

Caring for your collections: Children's artwork on paper

This leaflet covers the care of children's artworks on paper, collected and retained for long term preservation. Material in this category includes works such as crayon sketches, watercolours, paintings, pastels, dye-based, ink and pencil drawings, collages, diaries, sketchbooks, cards and other ephemera.

Parents, teachers, childcare workers, and children themselves may want to collect and retain artworks for many reasons, including:

- to preserve the history of a child's development
- for sentimental reasons
- to observe children's artistic ability over time
- to analyse a program or teaching method
- to understand how children communicate and express emotion.

Deciding what to keep can be complex and even fraught with anxiety. Having an open conversation with your child about their artwork can help to understand context and what your child values.

Common materials used

There are many different types of materials used by children to create artworks. Read below about paper supports, adhesives, and media.

Paper supports vary in weight, texture and quality. For example, cardboards, notebook paper and sketch pads have different mechanical and chemical properties. While the primary ingredients in paper-based material are cellulose fibre and lignin (from wood pulp), fillers and colourants may also be present and can affect the quality of the paper. Even though children's artwork is sometimes made using poor quality materials, such as butchers' paper and newsprint roll, there are things you can do to slow deterioration down.

Adhesives are used to attach materials together and sometimes as a binder to secure particulates such as glitter or sand. Common adhesives, or glues, used in children's art include polyvinyl acetate (PVA), starch-based adhesives (Clag™ paste), gummed tape (water activated), pressure sensitive tape (sticky tape), glue sticks, hot melt glue, spray adhesives, and even self-adhesive stickers. Fixatives for pastel artworks also fall into this category. The most practical adhesives for children to use have low toxicity and are convenient. For longevity, an attachment that will remain secure and not deteriorate over time is important.

Media includes a diverse array of materials, and sometimes children's artworks include multiple types:

- Coloured pencils and crayons generally have a wax or oil-based binder with pigment and additives. The colour stability is generally more lightfast than watercolours and felt tip pens.

- Chalk, pastel and charcoal are powdered pigments in a light binder making them 'friable' or 'loose' on application. Beware, this media smudges easily and care should be taken with handling and storage.
- Graphite or lead pencils have a thin graphite core embedded in a shell. The more graphite the softer the core and more friable it is when applied to the paper. Beware this media can smudge easily too.
- Felt tip pens and Textas™ are dye based dispersions in a water/solvent mix plus additives. Children's felt pens are non-permanent, non-toxic and poor quality. Colour stability is very poor. Beware as they can fade quickly with excessive light exposure.
- Permanent pens, Sharpies™ are somewhat toxic with heavier pigment loaded in a solvent mix. Their colour stability is more stable than felt tip pens.
- Watercolour / gouache paints are made of pigments suspended in a water-based solution. Application by brush is translucent, and in their purest form have few fillers to obscure the pigment colour. Therefore, there are less pigment particles on the artwork. Beware watercolour and gouache pigments can fade.
- Oil, acrylic, and corn flour paint are more resilient media with stronger colour stability. The pigment is suspended in either an oil, acrylic polymer emulsion or corn flour solution. The pigment load is heavy and often the media is thicker. Oil stains and deteriorating acrylic polymers can become an issue over time as the media saturates and penetrates the paper support.

What causes damage and what you can do?

All materials used in creating artworks on paper are subject to some form of deterioration. Even the materials of the highest quality, are susceptible to the effects of ageing and chemical reactions. The long-term stability of an artwork is also determined by environmental conditions and the level of care it is given.

Using quality materials

- Conservators recommend papers made from 100% cotton fibre will last considerably longer. Source a good quality watercolour paper or card from an art supplier. Beware of coloured papers and card. They can fade overtime and 'colour run' if they get wet.
- Conservators recommend that an archival PVA, wheat starch paste, or archival spray adhesive be used that doesn't yellow or cause unsightly stains.
- Sticky tape and self-adhesive stickers tend to become brittle, turn yellow, and fail to hold components in place. Avoid using if possible.
- Provide good quality pencils, pens, and painting materials with stable colour and pigments. Usually the cost of materials determines quality so make sure the drawing and paint materials aren't the cheapest.

Collection care & handling

Careless handling is one of the most common causes of damage and the most avoidable. Here are some simple tips:

- When drying children's artworks try to avoid hanging from lines with pegs, instead dry flat on racks.

- When moving an artwork, particularly if it is wet, or heavy with collage material, provide support from underneath. Either lay it across your arms for transport or slide a piece of board underneath for extra support.
- Avoid the use of paper clips, rubber bands, adhesive tape, and Post-it® notes. Metallic clips can leave rust marks on the paper surface.
- If Blu Tack® and sticky tape are used for display, they can leave damaging adhesive residue, if not carefully removed. Investigate other display options.
- Always handle artworks with clean hands.
- If an artwork is going to be accessed regularly or used for research purposes it is advisable to digitise instead of constantly handling the original.

Stable environmental conditions

- The ideal conditions for preservation of paper are 21°C (+/- 1 °) and 50% (+/- 5%) relative humidity. It can be difficult, near impossible to achieve this at home but simple improvements can be made.
- Locate collection storage and display areas away from outside walls to minimise the extremes of the radiant hot sun, temperature, and RH fluctuations.
- Select a well-insulated room away from sources of moisture, heat, and direct light. Avoid kitchens, bathrooms, and areas near heating systems and water pipes.
- Effective ventilation within the storage area will also assist in maintaining stable conditions by cooling the area and preventing stagnant air pockets. If ventilation is poor, there is a greater risk of insect and mould activity. The use of fans greatly improves air movement.
- Air-conditioning units are sometimes not the most ideal solution unless you plan on running them 24/7.
- Check what air pollutants are present in your area to ascertain any potential risks of dust storms, smoke, and off-gassing construction materials.

Minimise light

- To prevent light damage, material should be stored or displayed in areas away from direct light. Ideally, visible light levels for paper collections should be lowered to 50 lux with no ultraviolet (UV) radiation. The use of curtains or blinds can assist in minimising light levels.
- Lights should be covered with UV absorbing covers. Low UV emitting LED lights are more energy efficient and should replace older fluorescent and incandescent lights.
- Artworks that feature coloured felt tip pens (Texta™), fluorescent pens, watercolours, and some inks are highly sensitive to light and can fade very, very quickly.
- Avoid displaying material for long periods. If you want to display an artwork for a prolonged time, it is advisable to duplicate it and display a copy.
- Light damage is cumulative, and once faded there is no recovery.

Pests and mould

- Pests require food and moisture for survival. Create a hostile environment by minimising their food source.
- Avoid the use of chemical pesticides and use barriers, screening windows and doors to keep larger pests out.

- Pests are attracted to collage materials, adhesives, and dry food (i.e. macaroni, food wrappers, and wheat based, packaging beans). Make sure artworks with these materials are stored safely in enclosures.
- Regularly check collections for early signs of infestation or mould activity particularly during wet, humid weather.
- Avoid eating and drinking in areas where collections are stored or displayed.
- Good housekeeping is essential for deterring mould and pest activity. Floors, shelves, boxes, and cabinets should be kept clean, uncluttered, and dust free.

Safe storage enclosures

Once you have chosen a suitable storage room, shelf, or cabinet it is important to ensure your objects are housed safely in appropriate storage enclosures.

Proper storage:

- keeps collections clean and dust free.
 - provides insulation from unstable environmental conditions.
 - keeps your collection together. Making it easier to transport or evacuate in the event of a disaster or emergency.
 - provides protection from pests, mould, water, and handling damage.
- Place artworks either individually or interleave with acid free tissue into enclosures, sleeves, or folders and then into good quality storage boxes or flat cabinets.
 - It is best to store children's artworks flat, as collage material or glitter can fall off. Try to avoid folding artworks to fit enclosures as it will cause damage.
 - Never laminate objects for long term preservation. This process is damaging and irreversible. A safer alternative is to store artworks in clear, stable polyester or polypropylene sleeves or in acid free cardboard folders.
 - However, polyester or polypropylene sleeves are not suitable for friable media such as pastel, charcoal, chalk, pencil, and gouache. The media can be lifted off the paper due to electrostatic charge produced by polyester. Instead, place the artwork in a conservation grade board mount or interleave artworks with archival tissue in a box.
 - In humid climates, cardboard enclosures are preferred over plastic as they buffer and absorb humidity, preventing mould growth.

Loss of information related to the artwork

- At the time of an artwork's creation gather as much information as you can. The title, artist, date, subject, and any meaningful statements or curatorial rationale.
- Make sure you keep an inventory list of the collection. Keep this information safe and secure as it forms part of the collection's value and significance.

Conservation framing and display

- For mounting children's artworks use an archival quality, mat board and protect the object with spacing and a window mat. Spacing will be needed if the artwork has collage elements or protruding material on the surface.
- Select 100% cotton-rag museum board and insist your framer use archival materials and techniques as described below.

- The safest mounting option is to use archival (polyester or polypropylene) photo corners, or hinges made of Japanese paper attaching them with a wheat starch paste.
- Art works should not be dry mounted with a spray adhesive, or directly secured with, Blu Tack®, self-adhesive tape, or double-sided tape.
- Protective glazing can be glass or acrylic. Glass is preferred for friable media such as pastel and charcoal, as acrylic creates static which can lift media from the paper.
- Keeping artworks framed in storage provides protection, but make sure they are checked regularly.
- Framing materials, board, and storage enclosures should be assessed and replaced every 20-30 years.

More complementary information guides can be found here
www.slq.qld.gov.au/how-do-i/preserve-my-collection/how-guides

Useful Websites

- AICCM Australian Institute for Conservation of Cultural Material www.aiccm.org.au
- AIC American Institute for Conservation <https://www.culturalheritage.org/>
- Find a conservator in private practice through the Australian Institute for Conservation of Cultural Material (AICCM) www.aiccm.org.au/need-a-conservator

The procedures described here have been used by State Library of Queensland in the care of its collections and are considered suitable by State Library as described; however, State Library will not be responsible for damage to your collections should damage result from the use of these procedures

Need further information?

(07) 3840 7810 | <http://www.slq.qld.gov.au/preservation>



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