Hearing Every Voice:

What it Takes to Conduct Large-Scale Research with Children

Author: **Sofia Dias**

What does it mean to truly listen to children? Not just in theory, but in practice – in a way that values their words as data worthy of attention and not just as cute anecdotes. This is the challenge that a team of researchers from the University of Malta set out to meet. Funded by the UM Research Excellence Fund, the project is designed to position children as active and authentic agents in the data collection process.

At the heart of the project, titled 'A Pedagogy to Facilitate Children's Meaning Making', was the belief that children are capable of more than we often give them credit for. As Prof. Adrian Gellel (Department of Early Childhood and Primary Education) puts it, 'All too often, children's abilities are underestimated. Time and time again, I have witnessed adults being surprised at children's questions, intuitions and reasoning abilities when engaging with art and culture.'

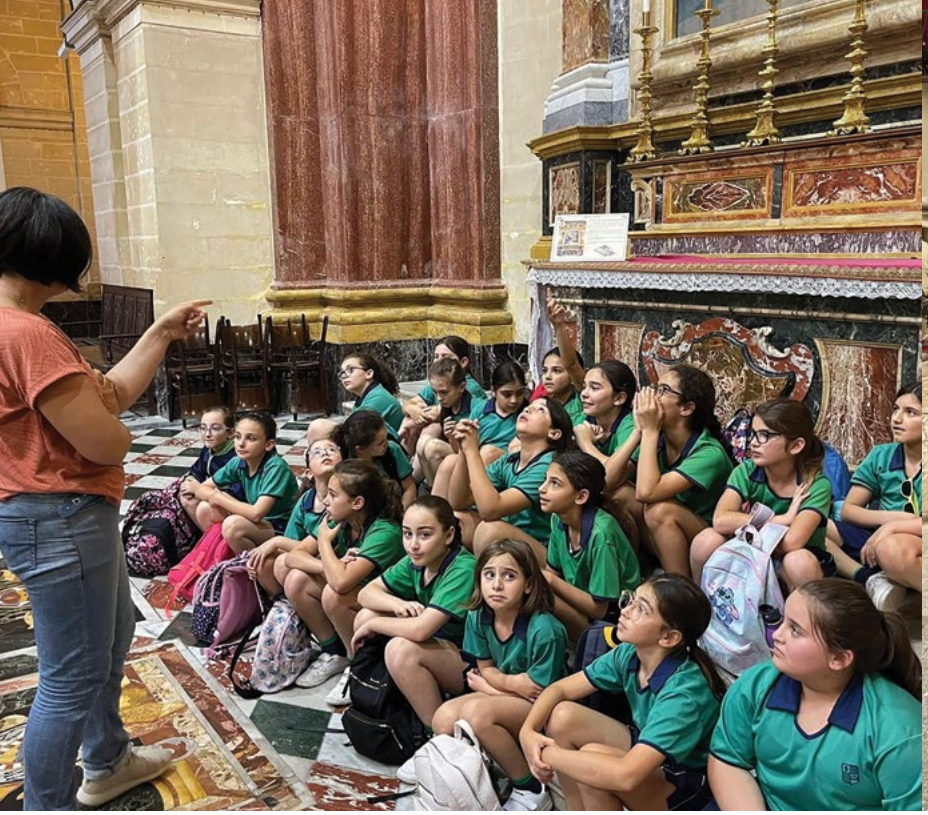
To help children make sense of the world around them, Gellel has developed the Symbol Literacy approach. This is a teaching method that encourages children to draw on the wisdom embedded in cultural artefacts such as stories, rituals, art, and their meanings as produced and experienced by different generations. This approach is a response to the growing need to help children navigate life's challenges by grounding their thinking in cultural and intergenerational resources. Over the last decade, this approach has reached more than 13,000 children through previous projects conducted by Gellel and colleagues, but the latest project was more ambitious, aiming to gather data systematically on how children make sense of their world in their own voice.

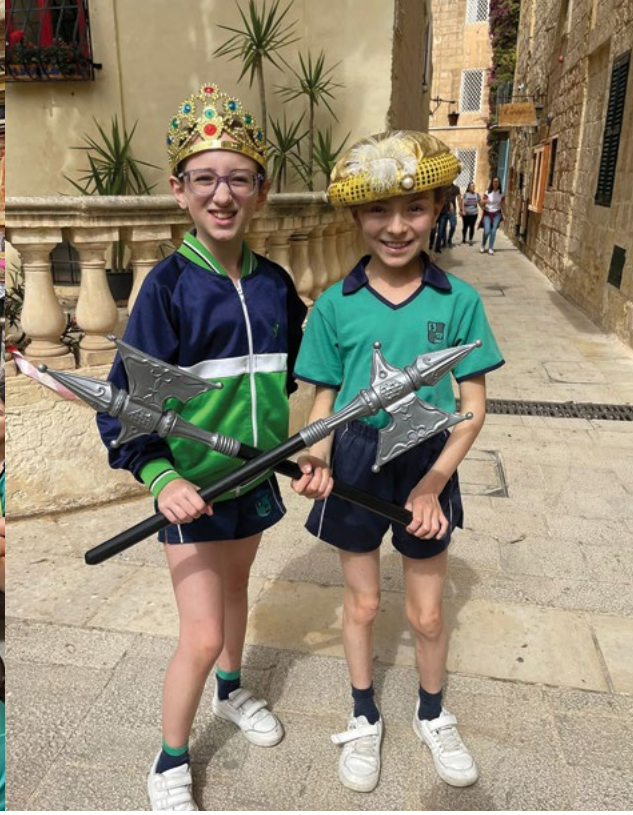
To achieve this, the research design had to work *with* children, not just extract information *from* them. This involved creating open-ended and inclusive tasks, removing spelling constraints, providing support for learners with literacy difficulties and ensuring that all students could participate, regardless of their background or ability. 'It was imperative to respect children's ability and will to express themselves as they wish and can,' says Gellel, 'and for this respect to emerge in the research project design.'

SCALING UP WITHOUT LOSING SIGHT

Conducting a study involving over 850 primary school students across 46 classrooms is no easy task. The decision to include schools from diverse social, economic, and religious contexts made things even more complex. However, this diversity was essential. 'To uncover the beauty of individual differences, it was important to recruit a large number of children from different backgrounds and types of schools. For this purpose, we approached State, Church and Independent schools that educate children from different regions and varying socioethnic, religious and economic backgrounds,' says Gellel.

As the project grew, so did its structure evolve. With over 25 years of experience in literacy pedagogies, Amanda Morales (a Research Support Officer with the Department of Early Childhood and Primary Education) led the work of building strict data collection protocols. 'Even the slightest difference in the presentation of tasks and prompts had a drastic effect on participant responses,' she explains. 'We created clear protocols to frame each task to help maintain consistency in procedures.'





Photos courtesy of Symbol Literacy team

The team didn't just rely on pen and paper. Digital tools – some common, others highly specialised – were central to managing the volume and complexity of the data. Children completed questionnaires, narrative tasks and cognitive tests (including working memory games developed at Utrecht University) on school-issued tablets. Julian Galea, also a Research Support Officer with the Department of Early Childhood and Primary Education, as well as a counsellor and youth worker on the team, says that 'digital tools were essential for data collection. Without them, we would never have managed to collect and process such a large volume of data and facilitate access to such a diversity of voices and perspectives.'

However, technology was as much a hurdle as it was a solution.

WHEN THE WI-FI GOES DOWN

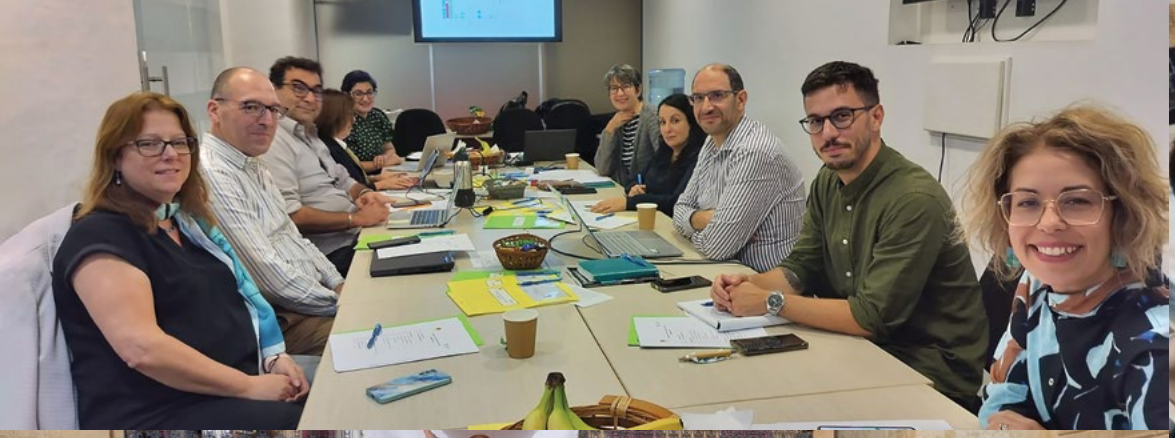
The team quickly discovered that their preferred tool, Google Forms, was blocked on many school tablets. Consequently, they had to convert everything to Microsoft Forms. Even then, they encountered all sorts of software and hardware issues. 'From tablets running out of battery, to login issues, to outdated software, to network issues, the next problem was always just around the corner,' says Galea. 'As we worked our way through the data collection process, we went from a Plan A-Plan B mentality to a Plan A/B/C/D/E/F… way of working,' he adds.

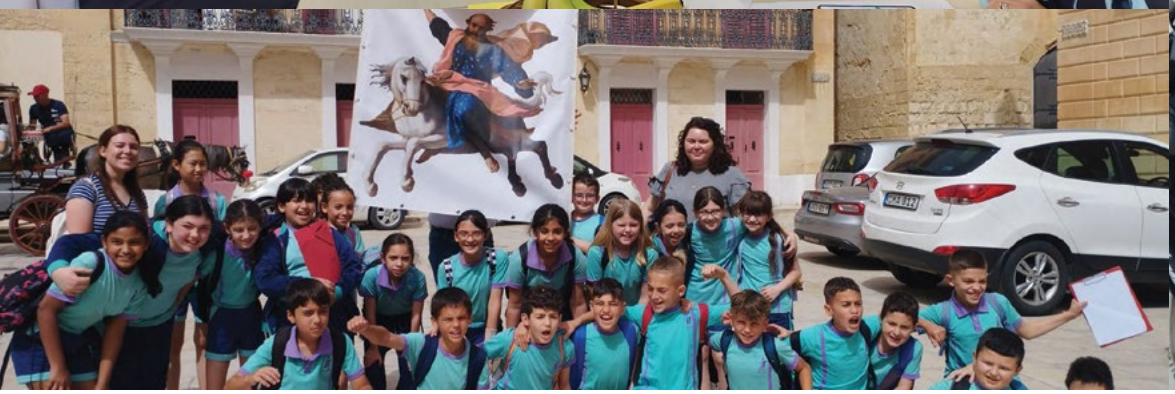
Adaptability became the name of the game. Teachers adjusted their timetables. Students shared devices. In contexts where literacy levels were low, neutral readers were brought in to ensure understanding without influencing the response. 'Research is a collaborative process,' Galea says, emphasising that the project worked because everyone – students, teachers and administrators – contributed.

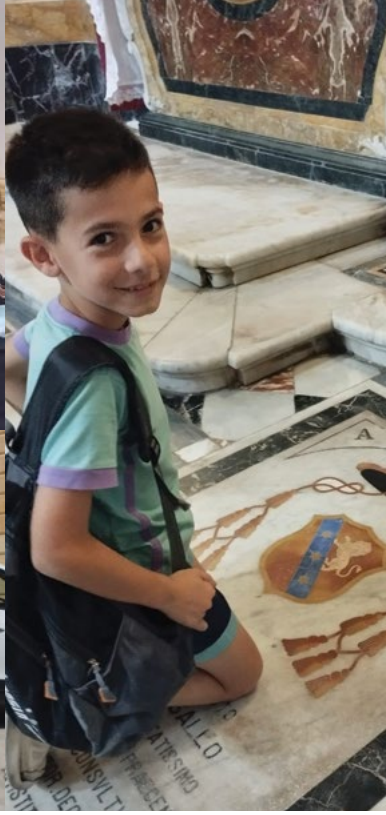
The team faced not only tech issues but also more subtle challenges that were just as important. These included cultural concerns about performance, accuracy, and the 'right way' to do things. This was particularly evident in the narrative tasks where children were asked to write or recount stories in response to visual prompts. Many were unsure about deviating from what they thought was expected of them. The researchers' work included a process of gently challenging this mindset. This involved a reframing of the tasks so that they were not seen as tests of correctness, but as opportunities for personal expression. 'The provision of amanuensis support for learners with literacy difficulties – a scribe, the removal of spelling constraints, and offering freedom in the language used, provided a safer and more inclusive environment for all participants,' says Morales.

DATA WITH DEPTH

Before launching the full study, the team conducted a pilot study with 50 children to refine their protocols and troubleshoot any technical issues. 'It was important to us that our data collection process was efficient, not only because of the size of the project, but also to respect the needs of our research partners within the schools,' adds Morales.







So, what are the results of all this effort? A trove of information that reaches far beyond test scores. Alongside 1,600 handwritten narratives and 300 verbal ones, the team collected demographic data, memory test results and qualitative feedback. AI tools were used to transcribe and digitise the children's stories (always with human oversight), and analysis software such as MaxQDA helped the team to begin to make sense of the layers of data.

However, it's not just the size of the dataset that matters but what it enables. The team is now exploring questions at the intersection of cognitive psychology and socio-cultural theory, such as: How does context shape learning? Is working memory malleable? What symbolic resources do children draw on when telling stories? What patterns of narrative reasoning can be found beneath the surface?

Gellel is adamant that no single discipline can answer these questions. 'We have teamed up with experts from different fields to help us unravel and delve deeper into our data. This conversation is only possible through the collaboration with Prof. Noellie Brockdorff, Dr Rebekah Mifsud, Prof. Leonard Busuttil, Prof. Giuseppina Marsico (Università di Salerno), and Prof. Luca Tateo (University of Oslo), all of whom bring to the table different perspectives and experiences,' Gellel says. 'Educators working in the field are also being consulted, as their insights inform our interpretation of the data and generate new questions.'

LESSONS LEARNED

Not all schools agreed to take part in the study. Some withdrew after concerns were raised that the research would take time away from exam preparation. Galea sees this as part of a broader cultural pattern, noting that 'this episode was a stark reminder that, despite constant dialogue and discussion on critical thinking, research, updating pedagogies, and so on, a deeply-sedimented undercurrent of traditionalist attitudes is still very present in our culture.'

Nevertheless, the team views this project as a step towards change. Gellel says that the project 'has refined our ability to listen to children, both individually and collectively, strengthening our belief that the voice and will of the child need to be brought to the fore and respected. Research does not take place in a vacuum, but in an ecosystem of different perspectives, needs, and voices.'

For a project grounded in pedagogy, it is clear that the researchers themselves were learning, too. They learned how to troubleshoot on a large scale, how to adapt in real time and, most importantly, how to keep the child at the centre of it all.

After all, as this project shows, children's voices are worth hearing. They are essential to understanding the world we live in and the one we are trying to build.

The project 'A Pedagogy to Facilitate Children's Meaning Making: Engaging with Art and Narrative to Develop a Symbolic Repertoire' is funded by the University of Malta Internal Research Grants Programme, Research Excellence Fund (Grant Agreement No. 202303).