





TECHNICAL SHEET ORIGAMI

WHAT IS IT?

SOME HISTORY...

The Japanese word ORIGAMI, used to indicate objects created by folding simple pieces of paper, is made up of two parts "Ori" 折 (to fold) and "Kami" 紙 (paper) and is in fact the literal translation of the German word "Papierfalten", which was only introduced in Japan towards the end of the 1800s by Friedrich Fröbel's German Kindergarten educational method. Before this date, other words were used to define both the technique and the shapes and objects obtained: orikata, orisue, orimono, tatamigami.

In all likelihood, the idea of folding paper originated with paper itself, although perhaps more for practical or perhaps religious reasons rather than artistic ones. According to tradition, paper was invented in China in 105 a.d. by the official Ts'ai Lun at the court of the emperor Yuan Hsing. However, there are also discoveries that show that paper-like materials made from plant fibres were used in India as maps and in China as early as 1000 BC to make kites. In 600 a.d., paper arrived in Japan introduced by a monk named Dokyo. There is a legend that the monk, travelling on a Chinese ship, was captured by the Japanese and thus forced to reveal the precious secret of papermaking. The Japanese greatly improved its composition, making it of higher quality, softer and more suitable for "folding", paving the way for creativity and, thus, also for Origami.

Paper was seen as a material that could connect humans with deities. In fact, the words "gods" and "paper" in Japanese have the same sound although they are written with



different ideograms, both pronounced "KAMI" which therefore means not only paper but also "a higher concept" that is above all things.

However, it was in the Edo period (around 1600-1900 AD) that the Origami technique became popular because the cost of producing paper decreased, allowing these 'objects' to be linked to many of the traditions and activities of Japanese life. Around the middle of the 1700s, printing arrived in Japan, allowing the first publications of books dedicated to Origami (1764, "Tsutsumi-no Ki" by Sadatake Ise with instructions for 13 ceremonial noshi and tutsumi patterns; 1797 the first creative book for "Folding Cranes"; 1845 a small series "Kayara-gusa" was published, teaching simple objects such as the frog, dragonfly, octopus, etc., up to the human figure).

Between 1900 and 1915, which corresponds to the Meiji period, the German kindergarten educational method arrived in Japan, introducing the ancient technique of origami into schools to teach children not only to develop their aesthetic sense but also to educate their manual skills.

HOW TO USE IT

Picking up on the good practice started with the kindergarten classes, we also introduce the creation of Origami into our educational path for all those aspects described previously.

Teachers will have a series of practical sheets at their disposal, which use simple instructions to show the steps required to make small simple shapes and, as the children become more proficient, also more complex shapes. There are, of course, also numerous texts on the market that teach how to make Origami (unfortunately, these are often translations of Japanese, Chinese or Korean books that lack some basic steps because these people are already familiar with them), but they can be very useful. If the teacher has never done origami before, we recommend practising at home, so that in the classroom they can teach the steps more easily.



We have included the realisation of very simple origami, in order to allow children to practise, up to the realisation of more complex figures. Furthermore, it is possible to use some of these as characters for storytelling, as if they were puppets.



TECHNICAL INSTRUCTIONS FOR USE

The materials, i.e., squares of paper of various colours and patterns, can be easily found on the market, or the teacher can prepare them. We recommend using reams of A4 white or coloured paper with a fairly low weight, 80 g or 90 g. From these rectangular sheets of paper, it will be necessary to cut out squares, the size of which depends both on what you want to realise and on the difficulty. In fact, the smaller the square, the more difficult the folds will be to make.

On an A4 sheet of paper, it is possible to cut out either a single large square 21x21 cm or two smaller squares 14.85x14.85 cm.

An infinite number of shapes, both 2D and 3D, can be obtained from this square of paper.



BENEFITS OF ORIGAMI FOR PUPILS WITH SPECIFIC LEARNING DISORDERS

Children with learning disorders very often struggle with tasks requiring the use of fine and gross motor skills, such as holding pencils, tying shoelaces, using scissors, holding books, and even being able to deftly move your gaze from left to right when reading. Introducing origami to your storytelling lessons can stimulate the development of these motor skills. This is because engaging in the act of folding paper creates coherence between the functioning of the hands and eyes, therefore strengthening the coordination between these senses. What results from this practice is increased hand-eye coordination, accuracy and precision, indispensable skills for improving reading and writing.

Manipulating paper to make origami shapes also targets the ability to stay focused on one task. As children with SLD struggle with staying present during lessons, a task such as this one sharpens their visual and intellectual concentration. Relatedly, through this exercise of following instructions and then working from memory, origami helps these pupils not only strengthen memory skills but also sequential and logical thinking – a model can only be constructed if the order of the steps is respected.

Finally, origami has been shown to specifically target the skill of reading, especially beneficial for children with language-based disabilities. This was touched on previously in relation to improving hand-eye coordination to follow lines of text from left to right. Apart from this, some reading experts state that while students are folding origami, they develop reading skills in the areas of being able to perceive a sign as a symbol, recognise it and interpret its meaning.

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