

**EARLYPOLY**  
**Poly-Universe**  
**in Pre-School and Lower Primary Education**



**NEEDS ANALYSIS**

**2024**

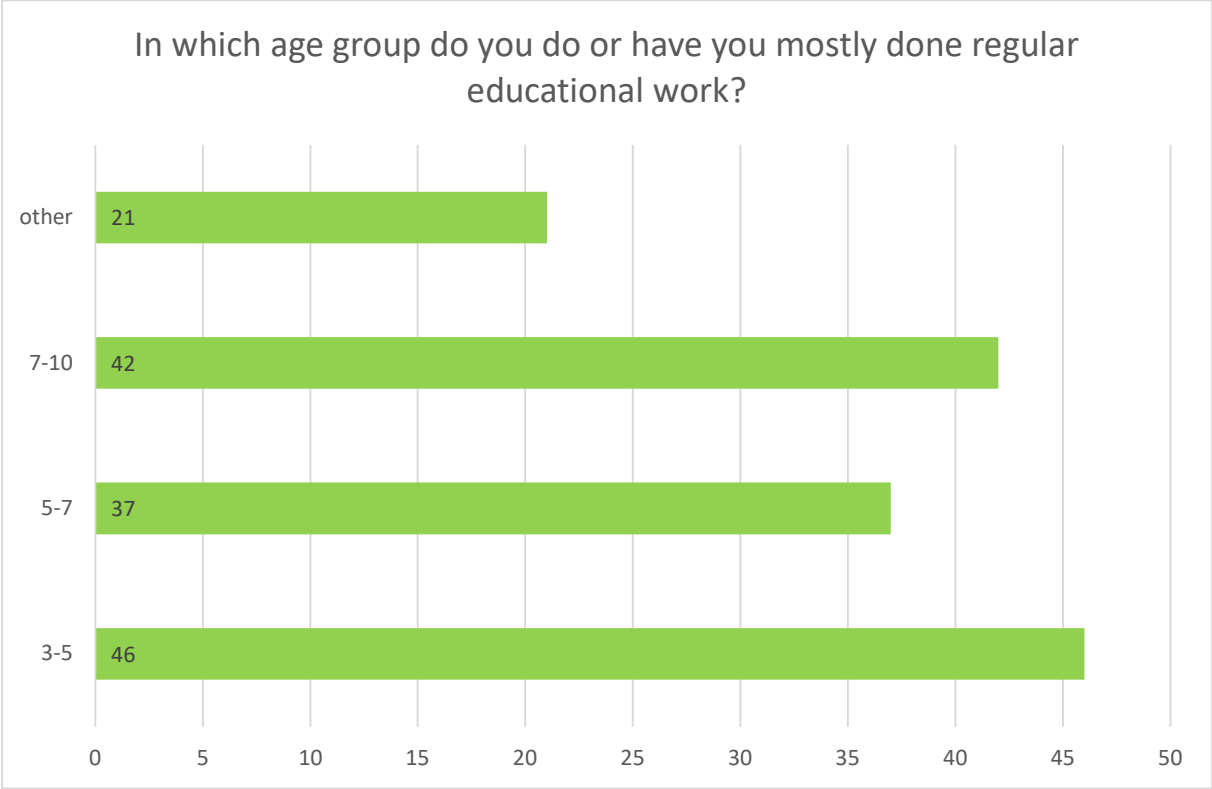
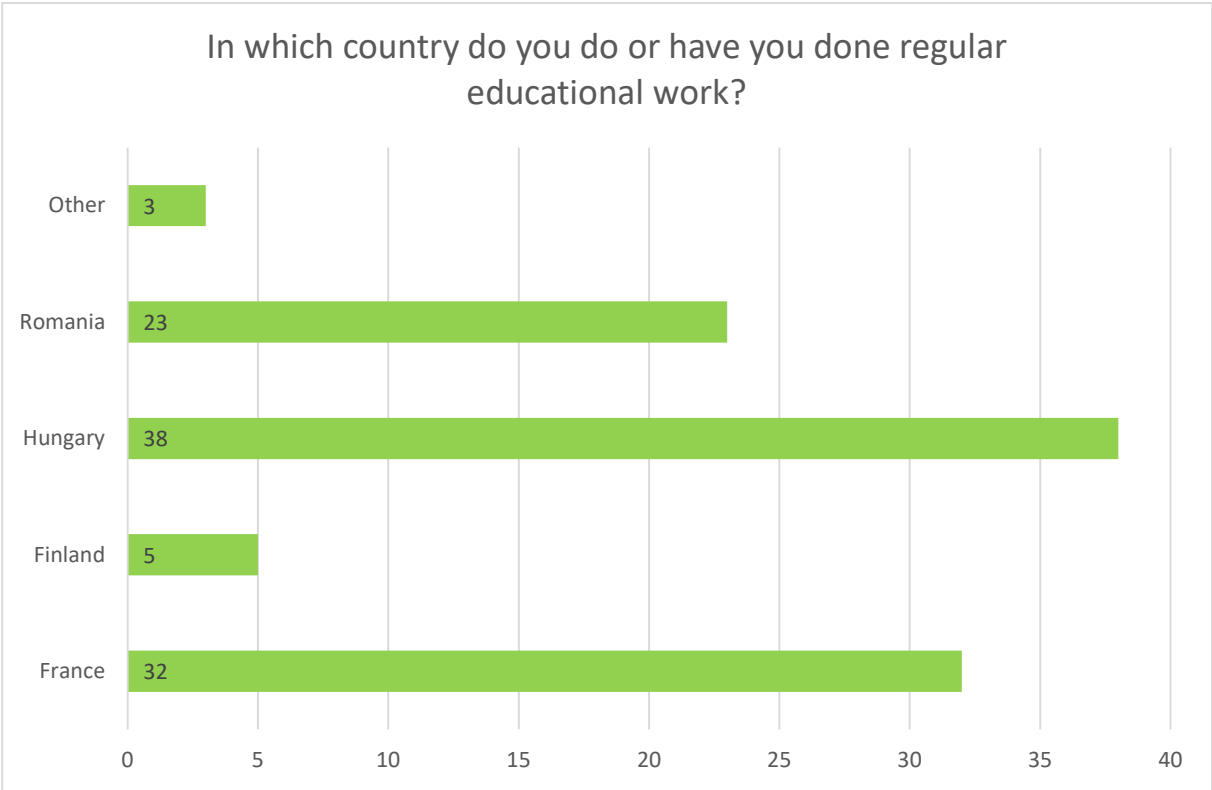
The aim of this document is to inform the reader about a comprehensive survey, providing insights into the needs and challenges faced by formal and non-formal preschool and lower primary educators and further education providers at this level as well institutions in implementing STEAM education using Poly-Universe.

The needs analysis is based on a survey conducted between October and December, 2024. Data have been collected anonymously through a Google form. The respondents – educators, kindergarten and primary school teachers – were allowed to complete the survey in their own native language in order to avoid any language difficulties (overall results have been translated to English). They were coming from the countries of the partner institutions – Finland, France, Hungary and Romania.

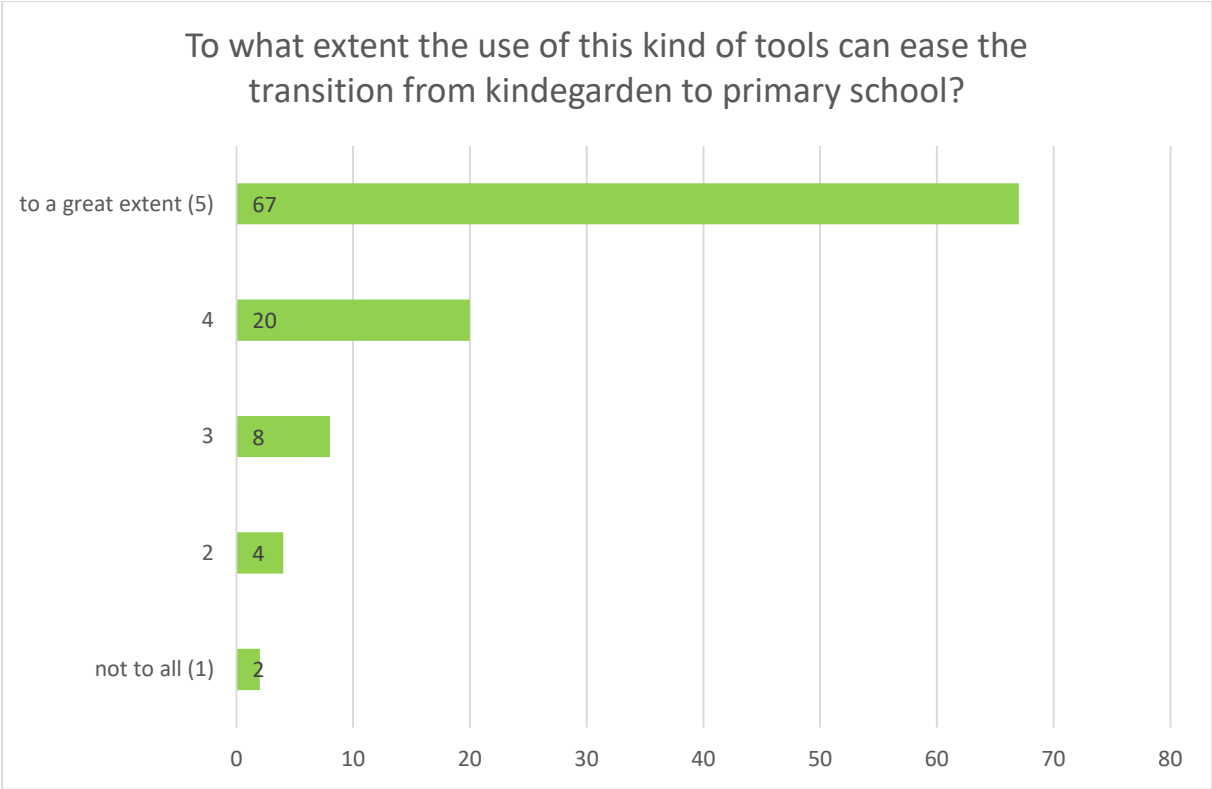
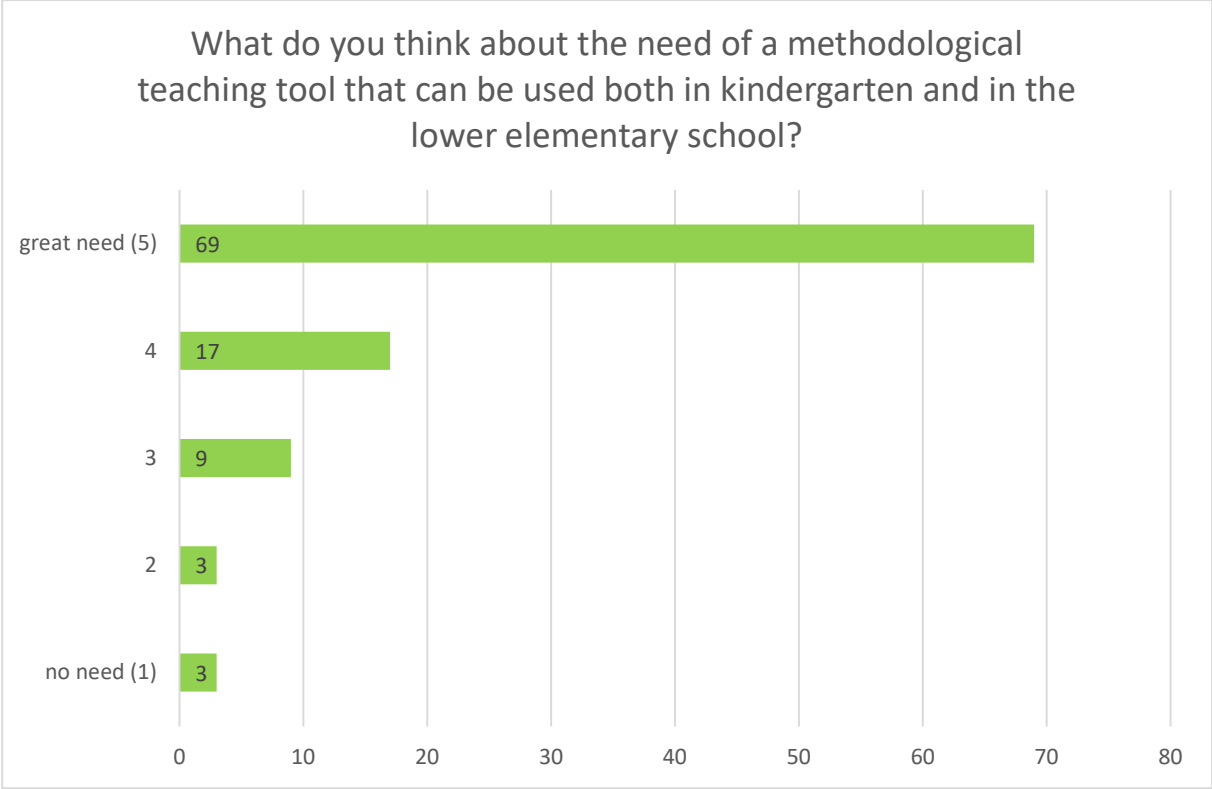
Overall, we have received more than 100 responses (due to the quantitative indicator of the project, minimum 50 have been expected originally). This means that the survey is sufficiently comprehensive and relevant for statistical purposes as well.

During data processing, we fully complied with the relevant regulations, GDPR regulations and ethical standards. These were also checked and approved by the Scientific Ethics Committee of the project coordinator Eszterházy Károly Catholic University.

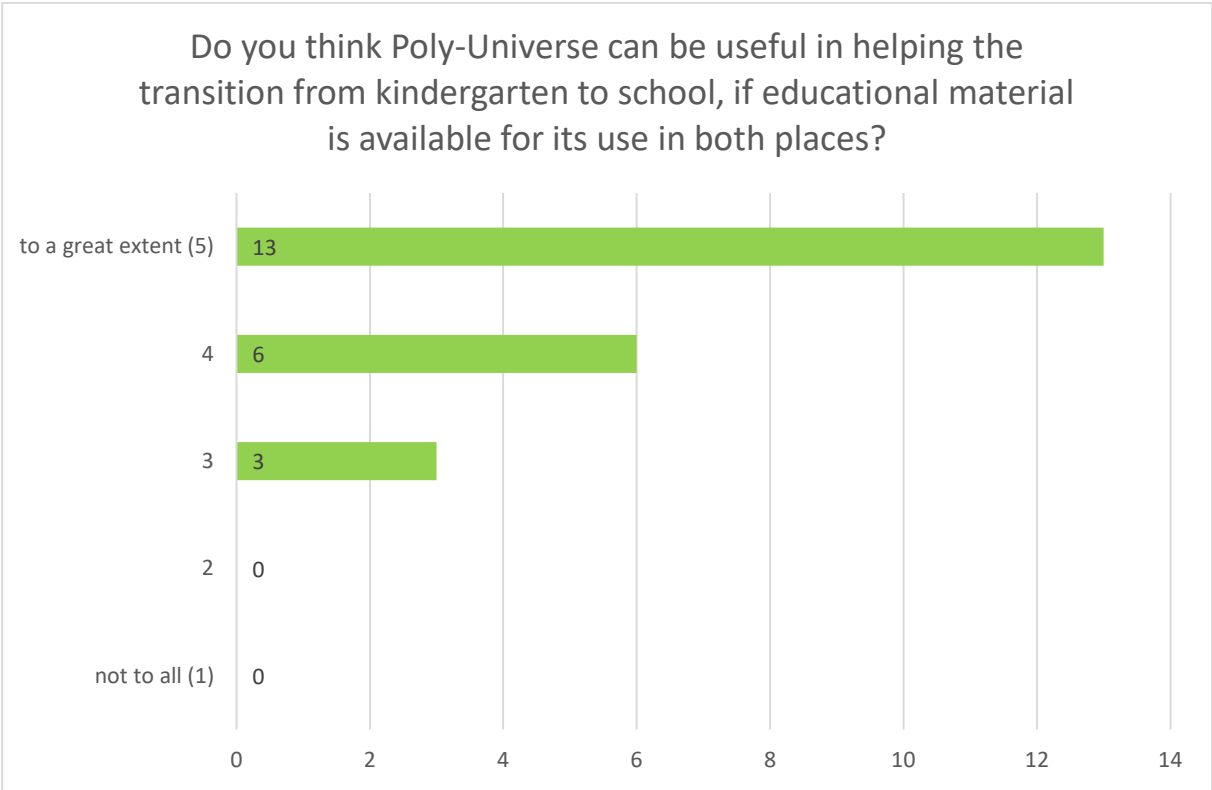
Respondents show great variety in terms of country of origin, and also in terms of the age group in which they do their regular educational work:



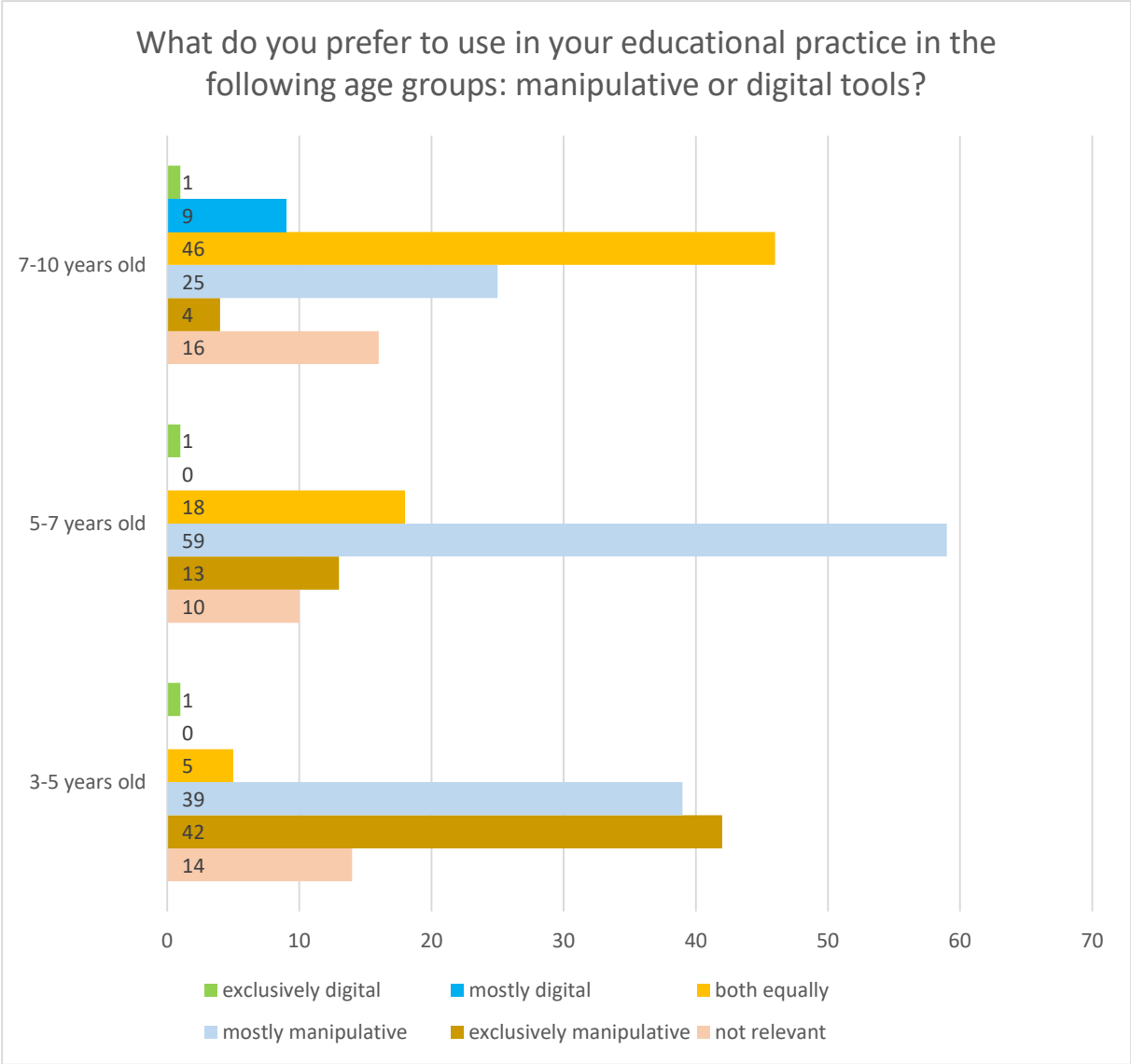
One of the most important aspects was to understand the need for educational tools which can support the transition from kindergarten to the primary school, that is it can be used in both age groups, such as the Poly-Universe tool.



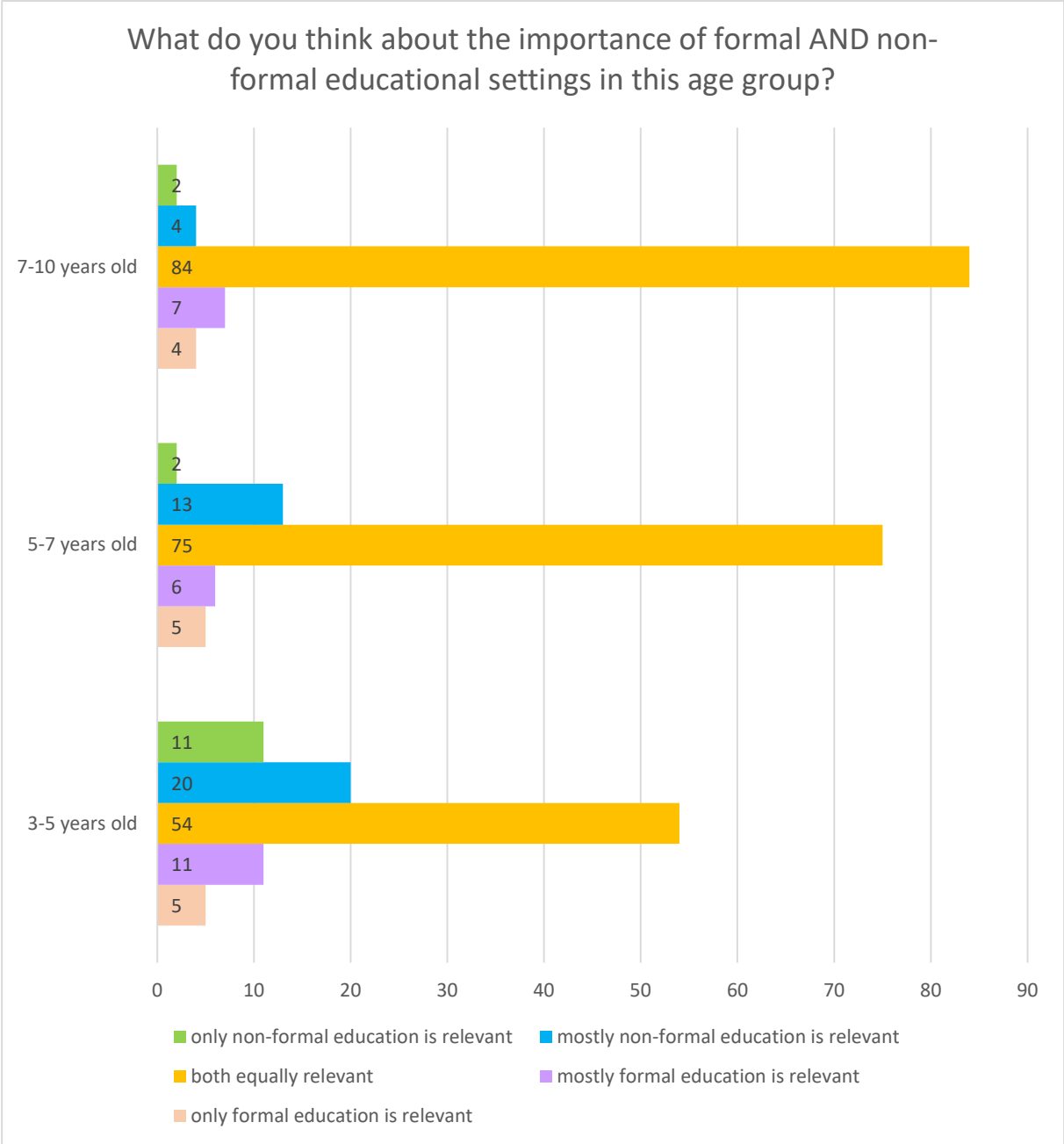
The answer for this question was specifically positive regarding Poly-Verse as a suitable tool for this purpose:



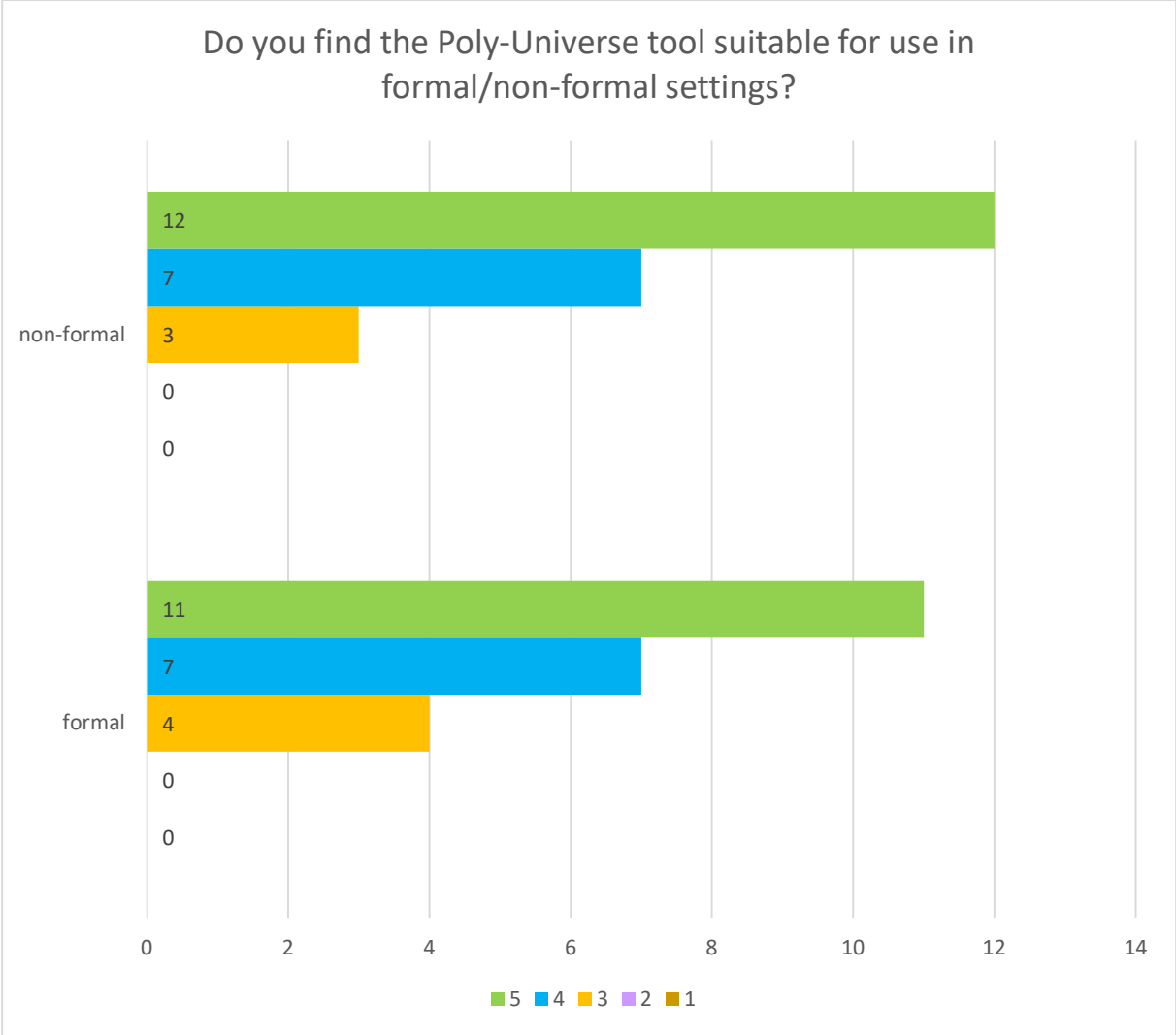
It is also clear from the responses that in the targeted age group, manipulative tools, such as the Poly-Universe, play pivotal role in educational practice:



The importance of formal education is almost trivial. What can be surprising and inspiring is that non-formal educational settings are thought to be just as important as regular forms. This means that we also have to pay extra attention to the effective application of Poly-Universe in this kind of educational settings.

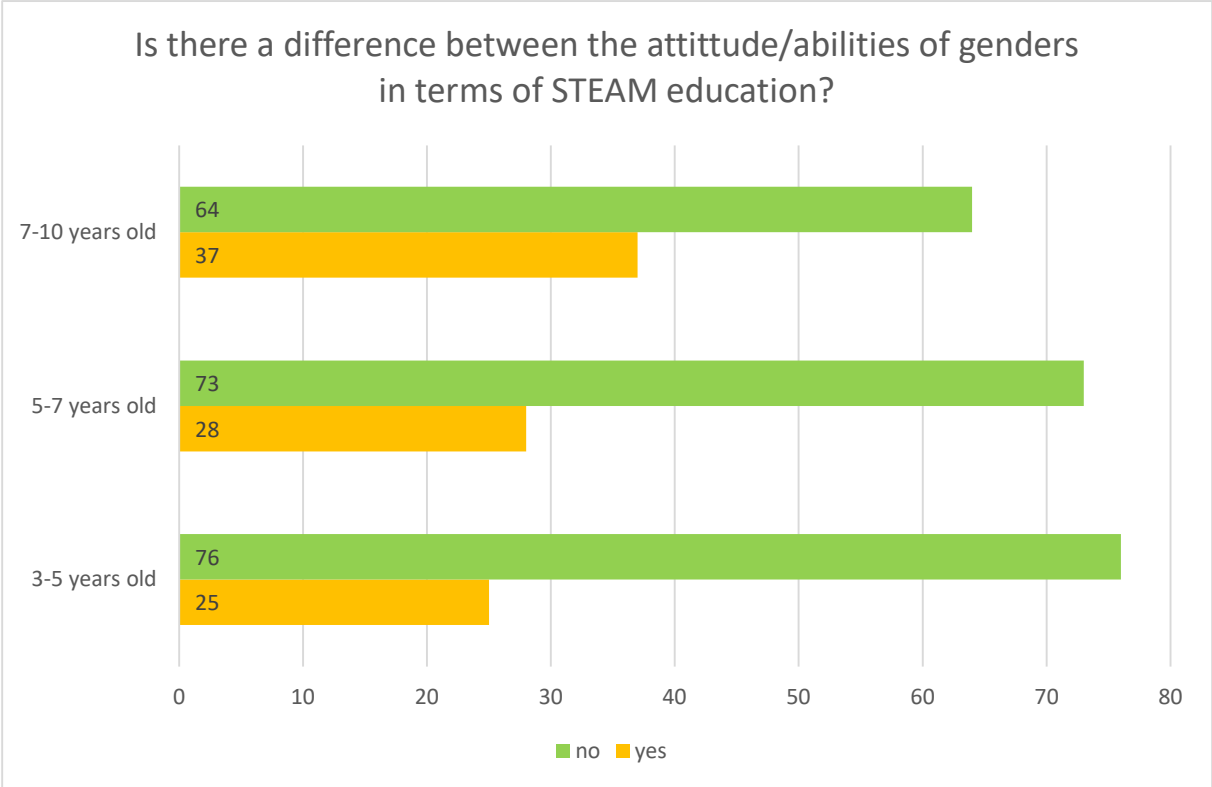
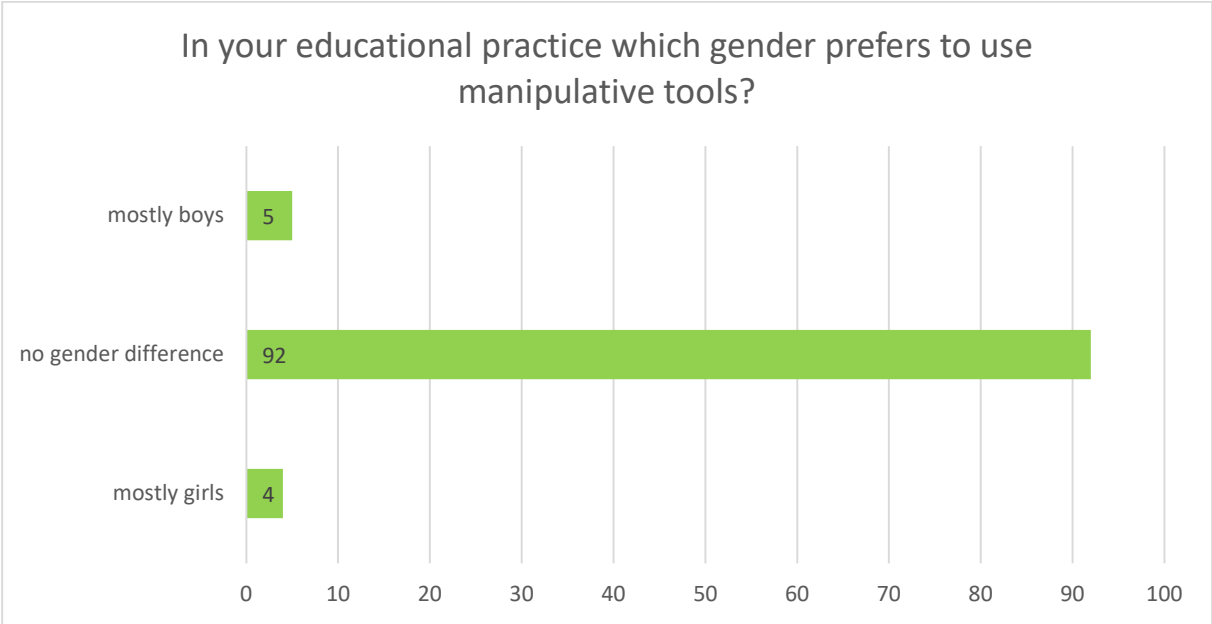


It is also an important confirmational feedback, that those who have already used Poly- Universe (about 2/3 of the respondents), think that this tool is suitable for use in both formal and non-formal educational settings.





A crucial point was in our survey is the evaluation of a potential gender difference. As we have learned from the responses, educators see no relevant difference between genders in terms of the use of manipulative tools, while roughly 1/3 of the respondents see some difference between the attitudes (with a bias towards boys). This means we have to encourage educators to pay special attention to the involvement of girls in every type of STEAM related actions.



Finally, it is evident from the survey, that there is a high need for further educational supporting material, specifically in terms of applying Poly-Verse in formal as well as in non-formal educational settings. And this is the ultimate aim of the EarlyPoly project.

