Intergenerational learning dynamics in the Storytellers Project

Evaluation report
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Introduction

The Storytellers Project[1] is a library service that connects a community of adult readers (the Storytellers) to young children and their families for remote reading aloud sessions. It was developed and initiated by Laura Boffi an interaction & service designer and researcher based in Italy. The aim of the project is to foster intergenerational relationships and promote active aging and playful learning. How is this achieved? Children use the Storybell robot at home to connect with readers willing to read. The Storybell robot transmits their reading live, allowing children and readers to speak and interact as on the phone. Most of the readers are older adults living in the same city as the children.

The Storytellers Project was piloted in 2020. Part of the pilot consisted of an evaluation study which assessed the **experience of the children, parents, readers and staff involved in the pilot** and to **analyse the quality of the intergenerational relationships** developed through the remote interaction between children and readers.

The study, which was conducted by TOY – Together Old & Young[2] researchers on behalf of Storytellers Project, was also designed to c**ontribute to the overall understanding of the effectiveness of the Project beyond its technological and design aspects, and aims to inform its scalability strategies**. TOY is a global knowledge hub about intergenerational learning between young children (0-10 years old) and older adults. Amongst the area of expertise of TOY Programme staff is evaluating quality of intergenerational learning initiatives and projects.

The report is organized as follows: Chapter 1 briefly introduces and explores the concept of IGL, explain the origins of the TOY programme and its link with the Storytellers Project; Chapter 2 describes how the Storytellers Project works and the various elements of its piloting phase; Chapter 3 focuses on the aim of the study, its methodology and the sampling strategy; Chapter 4mpresents the findings; and the final chapter, Chapter 5, is about conclusions and recommendations for scalability and further development of the Storytellers Project.

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[1] The project has been developed and initiated by Laura Boffi, interaction & service designer and researcher based in Italy. The Storytellers Project (https://www.the-storytellers-project.org/theconcept) has already received support from the major European research programme, Horizon 2020, and is part of the multi-country project called Designscapes (https://designscapes.eu/), which funded its feasibility (2019) and prototyping phases (2020).
[2] see www.toyproject.net. The TOY programme is coordinated by the Dutch NGO International Child Development Initiatives – ICDI

Chapter 1 - What is IGL?

Over the past two decades, the potential of intergenerational learning (IGL) involving young children (0-8 years) and older adults to address multiple societal concerns is commanding increased attention from policy makers, practitioners and researchers in the education, health and social sectors and the general public. The need to connect young children with older adults and vice versa is an obvious and 'human' response to a range of social and demographic dilemmas in community life and relationships.

- People are living longer, but young children and older adults are having less and less contact with each other.

- Families with young children are migrating to cities and countries often far away from grandparents, and it is difficult for them to maintain close ties.

- In many countries, older adults are living in care homes where they rarely see children and many young children are spending their days only with their own age group in day care centres, preschools and schools.

One important way of reconnecting young and old is through IGL whereby people from different generations have the opportunity to learn with and from each other and to come to understand each other.

The European Network for Intergenerational Learning (ENIL) defines IGL, as **"A learning partnership based on reciprocity and mutuality involving people of different ages where the generations work together to gain skills, values and knowledge"** (ENIL, n.d.).

Consequently, activities are labelled as Intergenerational Learning when they fulfil the following three criteria:

1. Involve more than one generation;

2. Planned as purposeful and progressive, mutually beneficial learning;

3. Promote greater understanding and respect between generations and, consequently, community cohesion.

IGL is now considered a form of lifelong learning. Importantly, both IGL and lifelong learning recognise and give value to informal and non-formal learning as well as formal learning. Furthermore, it is viewed important in IGL programming to build on the strengths and resources that might already exist in a community (Heydon, 2013), in order to also **help to develop social cohesion** i.e. a sense of local identity, support and belonging.

The link between TOY and the Storytellers Project

Since 2012 the TOY programme has been engaged in research and development in IGL in partnership with organisations in a range of countries in Europe. This research has resulted in the identification of goals and principles of IGL:

Two all-encompassing overall goals of IGL are:

1) Improved health and well-being of all generations, highlighting the importance of lifelong and life wide learning to the health and well-being of all age groups.

2) Building all age-friendly communities.

Five specific goals of IGL, which explain how young children and older adults benefit:

1. Building and sustaining relationships

2. Enhancing social cohesion in the community

3. Facilitating older people as guardians of knowledge

4. Recognising the roles of grandparents in young children's lives

5. Enriching learning processes of children and older adults

TOY Programme researchers have also developed an assessment tool designed to support improvements in the quality of intergenerational initiatives and services. Called, the TOY for Quality Programme[3], it also provides organisations with a method to enhance planning in the field of intergenerational learning and raise awareness at the local and national level about IGL as an area of professional and social action. This tool was adapted for the purposes of the Storytellers Project evaluation (see Methodology section below).

Laura Boffi, the creator of the Storytellers Project, first made contact with the TOY Programme in 2017, when she was developing the first concept of the project. In 2019, Laura Boffi conducted the feasibility study (Boffi, 2019) for The Storytellers Project and interviewed Margaret Kernan and Giulia Cortellesi, the two co-coordinators of the TOY Programme. Following this they were invited to participate in its prototyping and piloting. The TOY team's role was to provide training in IGL pedagogy and to design and conduct the evaluation of the Storyteller Project pilot.

Before describing the Evaluation study, we first provide an overview of the key milestones of the Storytellers Project to date.

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[3] http://www.toyproject.net/publication/latest-publications/toy-quality-programme-guidelines/.

Chapter 2 - The Storytellers Project

How does it work?

After completing a training course on interactive reading techniques and children's literature, the Storytellers (readers) communicate their weekly availability for reading sessions and are granted access to a selection of books to read to children remotely, provided by a local public library.

Families with young children connect with the Storytellers through the **Storybell robot**, which they borrow from public library and bring home. When the child wants to listen to a story, she/he grabs the ring handle of the Storybell and shakes it. By doing this, the Storytellers community will receive a call on their phones. The first Storyteller answering the call will read to the child. Alternatively, when Storytellers wish to show they are available to read, they can ask the Storybell to invite children for a reading session. To do so, the Storybell rolls around the house to look for the child and when it finds him/her, it will go in circles until the child grabs it, and in doing so answers the call to listen to a story.

The first prototyping session

The Storytellers Project was tested for the first time in 2019, in an experience prototyping session in May. The key learning points of that experience were as follows:

- To enable real conversations, it is key that the reader and the child are able to listen and speak smoothly without any technical difficulty.
- The reader needs to be constantly reassured that the child is engaged and listening to the story since there is no visual feedback.
- The Storybell shape and physical attributes offer affordances to the child to be able to fidget and concentrate during the reading.
- Reading remotely is a challenge because you remove the physical enablers of the experience, yet this can make the reading truly magical by focusing exclusively on the voice as a unique enabler
- Remote reading could educate children in focused listening and to drop (reduce?) distractions.
- The Storybell is a pedagogical toy through which parents can educate children to respect people and their time, to take turns, to thank people for their time, to be patient and wait, to

be kind to people they do not know, to meet and relate to unknown people from different cities, cultures and ages. (Boffi, 2019)

The piloting phase

The Storytellers project was **piloted between February and September 2020 in a public library in Empoli, Italy and involved 5 families with children between 3 and 11 years old, and 8 adult readers**. The pilot was designed taking all the lessons learned during the prototyping session into account. It began with four workshop sessions for library staff and senior readers about benefits and approaches in IGL involving young children and older adults; interactive reading and children's literature. Due to the COVID-19 lockdown in Italy, all workshops took place remotely. In the following months, the children and readers took part in 23 remote reading sessions using the Storybell.

Chapter 3 - Aim of evaluation study, methodology and sample

Aim

Evaluation is crucial in IGL programmes for the following reasons:

- It allows the IGL experiences of older adults, children and their families be heard.

- It facilitates reflective and learning processes among practitioners.

- It contributes to improve the quality of the proposed IGL activities.

It is with these three goals in mind, that the evaluation activities for the Storytellers Project were designed. As stated in the introduction, the overall aim of the Project is to foster intergenerational relationships and promote active aging and playful learning. Specifically, the following issues were of interest in the evaluation:

1. What were the benefits of the Storybell interaction for the children and the adult readers?
2. How did the relationship between children and adult readers develop using the Storybell?
3. Can an intergenerational activity taking place remotely build and sustain intergenerational relationships?
4. How did the COVID-19 pandemic effect the experience of children and adult readers?
5. How can the Storyteller's project be further developed and enriched?

Methodology and sample

The methodological approach of this study, which was conducted between May and September 2020, combined semi-structured interviews, analysis of logbooks filled in by parents and readers, observation of training workshops and analysis of the outcomes of the self-assessment tool filled in by the library staff.

   a. <u>semi-structured interviews with parents of children and adult readers involved in the piloting, conducted at the end of the process.</u>

The interviews focused on what children and readers enjoyed the most and the least, what benefits they gained from participating, how their interaction began and changed over time, what they thought was the value of the Storybell robot as a means to build a relationship and how the COVID-19 pandemic influenced their experience.

It was initially planned, that the TOY researcher would conduct the interviews with parents and readers in person during a visit to Empoli. However, due to the COVID-19 pandemic, it was not possible to visit the piloting site as planned and all interviews were conducted by Laura Boffi using the interview protocol prepared by the TOY researcher (see Annex 1). She was also provided with a matrix where all the data collected through the interviews was recorded. Interviews were conducted in Italian and data were entered in the matrix in English by the interviewer.

In total, 8 adult readers (all women, between 36 and 73 years old, average age: 54 years old) were interviewed and 5 parents. All were mothers, between 35 and 47 years old, with 7 children in total, between 3 and 11 years old, (5 boys and 2 girls).

b.   <u>analysis of the logbooks filled in by parents and readers during the piloting</u>.

The evaluation activities for this project were initially discussed during the training on IGL provided by TOY in Empoli in February 2020. On that occasion, the TOY researcher offered support to Laura Boffi to develop a logbook for parents and a logbook for readers, which they would fill in after every reading session. The idea was to provide both groups with a structured 'diary' that could help them track their experience from the technical and relational point of view. In total, 7 logbooks from adult readers and 1 logbook from parents[4] were collected.

c.   <u>observation of training workshops offered by experts to readers at the beginning of the piloting</u>.

In the initial phase of the piloting, after the readers were selected, four workshops were organized for them with the goal of preparing them to be interactive readers for young children – the Storytellers - through a remote device - the Storybell. The first workshop on interactive reading through the phone was conducted by an actress at the end of February in a face-to-face workshop in Empoli. The other three workshops – 'Reading Italian tale to connect generations', 'Narrative Pedagogy and creation of relationships with children through reading', and 'Interactive reading through the phone, part 2' – took place online in May 2020. All recordings of the training workshops are available on Youtube[5].

d.   <u>analysis of the self-assessment conducted by the practitioners involved in the piloting using the TOY for Quality Tool</u>.

During the workshop on IGL conducted by TOY trainer in Empoli in February 2020, an adapted version of the TOY for Quality Assessment Tool[6] was presented for the purpose of evaluating the Storytellers Project. Out of the six Dimensions of Quality contained in the tool, three were selected as relevant for this project: Dimension 1: Building relationships and well-being; Dimension 2: Respect for diversity; and Dimension 4: Learning with and from each other[7]. The Tool is a self-assessment tool which has to be completed during a group reflection meeting with the practitioners involved in the IGL initiative. For each dimension there is a set of indicators to help staff reflect on and assess the quality of the IGL initiative. Each indicator reports a list of reflective questions that can be used to conduct the group reflection meetings. The group decides on a rating (1, 2, 3 or 4) for each of the indicators in each

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[4] Just one parent completed the logbook
[5] https://www.youtube.com/channel/UC72fULbPk3zb7se_dlb32SQ?view_as=subscriber
[6] http://www.toyproject.net/wp-content/uploads/2018/11/toy_guidelines.pdf
[7] The remaining three dimensions: Dimension 3: Interaction with and within the community; Dimension 5: Professional development and teamwork; Dimension 6: Monitoring, evaluation and sustainability were excluded because they were not deemed applicable given the nature of the Storytellers Project and the short duration of the pilot.

dimension, indicating in which phase of quality development the intergenerational learning initiative is currently operating at. The group calculates then an average rating for each dimension.

The ratings are assigned according to the following phases of development:

Rating 1	Awareness phase– the initiative or programme shows some sensitivity towards this dimension of quality, however little action has been taken to embody it
Rating 2	Exploration phase – the initiative or programme shows awareness of this dimension of quality and has taken some steps to work towards these goals
Rating 3	Transition phase – the initiative or programme is aware of the importance of this dimension of quality and is taking several actions to embody it in practice
Rating 4	Full implementation phase – the initiative or programme is successfully promoting the principles and actions involved in this dimension of quality

Chapter 4 - Findings

This chapter presents the finding of the study, organized based on the group of respondents: parents, readers, and staff. A short introduction is provided to explain the context and constraints of the piloting of the Storytellers Project, which are useful to interpret the findings.

Introduction: technical challenges

During the piloting, two main technical challenges were faced by participants – both families and readers, which may have influenced their experience:

1. The app which should be connected to the bells, in which readers can submit their availability and parents can chat with them and check the history of reading sessions of their children, was not available. As a solution, Laura Boffi put herself at the centre of the communication between families and readers, taking note of the availability of the readers and helping parents to organize reading aloud sessions for their children.
2. The Storybells – 5 in total – which were produced in Spain for the plastic shell part and in Italy for the software and electronic hardware parts – were not fully functional. From the very start, it appeared difficult to establish an internet connection unless the Wi-fi signal in the house was very strong or if the Storybell was used outdoors (on a terrace, or in the garden).

The experience of parents

The five mothers who were interviewed by Laura Boffi all reported positive experiences of their participation and that of their children in the piloting of the Storytellers project, despite the technical challenges they faced. The parents' main role was to communicate with Laura to know the availability of the Storytellers – given the unavailability of the app - and to help their children to make sure the Storybell worked during the reading-aloud sessions.

All interviewed mothers report **frustration** with respect to these technical challenges. Some said the sound quality was not good, some others told about how this made their child upset. Two of them also reflected on how different it would have been if their child could have interacted with the bell without the mediation of a parent. However, this issue has not influenced the general positive feeling about their participation in the pilot.

Benefits and relationship building

Two mothers reported that their children enjoyed the **opportunity to interact with a 'secret' or 'stranger' reader**, and were fascinated by the surprise: they didn't know in advance who would pick up and what story they would be listening to.

"My child discovered the pleasure of imagination and curiosity: imagining what could be possibly read to her and being curious about who would read it to her" says P., mother of Z (5 years old).

This issue of sustaining relationships through the Storybell was also reflected in the interview question about how the relationship between the child and the reader developed and transformed during the pilot. The interviewees expressed frustration with the **short length of the pilot**, which didn't allow the children and readers to build a relationship, but at the same time they observed that this was starting to happen.

"With more time, they would have become friends, I saw that affection was starting to develop between them" says L., mother of L. (3 years old).

The views regarding the **random attribution of a reader to a child** divided the interviewees. Two mothers mentioned that their children found it interesting that they did not know who would read to them, while two other mothers reported that their children would have wanted to choose their readers, and have continuity in the relationship.

The pros and cons of a remote IGL experience

When asked what their child enjoyed the most, three mothers mentioned **the Storybell as the main aspect of interest**. The Storybell was perceived by the children as 'alive', as a 'toy' they could interact with, as a 'magical object'. This reflects the original intention of the designer, Laura Boffi, who created the Storybell with the idea of giving children an attractive object, an interactive toy.

"The Storybell has become a symbol in our home. It is like a 'piazza' (square), where we gather around, meet each other and listen, very much like a church bell tower in a village" says M., mother of T. (6 years old).

The interaction with the physical object and with the 'invisible' reader-friend, are also mentioned as the main benefits of the experience.

"My children learned how to listen, how to think critically and interact with an adult who is not a member of our family. They learned how to listen and how to speak" says S., mother of G. (7 years old) and D. (11 years old).

Four mothers also reported how surprised they were to see their children being able to **focus, relax and sit still while listening to the stories** through the Storybell. The absence of a physical book and visual stimulation which was initially feared by the mothers as a possible cause of distraction and disinterest, didn't seem to have any negative effect. On the contrary, four mothers recognized **the value of not having a visual support**, as this is unusual to children who are growing up surrounded by visual stimuli (tablets, TV, laptops, video games, etc.).

"Z. doesn't like video call, there is too much going on. With the Storybell she is relaxed and focused, she is not scared or overwhelmed. She discovered the pleasure of listening to oral storytelling, which went beyond the book, as the reader was interacting with the child and adapting and enriching the story during the reading. It doesn't replace reading a book but broaden the idea of listening and interacting" says P., mother of Z (5 years old).

How the COVID-19 pandemic affected the experience

The original plan was to organize at least three **fact-to-face reading aloud sessions** during which the readers and children could meet in person, get to know each other and each other's taste for reading. Unfortunately, these sessions never took place because of the COVID-19 pandemic. However, the limitations imposed by the lockdown, highlighted the **potential of the Storytellers project**, which was able to remotely connect and facilitate relationships between non biologically related children and adults in times of social distancing.

Suggestions for further developments

When asked whether they would involve their children in other intergenerational activities, all parents replied that they would happily do it and also shared some ideas for developing the Storytellers project further. One mother said it would be interesting to test the Storybell with children affected by **blindness**; another one suggested to **give the same books to the readers and the children**, so that they can look at the book while reading remotely.

All interviewees agreed that the activity was logistically very well organized, despite the technical problems and that parental involvement was adequately supported.

The experience of the Storytellers

Benefits and relationship building

The eight Storytellers interviewed at the end of the piloting expressed great appreciation for their participation in the project. When asked what they enjoyed the most, they mentioned: **feeling valued, useful and recognized for their role as readers and older adults, feeling active, being able to teach children to trust other people** and older adults in particular. They all highly appreciated the intergenerational goal of the project, and the opportunity it offered to be in contact with children.

"Interacting with children brought me joy, simplicity and I felt less alone" says A.

Another aspect that was valued by most Storytellers was the **training workshops** offered by experts at the beginning of the pilot. Through the workshops they were able to gain new knowledge and feel more secure in their role as readers. They also learned how to interact with children remotely and stimulate children's curiosity and attention.

On the other hand, all Storytellers reported **frustration because of the technical problems** with the Storybell and mention that they **missed the face-to-face interaction with children**, which was originally planned but couldn't take place because of the COVID-19 pandemic. Two readers also reported that they would have liked to have been able to organize their time better to allow more availability for the reading aloud sessions.

When asked what were the benefits of participating in the Storytellers Project pilot, the following points were mentioned: **rediscovering the pleasure of reading, having fun with the other readers, enjoying the company of children, feeling important and useful, learning new skills** – reading aloud remotely, feeling occupied and satisfied by knowing some me-time was given to the mothers of the children.

The Storytellers Project also changed the daily dynamics of the readers' lives and the activity became an important part of their life and commitments.

"Participating in this project makes me feel good. I feel new emotions: when I see the phone ringing and I read for example 'Storybell number 3', I say 'Oh gosh, the Storybell!'. Then I stop whatever I am doing and pick up the call immediately. One time I left my dinner on the table. Another time I was taking care of a friend's child, he didn't know about the Storybell, so I picked up the phone and started a reading-aloud session at 3, with two children, one with me and one remotely" says A., 54 years old.

Reflecting on how the interaction and relationship with the child changed during the weeks of piloting, some Storytellers admitted to have felt **shy and insecure at the beginning** and that they could perceive similar feelings from the children as well. The Storybell is described by one interviewee as an object that appears in a child's 'private or intimate space' - the home, and the reader interrupts this space, which requires adjustment.

"At the beginning we were both shy. This helped me because I felt insecure. We introduced each other. The child was already curious because of the new interactive object, the Storybell. It seems like you as a reader are entering in a child's private intimate space. I am entering in the child's home without knowing the child and I am invading his/her quietness" says F., 36 years old.

All agreed though that after one or two readings, the level of confidence and trust in each other and in the tool – the Storybell and the phone – increased and improved. **The book served as an ice breaker** and after the reading the child and the reader felt they knew each other better and were able to talk about themselves and laugh. Two readers, though, recognized the **importance to accept the shyness on both sides, and also the freedom children need to have to walk away** from the Storybell and interrupt the interaction when necessary. Most readers also say they missed the face-to-face meetings, which they were excited about and believed would have brought the relationship to another level.

The pros and cons of a remote IGL experience
All Storytellers felt that the Storybell successfully served its purpose and that the **absence of a video or a physical book in the hand of the child did not hinder the experience** at all. Their opinion is in line with what expressed by the parents. Most of the readers report that it was better not to use video calls; in this way both the object or toy, the Storybell and the voice of the reader were central to

the activity and initiated a new experience. Two readers also said that they thought that **the Storybell stimulated the child's imagination**: the child can imagine the reader and the book the way he or she wants.

"The Storybell stimulates curiosity towards who is behind or in it. It is very physical: for the child it is a big object that creates and defines the space around itself. A phone is small and brings distraction because it can do too many things. The Storybell is an object in its own, with its own purpose and functionality. Children hug it, put it between their legs…" says A., 54 years old.

Another positive aspect of the Storybell was that the child perceived it as its own. It didn't belong to the parents and they were free to use it when and how they wanted to. Children could decide to draw or play while they listened to a story, or simply focus and listen to the story and interact with the reader. When asked about the ideal length of a session, most readers mentioned between 10 and 15 minutes, and this includes some time to talk freely before, during and after the reading. Two readers also report that **the Storybell creates magic, mystery, and anticipation**.

How the COVID-19 pandemic affected the experience
However, despite being very positive with regards to the Storybell, when asked if the Storybell was an effective mean of interaction, most readers reported they would have enjoyed more a **blended approach**, which would include face-to-face meetings and remote reading-aloud sessions. But they also agreed that while the **COVID-19** lockdown prevented them meeting the children face-to-face, it had provided the **perfect opportunity to test the full potential of a project such as the Storytellers**. So, while the Pandemic kept children and readers apart, it also gave them the unique opportunity to get to know each other and have fun together at a time where this would have been impossible without the Storybell. Additionally, during the lockdown both children and readers had **more free time** for the project. In line with the opinion expressed by some parents, some readers also express **frustration at the fact that it was not possible for the child to choose the reader and give continuity to the relationship**.

Suggestions for further developments
All Storytellers agreed that the pilot was very well organized in terms of logistics, facilitation and materials. Also in this case, the experience was adapted to the lockdown and some activities could not take place as planned, e.g. training in person, peer-learning amongst readers, but given the circumstance the Storytellers believed they were able to create a 'community' of readers.

All interviewees express sadness at the idea that the pilot was over and declared their intention to staying involved in the next phases of the project. They all also showed interest in being involved in other intergenerational projects, and suggested organizing **cooking workshops, walks, theatre classes, and arts and crafts workshops**.

One reader suggested it would be interesting to **test the Storybell with children with ADHD or other learning differences**, as it is a one-purpose object that uses only one sense, the hearing, and it can be calming and facilitate concentration.

The experience of the staff

The TOY for Quality assessment tool was used to guide a reflection meeting between **the designer who developed the concept of the Storytellers Project and the local representative of the public library** involved in the pilot. Due to the COVID-19 pandemic, it was impossible to involve the other parties in the group reflection. Therefore, the data presented in this section are partial and may not represent the opinion of the whole team involved in the pilot.

As mentioned earlier the assessment focused on three of the six dimensions of quality contained in the TOY for Quality Tool: Dimension 1: Building relationships and well-being; Dimension 2: Respect for diversity; and Dimension 4: Learning with and from each other. Following the discussion on each of the indicators and corresponding participants, the participants rated each indicator. These scores and the overall average per dimension are presented below.

These are the average scores per Dimension:

	DIMENSION 1. Building relationships and well-being	Rating (1 to 4)
1	New, positive relationships have formed between children and older adults during the intergenerational initiative.	2.5
2*	Children think positively about the intergenerational relationship.	4
3*	Older adults think positively about the intergenerational relationship.	4
4	The Intergenerational Learning environment has allowed children to explore autonomy and agency in the development of the relationship.	2
5	The Intergenerational Learning environment has encouraged positive feelings of social engagement, value, self-esteem, self-confidence and/or purpose in older adults.	4
6	Children and older adults enjoy engaging in the various activities provided.	4
	Average rating for Dimension 1	**3.4**

Dimension 1 was rated 3.4 points out of 4 overall. Four out of six indicators received the maximum points (4), while two scored lower. Namely, Indicator 1: New, positive relationships have formed between children and older adults during the intergenerational initiative, and Indicator 4: The intergenerational learning environment has allowed children to explore autonomy and agency in the development of the relationship. The staff involved in the reflection meeting justified the low scoring for these two indicators in terms of the **technical challenges** that readers, children and families had to face during the pilot. In their opinion, the **quality of the relationships** between children readers as well as the **level of agency** children could enact in the development of these relationships were **hindered by the difficulty in connecting the Storybell to Internet, the need to always involve a parent to organize a reading session and the bad sound quality** during the reading sessions. However, this finding contradicts the perception that readers and parents have regarding these aspects. In fact, both parents and readers felt that relationships developed, although continuity and face-to-face contacts would have improved them. Also, they felt that the Storybell afforded a high degree of autonomy and agency for the children, who considered as a personal special toy, this despite the technical limitations.

	DIMENSION 2. RESPECT FOR DIVERSITY	Rating (1 to 4)
1*	Children have developed more positive views of older adults and aging.	4
2*	Older adults have developed more positive views of young children and youth.	4
3	Families have developed more positive views of intergenerational relationships.	4
4*	Children feel acknowledged, accepted and welcomed.	3.5
5*	Older adults feel acknowledged, accepted and welcomed.	4
6	The learning environment gives opportunities for children and older adults from diverse backgrounds to share their knowledge, culture and experiences.	4
	Average rating for Dimension 2	**3.9**

Dimension 2: Respect for diversity, scored an average of 3.9 point out of 4. All indicators except one received the maximum scoring. The only one that received 3.5 point is 'children feel acknowledged, accepted and welcomed'. Staff reported that the children were **disappointed when the Storytellers were not answering their calls** and both children and parents were at times frustrated by the **technical problems with the Storybell**, which did not always work properly. These remarks are in line with what both parents and readers also mentioned in their interviews.

	DIMENSION 4. LEARNING WITH AND FROM EACH OTHER	Rating (1 to 4)
1	Older adults actively engage in the programme, both as teachers and as learners.	4
2	Children actively engage in the programme, both as teachers and as learners.	4
3	The learning environment (indoors and outdoors) is one that is experienced as physically safe and accessible for people of all ages and easily supervised.	4
4	The learning environment (indoors and outdoors) is equipped with various accessible and appropriate materials that stimulate the agency of both children and older adults to explore, learn, and interact.	3
5	The learning environment can be physically modified to meet specific needs of children and/or older adults.	4
	Average rating Dimension 4	**3.8**

Dimension 4: Learning with and from each other, scored 3.8 points out of 4. The fourth indicator scored lower than the others, with 3 points out of 4. The staff involved in the group discussion explained that because the Storybell was not fully functional, the **children could not decide when to call the readers without the help of their parents, and the connection of the Storybell to the Internet was not always easy to establish**. It is expected that the agency of children and readers will be better when the Storybell is fully functional. However, it is interesting to mention that both parents and readers mentioned that the children felt in control of the Storybell and able to exercise their agency.

Chapter 5 - Conclusions and recommendations

The overall aim of this study was to assess the experience of children, parents, readers and staff involved in the piloting of the Storytellers Project, and to analyse the quality of the intergenerational relationships developed through the remote interaction between children and readers. The study also aimed to develop some concrete recommendations for the future development of the concept and its possible scaling up. The designer is currently looking for a technological partner who can support her to fix the technical problems incurred during the pilot and is searching for new funding to be able to produce more Storybells and activate the project in more municipalities in Italy.

In total, 8 readers, 5 parents and 2 staff participated in the evaluation activities.

According to the data obtained through semi-structured interviews, logbooks, observations and group discussion, it is possible to state that the majority of the children, parents and readers involved in the piloting are satisfied by their experience, despite some technical challenges they had to overcome. Knowing they were taking part in a pilot, these challenges did not limit their enjoyment of the activities and imagine the full potential of the Storybell when the technology is fully functional.

One of the questions posed at the outset was whether **a remote IG activity could actually build and sustain IG relationship.** Based on the findings, it can be concluded that yes, this is indeed possible to build a relationship. However, the lack of continuity in the contact between the same reader and child and the fact that the child was not able to choose a specific reader, was perceived as a weakness and inhibiting the IG relations being sustained. It is therefore, recommended that this option is made available.

The study also **explored the benefits of the Storybell interaction for both children and adult readers.** All parties involved recognised the value of the Storybell as a medium of communication, interaction, and connection. It was particularly interesting to notice that the absence of a video was considered by the interviewees as an advantage, since the Storybell was perceived as different from a phone or a tablet, and encouraged playful attitudes, listening and concentration. Of particular interest is the suggestion of some readers and parents to use the Storybell with children with special needs (blindness) or behavioural difficulties, such as ADHD. It is recommended that the designer tests this idea in the following phase of the project.

Children seemed to have created a playful relationship with the object, the Storybell itself. Most parents reported that their child was able to exercise his/her agency through the Storybell, and it was considered as magical. **The Storybell has multiple affordances for the child**: it showed the child the actions they can take without having to consider how to use it – the shape of a bell intrinsically brought the child to shake it and that would call the reader; but it also opened to other possibilities such as playing, creating a special space of quiet and focus for reading and listening, stimulating curiosity and anticipation and exercising agency.

Readers also reported that they felt empowered by their participation in this project. In line with what research tells us about the benefits of IGL for adults, the readers mentioned they **felt valued, useful and recognized for their role, felt active and were able to teach children to trust other people** and older adults in particular. Additionally, they reported to have rediscovered the pleasure of reading, sharing experiences with peers (the other readers), enjoying the (virtual)company of children and they learned new skills. In particular, using the Storybell as a mean of communication and interaction also requires an openness to learn. The four **training workshops** organized at the beginning of the pilot were fundamental to the successful involvement of the readers in the project: they proved very useful to build confidence, develop skills and competences and to create a 'community' of readers. Because of the COVID-19 pandemic, it was only possible to conduct the training sessions online, and the planned peer-support amongst readers was not organized.

It is recommended that **professional development** focusing on intergenerational learning for staff and readers, reading aloud remotely and interactively and the peer-to-peer support between readers is further developed and remain a high priority in the next phases of the project.

The timing of the pilot coinciding with the first wave of the COVID-19 Pandemic in Italy added another dimension to the evaluation. Most parents and readers expressed frustration at the fact that the face-to-face meetings between children and readers which were originally planned could not take place because of the outbreak of COVID-19. Both groups recognized the importance of a **blended approach that includes remote reading and face-to-face sessions** in order to build and sustain relationships and to achieve a broader impact in terms of social cohesion. It is therefore recommended that in the next phases of the Project a combination of modalities is offered.

On the other hand, the COVID-19 pandemic was the perfect time to test a model of remote intergenerational reading. The Storybell proved to be very effective and valued in overcoming the constraints of the social distancing and lockdowns forced people to stay at home and minimize face-to-face contacts.

In conclusion, the Storytellers project proved to be an **effective initiative to facilitate intergenerational contact and learning** between young children and adult readers. The quality and intensity of the relationship can be improved by offering **continuity** and more freedom of choice to the children and the readers with regards to deciding who reads and when. The **Storybell robot serves its purpose as a playful mean of communication and interaction**, and actually offered multiple affordances for children. The role of parents was critical to the success of the pilot. In the future, when technology of the Storybell is improved and the app is functional, parents could have a more 'background' role. However, the project could benefit of a **blended approach** that combines remote sessions with face-to-face ones. It was impossible to test this modality due to the COVID-19 Pandemic, but this is the direction children, parents and readers indicate the project should go to be even more successful. It is the opinion of the TOY researcher that if the blended approach was implemented and the project **builds a broader network of services** (such as: schools, old people's

homes, community centres, playgroups, etc.) to connect children and readers, it could **achieve another important goal of intergenerational learning, social cohesion**.

Annexes

Annex 1

Intervista / questionario per i genitori dei bambini che hanno partecipato al progetto Storyteller (o chi ne fa le veci)

Respondent nr	Age	Gender	Relation to child	Age of child	Gender of child

1. Cosa pensi che sia piaciuto di più dell'attività di lettura intergenerazionale al tuo bambino/alla tua bambina?

………

………………………………………………………………………………………………

2. C'è qualcosa che non gli è piaciuto? Cosa?

………

………………………………………………………………………………………………

3. Quali sono stati i benefici dell'attività di lettura intergenerazionale per tuo/a figlio/a? (dal punto di vista relazionale, dell'apprendimento, etc.)

………

………………………………………………………………………………………………

4. Come si è creata e trasformata l'interazione tra tuo/a figlio/a e le persone anziane durante le settimane in cui ha avuto luogo l'attività di lettura intergenerazionale?

………

………………………………………………………………………………………………

5. Quale è stato il valore aggiunto della campana come mezzo di comunicazione/interazione?

………

………………………………………………………………………………………………

6. Credi sia un mezzo efficace per il fine dell'attività di lettura? Anche rispetto ad una video-chiamata o ad una app?

………

………………………………………………………………………………………………

7. L'attività era ben organizzata? (Logistica, facilitazione, materiali, ecc.) In caso contrario, cosa, secondo te, mancava?

....

....

8. La partecipazione attiva dei genitori è stata adeguatamente sostenuta?

Si / No

Come e perché?

....

....

9. Vorresti che tuo/a figlio/a partecipasse ad altre attività intergenerazionali in futuro?

Si / No

Per favore, spiega la tua risposta

....

....

10. Hai altre domande o suggerimenti?

....

....

Annex 2

Intervista / questionario per lettori che hanno partecipato al progetto Storyteller

Respondent nr	Age	Gender	How many reading aloud sessions performed?

1. Cosa ti è piaciuto di più dell'attività di lettura intergenerazionale?

………
……………………………………………………………………………………………

2. C'è qualcosa che non ti è piaciuto? Cosa? E come suggerisci di cambiarla/migliorarla?

………
……………………………………………………………………………………………

3. Cosa ha significato per te partecipare alle attività di lettura intergenerazionale?

(- Benefici: senso di utilità, autostima, apprendimento nuovo competenze, nuove amicizie/relazioni sociali, scoperta di aspetti di te che ignoravi, nuove emozioni, etc.)
………
……………………………………………………………………………………………

4. Come si è creata e trasformata l'interazione tra te e i bambini e le bambine a cui hai letto durante le settimane del progetto?

………
……………………………………………………………………………………………

5. Il fatto che le attività di lettura si siano svolte in remoto con l'uso della campana ha influito sulla qualità della relazione tra te e i/le bambini/e? Se sì, in che modo?

....

....

6. Quale è stato il valore aggiunto della campana come mezzo di comunicazione/interazione?

....

....

7. Credi sia un mezzo efficace per il fine dell'attività di lettura? Anche rispetto ad una video-chiamata o ad una app?

....

....

8. Come hai influito il COVID sulla tua esperienza in questo progetto?

....

....

9. L'attività era ben organizzata? (Logistica, facilitazione, materiali, ecc.) In caso contrario, cosa, secondo te, mancava?

....

....

10. La partecipazione attiva dei lettori è stata adeguatamente sostenuta?

Si / No

Come e perché?

....

....

11. Ora che le campane verranno riconsegnate, consideri per te terminate l'esperienza Storyteller/lettore(trice)? Cosa porterai con te?

....

....

12. Vorresti partecipare ad altre attività intergenerazionali in futuro?

Si / No

Per favore, spiega la tua risposta

……
……

13. Hai suggerimenti/idee per altre attività intergenerazionali?

……
……

14. Hai altre domande o suggerimenti?

……
……

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