

TEACHING FOR



IN DESIGN AND TECHNOLOGY FOR YEAR 6

UNIT OF WORK EXEMPLAR

Selma Lawless

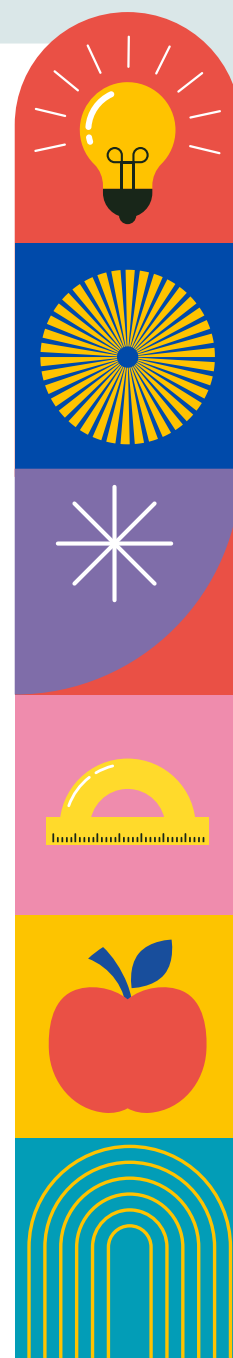
Orchard Junior School



How to read this document

This document contains three main components

- A description of the Creativity Collaborative programme context and our framework of teaching for creativity
- The key unit information provides an overview next
- Finally, the full unit description gives detailed information



Context: UWinAT Creativity Collaborative

Creativity Collaboratives is an action research programme, funded by Arts Council England and the Freeland Foundation, that aims to build networks of schools to test a range of innovative practices in teaching for creativity, with the explicit intention that learning is shared to facilitate system-wide change. The University of Winchester, the University of Winchester Academy Trust, and a network of Hampshire Infant, Junior and Primary schools became one of the eight national funded collaboratives, coming together with the key ambition of fostering pupils' creativity in subjects drawn from across the curriculum. Overall, our collaborative aims to enrich children's life chances by developing them into confident and creative problem-solvers, engaging them through authentic, meaningful problems, embedded in their schools and lives.

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). Our collaborative has focused on:

- Understanding and addressing the barriers and enablers of creative thinking
- Developing leadership for creativity in schools
- Developing new approaches to teaching for creativity across the curriculum
- Building children's and teachers' knowledge and understanding of creativity
- Developing children's and teachers' sense of themselves as creative and their ability to be creative in subjects across the school curriculum..

The Creativity Navigator: A Framework of Teaching for Creativity

To support our planning and implementation of teaching for creativity, we use a planning tool called the Creativity Navigator (see back cover). This was co-developed in our Creativity Collaborative and draws on a wide range of models, theories and frameworks of creativity. The Navigator emphasises that creativity can be a planned for process, that follows a typical sequence of explore – ideate – evaluate, but that this sequence can be varied and cycled around many times whilst working through a creative process. The process starts with the question 'where next?' emphasising the importance of metacognitive planning and monitoring throughout a creative process.

In a classroom context, a creative process can be operationalised through a set of learning behaviours. These behaviours can be grouped under creative 'habits' each of which can be used to support the creative

process. For instance, a think-pair-share learning behaviour could support children to collaborate on gathering relevant information as they explore at the beginning of a creative learning task. The same collaborative habit could later be used to support the evaluate stage of the creative process through getting constructive feedback from peers on each other's creative work and how it might be improved further.

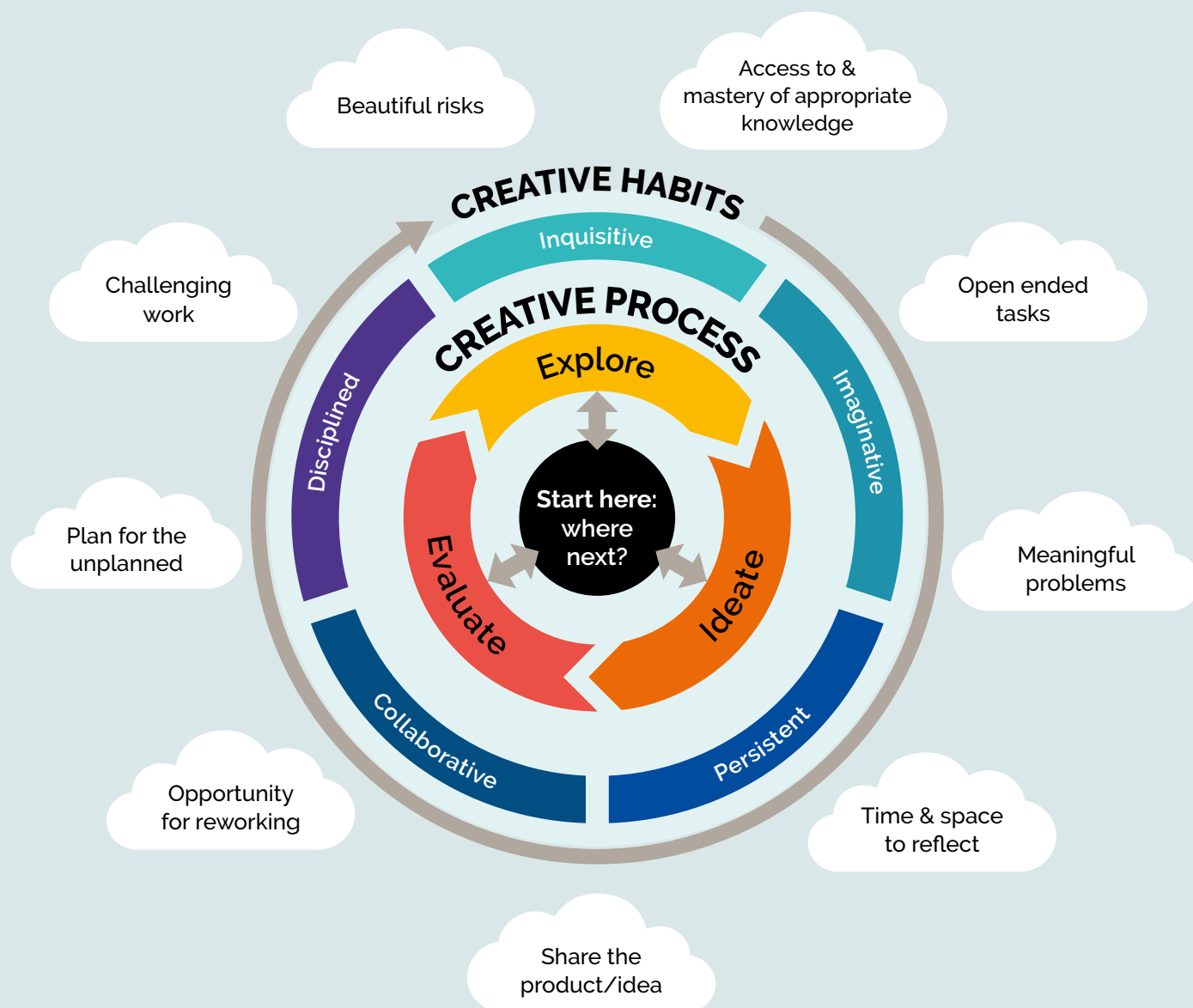
The final aspect of our Creativity Navigator focuses on the types of climate and task design that can support creativity to flourish in the classroom. For instance, tasks need to be personally meaningful, challenging, and open-ended, with children having some autonomy over aspect(s) of their learning. The classroom climate needs to provide psychological safety for children to take risks, make mistakes, learn from them and rework.



TO CITE THE CREATIVITY NAVIGATOR PLEASE USE:

Sowden, P.T., Warren, F., Seymour, M. Martin, C., Kauer, A. Spencer, E., Mansfield, S., Waite, J. (2025). A Creativity Navigator to Guide Teaching for Creativity: Implementation and Teacher Impacts in a Creativity Collaborative of Schools. *Journal of Creative Behavior*, 59(2), e70005. <https://doi.org/10.1002/jocb.70005>

CREATIVITY NAVIGATOR



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KEY UNIT INFORMATION

Designer Pencil Cases



INTENDED FOR:
Year 6



SUBJECT FOCUS:
Design and Technology



UNIT DURATION & FORMAT:
Weekly hour session over six weeks



LEARNING OBJECTIVES/OUTCOMES:

1. Learning objectives/outcomes:

- a. To use research and design criteria to inform the design of an innovative, functional, and appealing pencil case.
- b. To explore, practise and use different sewing stitches.
- c. To make a fabric pencil case using specific criteria.

2. Creative Outcome:

To apply creative thinking processes to design and produce a fabric pencil case to be used by teenagers.

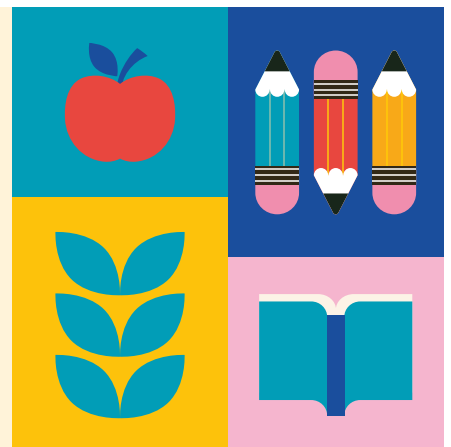
Solving a problem! Can we develop creativity within our designs?

This unit was designed to replace an existing DT unit focused on textiles. Previously the children had created one-design pencil cases, with a focus very much on the skill and less on the creativity. Needless to say, the result was 30 beautifully stitched pencil cases (largely thanks to the assistance of some nimble-fingered classroom assistants and parent helpers), each one largely resembling the other with little scope for individuality or creativity. I decided to change the way this topic was delivered and allow for a far more creative approach by adopting the strategies developed through the creativity collaborative. The focus of the unit became far more about the disciplinary knowledge of DT, focusing on the design process and less on the outcome, allowing children to fully explore creations and use their imagination. The skills required for sewing and how to successfully perform given stitches was taught and developed through a series of mini lessons.



STEPS FOR SUCCESS:

1. Allow time for exploration of ideas before introducing the final brief.
2. Be prepared for the adventurous designs that may seem impossible.
3. Stop worrying about perfection – these creations looked like they had been made by ten-year-olds – because they had!



FULL UNIT DESCRIPTION

Designer Pencil Cases

Introduction

This unit had previously been taught as two afternoon sessions dedicated to textiles. The initial sessions focused on developing the children's skills within sewing. They were reminded of previous skills used within sewing, threading needles, tying knots etc as well as the simple techniques of running stitch. Children were shown how to pin and tack fabrics together before being introduced to more advanced techniques such as over sewing and back stitch. The children were given the relevant fabrics, cut to size and shown how to stitch around the sides in order to secure the fabric. They were instructed on how to create a fastening, which was by means of a simple button and loop.

Through the adoption of the creative process, I decided to shift

the focus of the learning on to the design process, thus allowing time within the unit to first explore ideas prior to creating designs and even prototypes before any sewing skills were developed.

Initially, I set the children the problem that they need to design something that will hold specified items of stationery. Once the children had sketched out 3 original designs, I thought I would introduce the audience: Secondary school teachers wanting their pupils to have pencil cases that they like enough to look after, can be carried around school, either in bags or blazer pockets and are able to sufficiently hold and protect equipment for different lessons. They then 'thought-showered' ideas in their groups before designing their product.

Explore Stage

The children were then given opportunities to research and explore different containers and fastenings through prompt sheets which contained a variety of images specially selected to show each of the following:

- A range of products designed

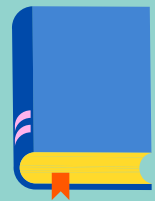
for 'carrying' (bottle carrier, rocket, rucksack, pet carrier)

- Things that are considered 'cool' by teenagers (festivals, fashion, media, phones)
- Ways to join fabric (zips, buttons, Velcro, ribbons, laces, hook and eye)
- Ways to join materials (gluing, welding, nailing, tying, stitching, taping)

Ideate Stage

The prompt sheets were used to generate discussion amongst the children, as well as give ideas for ways in which they could

further adapt their ideas. Children were then invited to adapt their initial ideas and come up with a final design. Designs were then generated and annotated to show individual ideas. At all stages, discussion was used to allow



children opportunities to explain why they had made design choices and questioning to ensure that the brief was maintained.

The next part of the process was the creation of prototypes. Children used paper to create 3D versions of their designs, enabling them to consider size, and ability to carry the given stationary.

Only once prototypes were completed and tested against the brief (would they fit the stationary items needed?) were we able to move on to the next stage of the project.

The next session was dedicated to the development of skills. Small pieces of fabric were used as a means to practise and develop a range of stitching methods. We were also able to demonstrate and

practise the joining of fabrics within these sessions.

We were then able to move on to the actual making of the pencil cases. This would initially have been much earlier within the unit, but by now, the children were excited to create their own designs on the fabrics of their choice. Children were asked to either bring fabrics from home or choose from an assortment that we provided.

No extra adult support was arranged, which meant that as a teacher, I was there to supervise but not do the sewing for the children. Instead, they did things for themselves and, yes, they made some mistakes. However, every child was able to create a pencil case that closely resembled their own design. The results were simply amazing.

Evaluate Stage

A final session on evaluating the finished pieces was then completed. Children were

asked to evaluate their work on its uniqueness, durability, and aesthetics. They considered whether the product fit the brief and discussed the unit as a whole.

Impact on learning

The unit had some challenges. Primarily for me, it was the thought of allowing the children to have the freedom to design what they wanted - knowing that there was an expectation to produce a hand sewn finished piece. I had to change my mindset to recognise that it was the 'process' that the children would be going through that was the focus, rather than just the end product. Thirty children all attempting to sew, thread needles, tie knots etc without the extra adult help in the classroom was also something that I had to come to accept. In previous years, I would have invited parent helpers in, or at least ensured the practical lessons took place on a day when I had an extra adult available. Again, once I

reassured myself that it would be fine; the children would do things for themselves and help each other out.

I feel that the learning gained by the children within this unit was vast. They completed the whole design process, right from initial ideas to final product and evaluation. There is no doubt that the children's work was far more creative than in previous years. The sheer variety of designs is evidence of that; pencil cases that are worn on the wrist, fold out cases with individual pockets, cylinder pencil cases, button fastenings, zip fastenings and velcro as well as the classic rectangular shaped ones we would have all produced in previous years.

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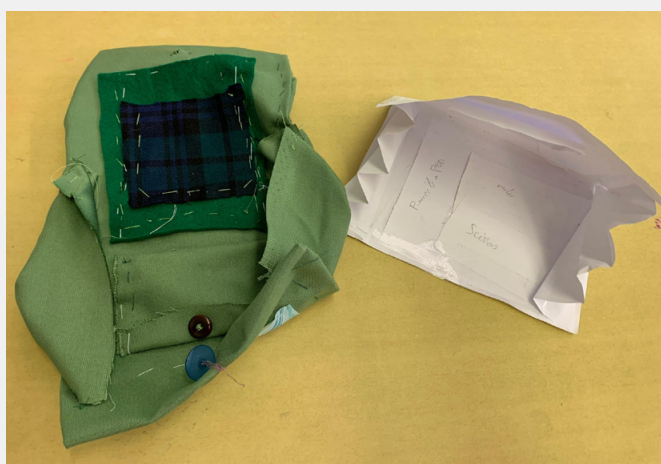
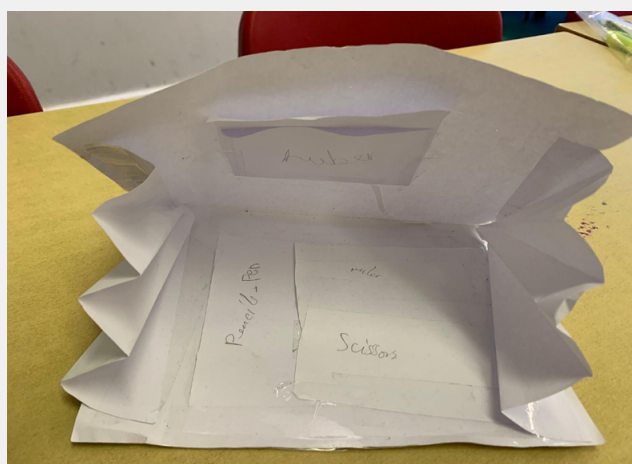


I am confident that the learning outcomes were met within the unit. Skill sessions ensured that there was time to teach the substantive knowledge of sewing, different methods of stitching were taught and developed. For me, it was the whole journey from initial design to final product that ensured this was a worthy project. The children were invested in their work from start to finish, they were creating their own design and they were proud of their work.

Pupils were engaged at all times within the sessions. Opportunities for discussion, designing, adapting, and creating ensured that there was continuous activity with children deeply immersed in their learning.

I feel the unit of work appealed to many of the children in my class, in particular those who might otherwise have struggled with a textiles-based unit of work. By regularly using vocabulary such as designer, prototype, testing and design brief, I feel that those who would not ordinarily be enthused by this kind of unit became more engaged within the topic. By shifting the expectation away from the final outcome, towards the whole journey, there were opportunities for those that may otherwise have failed at their needlework skills to shine through their imaginative thoughts instead. These pupils had clearly shown themselves to be confident and creative problem solvers.

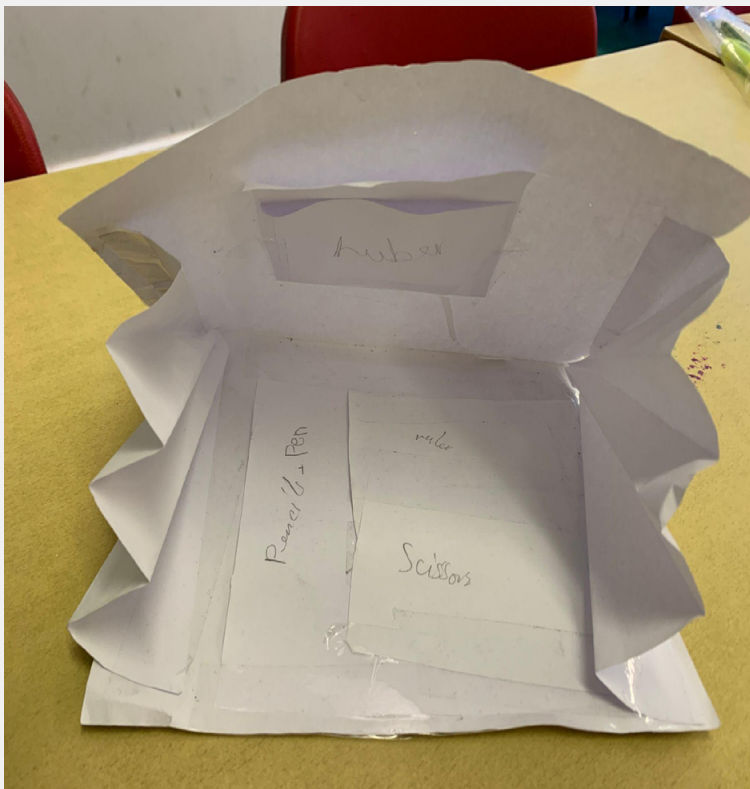
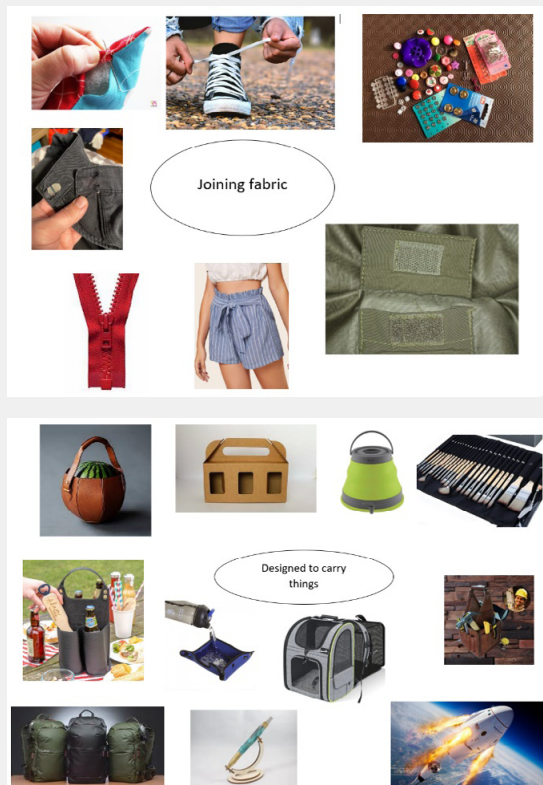
Prototype and final piece



The pencil case that can be worn on the wrists



Example of the prompt sheets used to encourage ideas and our prototypes display



FINAL REFLECTIONS:

My final thoughts...

Teaching lessons that allow children to develop their individual creativity is something that I feel, as a teacher, I have tried to achieve, however the constraints of the curriculum do not always allow for this. Allowing children to flourish within lessons that are meaningful and accessible for all can take time. Rethinking curriculum design is

what I will take away from this experience. It is ensuring the opportunities are there for the children to be able to work in creative ways, working to their strengths but also pushing boundaries. I would never have expected the outcomes of this unit to be so different and, as a result, for the children to have such pride in their learning. I really feel that the children felt their ideas and efforts were valued

and as a unit of work within DT, these children certainly felt that they had been part of a whole design process.

It may have felt less structured, I did not know exactly what the endpoint would be for each child, but the learning was rich and the success for the children evident. I will not be going back to the safe -one-design sewing lessons again!

CONTACT US:

✉ uwinatcreativitycollaborative@winchester.ac.uk
 🌐 <https://www.winchester.ac.uk/research/Our-impactful-research/Research-in-Humanities-and-Social-Sciences/Research-projects/creativity-collaborative/>

