Collaborative Virtual Spaces Enquiry: Is Art Essential (December- March 2021)

1. Introduction

The National Galleries of Scotland, in partnership with Hidden Giants, developed an investigative project with Blackburn Primary School to explore the value of visual arts to children and the potential role of visual arts as a tool to build their capacity to deal with uncertainty. The Shared Learning Spaces team at the University of Edinburgh has supported the research.

2. The Challenge

This project was inspired by a newspaper poll in June 2020 during the COVID pandemic, which suggested that the least essential job is that of an artist. The ability to deal with uncertainty was identified as a skill that artists have in abundance and could be particularly relevant at this time, hence this inquiry set out to explore how artists' skills and knowledge can be actively used to support children. Learning in schools has been impacted by the COVID pandemic, particularly the extensive use of virtual spaces as regulations about social distancing emerged. As a result, there has been much reflection on what children really need to learn.

Working in a context of official-non-essential-work, three artists worked in virtual spaces with children in Blackburn Primary School to raise some fundamental questions:

- What do children consider to be essential for learning and their future?
- What do they think is the role and value of art and artists in our society?
- Without entering the school building, what can artists offer schools to build pupils' resilience and capacity to deal with uncertainty?

These questions are central in enabling all our young people to learn safely and appropriately whilst building a mindset that allows every individual to become resilient and deal with uncertainty in ways that value who they are and how they build strength in 'adversity'.

3. The Goal

This initiative aimed to demonstrate how participatory inquiry can capture children's ideas about what is essential to them and how the role of art might become an 'essential' tool for learning. Enabling learners to engage in their own 'curriculum-making', meaningful, relevant, and owned by themselves, was fundamental. Initially, the project was designed to offer interactive, in-person sessions in schools led by artists working with a wide range of pupils and their teachers. However, whilst the underlying exploration remained constant, the nature of the project evolved with the onset of the first lockdown of the COVID pandemic. All the stakeholders and participants had to face the uncertainty

that came with COVID, lockdown and change as most of the pupils (except for those belonging to families with essential workers) experienced learning in their homes for the first time. In their different ways, all participants became actively involved in deepening their understanding of responding to global change and their impact as individuals and as a learning community. The research outcomes provide guidance to educators who wish to explore ways to equip learners to embrace uncertainty. Focussing on how children demonstrate across different modalities what is essential to them in their learning illustrates how artists can support educators and learners to grow a safe, healthy, and learning-rich space owned by those who inhabit those spaces.

4. Conceptual Framework and Theoretical Underpinning

Aiming to develop a greater understanding of how young pupils conceptualise 'essential learning' in uncertain contexts, this research applied the conceptual framework of **Pedagogies of Uncertainty** (Schulman, 2005; Tauritz, 2016) and was informed by Jackson's (2013) **Learning Ecologies.** A cyclical approach was carried out (see research design) using a case study approach (Yin, 2018) and thematic analysis was used to investigate the data (Xu and Zammit, 2020).

Tauritz's work in sustainability outlined a series of competencies that she suggests enables individuals and communities to deal with uncertainty, divided into three broad categories: learning to reduce uncertainty, learning to tolerate uncertainty, and learning to cherish uncertainty (see appendix). This project emphasised *cherishing uncertainty*, defined as using uncertainty as a catalyst for creative action, developing an enquiring mind, and employing lateral thinking. Reducing and tolerating uncertainty in terms of accepting the unknown and formulating and reformulating, experimenting, analysing, and reflecting upon actions to support the evolution of this challenge were also constants.

Jackson's Learning Ecologies were implemented as the learning communities (i.e. the teachers' group, the artists and teachers' forum, the stakeholder groups, pupil groups, home groups) evolved throughout the initiative as COVID regulations changed constantly. Everyone in this project acted as a researcher, rethinking spaces for learning, and creatively using alternative resources and processes to achieve and learn from the challenges set. The findings will be used to articulate 'actionable knowledge' (Goodyear, Ellis and Marmot, 2018) for dissemination and sharing to sustain growth within and across other learning spaces.

5. Research Questions

Overarching Research Question: How can art and artists support teachers and pupils to embrace uncertainty in curriculum making?

1. How might art play a role in empowering learning through uncertainty?
Understanding of the role of art in empowering learning in uncertain times from teacher, artist and pupil perspectives was triggered by a series of simple questions:
   a) Is art essential?
   b) What is essential?
   c) How might art enable learning?

2. What kinds of art interventions might lead to reconceptualising the role of art for learning by pupils and educators?

3. How can Pedagogies of Uncertainty guide interventions?

6. Research Design

The research team consisted of two project mentors, one from the National Galleries of Scotland and one from Hidden Giants, and three visual artists and a filmmaker working in partnership with pupils, teachers, and senior management across the school.

- Artist 1 worked with the autism classes A1 and A2.
- Artist 2 worked with P1/2 and P2/3/4.
- Artist 3 worked with P4/5 and P6/7.
- The Filmmaker worked with all classes.

Three mini-case studies were produced as a result of the artists' collaboration with their respective classes. As part of the evaluation, the filmmaker also created a film resource for other schools. Meetings between the artist and teachers took place throughout the project to organise resources, activities, and interventions, and to discuss and share ideas. Each Case Study recorded the answers to the research questions in three ways:

a) Asking the agreed questions (see Figure 1) and orally recording them (at each connection point) as a cyclical multi-perspectival process as each gathers data and submits it to the researcher in an agreed format (recorded conversations to be transcribed and analysed).
b) Gathering visual data of any artefacts (in liaison with the filmmaker and artists) to be analysed.
c) Transcribing reflective interview data by the researcher of the artists.

Figure 1: Cyclical data gathering
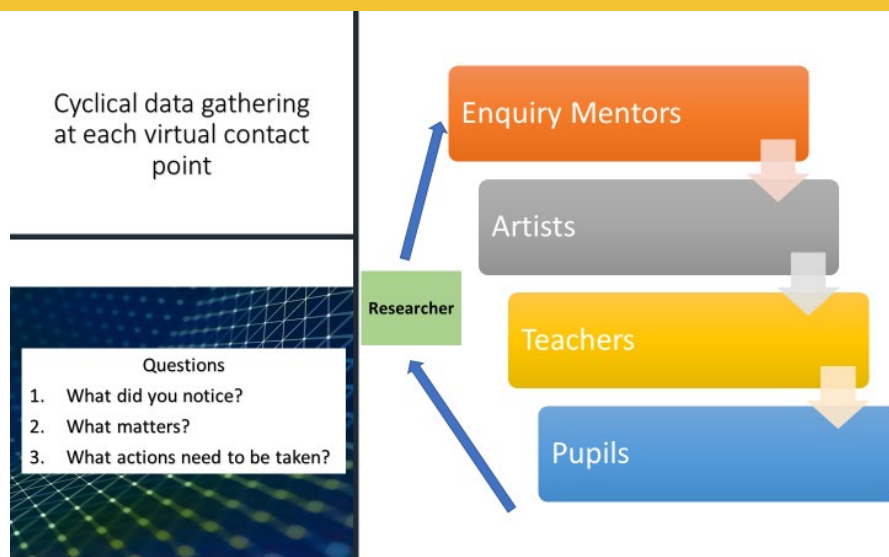
Data consisted of audio/visual recordings of virtual artist/teacher and pupil interactions, discussions between stakeholders and participants (e.g. teacher meetings, artist-teacher meetings), pupil discussions and artefacts, teacher interviews and the film made to capture the creation of 'actionable knowledge.' The data was coded and analysed using thematic analysis.

Pupils' names have been changed for anonymity.

1. <u>Case Studies</u>

<u>Case Study 1: Artist 1 collaborates with Autism classes A1 and A2</u>

Artist 1 set up a series of interventions for the autism classes, sending a red and yellow box of objects to each class. Teachers were tasked with allowing the pupils to engage with the boxes in whatever way they chose and share their observations. This was followed by a Teams meeting with each class where the artist introduced herself to the pupils, and they further explored the different objects and materials in the boxes. As the collaboration progressed, the artist recorded short videos in response to the different ways that the learners had used the items. The artist paid close attention to how the children were engaged, motivated and how their teachers reacted and interpreted their behaviours. The artist suggested ways for teachers and pupils to develop and challenge their creative explorations by nurturing the individual child's responses. Some suggestions included:

- Gathering items that were 'essential' or 'important' to each individual on a daily basis and showcasing them in a box of their own.
- Paired collaboration, where two children face each other and paint simultaneously on either side of a sheet of clear Perspex, allowing the opportunity for them to notice and respond to each other non-verbally.
- Gathering natural materials such as branches or twigs and experimenting with paint and water.

There was an emphasis on the sensorial and lived experience, with pupils encouraged to consider the feel, look and sound of the objects, the things around them and the things they created. The pupils were very curious about the boxes and excited to explore the different items in them. It prompted them to be creative, develop communication skills, and engage in role-play, demonstrated in the following teacher observations.

Stephen opened the box of split pins and asked, "what are these?" I asked him what he thought they were. He replied, "I don't know but they are bendy!" He then bent one of them into a new shape. Duncan said to Stephen, "it looks like a heart now!"

I would like to highlight that Stephen is a very reluctant writer. Mark-making tasks often cause him a lot of frustration; however, while exploring the box, Stephen began drawing and writing on a whiteboard, which was very surprising to see. I observed Stephen and Jamie discussing their game show that they had been role-playing in class that week, drawing faces on some of the shapes to make new 'contestants' [for their game show]. **(Teacher observation notes)**

Images 1-3:

Teachers used the different artworks that the pupils were making to introduce relevant curricula, including famous artists and artworks. It also provided a space for pupils to practice problem-solving and sense-making as they explored their creations and those of famous artists.

> *Jamie and Anthony were most interested in building figures out of the plasticine. They spent a while making them and using the little sticks pressed inside the plasticine to hold it together, and Anthony used one to prop his figure up and make it stand. I showed them the Joan Miro image [sent by Artist 1] and said that this artist makes figures of people too, just like they had done only larger. Jamie said, "that's not a person, he has not got legs," and then Anthony said, "maybe that's a bird leg on the bottom... maybe it is a person with bird legs."* **(Teacher observation notes)**

Images 4-7:

The pupils had a particular interest in constructing and building things. Based on this, the artist and teachers adapted the activities so that the pupils and their interests drove the learning. In this sense, the project provided valuable opportunities for learner-led rather than teacher-led learning. Artworks were introduced for their relevance to the children's creations, not as a starting point for children to copy.

> *By hands-on experiments, ideas emerge naturally. As the boys were showing interest in using the cardboard shapes slotted together as construction, we looked at some of the most famous buildings and structures in the world. I then asked the boys what made a building famous, and they all had different answers. Duncan said he thought a famous building had to be beautiful. I asked him to create a beautiful building. Anthony did not answer me, but he went to the iPad and searched for Big Ben. He then started building with the blocks and used a willow circle and hung it from the top. He told me the circle was a clock face. He called his building "Even Bigger Ben," and he told me a famous building had to have a purpose.* **(Teacher observation notes)**

The teachers viewed the artist as a 'driving force', and her interventions acted as inspirations and triggers for the pupils to be creative and imaginative. Although the pupils found certain aspects of verbalisation or communication challenging, the teachers felt that the activities had demonstrated that they found other ways to express their thoughts, ideas, and feelings.

> **Teacher:** *There's always the view that children with ASD are not imaginative. But I have found since the beginning of last term that there is definitely imagination and creativity going on there, and they will get involved and role play and engage with the activities.*

The boxes of items sent to the class by the artist were used in various ways. Wool was used for weaving and making a headband, and one child also used it to create a fish by putting the wool inside a bottle to represent the colour. These were all taken on the pupils' initiative rather than prompted by the teacher, who felt that the activities had "created a pathway for the children to think about things in a more abstract way."

Images 8-10:

Reflecting on the impact of COVID, one teacher felt that it would have been beneficial to have the artist come into class, but that was unfortunately not possible. As a result, the artist was 'visual but remote,' which is not always the most effective for autistic learners. However, another teacher commented that doing the project remotely had allowed them to become more involved than if the artist had come into the school, as the teachers would have tended to take a step back. The artist recognised the benefits of using remote learning to reimagine aspects of the curriculum whilst also recognising the challenges of capturing and evidencing learning in this context.

> **Artist:** *I noticed so many small but important interactions going on. The skill became capturing them and naming them. In this situation, the children didn't need us to give them ideas or tell them what to do. It was more useful for us to notice and acknowledge what they had shown us.*

The pandemic also prompted pupils and teachers to rethink what was certain and uncertain in their lives and explore this through the project. One teacher felt that they had become "more resilient in our thinking," and learned alongside the children to move step-by-step and adapt to the changes.

> **Teacher:** *What may have been essential, going to the gym, to a restaurant, or your holiday abroad, these were all considered essential. But, you know, we've spent a year without any of these things, so we've changed, and I would hope we've changed a bit for the better… I think that the likes of an art project or imagination has allowed us to recreate ourselves.*

In terms of curriculum and curriculum-making, the teachers felt that the introduction of uncertainty through the project and the context of COVID had encouraged them to "change, adapt and integrate what we do in more flexible, imaginative ways." However, it was also recognised that there is still a hierarchy that is "pushing to show achievement in the academic side," and that "it's not so easy" to develop new ways of curriculum-making, "without providing

evidence of achievement." Nonetheless, one teacher viewed art as not being separate from other curriculum areas but rather intertwined and inseparable: "I think it's mathematical, I think it's scientific, and I think it's technical, and it's most certainly creative and imaginative." In this way, they imagined ways in which art could be "woven into everything that we do*."*

The teachers viewed the project as a success and wanted to continue working with the artist. They felt that they had learned a considerable amount from the artist and from collaborating with the children and with other teachers on the project. The impact of this for one teacher was that she had "gained some new capacities that I didn't have before… and I'm able to adapt my practice."

Developing a more sustained project of this kind was seen as desirable by the teachers, though not without its challenges. Having staff on board and the support of school management was seen as key. Additionally, a regular 'trigger' or catalyst, such as intervention by artists, that would help inspire and propel the project forwards, was needed.

The artist also believed the project had many potentials and facilitated new ways of communication for learners, and created a 'community' between teachers, artists and learners tied together by a collective embracing of the uncertain. Artists embrace uncertainty on many levels including through play and open-ended tasks.

> **Artist:** *The honest and open way the children have engaged with the project has shown that schools, artists and uncertainty CAN come together, and visual communication in the form of active discovery and creativity can give us all a voice.*

Key observations from Case Study 1

How might art play a role in empowering learning through uncertainty?

- The relationship between the artist and teachers was vital. Projects often focus on the relationship between artist and learners, with teachers taking a back seat. In this project, teachers were empowered to develop and practice their skills without the fear of 'stepping on the toes' of the artist.
- Teachers and learners had no idea what the artist had put in the boxes, adding intrigue and excitement to the learning process.
- The artist provided a series of 'triggers', or new ideas, which inspired both learners and teachers.
- Learners were empowered and motivated to lead their individual experiences: one boy who is usually reluctant to write was voluntarily writing.
- For this artist, making art is an open-ended process of creative play and experimentation with materials, with no predetermined output. The artist applied this open-ended process throughout this project: children's actions and responses dictated the direction of learning and curricular content. The teachers closely observed and responded to what they noticed in order to build the curriculum.
- Artworks from the national collection were selected and shared with the children for their relevance to learners' interests and creations.
- The artist observed, noticed, and valued the children's actions and creations.

What kinds of art interventions might lead to reconceptualising the role of art for learners and educators?

- Artist as collaborator working with the teacher.
- Artist as 'trigger' to disrupt the usual routine.

- Artist as 'noticer' and 'valuer', an extra pair of eyes and ears to articulate to children the value of their actions and creations and to challenge them to go further.
- Process over product.

How can Pedagogies of Uncertainty guide interventions?

Uncertainty was allowed into the learning process through process-oriented, open-ended, and student-centred teaching, dynamic and emerging curriculum, teachers and students willing to reverse roles, increased student responsibility for the learning/teaching process, and small-group teamwork.

- The uncertainty introduced by the artist's interventions was welcomed as a trigger to inspire imagination and creative engagement with a range of unexpected materials.
- The learners and teachers felt safe to pursue individual learning paths and accept changing ideas and perspectives.
- There was no fixed outcome or output expected in this project and no closed instructions that the learners were expected to follow, allowing learners to determine their creative actions. Teachers then scaffolded curricular links in response to the learners' actions, interests, and motivations.

Case Study 2: Artist 2 collaborates with P1/2 and P2/3/4 classes

Artist 2 introduced herself to the learners with a short film and then set up a series of interventions through short videos shared with each class. The first intervention involved learners selecting three "essential" things and putting them in a bag; they made short videos to showcase their 'essential items.' In the second intervention, in direct response to the learners' choices, a series of follow-up questions were asked to challenge their thinking and deepen their investigation into what is essential. For example, in response to a child saying that colour is essential, they were asked to consider: 'What two colours could the world do without?'. The artist then held a series of live sessions with the classes over Teams. They continued to explore themes raised by the class, such as the body and senses in relation to art and how creating art can draw on uncertainty for a positive effect. Teachers picked up on the interests and views expressed by learners and used these as opportunities to introduce relevant curricular areas.

Image 11-12:
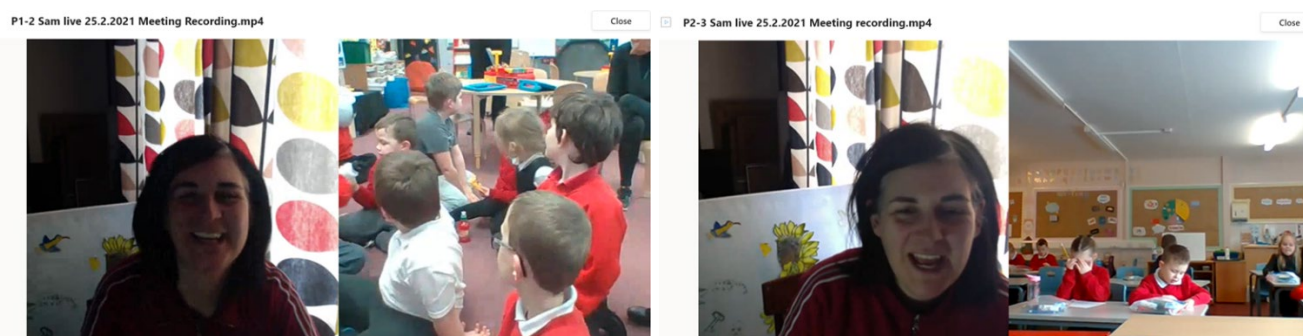
When the learners first discussed their 'essential items,' many talked about clothes, food, and toys or games. There was then a shift as they started to talk about bodies and body parts as essential and then looking at artists and musicians who did not have arms or hands or other limbs. One class teacher found this beneficial for the children

because it showed them that "there were no limits, no boundaries. Just because you don't have something, you can still excel."
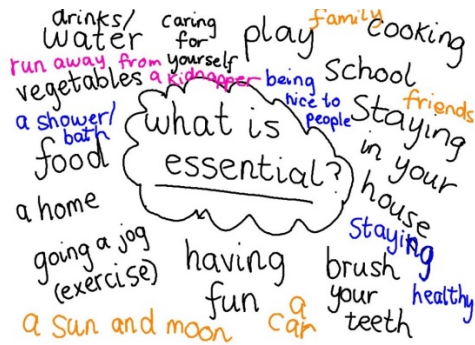
The teachers viewed the artist's role as a "facilitator of learning," keeping things open and supporting and guiding both the learners and the teachers.

> **Teacher:** *There's been discussion around there being a thin line between being an artist and being a teacher, and I think to some degree you're a bit of both because* [artist 2] *certainly has been a teacher for us [the teachers].*

The artist felt uncertainty at the start of the project, partly due to the "everchanging situations" caused by COVID, but also in reflecting on her role and the expectations as an artist researching at a school. At an early stage, the artist decided to embrace this uncertainty, seeing the openness and possibilities of the collaboration as a positive. One teacher was initially unsure about the value of bringing an artist to an already uncertain classroom environment. By the end of the project, this teacher recognised that the project had prompted her to reconsider her practice and feel more freedom "to use the children's ideas, be a wee bit more creative, and a wee bit more confident to do that."

> **Teacher:** *I've now been teaching for 25 years, so I've come through a lot of changes, from being very restricted… now … you're far more free to go with the children, to go with lots of different ideas, this [project] being one of them. I'm not quite at the stage of some of my colleagues, who are very far down that line, with agile learning… but I'm certainly part of the way along that journey, and I would like to think that this project has definitely helped me do that.*

The other class teacher stated that her views changed during the project, in that she no longer felt there was a need for an 'end product' for every activity they undertook: "it was nice not to have any preconceived ideas of what it is I'm looking for." Having no fixed outcome proved exciting for both the learners and the teachers. It created the space and freedom for the learners to be creative; the results were varied and, in many cases, not what the teacher was expecting. The teacher admitted this had impacted her thinking in organising activities and what she asked of her learners: "Why does it have to be a display on the wall where they all look the exact same? What's the benefit in that?"

Conversations in the staff room involved the teachers comparing notes on what they were each doing with their allocated artist. This prompted the headteacher to reconsider wall displays and their function within the school. She

suggested that she initiate a wall display where everybody in the school was invited to post answers to a philosophical question (i.e. repurposing wall displays as a place for questioning and reflection).

Task Reminders

Choose 1 or all - have fun

Task 1: Choose 2 colours that we don't need any more......

Task 2: What does your soul look like?

Task 3: Make something without using your fingers.

My soul/aura

In an online conversation, learners told the film maker that art was essential to them as it has no boundaries, perhaps influenced by the type of activities they had been doing in collaboration with the artist. However, when asked about the types of art they liked to create, the pupils mainly talked about painting or drawing, though there was some mention of building with Lego and singing. They also described feeling "happy" when making art and demonstrated a positive mindset.

Learner: Do you think you're the best artist in the world?

Filmmaker: I believe that I'm a good artist.

Learner: Then you are.

When asked what makes a 'good' artist, learners described people who created "really, really famous paintings that are usually hard to make," or "really professional paintings or drawings." Some learners stated that art could be anything but were unable to articulate further what they meant by this and perhaps attached more value to drawing and painting as they equated these artforms with famous art.

The experience of the project had led both teachers to reconsider their interpretations of the curriculum and curriculum-making. The initiative came at a time of change for the school in terms of planning and curriculum, where a previously rigid structure was making way for more learner autonomy

Teacher: *We started doing a kind of off-piste thing on a Wednesday, and it was just go in on that day, and it'll be whatever happened, happened. And those were the best days I've had with the children… the best learning came from that.*

The project seemed to have further impacted the validity of this approach:

Teacher: *I will always refer to this [project] and think what could I do that's going to give the children a bit more opportunity for involvement, for their pupil voice to be heard… and incorporate art into the curriculum, in whatever form that takes.*

The impetus of the project and its focus on learner voice, uncertainty and ownership of learning had translated across to other activities and projects that the classes were doing, with one teacher saying that since the return to school after lockdown, they were "just allowing the uncertainty to flow." The teachers praised the project as an opportunity to learn from other perspectives, outlooks and ways of learning and teaching highlighting the benefit of working with artists to "change things up a bit and be open to change and uncertainty".

There was recognition that there were potential barriers to expanding or developing projects like this in other schools or settings because of a resistance to embrace change and uncertainty. It was acknowledged that there was a range of views within the school amongst management, teachers, and parents at a time when some were calling for a return to basics (numeracy and literacy). At the same time, others recognised the significance of creating space for uncertainty in their practice.

Both teachers also felt that the project had made them rethink how they value learner voice in their teaching and the extent to which they allow learners to take the lead, especially amongst the younger age groups. One teacher was initially sceptical about the pre-project stimulus question "what is essential" and had assumed it was too difficult a question for them. She was pleasantly surprised and impressed by the children's responses.

> **Teacher:** *I think, not in a bad way, sometimes I underestimate the children a bit and give them a bit more than they actually need. I don't give them enough credit for things they know and have experienced.*

Key observations from Case Study 2

How might art play a role in empowering learning through uncertainty?

- Pupil voice and lived experience were central to the curriculum, with teachers and artist building the curriculum around learners' interests.
- The artist demonstrated how conceptually open questions could inspire children, challenge their assumptions, and deepen their thinking. Teachers were also inspired by these questions and discussed them in the staff room.
- Teachers did not plan: children's actions and responses dictated the direction of learning and curricular content.
- Art was selected and shared with the children for its relevance to their interests and creations.
- The artist noticed and valued the children's actions and creations and was willing to change direction, continually questioning and reflecting on her role, personal uncertainties and channelled this experience into creating experiences for the children.

What kinds of art interventions might lead to reconceptualising the role of art for learners and educators?

- Artist as 'trigger' to disrupt the usual routine.
- Artist as somebody who challenges thinking by noticing, questioning, and responding to learners' ideas, encouraging them to rethink what they thought they knew - challenging assumptions.
- Process over product.

How can Pedagogies of Uncertainty guide interventions?

Uncertainty was allowed into the learning process through process-oriented, open-ended, and student-centred teaching, a dynamic and emerging curriculum, interdisciplinary topics, a problem-based education approach, stimulating students to clarify, elaborate, extrapolate and explain their ideas.

- The uncertainty introduced by the artist's interventions was welcomed as a trigger to inspire imagination and creative engagement with a range of unexpected materials.
- Students were active in their participation.
- The artist and teachers scaffolded curricular links in response to the learners' ideas.
- Learners and teachers were willing to accept the concept of uncertainty and felt safe to pursue individual learning paths and accept changing ideas and perspectives.

Case Study 3: Artist 3 collaborates with P4/5 and P6/7 classes

The artist sent videos to learners and met over Teams as an introduction. A strong collaboration developed between artist, learners, and teachers, with the artist deliberately introducing 'uncertainty' as a tool to motivate and encourage learners to question, challenge and also just for fun. A meaningful dialogue was sustained between artist and learners through the Teams 'chat' function where they could share their ideas, thoughts, feelings and post their creative work (drawings, writing and videos).

Image 17-19:
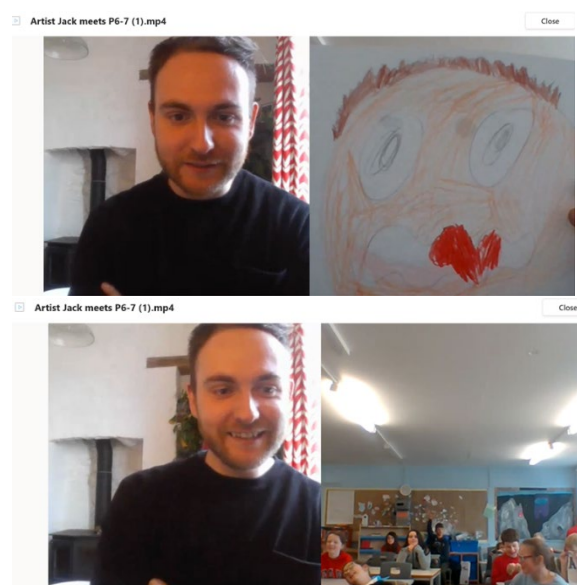
After some initial experiments, P6/7 settled on organising the *Festival of Fun*, a learner-led initiative, in response to their lived experiences at that time (during COVID lockdown, the learners decided that some fun was needed). The artist helped prompt and challenge them to come up with ideas for the festival; he set up a website where he posted videos and creative tasks for them; he also supported them to commission new artwork for their festival. They discussed how to commission an artist and decided that they would need to write instructions for the artist, to be certain they got what they wanted.

The artist challenged their thinking around this and their need for certainty (about how the art should look) in a playful way: he invited them to create 'uncertain' instructions before they drafted the instructions for the commission. They created their own sets of instructions, for example, how to bake something, how to draw something, how to go on a trip and so on. Then deliberately deleted parts of their instructions and passed them on to other learners who were invited to follow the 'incomplete' instructions. Learners demonstrated the ability to complete the task despite the instructions being incomplete (i.e. the ability to cope with uncertainty).

Image 20-21:

In the initial meetings, the classes considered what is essential alongside art and its role in society. They explored how things become essential, what happens when something we deem essential is taken away, and what happens if people have different ideas about what is essential. They generally defined the essential as 'everyday items' such as food and drinks. If the things that we deemed essential were to be taken away, they said "we would go crazy."

The conversation then shifted to whether art and artists were essential. The learners commented that an artist is not an essential person, distinguishing between artists and teachers, who they clearly felt *were* essential.

> **Learner to artist:** *You're not a specific person that is essential. You're not essential, you're not a teacher. You don't really need artists in the world. I'm not saying you can't* [do art with us] *but you're not essential.*

Learners then asked the artist questions about art, including 'How many artworks have you done?' and 'What's your favourite type of art?' They picked up that the artist said that he had made thousands of artworks but that most of them were not good. The learners questioned this statement and tried to encourage the artist, which suggested that although they would not describe art as 'essential,' they still believed it had value.

When told that he wasn't essential, the artist asked the learners what he was doing in their classroom (virtually). One child observed: "You're asking questions!" The teacher also acknowledged the value of encouraging learners to question things and think for themselves. Significant questions were raised by learners, such as "Why are we doing this?" and "How is this art?" demonstrating the children's uncertainty and their motivation to make sense of the project.

> **Teacher:** *If you allow the kids to ask questions about what's going on around them, the curriculum would emerge from that.*

Image 22-23:

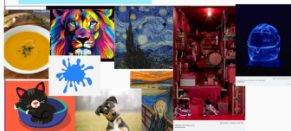As the collaboration progressed, the learners were given opportunities to elaborate on their views on art and its place in the world. In a conversation towards the end of the project, learner offered up their definitions of art. While some defined it as "drawing and painting," others commented that art could be anything you wanted it to be.

> **Learner:** *Art is just your brain… you can sketch it, you can paint it, you can do anything. Art can be a book, it can be space, even the stars in the sky… like patterns, like you can just look up and can think in your mind, what does that look like.*

The learners were able to describe the type of art they liked, for example, building models with Lego or making scrapbooks. They enjoyed the freedom to make art and the uncertainty associated with creating artworks. This prompted conversations amongst the learners about 'making mistakes' with art and 'following instructions' for making art in relation to the instructions task they did with the artist. They valued that there were no limits or boundaries in creating art, recognising that art does not have to have a set output and embracing the uncertainty inherent in this. The learners also felt that art was 'for everyone' and that determining the worth of a piece of art was up to the individual: "everyone has different opinions, so everyone decides."

They discussed the role of the artist and the relationship between art and work noting that "art you think about more widely. Work is more instructions that you need to do, but art is just free". While some learners drew distinctions between art and work, other pupils viewed the role of art as more multifaceted and relevant to all different areas of the curriculum.

> **Learner:** *I would say that art can be your work… like a couple of days ago I was doing Maths and there was things that you could like draw to help you do it. And sometimes you can do it while you're doing like spelling to like help you understand stuff. I just think that you can include art in whatever work you do.*

They also spoke about feeling different emotions when creating art, highlighting feelings of sadness or anger could influence artworks and art as a potential 'release' for these emotions. The teachers expressed similar views on the role of art and artist.

> **Teacher:** *I think art is for expressing how you feel in different situations… a way of making sense of things… it's different things for different people, and I think it's for everyone.*

The difficulty in engaging with learners online and the 'disconnection' during lockdown meant that teachers could not connect as they usually would, for example, by 'reading' the room and having class discussions. However, lockdown also afforded new ways to identify learners' concerns, for example, when they wrote comments or questions in their online Team chat. Some may have preferred engaging in this way to speaking out in class. One of the teachers noted that there were instances where the artist noticed things that she had not. One teacher found that she needed to inject some 'certainty' into the project, outlining what had happened so far and what they were aiming to achieve to re-engage and refocus her class.

> **Teacher:** *It was only the second day when we regrouped again, and we looked at the journey of the festival, what had happened from the start to the point we're at now, and we sort of created like a visual representation of that. I think when they could see that journey… then they were excited about it.*
>
> *You need certainties within the uncertainties, but how you decide and who decides is important. There's no point having certainties that the people it affects haven't fed into. A certainty for me is a time for class to come together and make decisions together and time for individuals to go off and do their own thing.*

It was recognised that 'letting go of certainty' might be an aspect that other teachers would find challenging.

> **Teacher:** *I think there might be an element of fear attached to that, like a fear of the unknown and what that might bring… maybe it's that idea of what happens when you give up your control over something, because I think a project like this does kind of require you to not be fully in control of what's going on.*

In P4/5, the teacher felt that the uncertain nature of the project had benefited her teaching and allowed her to shift roles from 'teacher to facilitator', commenting: "I think I've learned to embrace the uncertainty a bit more." She had been prompted to think about the role of uncertainty in the curriculum and how to adapt quickly and change effectively.

> **Teacher:** *Looking at the curriculum… personally I think things need to change, and we need to move with the times as well. We're very rigid… there's not a lot of scope for the uncertain. There has to be time and space for teachers and pupils to make decisions together about what the curriculum could be.*

The teacher suggested that rather than ticking boxes in a 'rigid format', there needed to be more space in the curriculum to be responsive and creative, focusing on skills-based learning. This was seen as particularly important in the context of COVID and all the uncertainty that had been created.

> **Teacher:** *Dealing with emotions, resilience and being able to pick yourself back up, and it's okay not to know, it's about the journey and how you got there*.

Both teachers agreed that there was a significant role for artists to play in education. They called for further opportunities to develop partnerships similar to those in this project. It was also suggested that the involvement of an external artist could act as a 'catalyst' for exploring curriculum-making highlighting that the artist often noticed or questioned things that the teachers hadn't.

For a project such as this to be both successful and sustainable, the teachers felt that support structures were vital, with school management and staff allowing both the freedom and scope required and "being willing to open up to change, to embrace the uncertain and involve kids in every step of the process."

Key observations from Case Study 3

How might art play a role in empowering learning through uncertainty?

- The artist deliberately disrupted the classroom, challenging expectations, to encourage learners to think for themselves and provoking them to ask questions, including questions about the role and value of art.
- Learners were empowered to lead their individual experiences, as well as collaborate to make group decisions.
- Artist and teacher worked together in close partnership to scaffold a curriculum led by learners.
- Art was selected and shared with the children for its relevance to the learners' ideas.
- The artist noticed and valued the children's actions and ideas and asked questions to deepen and challenge thinking.

What kinds of art interventions might lead to reconceptualising the role of art for learners and educators?

- Allow time for discussion and debate about art to allow learners time to develop and articulate their understanding of art.
- Artist as 'trigger' to disrupt the usual routine and challenge ideas.
- Artist as 'noticer' and 'valuer', an extra pair of eyes and ears to articulate to children the value of their ideas and to challenge them to go further.
- Real-world experience (commissioning artwork and hosting a festival).
- Creative Play – to generate or test ideas and to make sense of things.
- Contact with artists to demonstrate possible career options and deepen understanding of what different artists do.

How can Pedagogies of Uncertainty guide interventions?

Uncertainty was allowed into the learning process through process-oriented, open-ended and student-centred teaching, a dynamic and emerging curriculum, interdisciplinary topics, a problem-based education approach, increased student responsibility for the learning/teaching process, stimulating students to clarify, elaborate, extrapolate and explain their ideas, active student participation, teamwork in small groups, student exposure to conflicting frames of reference and teachers and students willing to reverse roles.

- The uncertainty introduced by the artist's interventions constantly challenged learners to think for themselves.
- The uncertainty contributed to accepting the unknown and learning to work in teams with mixed knowledge, skills, and experience.
- Uncertainty was made negotiable in the learning process by recognising the uncertainty explicitly and modelling that uncertainty can be embraced.
- Case study 3 engaged pupils in what Tauritz refers to as 'Quadrant 4' in Barnett's framework for transformational education. In quadrant 4, educational development is high risk (great uncertainty) and transformational to prepare learners for an unknown world. Learners were confronted with previously unknown dilemmas and uncertainties in the process of creating a real-life Festival of Fun.

7. Key Messages

Reconceptualisations of the role of art as a trigger for self-expression and wellbeing

The role of art as a conduit for self-expression and wellbeing during a global pandemic was evident throughout this project, with learners motivated to express their ideas about what they value. Teachers also benefited from contact with the artists and exposure to new ideas and processes to support learner-led learning. There were elements of play and fun in the processes that contributed to wellbeing, as did the opportunities to manipulate different materials without the pressure of achieving a specific output. In the ASN classes, verbalisation or communication can be challenging for learners; the teachers and artists felt that the activities had provided new ways for learners to express themselves nonverbally.

Articulating 'what is art' and 'what is it for' proved difficult for teachers and learners. More time could have been spent allowing learners to reflect on the role that art had played in their lives at this time. Some learners described art as "painting and drawing," while others viewed it as having no boundaries (i.e. "art can be anything"), believing art was "for everyone" and determined that the worth of artworks was up to the individual.

Younger learners talked about feeling happy when making art. In comparison, some older learners spoke of feeling "any emotion" when doing art, including anger and sadness, and the process of making art as a form of release. While the younger pupils were more likely to describe art as essential to them, some of the older pupils questioned the role of art and artists.

Embracing the uncertain: immediate and longer-term impact

Some teachers, artists and learners were more comfortable with uncertainty than others. For example, certain adults involved felt that the impact of COVID and the nature of remote learning had provided too much uncertainty. It was recognised that resistance to embracing change and uncertainty could be a barrier for developing projects like

this in other schools or settings. In contrast, other teachers and artists said that the project had made them more resilient in their thinking, helped them reconsider their practice and the curriculum, and allowed them more freedom to let learners' ideas drive the learning.

The impetus of the project and its focus on learner voice, uncertainty and ownership of learning translated across to other activities and projects that the classes were doing, with one teacher saying that since the return to school after lockdown, they were "just allowing the uncertainty to flow." The potential of a whole school adaptation of Pedagogies of Uncertainty was raised. Some first steps have been taken by the school in this endeavour: eg whole school professional learning opportunities, encouraging learner voice, critical appraisal of the quality of learning and crucially the health and wellbeing not only of learners but teachers as well, have been supported by the senior management team and the teaching community.

Curriculum-making

This project sought to find dynamic ways of enacting a co-created curriculum in the virtual classroom, specifically focusing on curriculum-making. Some teachers talked about the curriculum regarding Literacy, Numeracy and Health and Wellbeing. It was also acknowledged that a hierarchy demanded "evidence of achievement", making innovation more challenging. Other teachers felt that the experience of the project had led them to reconsider their interpretations of the curriculum and curriculum-making and encouraged them to "change, adapt and integrate what we do in more flexible, imaginative ways." Certain teachers had committed to creating more opportunities for learner-led activities with less emphasis on set outcomes. The project challenged the concept of an 'output culture' in education, with the need for learning intentions and end products for activities. Both teachers and artists recognised that when learners were 'freed' from these boundaries and allowed to lead, this positively impacted everyone involved.

The initiative created a sense of community between teachers, learners, artists, and the school. Teachers viewed the artists as a 'driving force' bringing interventions that teachers alone would never have attempted. Teachers agreed that there was a significant role for artists to play in education and called for further opportunities to develop partnerships. Support from staff and school management was cited as key to making projects such as this both successful and sustainable.

8. Conclusion and Recommendations

This initiative set out to explore the role of art and artists in enabling all learners to engage in curriculum making in uncertain times supported by teachers and artists, which would encourage their voice and a sense of self-awareness and wellbeing. The COVID pandemic led to alternative explorations of the type of 'art interventions' which would trigger curriculum-making, actively involving learners and teachers in developing classroom Learning Ecologies. Underpinned by the theoretical principles of developing competencies for dealing with uncertain times, the first steps were taken guided by Tauritz's framework for developing Pedagogies of Uncertainty. The school has laid the foundation for further developments and adaptations of the competencies to encourage and enable all learners and teachers to benefit. Some of the process has also been captured in a short film (Making Sense of Art).

The following recommendations reflect participants' responses in this study, for further development and dissemination of the key ideas by other schools.

A whole-school approach to a similar initiative would benefit and enable all participants to grow their learning communities in dynamic, safe, and enjoyable ways.	**Recommendation 1** – *ensure senior management team buy-in and inclusion of initiative for professional learning as a school focus on developing pupil voice, self-awareness and wellbeing.*
Teachers were more likely to talk about the impact on pupils rather than the impact on themselves when asked about the impact of artists' interventions.	**Recommendation 2** – *make explicit and find ways of ensuring that the project and interventions are also for teacher benefit, for example, by linking to professional learning agendas such as those required by the General Teaching Council for Scotland.*
Building on projects like this, sustainability needs to be considered to achieve its full potential. Asking long term questions such as – what are the lessons learned? What does this mean for our staff and our students? How can we develop further the innovative pedagogical approaches which may have been 'forced' upon us by COVID, but which have enabled alternative teaching and learning practices to evolve?	**Recommendation 3** – *build time for deep reflection on experiences and consider what changes may be made to sustain the benefits accrued in a rapidly changing educational and societal environment.*
Developing a classroom understanding of Pedagogies of Uncertainty requires, in practice, teachers with their learners to continue to act as critical enquirers, explore the competencies and conditions conducive for developing these, and adapt, refine, and add to the framework – making it their own.	**Recommendation 4** – *encourage schools to develop critical enquiry approaches to transforming Pedagogies of Uncertainty into their principles for classroom practices to sustain the benefits accrued.*
The COVID pandemic resulted in many students being based at home throughout this project. In some instances, family or carers were involved. This can be viewed as positive, and the project can involve further family members and carers as active enquirers.	**Recommendation 5** – *consider the possibility of a close home-school liaison and involvement in adapting this project to suit different school contexts.*
Artists have a skill set that enables them to cherish uncertainty, including noticing, questioning, reflecting, provoking, adapting, working collaboratively, researching, employing an enquiring mind, lateral thinking, and open-ended creative play.	**Recommendation 6** – *consider the potential role of artists in schools to support teachers and learners with curriculum making for interdisciplinary learning, which goes beyond making wall displays to enable learners to think like an artist.*
There is scope for further discussion with learners around the role of artists in school and in society – including if they are essential. Learners told us that art was essential or at least important to them personally or individually but didn't always connect the role of the artists in this project to the role of being an artist more generally (and who is an artist, what makes an artist).	**Recommendation 7** – *the role of art in curriculum-making has untapped potential for learners of all ages and stages. National Galleries of Scotland would welcome enquiries from schools interested in exploring this further.*

Appendix

Revised List of Uncertainty Competences (Tauritz, 2016)

Learning to reduce uncertainty

1. Being able to find, evaluate and utilise information (specific knowledge)

2. Being able to judge the credibility and cognitive authority of information sources

3. Being able to conduct research on complex and uncertain topics

4. Being able to reason (inductive and deductive reasoning)

5. Being able to respond in accordance with the underlying probabilities

6. Being able to prioritise among many urgent issues

7. Being able to formulate a plan of action to deal with uncertainty

8. Being able to employ previous experience

9. Being able to assess one's own ability to achieve a desired outcome

10. Being able to engage a supportive network

11. Being able to work in teams with mixed knowledge, skills and experience

12. Being able to use one's intuition as a source of information

13. Being able to interpret what others are communicating about their degree of certainty

14. Being able to express one's beliefs about one's own degree of certainty

---

Learning to tolerate uncertainty

15. Being able to accept not knowing (what will happen or what the right answer/action is)

16. Being able to reflect on and (potentially) change one's beliefs regarding uncertainty

17. Being able to understand people with different perspectives

---

Learning to cherish uncertainty

18. Being able to use uncertainty as a catalyst for creative action

19. Being able to entertain an enquiring mind

20. Being able to employ lateral thinking

References

Goodyear, P., Ellis, R A. & Marmot, A. (2018). Learning Spaces Research: Framing Actionable Knowledge. In Spaces of Teaching and Learning. Understanding Teaching-Learning Practice in Ellis, R. A. & Goodyear, P. (eds) *Spaces of Teaching & Learning, Integrating Perspectives on Research & Practice*, 221-238.

Jackson, N. J. (2013). The Concept of Learning Ecologies. In: Lifewide Learning, Education & Personal Development. Available at: http://www.normanjackson.co.uk/uploads/1/0/8/4/10842717/chapter_a5.pdf

Schulman, L. (2005). Pedagogies of Uncertainty. *Liberal Education*, 91(2), pp. 18-25.

Tauritz, R. (2016). *A Pedagogy for Uncertain Times.* In: W. Lambrechts and J. Hindson, eds. Research and Innovation in Education for Sustainable Development. Vienna: Environment and School Initiatives, pp. 90-105.

Xu, W., and Zammit, K. (2020). Applying Thematic Analysis to Education: A Hybrid Approach to Interpreting Data in Practitioner Research. *International Journal of Qualitative Methods*. doi:10.1177/1609406920918810

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). Sage.

This paper was co-written by Caitlin McKinnon, Johnathan Hancock, Do Coyle, Paul Gorman, Liz Conacher.

Images:

1-10   the autism classes experiment with materials of their choice

11   online art making with P1-2 and artist Sam

12   online art making with P2-3 and artist Sam

13-14   artist Sam's video stills reflecting learners' ideas about what is essential

15   artist Sam's video still setting 3 tasks to extend learning around learners' ideas

16   learner's drawing of a soul

17   "Waiting to be essential": artist Jack's video still, introducing himself to P6-7

18-19   artist Jack meeting P6-7 for the first time (online)

20   P6-7 create "uncertain instructions"

21   learners make sculptures from found objects

22   learners put out a call for an artist to make art for their Festival of Fun

23   artwork commissioned by learners for the Festival of Fun