project, to assess whether project activities result in measurable changes in the information gathered, thereby providing evidence of project impact.

Schools also provided pupil data regarding receipt of pupil premium as an indicator of inequality and disadvantage.

4.1 Surveys

When schools first joined the project, questionnaires were used to gather information on:

- **Teachers'** – knowledge and understanding of creativity and teaching for creativity; perceptions of their own creativity; sense of confidence and efficacy for teaching; confidence to teach for creativity; classroom approaches to teaching creative behaviours; barriers and enablers of teaching for creativity.
- **Trainee teachers** – knowledge and understanding of creativity and teaching for creativity; perceptions of their own creativity; confidence to teach for creativity; barriers and enablers of teaching for creativity.

- **Year R & KS1** – Growth mindset for creativity; perceptions of their own creativity; school satisfaction; mental well-being.
- **KS2** – knowledge and understanding of creativity; growth mindset for creativity; perceptions of their own creativity; classroom opportunity to engage in creative behaviours; school experience and satisfaction; mental well-being.

4.2. Interviews

To provide a richer description of teachers' starting knowledge and understanding of creativity and of teaching for creativity, teachers from our Teacher Research Group also took part in interviews conducted soon after their schools first joined the project.

To provide a richer description of pupils' starting knowledge and understanding of creativity and their experiences of and opportunities to be creative at school, groups of pupils from each participating class took part in focus group discussions conducted soon after their schools joined the project.

In addition, to gather evidence on the impact of teaching for creativity in the classroom, teachers and pupils are interviewed at the end of 'units of work' that are typically around six-weeks long. These interviews seek to understand teachers' planning and implementation of teaching for creativity in specific curricular units and the impact on their pupils' creative outcomes in those units. Photographs of pupils' class work and copies of teachers' teaching plans for these units of work are also being collected to further understand the relationship between planning, implementation, and outcomes.

Finally, to understand the implementation and impact of the project activities at a school level, reflective interviews were conducted with senior leaders one year into the project.



5.

WORKSTREAM 1

CONTEXT FOR CREATIVITY: UNDERSTANDING BARRIERS AND ENABLERS OF LEARNING AND TEACHING FOR CREATIVITY



5.1. WS1 Research Context: Creativity in Education

The focus on creativity as a key skill in education is increasing (James *et al.*, 2019), reflecting its value within wider society. Indeed, according to the 2023 'Future of Jobs Report' (World Economic Forum, 2023) creative thinking is the skill showing the greatest increase in importance for employers (p. 38) and after analytical thinking is the second most frequently cited skill that is 'core' for the workplace (p. 39). However, beyond an outcome to be achieved, creativity is also a fundamental skill in the "toolkit" of learners (Egan *et al.*, 2017, p. 1) and is inextricably tied to effective learning and motivation (Amabile, 1989; Starko, 2018).

Despite this, there is the long-standing view that the education system does not always do well in preparing young people for creative endeavours (e.g. Berliner, 2011; Craft, 2002; Newton & Newton, 2009). While previous policy initiatives may have endorsed creativity, its presence in formal education has remained varied and intermittent (e.g. Cropley, 2010; Davies *et al.*, 2018; Feldman & Benjamin, 2006). Lucas and Spencer (2017) outline potential challenges for embedding creative pedagogies into schools, including time and budget constraints, pressures from regulatory bodies (e.g., Ofsted in England), curriculum content, and the importance of evidence and accountability. Furthermore, it has been suggested that the 'pinch points' created by

an emphasis on high-stakes testing and performativity have resulted in narrowing of curricula. Assumptions and variations in understanding may limit the use of pedagogies of creativity based on beliefs that they can lack focus and rigour and may disrupt other classroom processes, such as the progression of a class through the curriculum (Davies *et al.*, 2018; Kaufman & Sternberg, 2010).

However, as evidenced by the current Creativity Collaboratives project, and as noted by Lucas and Spencer (2017), a "*great shift [is] taking place*" (p. 1). Back in 2010, Ofsted evaluated the attempts of a set of schools in using creative approaches to learning. In its report *Learning: Creative Approaches That Raise Standards*, it found no conflict between standards in core subjects and creative approaches in schools with good teaching, outlining a "*perceptible and positive impact on pupils' personal development*" (p. 4). Highlighting the impetus of creativity in education, PISA have included innovative assessment domains such as creative problem-solving (PISA 2012) and creative thinking (PISA 2022) in their international benchmarking and global comparisons. Furthermore, the recent Durham Commission report (James *et al.*, 2019) found "*excellent examples of teaching for creativity*" (p.47) in schools across the country, and while creativity has not yet been given the priority that is required, it refers to teaching for creativity as becoming a "*global phenomenon*" (p. 6). Indeed, reflecting this global emphasis, OECD recently published

their findings on teaching for creativity and critical thinking in a network of schools and teachers spread across 11 countries (Vincent-Lancrin *et al.*, 2019).

Therefore, gathering information relating to barriers to learning and teaching for creativity in our collaborative, as well as the conditions that help to foster such approaches, will help us to better understand the mechanisms by which creative pedagogies can be best implemented and sustained to ensure that they become embedded into normal practice.



“Sometimes as teachers, we’re afraid to do that [introduce new methods], because we think we’ll get told off”

5.2. WS1 Project activities

Based on previous research, we had some expectations about what potential barriers and enablers of teaching for creativity might look like. Informed by these, we put in place measures we anticipated would best support our creativity practitioners. These included making provisions for time to be set aside for planning, budgeting for teaching cover, developing planning and assessment tools, and establishing regular Teacher Research Group sessions for sharing good practice and cross-curricular ideas with other creativity practitioners across the collaborative.

On joining the project, teachers were interviewed by researchers from the University of Winchester, giving us the opportunity to surface beliefs about barriers and enablers of learning and teaching for creativity. These conversations were continued at our Launch Conference where we collected views of likely challenges and obstacles. The findings from these discussions have become a key focus of developing our Teacher Research Group and Leadership Steering Board, where we continue to reflect on and monitor our understanding and approaches.

5.3. WS1 Initial Findings

Perceptions of teachers: Barriers and Enablers

Enablers

In terms of the conditions that help to foster learning for creativity, in baseline interviews teachers spoke about the importance of flexibility and adaptability for both teachers and pupils, highlighting the ability to deviate from set plans when necessary and to be free from fixed outcomes. Teachers talked about the need to provide freedom and opportunities for students, allowing them to try different ways of thinking and doing things. Teachers also reflected on pupil factors that can help to support learning for creativity, including an emphasis on the early years providing them a good foundation of knowledge and

skills, as well as the confidence to be creative.

When considering enablers of teaching for creativity, teachers identified three key areas: peer feedback; observing others; and collaboration. Many of the teachers interviewed expressed a willingness for classroom observations and the value of receiving feedback on their planning, while others suggested that observing others' teaching for creativity would be beneficial. Finally, more general collaboration was also seen as a method of developing creative pedagogies, with general discussion between colleagues, sharing of ideas, and focus on a whole school approach all cited as important *“doing more kind of getting together, sharing ideas of ways at being creative, and maybe having a specific creativity focus”*.

Barriers

When reflecting on factors that may hinder creative pedagogies, many teachers spoke of the restrictions of the curriculum and school processes as a barrier for their own creativity, whereas imposed structure in both environment and learning resources, along with limited exposure to creativity, were considered barriers for pupils in learning for creativity. With regard to pupils, a lack of basic social skills or knowledge was highlighted as a challenge, along with pupil behaviour in some cases, potentially exacerbated by social learning missed through the COVID-19 pandemic.

Teachers also perceived a lack of confidence as presenting a potential barrier to learning and teaching for creativity, both on behalf of the pupils *“I think, even that very young age will hold back if they haven't got that confidence”* and of the teachers themselves, indicating that sometimes they are worried about introducing new teaching methods. This sense that fear is a barrier to teaching for creativity was reflected across the interviews; fear that there may be no certain outcomes, that control must be maintained in the classroom, and that the curriculum and assessment requirements will not be adequately met *“I think there is a real fear that if we do that we will*





not get the marks that we need in assessment”.

A number of practical issues were raised as barriers to creative pedagogies. Time pressure was a recurring theme, with teachers suggesting that time to plan and prepare resources, along with the pressure of competing priorities, impacts their ability to teach for creativity. Physical, spatial, and staffing resources were also raised as potential barriers, as was a perceived lack of peer support. Some of the issues raised related to budgetary constraints and availability of time or personnel, while others referred to overt resistance to including more creative methods due to a perception that teaching for creativity will have no tangible objectives *“I have put it into some planning, and it has been taken out by other teachers, because there is a fear that it’s not got a clear learning objective”.*

Findings from the teacher interviews emphasise the importance of establishing a network of teachers teaching for creativity with adequate time both

within and outside the classroom to experiment, share, and develop practice. The importance of effective peer-to-peer support, mentoring, and school leadership involvement to build confidence and reduce fears relating to teaching for creativity was further emphasised.

Perceptions of senior leaders

One year into the project, reflective interviews were conducted with senior leaders. Many of the issues raised by senior leaders relating to this workstream, mirrored those discussed by class teachers. Once again, time was mentioned in terms of allowing space to develop creative pedagogies, with specific mention of teacher workload as one of the *“biggest barriers”*. However, it may be the case that teachers have more flexibility in terms of time than they might think, with one senior leader encouraging their Creativity Champions to ensure that they take the time that’s allocated to them: *“I just checked. I said, you two are taking the time and there is supply cover for this”.*

“Time pressure was a recurring theme, with teachers suggesting that time to plan and prepare resources, along with the pressure of competing priorities, impacts their ability to teach for creativity”



“Senior leaders discussed the need to balance teaching for creativity with other priorities as a challenge in order to ensure that learning objectives are met across the curriculum.”

Another recurring theme raised by school leaders as a barrier for teaching for creativity was the managing of expectations and external measures. Some senior leaders discussed the need to balance teaching for creativity with other priorities as a challenge in order to ensure that learning objectives are met across the curriculum *“balancing that the approach that we know absolutely works with making sure you’re also covering your curriculum properly, that you’ve got your progression in there properly and the children are, you know, getting to where they need to get to from that, you know, national expectations”*.

In relation to developing teaching for creativity throughout their schools, senior leaders also discussed the challenges of embedding creative practices throughout the school. There was some reference to teaching staff who may be reluctant to make adjustments to their teaching practice, *“staff who are not open to change, for staff who want to do things the way they’ve always done it”*. Embedding creative teaching practices across the whole school with consistency was raised as a potential barrier, especially in larger schools. It was acknowledged by one senior leader that, while school staff might be focusing on developing creativity as a common goal throughout the school, the methods of doing so might be different, potentially causing difficulties for external expectations *“We’re focusing on the outcome and the journey might be different along the way, but the outcome needs to be the same. But to an extent, we get a lot of external validation and external people coming in, and if they come in and see it’s different in one class or another, they won’t necessarily understand and they won’t see the outcome”*.

The findings from the senior leader interviews reflect those from teachers but also emphasise the importance of developing a whole school approach to teaching for creativity.

5.4. WS1 Response to findings

At the outset of our collaborative, we built in time for planning and sharing best practice across curriculum areas through our Teacher Research Group, Leadership Steering Board and Creativity Champions. The interviews and subsequent project experiences indicate the importance of also establishing opportunities for peer observations across the different schools within our collaborative and these are now taking place. In addition, we began to bring meetings of the Teacher Research Group and Leadership Board together in order to enable teachers and leaders to directly work on developing teaching for creativity together, away from their everyday school context, and to build confidence and reduce fear. Finally, we have been working with leaders at each of the schools within the collaborative to best support a whole school approach, as described in Workstream 5, and making use of the resources developed in Workstreams 2 and 4.



6.

WORKSTREAM 2 KNOWLEDGE FOR CREATIVITY: BUILDING CHILDREN'S AND TEACHERS' UNDERSTANDING OF CREATIVITY



6.1. WS2 Research Context: Creative Metacognition

Pupils' ability to monitor, direct, and review their learning is called metacognition. Effective metacognitive strategies get learners to think about their own learning more explicitly, usually by teaching them to set goals, and monitor and evaluate their own academic progress (Collins, 2021, in Quigley & Stringer 2021). The capability to set goals and direct progress towards them requires learners to have metacognitive knowledge of the strategies and approaches to learning that may be most usefully applied to a given task. In the context of creativity, this includes knowledge about the nature of creative outcomes and thinking processes, about one's own creative thinking capabilities and about what, how, and when cognitive and behavioural strategies can be used to support creativity in a given task context (Jia, Li & Cao, 2019; Lebuda & Benedek, 2023).

Therefore, to support creative metacognition, we anticipate that it is important that learners and teachers have opportunities to explore and develop a shared understanding of creativity that encompasses the diverse experience and expression of creativity in different subject areas, activities, and careers. Without this opportunity, pupils and teachers may fall back on idiosyncratic understandings of creativity, pupils may be unsure of how to 'be creative', and teachers may be unsure how to foster and assess it.



“My initial gut instinct was to think arty or crafty. But actually, you can be creative in any area of life and when I think about it more deeply I think we have to be creative in how we speak to people, how we plan things, how we deliver things, so it’s a much wider thing as well”

6.1. WS2 Project activities

Informed by the research on creative metacognition, an important component of the work in our collaborative has been to build knowledge and understanding of creativity as a set of thinking processes that are supported by creative behaviours. In our conferences and Teacher Research Group, teachers explored the notion that creative outcomes are *original* and *effective* responses to a task or challenge that has many possible valid outcomes and approaches. They further explored that at the beginning stages of creativity, creative responses might only be new to the individual child but through feedback and practice can progress to the production of creativity that is original compared to responses produced by other children of similar age and capability. We also explored how working through a creative process – for instance, by in-depth exploration of a curriculum area, facilitated by creative ‘habits’ such as asking questions, learning relevant knowledge and techniques, collaborating with others, and playing with possibilities – can support the development of a richer web of associations (Denervaud, Christensen, Kenett & Beaty, 2021), and more creative responses. We explored how these rich associations enable learners to make new connections and generate novel ideas that are further improved by analysis and evaluation, supported by behaviours such as reflecting critically and seeking feedback.

Expert practitioners in different curriculum areas provided sessions that exemplified how teachers’ knowledge about the creative process and ‘habits’ could be translated into practice in the classroom (see also Workstream 4).

6.2. WS2 Initial findings

Teacher’s initial knowledge and understanding of creativity and of teaching for creativity

Our baseline interviews found that many teachers instinctively associated

creativity with the arts, but most went on to consider creativity as a feature of other subject areas too.

However, teachers were generally not able to give examples of how they had embedded teaching for creativity in specific subject areas. Nevertheless, many teachers linked creativity to being able to solve problems and articulated some general principles of teaching for creativity. Especially, giving learners the autonomy to make choices about their learning, and how they approach and express it “*allowing children to have a say in their own learning and then explore it their own way*”. Teachers also noted a range of personal characteristics that they thought could be supportive of creativity including being resilient, courageous, confident, open-minded, flexible/adaptable, and able to collaborate with others. Most thought that creativity was something that could be developed or learned. Finally, many teachers mentioned various aspects of a creative process including exploring and investigating, thinking divergently to generate a range of options, thinking imaginatively to see things in other ways, making associations to previous ideas and knowledge, and thinking analytically to reflect on creative work and see how it can be re-worked and improved.

Overall, the findings indicated that, at the start of the project, teachers already had a wide range of relevant knowledge and understanding about creativity, about teaching for creativity, about aspects of a creative thinking process and about a range of personal characteristics that might be important for creativity. However, this knowledge and understanding was often somewhat fragmented.

The findings suggested that there would be value in building on teachers’ starting knowledge to develop a more coherent framework of teaching for creativity that can be used to support teachers’ practice in different subject areas and to support pupils’ metacognition for creativity.



Pupil's initial knowledge and understanding of creativity

Our baseline focus groups found that pupils struggled to formally define creativity. However, for most, creativity was associated with *making* across a wide range of domains, albeit art and craft domains were the most common association. Many pupils talked about novelty and uniqueness as features of creative activities and outcomes “*my football is quite creative because we do lots of different drills*” and things “*you've never done before*”. A smaller number also considered that creative outcomes are those that can be of value to others “*something that someone else really liked*”. A number of pupils thought that the judgement of creative outcomes is subjective. Some pupils also made reference to the process of being creative, often through taking part in creative activities, with examples drawn from across the curriculum. Some pupils elaborated some of the specific thinking skills involved in a creative process including: using imagination “*you go outside and find a stick and pretend that's a sword*” and “*I let my imagination sort of flow and thinking of new things*”; thinking divergently to generate ideas “*thinking of new things and ways to use them, but you might not normally use them that way*”; making associations with other(s) ideas and experience “*building on those ideas and being even more creative*”; and reflecting critically “*try and test if your friends are good at it*”. Interestingly, almost no children talked about the process of posing questions as an important part of a creative process.

Mirroring teachers' views that creativity involves autonomy, many pupils identified that creativity involves freedom of choice about activities and how they are done; freedom from rules rather than freedom through rules.

Pupils also described a range of personal characteristics that they associated with creativity including being clever, determined and persistent, confident, able to take risks, having a drive to master material and methods, and being able to work

with others. Pupils also described creativity supporting behaviours, including seeking ideas and feedback from others, going with the flow, and trying things out and playing with possibilities. Just as pupils did not mention posing questions as part of a creative process, nor did many describe the related behaviours of exploring and gathering information driven by their questions and curiosity as a part of being creative.

Overall, the findings indicated that for pupils, the dominant understanding of creativity was the making of some kind of product. Across the pupil group, there was a wide range of additional understandings about features of creative products, about elements of creative processes and behaviours and about some of the personal characteristics associated with creativity. However, pupils generally did not understand creativity as an overarching coherent process.

The findings suggested that pupils may find an explicit framework of a creative process a useful aid for planning creative approaches to their work. Further, a particular attention to developing their ability to pose questions and gather relevant information to build 'problem understanding' may usefully complement their more established understanding of having ideas and of making as parts of a creative process.

Development in teacher and pupil understandings of creativity

Our End of Unit interviews, conducted in December 2022 one year into our collaborative's activities, found that pupils' knowledge and understanding of creativity had developed in some areas. For instance, they showed understanding of the potential for creativity in all curriculum areas, rather than being limited to the arts, and that creativity was not just about 'making', but about sharing thoughts and ideas. Some pupils could articulate a sequential creative process.

“So the first step is like playing with your ideas then you need to like base one and then you figure out the problems, and you figure ways how to do it.”

“... if you were writing a story in English, you are told what to write about, and then it goes off into your own ideas, but I would prefer it if you could choose what you could write about, because then if you had a good idea of what to write, and it was really creative, and then you had to write something completely different in your English book, then your ideas are gone. So, it would be helpful if you could choose what you could write about.”



“I think it’s made me more creative in thinking about there are stages you need to go through, you can’t just pop in this idea. That actually it’s better quality in the end if you’ve gone through the process of really diving in deep, questioning and asking, looking and playing”

Then you have made your prototypes and then you build the real thing and that’s how it works”

Many could talk about their engagement in behaviours that support creativity such as developing techniques, taking different perspectives, gathering information, getting other people’s opinions, and re-working ideas. However, for the most part pupils did not explicitly use the language of *explore, ideate, evaluate* associated with the creative process or the language of *inquisitive, imaginative, persistent, collaborative, disciplined* associated with the, creative process supporting, behaviours of the creative habits model.

The findings from the pupils, suggest that including more explicit use of the language of creativity within the classroom, and accompanying visual display materials to reinforce this vocabulary and what it represents, could be beneficial for further developing pupils’ metacognitive understanding of creativity.

The End of Unit interviews also found that teachers’ understanding of creativity appeared to have deepened, with most talking knowledgeably about the creative process and creative ‘habits’. Teachers were able to describe how they had included the creative process and ‘habits’ in their units and reported evidence that each was demonstrated by their pupils. Teachers reported changes to the way that they planned and taught that were consistent with their developing knowledge about creativity. For instance, increasing pupils’ opportunities to make choices about their learning with more time spent exploring information and materials relating to a topic before starting to work on specific ideas *“it’s really important to go into the exploration stage to get that knowledge to be able to come up with their own ideas”*.

Teachers expressed a clearer understanding of the characteristics of creative outcomes including the importance of novelty and effectiveness, in the classroom context, and were able to provide

clear evidence of these outcomes in their pupils’ work.

“they’re really good ideas that we’d never even think they would come up with. We haven’t fed that to them. It was just through questioning.”

6.3. WS2 Response to findings

The Teacher Research Group worked in small groups to synthesise work on the creative process and the model of creative habits into a framework that could be used as a tool to support creative metacognition and guide teaching and learning of creativity. The framework drew on models of the creative process (Cambridge Inclusive Design Toolkit; Sawyer, 2013; Sowden, Pringle & Gabora, 2015), models of creative habits (Lucas & Spencer, 2017) and design principles of teaching for creativity (Beghetto, 2019; Vincent-Lancrin *et al.*, 2019) and was finalised by the project team (see Figure 1 for a Teaching for Creativity Metacognitive tool derived from the framework). Materials are being developed that can be used for classroom display to make more visible the language of creativity and the process of planning for a creative process.



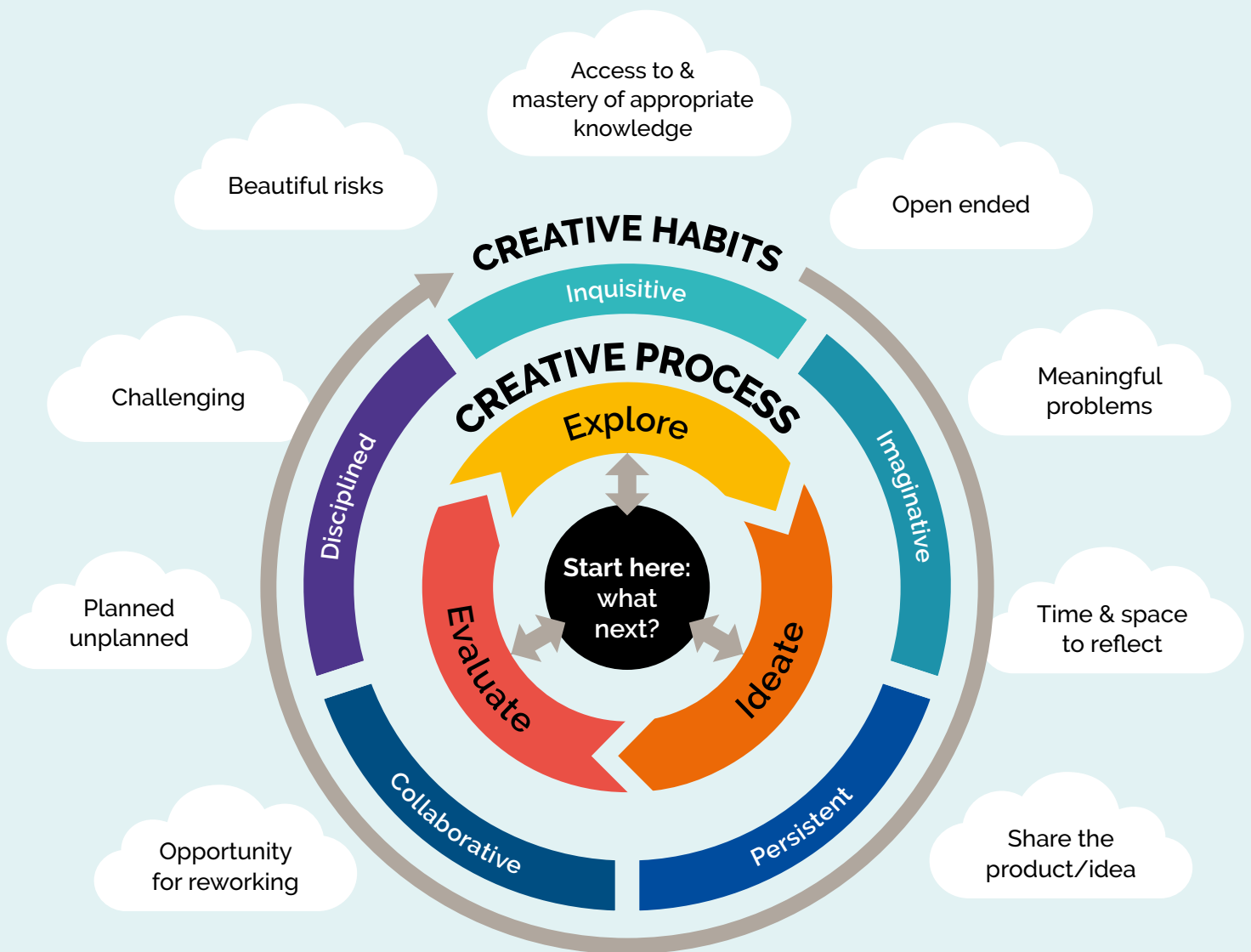


Figure 1: Teaching for Creativity Planning Tool

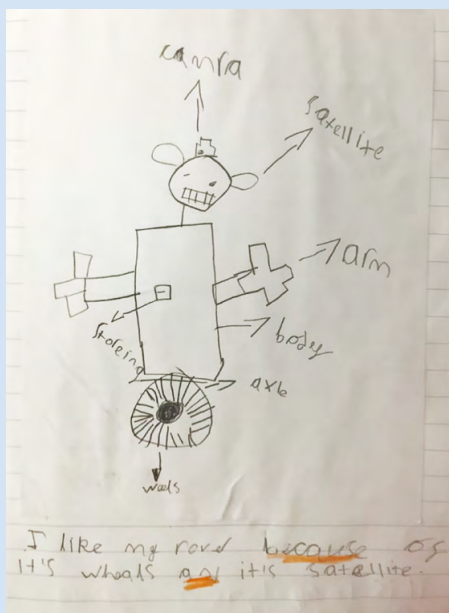
The cycle of creative process stages, explore → ideate → evaluate, is supported by selective engagement of creative habits (inquisitive, imaginative, collaborative, persistent, disciplined). For instance, collaborative habits might initially support the 'explore' creative process stage, by working with others to gather information to better understand a creative task, and then later support the 'evaluate' stage through obtaining peer feedback on an idea. The clouds signify general principles for the design of creative learning opportunities.

CASE EXAMPLE 1: YEAR 1 DESIGN & TECHNOLOGY, AND SCIENCE – GEMMA WILLIAMS, ORCHARD INFANT SCHOOL



About the unit and what was done

In Year 1, our project is called "Roaming Rovers" and is a 5-week long project with a focus entirely on Design and Technology, English, and Science. The children were set on a mission, following a news broadcast, to design a rover that can explore a new planet. This sets the children on a learning journey to design, make and evaluate a rover, and send their plans and photographs of their prototypes to NASA.



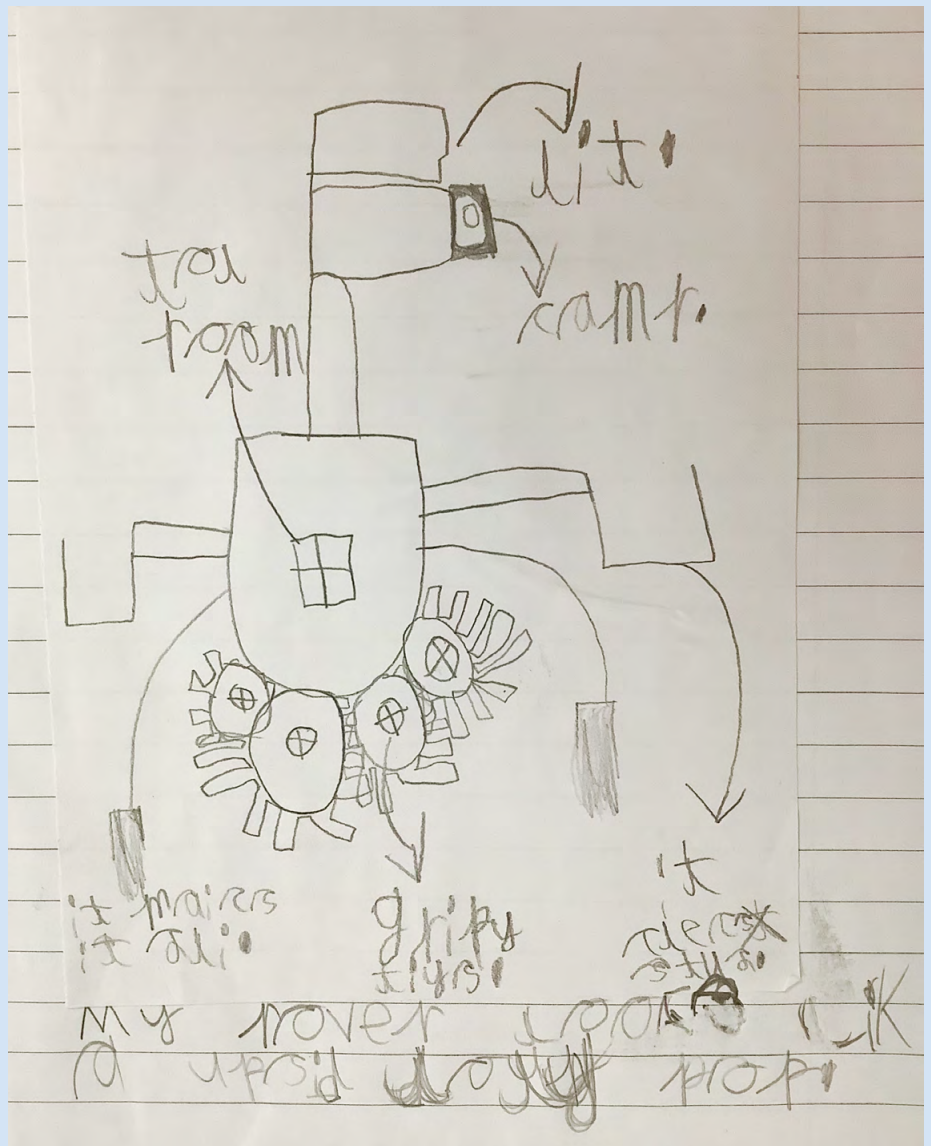
In previous years, after our hook, I would have shown the children real rovers, provided them with the cotton reels and axles they needed and cardboard boxes for the vehicle's body so they could learn how to make a rover. Since being a part of the creative journey and engaging with research, I knew this had to change. Previously, there were so many missed opportunities within this project that could have encouraged children to think more creatively, so I started to redesign the project to support my children to experience the creative process of explore, ideate, evaluate.

After our hook, I decided that I would not show the children what a rover looks like but instead explained that it is a vehicle that can be used to explore planets. I covered up any pictures of rovers in our project books and this meant that the children didn't have any preconceived ideas about what a rover looked like. It was all left to their imagination. During the explore stage, we spent time playing and exploring with lots of different

toy vehicles (cars, lorries, planes, boats, bikes) and spoke about their shape, how they work, and whether we think this would be a good shape for our planetary rovers. We then started to ideate, generating lots of ideas collaboratively about what their rover design might include. We worked collaboratively to come up with our design criteria which were quite generic and included elements such as "It needs to be able to collect samples", "It needs to move over different terrains" and "It needs to be able to store things". This ensured there were constraints with regards to their rovers however the task was still very open-ended; this allowed the children to 'think inside the box'.

We continued developing our ideas during the ideate stage, and I set up different activities to enable children to develop the habits of "inquisitive", "persistent" and "collaborative". One activity was to explore the possibilities of different wheels and what we might choose to use as wheels for our rovers. I provided the children with a range of materials: polystyrene balls, cotton reels, corks, cans, 2D and 3D shapes, to see if other shapes would be best, and the children tested out their potential as wheels, then decided and explained which wheels they would be using and why. They added this to their design. The second activity was to explore how our rovers could store things, so we looked at containers and bags that store things in our day-to-day life such as pencil pots, book bags, handbags, and trays. The children again added the most suitable container to their rover design.

The children then spent a number of weeks making their rover, whilst learning about the habits of "persistence" and "disciplined". We spoke about these creative habits as the children were subconsciously using them. When the children had finished their rover prototypes, they evaluated their rovers against our design criteria. They had a "star system" where they had to read each statement that we collaboratively agreed at the start of the project and rate their rover out of five. We then invited our parents to attend our "Roaming Rover Reveal" where the children were able to share their prototypes, test out their rovers, teach their parents some of the skills they had learnt. The parents and children were also able to bring in their home learning, which was to create what they thought the terrain might be like on this new planet. The parents commented on how impressed they were with their child's work and how much they enjoyed creating the home learning with their child. Due to the home learning being very brief, it was lovely to see how creative everyone's home learning was, which shows that parents can also support their children in engaging with the creative process and habits.



Overall, this project was fantastic and made me realise just how restricted the children were in previous years. This year, the children had the freedom to make mistakes, explore and make their own informed choices, and work within constraints that had been agreed collaboratively. Their final rovers were all unique, different, and purposeful, which differs from previous years as before they had all been a typical cuboid shape with four wheels.

The outcomes

Compared to previous years, the children were far more engaged with their learning this year as they were given more independence and choice within their work. Their rover designs became their own work-in-progress, morphing and changing depending on what they had explored and the decisions they had come to.

However, in previous years, I would argue that the children were very much constricted to what we as teachers had in mind for them. This year, the children's final rovers were very creative, all unique and different but had all met the brief, which was fantastic. For example, in previous years, every rover had the same four cotton reels, a cuboid-shaped body, and the only differences were the colours of the rovers, which has nothing to do with creativity or Design and Technology. This year, we had square rovers, circular rovers, four wheels, six wheels, lollipop-shaped rovers. The children's work was far more creative and they could all explain and justify why they made the choices they had with regards to their rover design.

In our Design and Technology projects, we encourage the children





to use an iterative process. I have found that by exposing the children to the creative habits and creative process, the quality of their work and learning outcomes have significantly increased in comparison to previous years. The children were able to accept failure and learn to persevere, they became disciplined and were not afraid or affected by things going wrong. I believe it is because of these creative habits that the children had better outcomes as they continued to persevere and evaluate their rovers to improve them over the five weeks.

Our SEN children were easily able to access the learning and loved having the opportunity to explore at the start of the project. Through engaging with the creative process, our SEN children were able to ask questions, look and play with vehicles

and could then make excellent connections and suggestions for their own designs. By adopting the creative process, it provided the children with opportunities to explore, learn and find out what works, and what could be suitable, for themselves, rather than us telling them what might be good. The children had to take ownership of their choices and persevere when making their rovers.

Reflections

Overall, this project was incredible, and I am looking forward to teaching it again next year. What worked really well was not only removing all pictures of rovers, but also providing the children with opportunities to explore through a series of investigations. Playing and exploring with different objects which could be wheels, different storage containers and different ways to join, enabled the children to learn first-hand what they think works well and what does not.

This really helped to inform the children's designs and ultimately, their rover prototypes. The children were incredibly proud of their final rovers and had become so resilient and really developed in their confidence over the five-week project.

The challenges were at a teacher level and not the child's level. Opportunities to learn, explore and find out what works for themselves was brilliant but it took a lot longer. Next year, I will need to plan in additional time during our 'five-week block' for the children to really explore, investigate and conclude which wheels and storage containers would be best. If we don't 'plan for the unplanned' and allocate a certain period of time to each stage of the creative process then it could feel rushed, and we won't reap the benefits of engaging with a creative style of learning.

Next year, I would like to add in further opportunities for the children to ideate, test out their ideas, and change them if they need to. I am looking forward to teaching the project again and enhancing the creative process even further.



7.

WORKSTREAM 3 AGENCY FOR CREATIVITY: HOW CAN WE FOSTER CREATIVE SELF-BELIEFS, INCLUDING CREATIVITY AS A LEARNABLE SKILL, IN TEACHERS & PUPILS



7.1. WS3 Research Context: Creative self-beliefs

One particularly pervasive myth surrounding creativity is the belief that people are either born creative or they are born uncreative, with no capacity for change (Plucker, Beghetto & Dow, 2004). Despite good evidence showing that creativity can be learned (e.g., see meta-analysis by Scott, Leritz & Mumford, 2004), the impact of this myth is reflected by the words of Guilford (1958) *“there seems to be a popular opinion that creative performance is the special prerogative of the gifted few who are capable of it. If the child classifies himself as belonging in the non-creative group he accepts his fate and makes little or no effort to be original or productive”* (p. 17).

Research on individual differences in creative self-beliefs has increased in recent years, encompassing a wide range of constructs (Karwowski & Kaufman, 2017; Karwowski & Lebuda, 2016). These range from a person's self-estimates of their creativity in general (creative self-perceptions), to whether a person values creativity (creative personal identity), to how creative a person believes that they can be at a particular task (creative self-efficacy). The creativity literature shows that these self-beliefs play an important role in determining why, how, and what we create (or do not create), with individuals showing domain specific profiles of creative self-belief (Snyder, *et al.*, 2021), and those scoring high on

creative self-beliefs being more likely to engage in creative activities (e.g., Beghetto, 2006). This engagement brings a range of potential benefits for the individual including increased creative performance (Kaufman & Beghetto, 2009; Royston & Reiter-Palmon, 2017), personal growth (Forgeard & Elstein, 2014), and an increase in wellbeing (Conner, DeYoung & Silvia, 2018). Further, assessments of creative self-beliefs, when used in conjunction with performance-based measures, can offer insights into creative metacognition and how interests and values align with ability (e.g., Kaufman, 2019).

The potential importance of creative self-beliefs for creative achievement and activities makes them important to foster and assess in our teachers and learners,

as work in the collaborative progresses. Evidence suggests that individuals who have incremental implicit theories of creativity (they believe creativity to be malleable in nature, as opposed to fixed) also have stronger creative self-beliefs (Karwowski, 2014; Hass *et al.*, 2016), and show increased performance on relevant tasks (Warren *et al.*, 2018). We will explore how our activities, including the fostering of metacognitive knowledge about creativity in general and domain specific forms (see Workstream 2) and new approaches to teaching for creativity, in turn support incremental theories of creativity, stronger creative self-beliefs, and greater creative engagement and achievement.



“Notably, for both infant and junior pupils, creative self-efficacy was also positively related to measures of wellbeing and school satisfaction.”

7.2. WS3 Project activities

Fostering teachers' and pupils' sense of their own creativity has been an important focus of the work of our collaborative, guided by prior research on the role of creative self-beliefs in creative engagement and performance. In our launch conference with teachers and school leaders, we unpicked a number of common 'myths' surrounding creativity, such as that creativity is the preserve of lone genius or that it is fixed, spontaneous, and unteachable/unlearnable.

We also put in place measures to support and encourage our work in practice. These included using our Teacher Research Group sessions as an opportunity to share good practice and to celebrate successes, and each school being allocated a Creativity Champion who regularly visits project teachers to support them with developing their teaching for creativity within their own school context. Further, our metacognitive tool (described in workstream 2) and planning framework (workstream 4) have been used by project teachers to guide planning of teaching for creativity in specific subject areas and plans are then shared with Creativity Champions to develop ideas through discussion and feedback.

7.2. WS3 Initial findings

Teachers and pupils' creative self-beliefs at baseline

Data from our baseline survey show that teachers' creative self-efficacy correlates positively with measures of their implicit theories of creativity (the belief that creativity can be developed), as well as their sense of general teaching efficacy.

For pupils, our data show that creative self-efficacy decreases with age, with infant pupils scoring significantly higher than junior-aged pupils. As with teachers, there was a positive correlation between juniors' self-reported creative self-efficacy and how strongly they endorsed the belief that creativity can be developed (an incremental implicit theory of creativity). Notably, for both infant and

junior pupils, creative self-efficacy was also positively related to measures of wellbeing and school satisfaction.

Given the relationships identified between different measures, the findings from our baseline survey show that supporting the development of creative self-beliefs in both teachers and pupils is an important focus as the work of the collaborative progresses.

Development of creative self-beliefs in teachers and pupils

The End of Unit interviews, conducted in December 2022, showed that teachers' understanding of creativity had deepened across the course of the first year (see WS2). Further, these changes in understanding, along with the experience of planning and teaching for creativity, had impacted their beliefs about their own creativity. For example, *"it's certainly made me more of a thinker and more of a problem-solver I think in my own life, without a doubt"*, as well as helping them to *"understand how to become more creative"*. Teachers also described how planning and teaching these units of work has developed their own understanding of creativity by helping to *"embed it"* into their own minds and to better *"recognise where the opportunities are"*.

These interviews found that teachers' shift in beliefs and understanding of creative approaches has impacted their teaching practice, particularly in terms of planning in *"a different way"*. Teachers spoke of being more reflective in their planning and being more *"mindful"* about the content and delivery of their lessons to ensure opportunities for creativity: *"what I think this has helped me with is thinking about the different elements of it and thinking that it's not just about being imaginative, that you're thinking about have they had opportunities to be collaborative? Have they been given opportunities to fail and retry? [...] By being reflective and being explicit in making sure that there are opportunities for the children to progress"*. Teachers felt that this change in their approach to planning has had a positive effect on their teaching practice *"I think it's enhanced my activities"*. The impact



of this shift in understanding and beliefs about creative processes is encapsulated in the words of one teacher:

"I remember at the beginning talking about what creativity was and now thinking actually it's totally different. And so many people at the school as well. We've done teaching meetings on it where we've talked about creativity and people have gone, "But yeah, it's all art work and it's this." And we're like "No it really isn't, it's so much more. It's about teaching the children to be collaborative, it's about teaching them to sort of explore their resources and, you know, come up with their own ideas. Getting them to be imaginative and inquisitive and all of these things that come under the umbrella of creativity." I think it's challenged so many people's perceptions of it including my own [...] So yeah, I think it's improved my practice massively."

During the End of Unit interviews, teachers were also asked to consider whether the work they had been doing has impacted their pupils' sense of seeing themselves as creative. In

the most part, teachers agreed that it had on some level, with pupils beginning to recognise, and talk about, their own creative processes and habits, *"the children are starting to identify, oh I've been disciplined, or I've been creative"*. However, many of the teachers reflected on the 'journey' involved in this, referring to being in the *"early days"* and *"at the building blocks of that"*. Their responses highlight the need to support children in recognising their own creativity as an important *"next step"* in the work of the collaborative: *"I think in order for the children to truly be able to understand how much their creativity has developed or to measure it, we perhaps need to be more explicit"*.

More globally, teachers noted a number of positive changes in pupils' self-beliefs and approaches to learning in response to their teaching for creativity: *"They're almost feeling better in themselves as learners"*. Teachers described children as being more resilient, more engaged in their learning and having *"a lot more focus and excitement"*. A perceived increase in pupil confidence was mentioned by many of the teachers, *"I think what they've done is definitely show more confidence which is what was lacking"*, as well as an increase in the quality



“It has really enabled them to think, you know, I did learn today. Even if I wasn’t successful and I didn’t get that nice, shiny outcome, I’ve learnt so much about doing something in this way and I know what next time I would do. So again, it’s seeing that yes okay success comes in many forms. It’s them seeing themselves as learners.”

and quantity of pupil’s work, with the children *“thinking more deeply”* and being *“more focused in their learning”*.

An interesting theme, emerging from these interviews, centres on children’s understanding of success, with teaching for creativity encouraging pupils to take *“more ownership over their learning”* and supporting them to focus more on the process of learning rather than just the outcome. Teachers felt that their units of work were *“really inclusive”* and *“empowering”* for all children, especially those with SEND status: *“Because it’s so open-ended, there was no fixed box outcome. They were able to show it in whatever way and they were creative with their own ideas, and they felt successful.”*

The findings here show that the process of teaching for creativity in specific units of work has played a role in developing teachers’ sense of their own creativity, as well as impacting their teaching practice. The interviews suggest that while pupils are beginning to identify and describe creative processes in their own work, many teachers felt that this sense is still developing, and supporting pupils to recognise their own creativity should be an important next step for the work of the collaborative. This emphasises the value in developing a self-assessment tool that children can use to assess their own creative growth.

7.3. WS3 Response to findings

In recent Teacher Research Group meetings, we have been talking about operationalising the ways in which we assess creativity to help us to develop our recognition and identification of creative processes and products. By representing what creativity might look like in the classroom, the goal is to enable shared understanding and expectations that can be used to support children in developing the sense of their own creativity.



8.

WORKSTREAM 4

PEDAGOGIES FOR CREATIVITY: DEVELOPING RESEARCH GUIDED PARTNERSHIP WORKING AND A MENTORING PROGRAMME TO EMBED EXISTING AND DEVELOP NEW PEDAGOGIES TO FOSTER CREATIVE CAPACITIES AND THINKING ACROSS THE CURRICULUM



8.1 WS4 Research Context: Teacher Professional Development

Supporting high quality teaching and classroom practice through effective professional learning is fundamental to improving outcomes for children (Zuccollo & Fletcher-Wood, 2020; Cordingly et al, 2015). Indeed, Rauch and Coe (2019, p. 10) argue that professional development (PD) is 'the single most important thing that teachers and school leaders can focus on to make a difference in children's learning'. In the Education Endowment Foundation's (EEF) *Effective Professional Development Report*, teacher PD is defined as "structured and facilitated activity...intended to increase their teaching ability" (Collins and Smith, 2021, p. 7). In this context, the EEF make three key recommendations for schools (p. 8-9):

1. When designing and selecting professional development, focus on the mechanisms.

The mechanisms or 'building blocks' suggested to be of fundamental importance to the effectiveness of any PD programme include; ensuring the programme is underpinned by credible research, providing regular opportunities for teachers to action plan as well as to monitor the impact of the professional development on teaching quality and pupil learning, and incorporating a degree of social support for the teachers including the use of coaching (Collins & Smith, 2021, p. 29).

2. Ensure that PD effectively builds knowledge, motivates staff, develops teaching techniques, and embeds practice

In relation to this recommendation, peer-to-peer working is argued to be effective as teachers have a shared understanding and experience of the challenges they face and are often able to problem-solve successfully together and to share good practice in order to overcome barriers and to improve teaching quality (Sims *et al.*, 2021).

3. Implement PD programmes with care, taking into consideration the context and needs of the school

In order for PD to be successful, consideration needs to be given to the readiness of, and alignment to, the individual school contexts in which the teachers are working. Therefore, as Sims *et al.* (2021) maintain, those responsible for designing PD programmes need to

"provide sufficient clear guidance about the purpose, goals and principles of the intervention, whilst maintaining the flexibility needed to ensure teachers can fit the intervention into their working patterns" (p. 53). This is what Durlak and DuPre (2008) term 'intelligent adaptation'.

These key principles and recommendations helped to shape the design of our work with teachers over the course of this project as outlined below. Overall, our work as a Creativity Collaborative was based on the premise of designing professional learning which would effectively support the development of teachers' knowledge and understanding of creativity, support their ability to engage with the key foundational research in this field, and to apply this knowledge in practice in their own classrooms in order to enhance the learning and outcomes for their pupils.



“The teachers interviewed identified three main factors as being important; peer feedback, observing others, and collaboration.”

8.1. WS4 Project activities

Teacher professional development

The research into effective professional development formed the guidance principles of two key elements of our collaborative.

1. The first took the form of Teacher Research Groups (TRGs). These half-termly face-to-face meetings with all of the project teachers in our collaborative provide valuable opportunities to learn about key research and to co-construct knowledge and understanding from the evidence-base, explored in relation to teachers' own school contexts. This pattern of coming together regularly over a sustained period of time was designed deliberately as a means of ensuring that new learning was well embedded, thus having the best chance of influencing and changing practice in the classroom. The TRGs also provided an opportunity for teachers to set targets and goals for the following half term, to share and celebrate their successes and challenges faced, and to gain feedback from their peers. This was deemed to be essential as a means of sustaining teacher motivation and for keeping this work high on the teachers' agendas when they were back in their own schools and classrooms (Cordingley *et al.*, 2015).
2. The second key element of support for our teachers involved identifying a 'Creativity Champion' to work with each school. These Creativity Champions visited their allocated schools each half term to undertake a number of activities including supporting with planning, team-teaching, and observing and providing feedback about the impact of any changes to practice. This role was flexible, depending on the needs of the schools. At times the Creativity Champion adopted a more mentoring, 'mantle of the expert' approach and, at other times, the role became more facilitative where problem-solving and ideating was more collaborative and co-constructive in nature. These school visits also

enabled the Creativity Champion to gain a better understanding of the individual contexts in which the teachers were working and to consider how the principles for creativity explored through the project could best be applied and adapted for these contexts.

Planning units of work

An important area of focus for the TRGs, has been to plan and deliver subject specific units of work that develop children's creativity over approximately half a term. To support this, the project team developed a 'Teaching for Creativity Planning Template' that could be used to plan teaching for creativity in specific subject areas. The template drew on the metacognitive framework and planning tool developed in workstream 2, and was trialled by teachers in November-December 2022.

8.2. WS4 Initial Findings

Teacher professional development

Some tentative, early themes regarding the design of the PD emerged from the first round of interviews conducted with the initial cohort of teachers.

In relation to support and professional learning, the teachers interviewed identified three main factors as being important; peer feedback, observing others, and collaboration. Teachers identified having their own practice observed and receiving constructive feedback on their practice as being a valuable means of support, *“people coming in to have a look at what I'm doing in the classroom. I'm open to people telling me, you know, as nice as it is to hear things that are good, I'm more than happy if people tell me things, I could do to improve on it”*. Teachers also felt that being afforded the opportunity to observe others teaching for creativity would support them to translate the theoretical principles into practice, *“if there's chances that we can watch other people through the workshops and things, and I think watching other people deliver different types of lessons with this creative approach I think*



would be really beneficial, because then I can see how it works”.

Teachers also spoke more generally about the value of collaboration as a means of improving teaching practice for creativity, with general discussion and reflection between colleagues and opportunities for the sharing of ideas cited as being important for them. *“doing more of kind of getting together, and sharing ideas of ways at being creative, and maybe having a specific creativity focus”.*

Units of work

After the initial trial of using the planning template, feedback was collected from the teachers through End of Unit Interviews. In general feedback suggested that the planning process was valuable - *“It was useful. Not very easy but useful. [...] it was useful to be able to think that way and also useful to get the feedback from [NAME] to question myself further in why I chose to think that way”* and *“once I got into it, it really helps me with thinking about the process and what the children needed to learn and how they were going to learn it”.*

However, some teachers found the planning template itself was challenging to use *“it felt very university”.* Nevertheless, teachers noted the value of the planning questions within the template *“the questions were nice to prompt”.*

The findings showed that a Teaching for Creativity Planning Template was useful to guide practice but completing it added to teachers’ workload. Integrating the planning of teaching for creativity into school’s own planning templates, rather than introducing additional planning pro-forma, may more readily help embed new practice.

Examples of units of work developed by the teachers that were informed by the planning process developed in TRG’s can be seen in our teaching for creativity case examples.

8.3. WS4 Response to Findings

A key focus, going forwards, will be to seek the views of teachers and school leaders about which elements of the

professional learning that has taken place over the course of the project have had the biggest impact on their thinking and practice. These data will be critical in order to draw broader conclusions about how this support can be replicated and adapted on a larger scale and in other networks of schools.

Teachers have been working on integrating planning of teaching for creativity into their respective school’s planning templates, drawing on the Teaching for Creativity Metacognitive Tool and a set of prompting questions extracted from the Teaching for Creativity Planning Template.



TEACHING FOR CREATIVITY

CASE EXAMPLE 2: YEAR 1 ENGLISH – BRONTE BAILEY, STONEHAM PARK ACADEMY

About the unit and what was done

I carefully planned a unit of work in English, which was based around a key text 'The Bee Who Spoke', with the objective to create a narrative. This was a three-week unit with 7 sessions. I had planned the unit to have a week on each part of the creative process – explore, ideate, and evaluate. The creative habits were supporting the process each session depending on the outcome of the session. During planning, I carefully mapped out the different stages of the creative process and the pedagogical approaches needed to support these stages.

For the exploration stage, the children listened to the story and used actions as we went along. They were given opportunities to *play* with the story through role-play and drama. We were "*warming up the words*" for

children to practice the vocabulary that they might want to use in their choosing stage of the narrative write. The children were told to exercise their *collaborative* habit to listen and learn the narrative vocabulary from each other. We then looked at different ways to record a story and the children chose to film, draw, build or even map this out to help form the narrative sequence in their memories. Throughout the unit, the children were explicitly told which part of the creative process they were working through to help deepen their understanding of how to be creative and to encourage an effective level of engagement throughout each stage.

In week 2, we progressed onto the ideate stage to build on from our exploration. The children looked back through the key text to identify essential skills to write a narrative (e.g., 'think' and 'fuse'). They then began to use the learning from their exploration stage to ideate different parts of the story, changing the setting or character. They then linked their ideas together to build a prototype narrative using key skills taught ('apprentice write'). Throughout this stage, the children were exercising their *imagination* habit to think outside the box and create something unique in their story.

We then finished with the evaluative part of the process where, first, children collaborated with others to share their prototype and build on it by adding in richer vocabulary. They went through a condensed version of the whole creative process again as a recap to help them edit and refine their work. The children were really proud of their creative narratives and



could see that their story was unique and effective.

Previously, this unit would not have been mapped out using the creative process and the children would not have noticed the importance of each stage of the process. The children were also excited to create a novel story idea that no one else had thought of.

The Outcomes

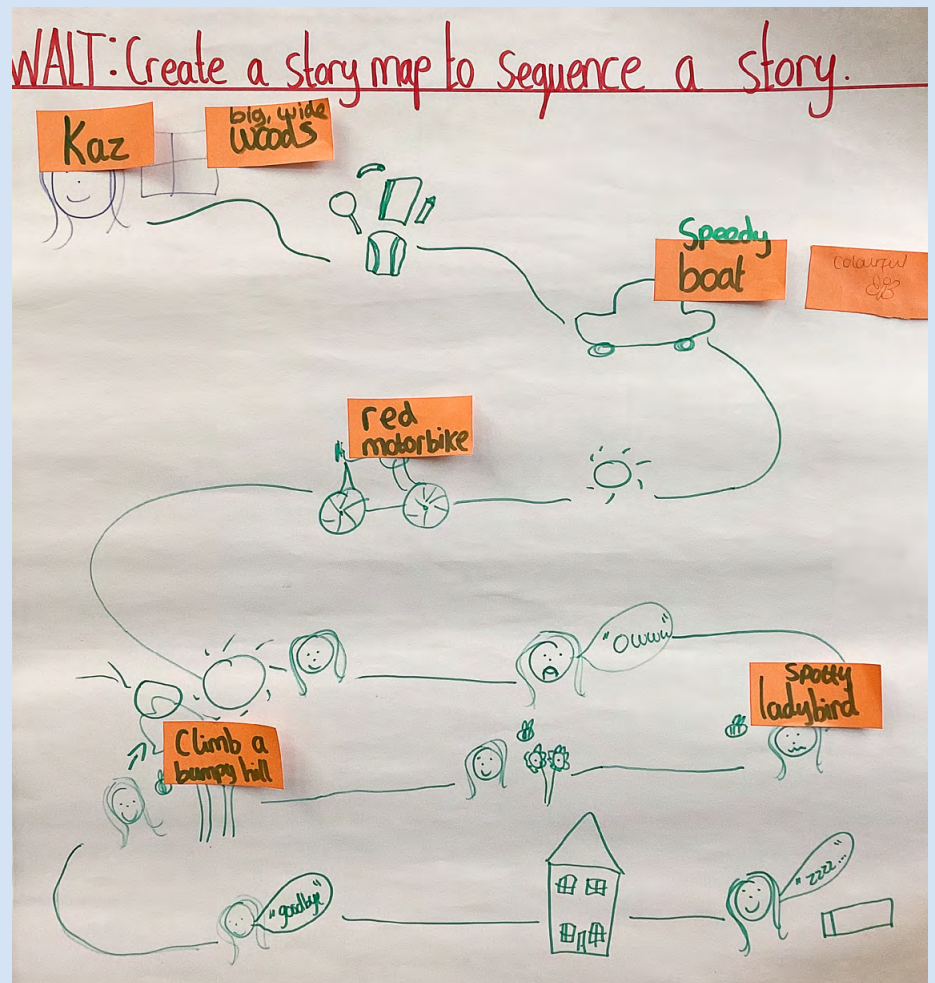
During the unit, the children were explicitly told which part of the creative process they were working through and where they were heading to next. We talked about the importance of engaging well in each stage of the process so that they had a more effective and creative outcome. This differs from previous years as the children would not have been told about the process of creativity and would have seen it as episodic learning rather than sequential building blocks to creativity. The children were excited to innovate their stories and become creative writers. The children's outcomes were more novel and effective, and the key skills came naturally to them as they were generating these outcomes. This suggested to me that their learning had become more embedded as it was being applied independently. This was the first time this unit had used this text, so it is therefore hard to directly compare the creativity of outcomes to previous years, but there was a noticeable difference in the children's creativity in narrative writing. The unit of work was very accessible and all children in my class could access it to generate creative ideas for their story. One lower ability child was very excited to write and had written a whole page "faster than all of my friends".

Reflections

Reflecting on this unit, I know that the children really embedded the skills to create their own narrative through their own unique creative process. This generated better engagement and focus across the class as everybody could access the unit. Through playing and exploring, the children widened their vocabulary

ready to support their writing. By explicitly teaching the children the creative process throughout this unit of work, I could see that the children understood the importance of each part of the process. Children also enjoyed exercising their creative habits throughout and this was celebrated as and when the children used a habit to promote creative work. The challenges of this unit were allowing the children enough time to write up their end result and have time to go back and edit. I will be printing off children's stories for them to edit in provision time if they want to go back and be *disciplined*. If I was to redo this unit of work, I would be more reflective during the process. I would have more visuals for the children to continue to refer during the exploration stage and more visuals to support *imagination* for the ideation stage. When using *imagination*, it was clear that a barrier was lack of life experiences as some had fewer ideas to draw upon. This emphasises the importance of the exploration stage for creative work.

"By explicitly teaching the children the creative process throughout this unit of work, I could see that the children understood the importance of each part of the process."



9.

WORKSTREAM 5 LEADERSHIP FOR CREATIVITY: DEVELOPING EFFECTIVE LEADERSHIP, GOVERNANCE & COLLABORATION STRATEGIES TO GROW A CLIMATE FOR CREATIVITY



9.1. WS5 Research Context: Creative leadership

Creative leaders are the cornerstones of creative schools. It is leaders who create the structures, culture, and conditions where innovation and creativity are deliberately nurtured and can flourish (Stoll & Temperley, 2009). Developing a climate which fosters the creativity both of its young people as well as of its leaders and staff is, argue Lucas, Spencer and Stoll (2021), the marker of a truly creative organisation.

Developing an understanding, therefore, of what is meant by 'creative leadership' on a conceptual level, as well as examining how this might manifest itself in practice, would seem to be of critical importance (Lucas, Spencer & Stoll, 2021). Stoll and Temperley (2009), for example, posit that creative leadership is about "*seeing, thinking and doing things differently*" (p. 66) whereas Keamy (2016) makes a clear distinction between leading creatively and leading *for* creativity. Thompson (2011), on the other hand, positions creative leadership firmly as pedagogical leadership. These distinctions are important as they, arguably, influence the approach leaders take to managing change in their schools.

Another factor which influences a school leader's strategy to cultivating a climate for creativity, and changing practices in their school, is their vision for the

intended goal or outcome of doing so. Keamy (2016), for example, considers creating a climate for creativity as being vital for enabling and enhancing the quality of teaching and learning, while Stoll and Temperley's (2009) attempt to define creative leadership is positioned perhaps more ambitiously as seeking to "*improve the life chances of all students*" (p. 66).

Establishing meaningful and lasting change to school practices, however, is "*one of school*

leadership's greatest challenges" (Stoll & Temperley, 2009, p. 76). Therefore, a key element of our work as a collaborative was to gain an in-depth understanding of how leaders can effectively develop and foster an embedded and sustained climate of creativity in their schools.



9.1. WS5 Project activities

In March 2023, the headteachers of the seven schools, who were in our first cohort and had, therefore, been part of the collaborative for one year, were interviewed to explore what motivated them to become involved in the project, how they viewed their own role in driving the work forward, and what deliberate actions were being taken in order to maximise the impact of their involvement in the project at whole-school level. A detailed understanding of these issues is critical in order for our collaborative to be able to draw conclusions and make recommendations about how headteachers in other schools and contexts might effectively lead and support sustainable whole-school change in teaching for creativity.

9.2. WS5 Initial Findings

Motivation to be involved in the collaborative

In most instances, headteachers spoke passionately about what drove them to be part of the collaborative. In many cases, it was felt that the aims of the project aligned with the leader's own views and vision for developing a more creative curriculum in their school. They talked about the need to provide learning opportunities for children which promoted more transferrable skills, such as problem-solving, critical thinking and resilience, and about increased opportunities for children to take ownership and responsibility for their own learning. In a number of instances, this desire for change stemmed from a clearly identified need for the schools to develop an enhanced 'richness' to their curriculum, which better supported children's application of knowledge. This need for change was in response to what one headteacher called the more "*formulaic teaching*" prevalent in their school and another who felt that the focus of the current curriculum had become more about "*learning knowledge by rote*". Two of the headteachers also attributed some of the existing practices and challenges in their schools to the legacy of the restrictions put in place during the COVID-19 pandemic.

When asked what the school leaders hoped impact would look like, responses varied. For a few headteachers, success would involve more learner 'buy-in', engagement, and independence. For these headteachers, children becoming more resilient in their learning was a key focus. Another leader talked about wanting to see more creative outcomes, with children demonstrating their learning in different ways. One leader, however, talked more specifically about wanting to see a "*deeper understanding of children's learning*" and "*mastery of knowledge*" evidenced in the classroom as a result of their engagement with a more creative pedagogy. Interestingly, it was felt by some of the headteachers interviewed that any success and impact resulting from being part of the Creativity Collaborative would be harder to measure in any quantifiable way.

Role of the school leader

All of the headteachers interviewed recognised how critical their role is in needing to drive the creativity agenda forward in their schools. They articulated the importance of maintaining a "*relentless push*" and to "*keep the momentum going*" in order that creativity became an embedded part of the schools' culture and systems. However, their approaches to achieving this varied. Only one leader from Cohort 1 felt strongly that the project aligned sufficiently closely to the existing culture and ethos of the school that she was able to trial and adopt the key principles of teaching for creativity at a more whole-school level from the outset. The other schools in the cohort tended to adopt a more cautious and gradual approach. For example, one leader described "*starting small and making it stick*" through achieving consistency in one subject with the view to building gradually from this. The others were prioritising trialling new strategies in only the classrooms of those teachers involved directly in the project in the first instance and allowing this to grow more organically over time before seeking to explicitly involve all staff. Perhaps not surprisingly, these differing approaches appeared to

“So it’s being brave and planning less, but being very smart about what you plan, and possible routes that children could take and acknowledging that some of them might want to take routes that you haven’t even thought of.. and that’s okay.”



“The need to develop a culture of risk taking was highlighted by all of the headteachers, who recognised that they needed to be prepared to “relinquish some control” in order to give staff “permission” in their own classrooms to try out new ideas, to make mistakes, to refine practice, and to learn.”

have a bearing on the degree to which creativity took centre stage in school systems and structures.

For example, many of the leaders had identified creativity as a key priority in their school improvement plans, some had required subject leaders to incorporate planning for creativity in their subject action plans, and some headteachers had set performance management targets for some teachers which related specifically to developing their understanding and ability to teach for creativity. All of the school leaders confirmed that their governors were aware of their involvement in the project, although again this varied in approach. Some leaders kept governors informed through reporting at board meetings, whilst others had gone further and had assigned a governor to the priority, had invited them to attend the launch conference event, and ensured they were now directly involved in learning walks and lesson observations, as a means of gaining a deeper understanding of creativity in practice and the impact of this work.

Seeking buy-in and empowering staff

In addition to these more formalised and strategic actions, school leaders also talked about the importance of their role as being an “*enthusiastic*” advocate for creative pedagogy as a means of seeking buy-in and commitment from their staff. The need to develop a culture of risk-taking was highlighted by all of the headteachers, who recognised that they needed to be prepared to “*relinquish some control*” in order to give staff “*permission*” in their own classrooms to try out new ideas, to make mistakes, to refine practice, and to learn. One leader in particular talked at some length about the need for her to work alongside teachers, to have open, honest conversations about what is working well and to be seen to problem-solve alongside her teachers in a collaborative, non-judgmental way when strategies were less successful. Another headteacher, explained how she felt that it was important to celebrate the “*small wins*”, publicly praising the creative practices when she saw them. Sharing success in this

way, she felt, kept creativity high on the agenda.

The need to demonstrate to staff in a visible and tangible way that headteachers were committed to the project was recognised by a few of the leaders interviewed. One leader, for example, felt that her attendance and involvement in all of the training events and Teacher Research Group meetings sent a strong signal that she saw this project as being important for her school. Another headteacher reflected in her interview that she needed to start to plan in regular update meetings with the lead teachers in the project as a means of demonstrating the extent to which she valued the work they were doing in their classrooms to promote creativity.

Overall, the findings showed that school leaders saw the project as enabling children to develop a range of transferrable skills and strengths, with opportunities to develop deeper knowledge and demonstrate learning in different ways. School leaders were able to identify a range of informal strategies to support teachers to build agency with respect to teaching for creativity as well as recognising the importance of formal mechanisms to embed teaching for creativity across their schools.

9.4. WS5 Response to Findings

The findings from the leader interviews are beginning to shape the focus of leadership meetings. As we begin to look to the later stage of the project, there has been a distinct shift towards prioritising discussion and strategic planning to focus more on how leaders will deepen and embed the work of the collaborative across their schools. The need to embed this work into the very fabric and culture of school practices has begun to take centre stage in our work with school leaders.





10.

SUMMARY AND NEXT STEPS

The findings from the first one and a bit years' of work in our Creativity Collaborative suggest that pupils, teachers and leaders moved from a more fragmentary understanding of creativity towards a more holistic understanding of creativity as a process that can be systematically planned for. This was supported through a range of collaborative activities including conferences, teacher research groups, mentoring, and teachers and leaders working alongside each other. New pedagogic approaches were assisted by a co-created framework and metacognitive tool to support the development of a creative process in learning and teaching for creativity. Growth in understandings of creativity were accompanied by an increase in teachers' creative self-beliefs and agency, and there are signs of this

developing in pupils. Leaders and teachers identified a range of effective ways to empower teachers to take the 'beautiful risk' (Beghetto, 2019) of teaching for creativity and leaders are increasingly focused on ways of embedding new practices across their whole schools.

As we enter into the later stage of our Creativity Collaborative project our focus will be on assuring the legacy of our collaborative's work informed by further evidence on the impacts of our work. Particular attention will be paid to: widening the extent of teaching for creativity across our schools and ensuring that change is embedded in sustainable ways, and on developing our resources such that they can be shared beyond our collaborative to other schools in our network seeking to implement teaching for creativity.



TEACHING FOR CREATIVITY

CASE EXAMPLE 3: A VISITING SPECIALIST'S PERSPECTIVE – JUDY WAITE, UNIVERSITY OF WINCHESTER

About the unit and what was done

This was a six-week literacy unit of work, planned with the class teacher, Mrs Kelly-Anne Sweetnam, for lower KS2 children in her class at Awbridge Primary School, combining class teacher sessions with direct input from myself, as a Visiting Specialist, to four of these.

Literacy is often perceived as a creative subject in its own right, with therefore arguably less incentive to embed new creative practices than with other subjects. The intention was to investigate this utilising existing school materials and practices whilst 'weaving through' additional approaches, enhancing pupil confidence through kinesthetic and mindful approaches to learning.

The starting point was David Almond's *Boy Who Swam with Piranhas*, which connected with curriculum needs and was already available in the school. The existing lesson plans were scrutinised to ensure core requirements were maintained, acting as a platform for embedding new practices. The initial two chapters introduce readers to characters and an initial setting, although this is only a starting point and the central premise of the story – running away to a funfair – is not yet evident.

To clarify the main character, Stanley Potts, lives in a specific place and has a pet.

- Pupils would go on to create their own characters and specific home lives and create an original pet.

Stanley runs away from home, with his pet.

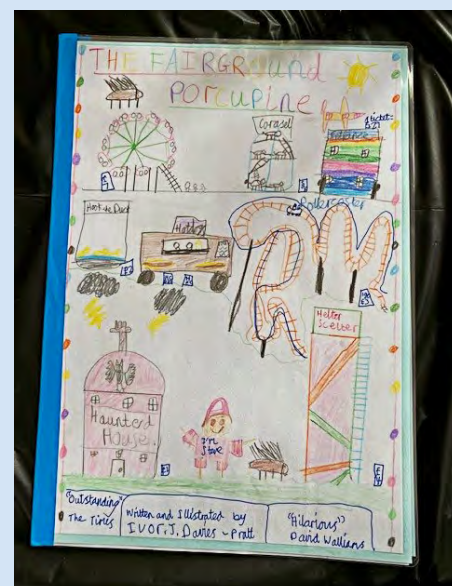
- Pupils' characters would run away with their pets.

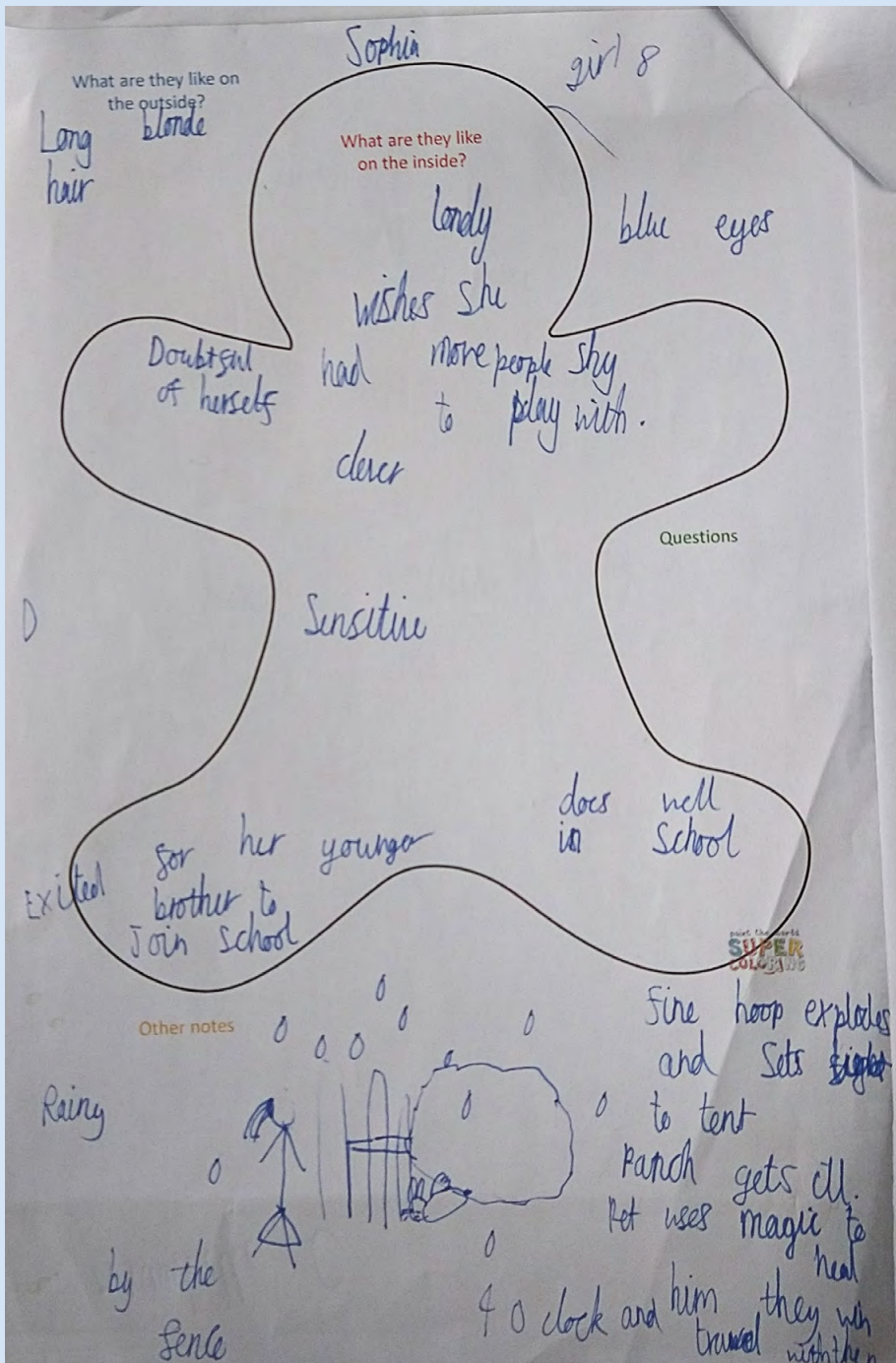
Stanley reaches a funfair.

- Pupils' characters would reach a funfair.

The first chapters were introduced to the class by Kelly, and on my first visit a sense of mystery was established by the creation of a 'clues corner', which included rubber ducks, a silver sixpence, a crystal ball, and a ticket to somewhere unknown. Kelly appeared in role as 'Gypsy Rose' (a character who would appear later in the book) predicting a future for experiences pupils might have during the unit and this served two purposes – to demonstrate ways the teacher was prepared to 'play' and take risks, fostering inquisitive elements, while preparing the ground for the children who then invented their own original characters for whom they would later role play themselves.

Moving beyond the first two chapters, pupils entered Almond's narrative with their own original characters and plot lines evolved initially from a template with which they were familiar. This template, known as 'role-on-the wall', is an established method in the school that utilises the drawn blank outline of a character on which pupils identify physical appearance on the outside, and elements related to emotion, memory, and personality on the inside. Repurposing existing materials enabled a level of confidence from which pupils were more willing to explore techniques they hadn't





and came to life during role play activities, which gave children further confidence in when they were ideating original possibilities and outcomes.

Pupils did not initially know their intended outcomes and were encouraged to explore and ideate, finding new possibilities in which to engage their characters, setting and plots. This level of experimentation opened up the practice of unplanned elements existing besides aspects that were planned. The pupils took elements from the existing publication but these broadened as techniques became embedded. They made their own decisions both individually, and through collaborating in pairs or small groups, ensuring there was a logic to their approaches, however random or fantastic their ideas had initially seemed to be. In this context, pupils produced original work that had value in the context of viable and often multi-layered story-ideas.

As the narrative evolved, there were regular points when pupils stopped for up to two minutes of silent mindful practice, during which they visualised distinct scenes from their idea – they watched it act out in their mind, before writing the subsequent section. Initially techniques to nurture this were implemented using a darkened room and LED candles, but pupils soon became able to engage independently.

Through this whole process, we can see the pupils engaging both with the familiar, in discussing and deconstructing a text, but having agency and empathy through their original ideas, and therefore building a deeper connection with the process and potential outcome. They cared about their characters, and what happened to them mattered. This connection and enhanced awareness enabled pupils to discuss their characters and their rationales, and to evaluate and adapt to make their narrative stronger. The subsequent writing evoked atmosphere and description, and much of the writing contained elements of suspense, capturing creative energies and evolving writing that had both balance and flow.

previously encountered, giving pupils agency, and engaging them in active scenarios through which they could explore further. This development of character and, later, back-story, shifted away from some of the more predictable or traditional approaches to these aspects, allowing ideas to breathe and keeping pupils engaged. Furthermore, the depth afforded to these emerging characters became crucial to actions and behaviours as the stories advanced.

Characters developed distinct personalities, evolving from each child's perception of their invention,

The final, reflective, session included a 'meet the author' book fair where the pupils – as authors – displayed complete 'published' books. Their full stories, complete with cover and 'blurb', were displayed in the class, and pupils, staff and guests interacted with the authors and their work, discussing the ideas and the ways the stories had evolved. Pupils celebrated with a final performance of their favourite scene or element of their publication.

Reflections

As they gained confidence in the sharing of ideas, and reading extracts aloud, pupils became increasingly willing – in fact proud – to read their material to an audience of peers and staff.

It seemed there was value to pupils in terms of creative process, their engagement with each stage, their willingness to explore and experiment, and the levels of reflection around the final outcomes.

The sessions were also kept open-ended at all times – if it seemed the class was losing focus we could quickly return to the role play, shift back to the visualisation process, or invite brief performances of the work as it evolved.

The element of 'unplanned' did require courage and confidence from the class teacher. The role play in particular can at times seem unchanneled from an observer perspective, but in talking to pupils it is not them sitting sulking in a corner but their character, upset for a valid reason; it is not them jumping or cartwheeling (some of the role play took place outdoors), but their character in training for a fairground extravaganza.

The mindful visualisations enabled brief quiet and reflective periods, where pupils thought before they wrote, building an energy for their ideas and the subsequent writing. Through this approach they articulated that they felt less fearful of getting started, or not knowing what to write – aspects that often hamper not just young writers, but all writers.

Within the Creative Collaboratives framework, and alongside the three identified headings of **Explore, Ideate and Evaluate**, pupils were also demonstrating persistence and disciplined approaches, which created a frame that supported originality, whilst still engaging with a learning environment that was mindful of curriculum requirements related to grammar, spelling, and punctuation.

The approaches were also inclusive, engaging both those pupils who struggle with writing, and those who were already competent. A significant number of pupils wrote beyond the usual expectation, related to their previous outputs, and Kelly observed that many had moved up a level in terms of the quality and content of the outputs.

Both myself and Kelly learned much from this experience, and one change that seems worthy of further development might be taking this forward as a contiguous block of creative learning, as opposed to evolving the work over a number of weeks, in amongst other subjects and units. This is an area where we would be interested in identifying future possibilities.

Dr Judy Waite

Visiting Specialist: Creative Collaboratives

Senior Lecturer Creative Writing: University of Winchester

“As they gained confidence in the sharing of ideas, and reading extracts aloud, pupils became increasingly willing – in fact proud – to read their material to an audience of peers and staff.”



10. REFERENCES

Amabile, T. M. (1989). *Growing up creative: Nurturing a lifetime of creativity*. Norwalk, CT: Crowth House Publishing Limited.

Beaty R. E. & Kenett Y. N. (2023). Associative thinking at the core of creativity. *Trends in Cognitive Sciences*, 27(7), 671–683. <https://doi.org/10.1016/j.tics.2023.04.004>

Beghetto, R. A. (2006). Creative self-efficacy: Correlates in middle and secondary students. *Creativity Research Journal*, 18(4), 447-457. https://doi.org/10.1207/s15326934crj1804_4

Beghetto, R. (2019). *Beautiful Risks: Having the Courage to Teach and Learn Creatively*. London, UK: Rowman & Littlefield.

Berliner, D. C. (2011). Narrowing curriculum, assessments, and conceptions of what it means to be smart in the US schools: Creaticide by design. In D. Ambrose & R. J. Sternberg (Eds.). *How dogmatic beliefs harm creativity and higher-level thinking* (pp. 79-93). New York: Routledge.

Cogdell-Brooke, L., Sowden, P. T., Violante, I R., & Thompson, H. E. (2020). A Meta-Analysis of Functional Magnetic Resonance Imaging Studies of Divergent thinking using Activation Likelihood Estimation. *Human Brain Mapping*, 41, 5057-5077. <https://doi.org/10.1002/hbm.25170>

Collin, J. & Smith, E., 2021. Effective Professional Development. Guidance Report. *Education Endowment Foundation*.

Conner, T. S., DeYoung, C. G., & Silvia, P. J. (2018). Everyday creative activity as a path to flourishing. *The Journal of Positive Psychology*, 13(2), 181-189. <https://doi.org/10.1080/17439760.2016.1257049>

Corazza, G. E. (2016). Potential originality and effectiveness: The dynamic definition of creativity. *Creativity Research Journal*, 28(3), 258–267. <https://doi.org/10.1080/10400419.2016.1195627>

Cordingley, R., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., Saunders, L., & Coe, R. (2015). *Developing Great Teaching: Lessons from the international reviews into effective professional development*. Teacher Development Trust. <https://tdtrust.org/wp-content/uploads/2015/10/DGT-Full-report.pdf>

Craft, A. (2002). *Creativity and early years education: A lifewide foundation*. London, UK: Continuum.

Cropley, A. J. (2010). Creativity in the classroom: The dark side. In A. J. Cropley, J. C. Kaufman & M. A. Runco (Eds.). *The dark side of creativity* (pp. 297-315). New York, NY: Cambridge University Press.



- Davies, L. M., Newton, L. D., & Newton, D. P. (2018). Creativity as a twenty-first-century competence: An exploratory study of provision and reality. *Education 3-13*, 46(7), 879-891. <https://doi.org/10.1080/03004279.2017.1385641>
- Denervaud, S., Christensen, A.P., Kenett, Y.N., & Beaty, R.E. (2021). Education shapes the structure of semantic memory and impacts creative thinking. *NPJ Science of Learning*, 6, 35. <https://doi.org/10.1038/s41539-021-00113-8>
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American journal of community psychology*, 41(3-4), 327-350. <https://doi.org/10.1007/s10464-008-9165-0>
- Lendrum, A. & Humphrey, N. (2012). The importance of studying the implementation of interventions in school settings. *Oxford Review of Education*, 38(5), 635-652. <https://www.jstor.org/stable/41702781>
- Egan, A., Maguire, R., Christophers, L., & Rooney, B. (2017). Developing creativity in higher education for 21st century learners: A protocol for a scoping review. *International Journal of Educational Research*, 82, 21-27. <https://doi.org/10.1016/j.ijer.2016.12.004>
- Feldman, D. H., & Benjamin, A. C. (2006). Creativity and education: An American retrospective. *Cambridge Journal of Education*, 36(3), 319-336. <https://doi.org/10.1080/03057640600865819>
- Forgeard, M. J. C., & Elstein, J. G. (2014). Advancing the clinical science of creativity. *Frontiers in Psychology*, 5, 613. <https://doi.org/10.3389/fpsyg.2014.00613>
- Guilford, J. P. (1958). Can creativity be developed? *Art Education*, 11(6), 3-7 & 14-18. <https://doi.org/10.2307/3184459>
- Hass, R. W., Katz-Buonincontro, J., & Reiter-Palmon, R. (2016). Disentangling creative mindsets from creative self-efficacy and creative identity: Do people hold fixed and growth theories of creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 10(4), 436-446. <https://doi.org/10.1037/aca0000081>
- James, S. J., Houston, A., Newton, L., Daniels, S., Morgan, N., Cohu, W., Ruck, A., & Lucas, B. (2019). *Durham Commission on Creativity and Education*. Arts Council England.
- Jia, X., Li, W., & Cao, L. (2019). The role of metacognitive components in creative thinking. *Frontiers in Psychology*, 10, 2404.
- Karwowski, M. (2014). Creative mindsets: Measurement, correlates, consequences. *Psychology of Aesthetics, Creativity, and the Arts*, 8(1), 62-70. <https://doi.org/10.1037/a0034898>
- Karwowski, M., & Kaufman, J. C. (2017). The nuances and complexities of who we are when we create: An introduction to creativity and the self. In M. Karwowski & J. C. Kaufman (Eds.). *The creative self: Effect of beliefs, self-efficacy, mindset, and identity*. Elsevier Academic Press.
- Karwowski, M., & Lebuda, I. (2016). The big five, the huge two, and creative self-beliefs. A meta analysis. *Psychology of Aesthetics, Creativity, and the Arts*, 10(2), 214-232. <https://doi.org/10.1037/aca0000035>
- Kaufman, J. C. (2019). Self-assessments of creativity: Not ideal, but better than you think. *Psychology of Aesthetics, Creativity, and the Arts*, 13(2), 187-192. <https://doi.org/10.1037/aca0000217>
- Kaufman, J. C., & Beghetto, R. A. (2009). Beyond big and little: The four c model of creativity. *Review of general psychology*, 13(1), 1-12. <https://doi.org/10.1037/a0013688>



Kaufman, J. C., & Sternberg, R. J. (Eds.). (2010). *The Cambridge handbook of creativity*. Cambridge, UK: Cambridge University Press.

Keamy, R. (2016). Creative leadership? 'It's just the norm'. *School Leadership & Management*, 36(2), 151-168. <https://doi.org/10.1080/13632434.2016.1196173>

Lebuda, I., & Benedek, M. (2023). A systematic framework of creative metacognition. *Physics of Life Reviews*, 46, 161-181. <https://doi.org/10.1016/j.plrev.2023.07.002>

Lucas, B. & Spencer, E., (2017). *Teaching Creative Thinking: Developing Learners who Generate Ideas and Can Think Critically*. Wales, UK: Crown House Publishing.

Lucas, B., Spencer, E. & Stoll, L. (2021) *Creative leadership to develop creativity and creative thinking in English schools: A review of the evidence*. London: Mercers' Company.

Newton, D. P. & Newton, L. D. (2009). Some student teachers' conceptions of creativity in school science. *Research in Science & Technology Education*, 27(1), 45-60. <https://doi.org/10.1080/02635140802658842>

Ofsted (2010). *Learning: Creative approaches that raise standards*. https://webarchive.nationalarchives.gov.uk/ukgwa/20110107221234mp_/http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Documents-by-type/Thematic-reports/Learning-creative-approaches-that-raise-standards

Plucker, J. A., Beghetto, R. A., & Dow, G. T. (2004). Why isn't creativity more important to educational psychologists? Potentials, pitfalls, and future directions in creativity research. *Educational Psychologist*, 39(2), 83-96. https://doi.org/10.1207/s15326985ep3902_1

Pringle, A. & Sowden, P. T. (2017a). Unearthing the Creative Thinking Process: Fresh Insights from a Think Aloud Study of Garden Design. *Psychology of Aesthetics, Creativity & the Arts*, 11, 344-358. <https://doi.org/10.1037/aca0000144>

Pringle, A. & Sowden, P. T. (2017b). The Mode Shifting Index (MSI): A new measure of the creative thinking skill of shifting between associative and analytic thinking. *Thinking Skills and Creativity*, 23, 17-28. <https://psycnet.apa.org/doi/10.1016/j.tsc.2016.10.010>

Quigley, A. & Stringer, E. (2021). *Metacognition and Self-regulated Learning*. Education Endowment Foundation.

Rauch, C. J., & Coe, R. (2019). Evaluating and Measuring Teaching Quality. In C. Scutt & S. Harrison (Eds.) *Teacher CPD: International Trends, Opportunities and Challenges, Chartered College of Teaching* (pp. 10-14). <https://my.charteredcollege/wp-content/uploads/2022/01/Chartered-College-International-Teacher-CPD-report.pdf>

Royston, R., & Reiter-Palmon, R. (2017). Creative self-efficacy as mediator between creative mindsets and creative problem-solving. *The Journal of Creative Behavior*, 53(4), 472-481. <https://doi.org/10.1002/jocb.226>

Sawyer, K. (2013). *Zig Zag: The Surprising Path to Greater Creativity*. San Francisco, USA: Jossey-Bass.

Scott, G., Leritz, L. E., & Mumford, M. D. (2004). The effectiveness of creativity training: A quantitative review. *Creativity Research Journal*, 16(4), 361-388. <https://doi.org/10.1080/10400410409534549>



Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., Cottingham, S., Stansfield, C., Herwegen, J. V., & Anders, A. (2021). *What are the characteristics of teacher professional development that increase pupil achievement? A systematic review and meta-analysis*. Education Endowment Foundation.

Snyder, H. T., Sowden, P. T., Silvia, P. J., & Kaufman, J. C. (2021). The creative self: Do people distinguish creative self-perceptions, efficacy, and personal identity? *Psychology of Aesthetics, Creativity, and the Arts*, 15(4), 627–636. <https://doi.org/10.1037/aca0000317>

Sowden, P. T., Pringle, A., & Gabora, L. (2015). The Shifting Sands of Creative Thinking: Connections to Dual Process Theory. *Thinking & Reasoning*, 21, 40-60. <https://psycnet.apa.org/doi/10.1080/13546783.2014.885464>

Starko, A. J. (2018). *Creativity in the classroom* (6th ed.). New York, USA: Routledge.

Stoll, L., & Temperley, J. (2009). Creative Leadership: a challenge of our times. *School Leadership and Management*, 29(1), 65-78. <https://doi.org/10.1080/13632430802646404>

Thomson, P. (2011). Creative leadership: a new category or more of the same? *Journal of Educational Administration and History*, 43(3), 249-272. <https://doi.org/10.1080/00220620.2011.586493>

University of Cambridge (2023, July 27th). *Inclusive Design Toolkit*. https://www.inclusivedesigntoolkit.com/GS_overview/overview.html

Vincent-Lancrin, S., González-Sancho, C., Bouckaert, M., De Luca, F., Barrera, M. F., Jacotin, G., Urgel, J., & Vidal, Q. (2019). *Fostering Students' Creativity and Critical Thinking: What it Means in School*. Centre for Educational Research and Innovation, OECD Publishing: Paris. <https://doi.org/10.1787/62212c37-en>.

Warren, F., Mason-Apps, E., Hoskins, S., Azmi, Z., & Boyce, J. (2018). The role of implicit theories, age, and gender in the creative performance of children and adults. *Thinking Skills and Creativity*, 28, 98-109. <https://doi.org/10.1016/j.tsc.2018.03.010>

World Economic Forum (2023). *Future of Jobs Report 2023*. Geneva, Switzerland: World Economic Forum <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>

Zuccollo, J., & Fletcher-Wood, H. (2020). *Evidence review: The effects of high-quality professional development on teachers and students*. Education Policy Institute. <https://epi.org.uk/publications-and-research/effects-high-quality-professional-development/>





**Context, Knowledge, Agency,
Pedagogies and Leadership for**

CREATIVITY

in Schools