Tool Box – Notes for Teachers

This resource is part of the **Tool Box** series created by AccessArt. Tool Box aims to enable children to design and build games which others can play.



Tool Box - Information for teachers and facilitators

- **1. Introducing the Philosophy behind the Tool Box Project**

  The Tool Box Project is about creating opportunities for children and young people to engage in making via a constructive, sociable project. Working alongside

creative practitioners via resources which are delivered remotely via the AccessArt website, children will be challenged to work in small groups to brainstorm, design, make and test a series of games which can be used at a school fair/community fete as money raisers.

Tool Box will give children the chance to become more confident, dexterous and articulate in the way they translate their thinking into action, through a series of stages from research through to design and marketing.

Using tools to manipulate without fear of injury, understanding which materials can work best for which jobs, understanding the design process, and feeling a sense of ownership in the outcomes, are all important qualities which children will develop through this process.

Tool Box aims to enable teachers and facilitators to create an environment in which children are given freedom to explore materials, tools and processes, in a supportive atmosphere, and with a clear brief. Central to Tool Box is the concept that children need to be given enough space to make mistakes, learn through doing, and in doing so build an understanding of the properties of materials and how they can be manipulated through the use of appropriate tools. In doing so children will also develop an understanding of the relationship between intention and outcome, and of the benefits of both individual and social learning.

The focus for Tool Box is design through making – an acknowledgment that for many visual and spatial thinkers, their primary language of communication and learning is making and doing. Tool Box provides a way for teachers, facilitators, parents and pupils to give pupils who learn best by doing, the opportunity to show and develop their skills, in a community-based context.

For all children, Tool Box provides the opportunity to improve dexterity and manipulation skills, as well as spatial, thinking and language skills.

Whilst Tool Box is a design project, Tool Box is very much informed by the working processes of sculptors and makers. Whilst many designers may sketch on paper and think through ideas by drawing/notemaking, many makers will reach instead for materials – building becomes their way of understanding the brief/ and realising their ideas.

Presenting children with a similar opportunity to design through making is a valuable way of freeing children who might otherwise feel daunted by a preliminary "design on paper/through writing" stage. And equally, designing through making enables children to create objects which are based on the actual properties of materials, processes and techniques, not some fantasy wish list.

2. Individual or Social Learning

Designing through making can be both a social and individual activity.

Challenges of designing through making can be met by a team working cohesively and purposefully together, and Tool Box, with its many areas of exploration, provides plenty of opportunities for individuals within a team to contribute and learn from each other It is also very important that individual team members are given the opportunity to develop their own strengths and new skills.

Some children find working through ideas in 3d very natural, and some find it much more challenging. It is very common for children to have a 'hidden talent' for making, because opportunities to make in schools are so

rare, so talent can go unspotted. The children themselves may not know they are good at it. Children may be natural makers, for example, but not good at drawing and therefore not be perceived by their teacher or peers as ‘creative’ or ‘artistically talented’.

Group activities may be a fun way for children to develop communication skills; however, they may also impede creative opportunities presented by the project. Some children will simply find the social element of working together too difficult and may be better working alone.

Tool Box would like to promote the idea that children are given the choice of whether they work socially or alone, and also encourage sensitive facilitators so that if a child starts off as part of a group, but during the process finds that they need to work alone, that this is not seen as a failure – rather part of a natural process which facilitators can help smooth over.

Tips for facilitating group 3d work:

– Try and create creative opportunities which are open and without a fixed,
prescribed outcome.

– Try and create creative opportunities, which also provide multiple elements, so that children can break away with individual tasks.

– Monitor which tasks children seem naturally inclined to follow. Get children to try and verbalise what they enjoy.

– If there are disagreements about basic design features then offer the children opportunities as individuals to work out the challenges (in their own styles) and present their ideas to the group. Encourage children to

‘package’ their ideas either in a sketch or diagram or a 3d sketch made out of an easily manipulated material like cardboard and glue guns or straws.

– Give children plenty of opportunity and time to articulate their ideas in words (and gesture).

– Document the process from beginning to end and give children the opportunity to participate. Make sure that the form of documentation comes easily and does not impede the actual process e.g use short burst video and snap shot.

3. Space to Learn

We’d encourage teachers and facilitators to think carefully about how to create time and space for pupils to effectively take part in the Tool Box project.

Room Space:
If possible, make sure there is plenty of room for the pupils to work on all scales. If pupils are only presented with desks on which to work, the chances are they will produce table-top sized models. Providing the opportunity for children to work on the floor will mean they can make work which relates to their bodies in a different way.

Materials and Tools:
Find a suggested list of materials, tools and equipment here. Once the materials are collected, don’t underestimate the amount of space in a room they will take up. But having the choice of materials is vital to the project, and you’ll find that when pupils become stuck, a visit to the materials area quickly gets them unstuck. Putting materials in the centre of the room works well if there is space.

Safety:
Tool Box promotes they idea that children have to be given sensible, guided/supervised access to tools if we are to improve upon the levels of dexterity in children. But of course, safety is paramount. Setting up supervised work stations (e.g. a sawing station, a cutting station etc) with the appropriate materials and equipment will help prevent accidents whilst given children the freedom they need to learn new skills.

This is a sample of a resource created by UK Charity AccessArt. We have over 1500 resources to help develop and inspire your creative thinking, practice and teaching.

AccessArt welcomes artists, educators, teachers and parents both in the UK and overseas.

We believe everyone has the right to be creative and by working together and sharing ideas we can enable everyone to reach their creative potential.