



Theme 10

Interdisciplinarity and the making of a castelet: *mathematics, technology...*

This is the report of an experience in Portugal during the 2018-2019 Kamishibai Contest's first edition in this community, entitled "From my window to the world" (quote by Fernando Pessoa).

It is the first time that this elementary school takes part in the Plurilingual Kamishibai Contest. The project was carried out from November 2018 to April 2019 and was addressed to children aged 6 to 10 years.

This document relates the testimonies of the teacher regarding the interdisciplinarity around the crafting of a castelet (puppet theater). It was extracted from the 2019 logbooks.

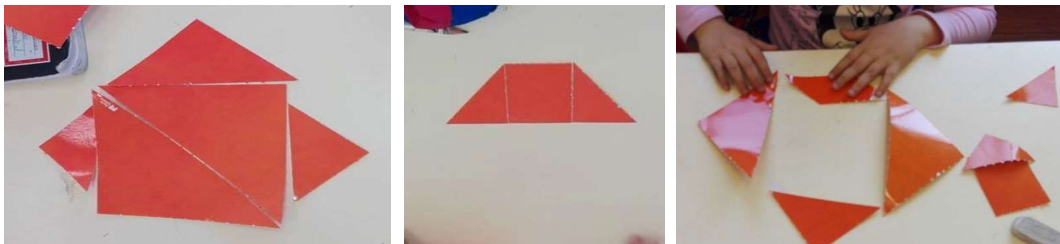
Cross-disciplinary approach - development of scientific learnings, languages and mathematics (among others) ...


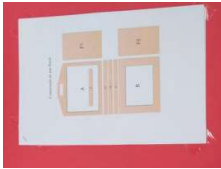



« All the work conducted around the crafting of the plurilingual kamishibai has enabled the development of learning linked to arts education, languages, world discovery, mathematics - among others...

The construction process of this plurilingual kamishibai has naturally established itself as a very rewarding learning path. For, the kamishibai theater has become an inestimable educational tool that developed a whole panel of essential skills for the pupils and gave a meaning to their instruction, thanks to a cross-disciplinary approach interweaving Portuguese, mathematics, world discovery, English, arts and citizenship education.


By straying from the class's traditional routine, the pupils were able to work collaboratively and to give free rein to their imagination."

Pedagogical Stakes



<p>Strong Points</p>	<p>The crafting of the butaï has been integrated in the field of mathematics</p> <p>« "The crafting of the butaï has been integrated in the field of mathematics during class. Through the construction of mini-butais, tangram activities and the internal butaï contest - that resulted in the creation of a homemade castelet with the help of parents -, the children had the opportunity to learn various mathematical contents (geometrical forms and solids, notion of model/sequence and even hours).</p> <p>The pupils were able to identify the names of the various geometrical forms and to associate them with the shapes of everyday objects. They took measures for the construction of mini and standard-sized butais and cards, and the distance between the countries present in the kamishibaï were compared.</p> <p>It went the same for certain geometrical solids that were mentioned and compared to certain parts of the butais. Moreover, it also alludes to patterns - meaning sequences. This means that the pupils are aware of the regularity of the pattern and understand that it's a content related to mathematics. This has been an extremely positive experience."</p> <div style="display: flex; justify-content: space-around;">     </div>
<p>Consequences</p>	<div style="display: flex;">  <div style="margin-left: 20px;"> <p>Learning differently</p> <p>"The construction of the butaï is an amazing pedagogical resource, since it enables children to learn differently, and it puts them in the position of main actors."</p> </div> </div>



Consequences	<p>Interdisciplinarity</p> <p>“The development of skills doesn’t only concern Portuguese and languages — it also occurred with mathematics. Thanks to the measures taken for the construction of the butaï and of the cards, the children compared the distance between the various countries mentioned in the story, which led them to reading numbers.</p> <p>Other fields, such as arts education, were involved during the creation of the characters, the decoration of the cards composing the story, the construction of the miniature butaïs and the invitation for parents to be present during the final performance.</p> <p>It has been an extremely positive experience. The pupils progressed significantly in the field of mathematics, the conception and dynamic of group work, and they also developed a critical and creative mind.”</p> <p>Involvement of parents</p>  <p>The help and involvement of the parents has been very important since it showed their interest in what children do and learn at school. It passed on values of respect and citizenship regarding the school.</p>
Difficulties Encountered	<p>No difficulty in linking the project and mathematics together</p> <p>“[...], One may think that it’s more difficult to link mathematics with the kamishibai project, but it’s not.</p> <p>Anything is possible, one should simply know what the contents of each topic’s curriculum are and then interweave it with the project.”</p> 