An evaluation of professional's use of the Ida Institute My World tool

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Introduction

Play is essential for learning especially in the early years of a child's life. Play provides opportunities for all aspects of a child's development, providing meaning and context for learning. The Ida Institute's 'My World' tool was developed for use with children from about 4 to 10 years of age with all degrees of hearing loss using play as a means to understand the child's perspective of their hearing loss and providing them with the opportunity to become an active partner in their hearing care alongside the professionals that support them (Gregory, Parfitt, & Nielsen, 2012).

My World was designed primarily for use by teachers of the deaf, clinical and educational audiologists, teaching assistants, mainstream school staff and speech and language therapists. The tool represents three different environments, classroom, home and outdoors; cardboard layouts depicting these environments and a range of figures and everyday objects within them are provided to encourage discussion with the key aims of:

- Improved fitting and use of hearing technology
- Improved use of communication strategies by both the child and their communication partners
- Improved educational plans, with increased motivation and participation from the child

My World can be used in one to one sessions, in pairs or small groups with peers. It can also be used to collect informal language and speech samples and make baseline observations of the child's language skills and learning styles, which can inform further assessment and interventions. Meaningful use of the tool relies on the professional's understanding of its purpose and their skills in engaging the child in a My World session. To address this, a training module for professionals was developed by The Ear Foundation. The training consisted of lectures, experiential learning with the My World materials and video clips of My World in action with the following aims:

- To understand the conversational and play based principles on which My World is based
- To explore how My World can be used to explore issues such as the child's use of hearing technology, communication, thought and feelings
- To understand how to work together with children to solve problems which are most relevant to them
- To learn how to encourage children to work together as a team to understand others perspectives and points of view

To better understand professional's experience of using the My World tool and make recommendations to develop it further, an evaluation was carried out by The Ear Foundation, Nottingham.

The My World evaluation project

The Ear Foundation Research programme follows procedures laid out by the British Education Research Association (2011); all research projects are subject to internal and external review and approval. Participation was voluntary and all information provided was anonymised and stored in line with the Data Protection Act (1998).

Three Cochlear Implant centres in the UK and a centre for parents and professionals in Belgium offered training to professionals working with children on the centres' caseloads or through a professional network. Interested professionals contacted the centre and the final number of participants was only restricted by the venue size. In total, eighty one professionals took part in the training. Professionals who attended the My World training were invited to take part in an evaluation of the tool, which would include using My World with at least one child and completing an online survey about the experience. Twenty participants were selected at random.

The online survey was drafted using both open and closed questions, which were reviewed and agreed by members of The Ear Foundation team. Participants had approximately three months in which to use My World; a link was then provided by email and the survey was open for completion for four weeks with a reminder sent before it was closed for analysis.

Survey data was imported into Microsoft Excel for analysis by the team, providing both descriptive statistics and qualitative findings.

What did we find out?

Twenty professionals volunteered to participate in the evaluation; responses were received from seventeen. Of these responses, two were incomplete and excluded from the findings. These findings are therefore based on fifteen responses. Table 1 shows the range of professionals represented, Table 2, the number of times each participant used My World before completing the survey and Table 3, how the professional used My World on each occasion.

Professional role	No. of respondents
Teacher of the Deaf	11
Speech & Language Therapist	3
Educational Audiologist	1
Total number of respondents	**15**

Table 1: Professionals represented

Uses of Ida My World	No. of responses
Using Ida My World for the first time	15
Using Ida My World for a second time	9
Using Ida My World for a third time	2
Total uses of Ida My World	**26**

Table 2: Number of uses of My World

How did you use My World?	First time (n=15)	Second time (n=9)	Third time (n= 2)	Overall %
In a 1:1 situation	87%	78%	50%	**81%**
In a small group of 2-3 children	13%	22%	50%	**19%**
In a group of 3+ children	0	0	0	**0**

Table 3: How participants used My World

Using My World

Using My World is easy and engaging

When asked about the My World session, respondents generally reported that using My World was easy and enjoyable. Findings also suggest that professionals learn quickly how to use the tool, increasing in their confidence and getting more out with repeated use.

Statement about using My World	% of respondents who completely or somewhat agree with this statement		
	First time (n=15)	Second time (n=9)	Third time (n= 2)
Introducing the characters with the child was easy	100%	100%	100%
The child enjoyed playing with the characters	100%	89%	100%
Introducing the My World environments to the child was easy	100%	100%	100%
The child enjoyed playing with the My World environments	93%	100%	100%
Using My World made it easy to work out problems with the child	87%	100%	100%
Using My World made it easy to work together with the child to find a solution	87%	89%	100%
I felt confident to use My World to problem-solve with the child	93%	100%	100%

Respondents reported that the children enjoyed engaging with the materials

> *The child was very excited about using my world and keen to find herself and her friends in the characters. It was easy to engage her in the environment*

> *I was surprised at the characters the children choose to represent the people in their life I thought they would need characters that looked like that person but they didn't. They were able to fit the My World environments into their world*

> *The students were happy to substitute the characters and understood they were representative of their friend/other person/teacher*

Respondents found the visual and hands-on equipment helped in a number of ways

> *Having the tool to concentrate on and having a shared focus*

> *Using the characters enabled the child to show me rather than tell me things*

> *Student didn't have to find vocabulary for everything, I could see what she meant by where she placed the characters. Also, as speech production can be unclear at times, I was able to follow the conversation quite easily*

Made it easier for us both to understand/ ask questions

The visualisation also helps them to discover and identify their own goals, which means that they are more motivated, it is less confronting

Tackling ideas that without the characters and contexts I may have felt would be too abstract to get any useful feedback

They were in control as to what they shared [...] more information was revealed than might have been without the support of the characters

My World encourages children to have fun and play; the children seemed to respond to this more relaxed approach, encouraging participation, even those with limited language skills

Using the game they find it easier to communicate

They liked it because it was like a game. It was useful because you could role play different situations and the focus was on the figures

Using the characters to 'talk' rather than him feeling he was explaining

He seemed to enjoy moving the items around to make it like his bedroom/ classroom etc so that he could explain what he meant - where people would be in relation to him/ what made things better/ worse.

I thought the students became more relaxed when talking. Even the older ones like to role play scenarios that they could choose

It gave the pupil a chance to show things as she has a limited vocabulary

Using My World enables discussion of a wide range of issues

For each time that they used My World, respondents were asked to tick the issues that had been discussed during that session. In total, this provided 200 responses. Respondents used My World to talk about a wide range of issues and topics often within each session. This table demonstrates the range and frequency of issues discussed in My World sessions.

	First time (n=15)	Second time (n=9)	Third time (n= 2)	% (total no of sessions=26)
Using hearing technology	13	8	1	**85%**
Using assistive technology	8	6	0	**54%**
Communicating with friends and peers	14	8	2	**92%**
Listening to friends & peers	12	7	2	**81%**
Friendships	10	6	1	**65%**
Communicating with teachers	15	6	1	**85%**
Listening to teachers	12	7	2	**81%**
Listening in the classroom	12	7	1	**77%**
Being in the classroom	15	7	1	**88%**
Being outside	10	5	1	**62%**

- **Hearing technology**

Unsurprisingly My World was used to discuss issues of a child's use of their hearing technology

> *To support a cochlear implant child to be less self conscious of his implants when in the community*

> *To support child with transition and use of FM system*

> *To explore how a radio aid was being used at home*

> *To find out how well the radio aid was being used in school*

> *Has given me a lead into to talk to families about the importance of using speech processors and hearing aids at home*

> *We both felt this child would benefit from talking about how he felt about his implant in different situations*

- **Communication & Listening**

They also discussed issues of communication and listening in a variety of environments

The child did not really communicate much with his teacher and that his TA took over and that we needed to do work with him about going up to and communicating with other children

When discussing use of the radio aid, it did help the students to think about how they listened and when they found it useful. It also made them realise how much they were dependent on lip reading

We discussed how we attract attention and how we ask for help, how we access help independently etc

To discuss seating arrangements and bullying by a certain pupil in that class

To discuss areas of the home that might present difficult listening conditions and explore home routines with hearing equipment

Students were aware of things like where the teacher stood, they found it easier when the teacher addressed the class from the front near them and more difficult if they started talking from the back of the classroom (even with a Radio Aid). However, when others were whispering, or messing about (low level disruption so the teacher maybe did not notice), not only was there concentration affected but the effort they put into listening

Good for gauging students grasp of Theory of Mind concepts.

- **Other contexts and situations**

For professionals working with the child at school, using My World was found to be useful in exploring other environments that the professional may be less familiar with or have limited access to

To find out what the child does at home and how he relates to his family

To see how my pupil saw herself as related to her hearing peers and at home

Getting a new child used to me and gaining an understanding of him and his family

To find out about the children feelings about their listening experience and get an insight in their use of equipment at home

- **Feelings & Friendships**

My World also provided a way for talking about feelings and friendships in a non-threatening way

They loved playing with the tool and issues about friendships and playtime came out

To explore the children's thoughts and feelings about different situations, including ones they find difficult

To find out about the pupils feelings about being in mainstream class for lessons as opposed to a small group

Finding out about their own perception of their disability, their deaf /hearing identity

Help a student express their feelings about making friendships

My child finds it hard to relate to her hearing peers and does not like it when her deaf friends play with them. I wanted to try and explore the feelings and issues behind this and help her move on to develop friendships with hearing children

I don't think I would have got the whole story from questioning alone, the pupils acting out the issues with the characters made it clearer to me what was going on

- **Theory of Mind**

My World enables students to develop a visual in-road into social and emotional skills, and to start discussing how people may be feeling and the fact that they may not always show how they are feeling

Impact & outcomes of using My World

Overall using My World provided an insight into the child's perspective, enabling professionals to hear and respond to the child's voice

> *With the characters she re-enacted how miscommunication can effect interactions, e.g. prejudice and impatience etc, which gave me useful insight into her world*

> *They were in control as to what they shared [...] I noticed that they would start with a safe issue and then as I questioned them about the characters, we were able to get down to the real issues that were causing problems.*

> *My World is a great tool to have and use with primary age children, because so many resources are adult directed and don't give the child such free rein*

Professionals reported that not only did using My World enable them to address identified issues and goals; they also learnt new information about the child's personal issues and goals that they hadn't anticipated

> *I was looking at listening but friendship issues came in and we were able to resolve these*

> *Students ended up taking the discussion in slightly different directions. As these directions were very important to them and their understanding of situations, I felt I need to put my own agenda aside and follow their need to discuss issues that had arisen from the discussion*

> *I learnt some incidental information about the children which I would otherwise have missed*

Respondents often reported unexpected insights into the child's needs having used My World

> *I learnt that this student really doesn't have a clue about what goes on in the lesson. She smiles beautifully and nods so everyone thinks she's got it*

> *It made me realise how little the student was learning and there may be an underlying learning difficulty that is not directly connected to hearing loss*

> *I began to wonder if my students really understood the meaning of a 'friend'. It seemed like it was more about being part of a group/belonging*

92% of respondents reported that using My World had helped them to at least partially achieve the goal of their session. However importantly several commented that as are result of using My World, their original goal had changed to better address the child's needs.

> *Have now spoken to the SENCO who is putting in more direct support. Differentiation is also being looked at.*

> *It has given me the evidence to tackle the parents and school about sound proofing the hall*

> *We were able to come up with strategies for individual children and a short help sheet for teachers explaining what was more helpful and why*

> *I think the students became more aware of their own needs*

Resulted in finding a potential solution to why child was preferring to only use one processor, and with retuning, hopefully will result in him being able to consistently wear two again

We were not able to identify poor listening zones in house/home but we were able to discuss hearing routines. The activity then prompted us to work on other goals.

During the trial, respondents used My World a maximum of three times. However although they had only used My World over a short trial period; they were already noticing how using My World was having an impact on the child, both directly observed and also reported by others

The child asked a question of a stranger on a school trip and removed his hoody to do this. He found a safe place for the implant at home. It led to conversations with parents about where the implants are saved at home

His mum however, tells me it has also improved his attitude around the supermarket as we used it to role play a social story

One has started telling me more about her day to day problems in school, so will use it again to have a discussion about if these issues transfer to home or free time during the holidays

The child is starting to communicate with his peers and not let the TA talk for him

He is more able to say "I'm worried about...."

Respondents highlighted the usefulness of this way of working; seeing the effectiveness of this approach led them to reflect on and change their practice

I feel I have relaxed a bit so will ask more open questions and wait for a response, if student is hesitant, I now just add a little to the open question to help their thinking

I think if I used it more with small groups it would help me see how they perceive themselves, situations and their interactions at school and home. In turn, this would give me a better insight into what affects them and how I can help them overcome any difficulties and recognise and celebrate strengths and successes

I will use more of this type of role play in my practice as it gives an insight into the children.

I have to be conscious about using open questions not to influence the response of the child

The children's practice has not changed dramatically but ours has and I hope the families have

Respondents talked about how they were becoming more confident in using the My World tool and their intentions to use it in the future

It gave me ideas to use again. I will definitely improve on my use of it as I use it more

I intend to include it in my planning for next year

At the time, I felt as if the discussions we had about not wanting to relate to her hearing peers and not wanting her deaf friends to do so could have taken place just as well without

My World. However, on reflection, I think that it was helpful to have something visual and practical that my child could use as a stimulus for the discussions

Issues and suggestions
The respondents provided useful feedback about the issues they encountered using the tool; many had adapted the tool themselves and would like to see these changes incorporated.

- My World environments and objects
  They found the bird's eye view of the classroom/home harder to get their heads around

  The school environment and home environment worked better but the children were a little unclear about some of the areas of the outside environment and were distracted by it (asking about the large 'M' sign and what was down the steps)

  More furniture and things to put in the environments would be good

  The game needs to be more visually realistic maybe use real photos of objects etc

  The scale of some of the items could be improved and the bird's eye view of furniture was a bit confusing. Perhaps the cardboard tables could bend to stand up?

  A 2D backdrop and accessories might be easier to relate to than a 3D aerial view of the world

- My World characters
  Child got confused about where she sat and who sat with her so we wrote name labels and blue tacked them to the characters

  The characters took some accepting by this girl and I think this was because she felt they didn't represent her enough.

  I found it more difficult to use with less able children as they often got confused with the characters and found it difficult to recall what happened

  More cultural representation

  More ethnic characters

  Name cards, text balloons, Velcro to attach accessories on the characters

  Wipe clean outlines of people so child could draw themselves/ others on to the people outlines to make them more personal
  I have adapted the characters with faces of friends for a child in nursery

  It would be helpful if the figures had a face on one side and a back of the head on the other so that it was clear when characters had their back turned.

  More visuals to make it even more relevant to a wide range of pupils: e.g. chairs for tables in class, a wider variety of multi-ethnic people, etc.

- Hearing technology

  More hearing aid pics - and different types.

A way of fixing hearing aids/ CIs on to the people

CI/hearing aids more in perspective, size wise [...] Children wanted to stick HA and CI on their characters but they are not in proportion with the characters

- General design and functionality

A little less fiddly as I kept knocking over the characters

 The figures are too flimsy

Laminated pieces

Respondents also provided useful tips and advice to others using My World for the first time

- Allow time

Allow longer sessions out of class, given the first child I used it with more time to just play with the set before jumping in

Let the pupils explore the characters and objects for longer at the start as I was too keen to get on with the objective of the session

- Planning & preparation

Offered less pictures for use as he then wanted to use everything

Try to limit the targets set

Thought more in-depth beforehand about what scenarios and questions would be most useful. Next time, I would use it with a group of 2-3 children to get a dialogue between them about how they feel when the others act in certain ways

I would have chosen to list the questions I wanted to ask more fully

I would say that it takes a bit of time to prepare (attaching photos of the children and the staff to make it personal and worthwhile) but, with thoughtful application it can be useful in finding out more about children in regards to many different areas (audiology, social, emotional, etc.)

Maybe having the TA there to see how the child saw her interaction

Discussion

Through play she showed me her understanding of what it is like to have hearing and hearing loss

The long-term goal of working with children with hearing loss is to help the child develop the independence, confidence and strategies to succeed and participate in the world. Research shows that play is an essential part of this development, learning important skills, ranging from "verbalization, vocabulary, language comprehension, attention span, imagination, concentration, impulse control, curiosity, problem-solving strategies, cooperation, empathy, and group participation" (Smilansky & Shefatya, 1990). Play provides opportunities to express thoughts and feelings, to problem-solve and experiment with new ideas and strategies in a reassuring and risk-free way. It provides a scaffold to help children move from concrete to more abstract understanding and actively engages children in personally relevant activity and talk, which helps them to remember and learn, rather than simply being told or shown by someone else. Despite this, play is becoming less common within the school curriculum (Bodrova & Leong, 2003) and once a child is in school, important opportunities to develop these skills are potentially lost.

This study explored the findings of professionals working with children with hearing loss who used the play-based tool, My World over a period of three months following training provided by The Ear Foundation. Despite some issues around the My World materials; respondents largely overcame these, reporting that using My World was easy right from the start, that their confidence using it grew with repeated use and in turn, they found it more useful. Professionals found that the tool engaged children easily, that they enjoyed playing with it and that the use of concrete characters and environments helped children to talk about more abstract issues. Not only did they find that My World helped them address the identified aims of improving hearing technology, communication and listening strategies and increased child motivation and participation, but also a wide and sometimes unexpected range of issues arose.

An important foundation for long-term success is self-determination, a combination of many skills which underpin the ability to make decisions for yourself (Luckner & Sebald, 2013). Developing self-determination means having the opportunity to make choices, to learn from success and manage failure. It is about having self-awareness and the ability to regulate your behaviour; learning to problem-solve, to set and work towards goals and to develop self-advocacy (Gregory, Harbor & Allen, 2017). However, children with hearing loss are more likely than typically developing children to have an external locus of control (Dowaliby, Burke and McKee, 1983); in other words, to feel less control or responsibility for their own actions and in turn make less effort to create change. They may often find themselves in teaching or intervention that follows an expert model, with the professional leading the session, asking the questions and setting the goals. However the My World training encouraged professionals to use known counselling techniques such as observing, active listening, providing contingent responses and reflecting on actions taken. By using this approach, My World provided a platform for developing self-determination by encouraging the child to take a lead, to share issues that are meaningful to them and to work through ways they could improve the situation. Professionals reflected on the effectiveness of this approach, which led to open dialogue, successful communication and unexpected insights; by changing their interaction style, they recognised that it changed the information shared by the child.

Children with hearing loss often have difficulties with communication, ranging from limited vocabulary or ability to structure a sentence, unclear speech affecting intelligibility or a poor grasp of abstract concepts such as feelings and the language to describe them. This can make talking about situations other than the current context or about "tricky" issues like friendships all the more difficult. However for professionals, such as teachers, audiologists or speech and language therapists, these are often issues which they would like to explore with the child and it can be difficult to engage a child in discussion about their wider life without resorting to a Question and Answer-type approach. This type of directive style typically does not lead to open dialogue; research shows that in fact it leads to language use, which is less elaborate and spontaneous, than a more open approach (Wood, 1984). Professionals reported that using My World provided a shared, visual context, which seemed to ease and facilitate communication, by reducing the load on vocabulary knowledge, speech intelligibility and linguistic ability, helping children to focus, encouraging more open dialogue and avoiding the need for direct questioning.

Using My World enabled professionals to 'hear the child's voice', to see things from their perspective and better understand their individual issues and needs. Professionals recognised the value of putting aside their own targets and agenda; that by working out problems and finding solutions together with the child, goals and actions were more relevant and meaningful to the child. For the child, this active engagement and increased sense of ownership is also likely to increase the chance of carryover into everyday life and despite the relatively short trial period, change as a result of using My World was reported by the professionals. Using My World may also provide a useful tool for capturing the outcomes of the goals over time.

There is a growing understanding of the important role of Theory of Mind in a child's social, emotional and academic development. Theory of mind is the ability to recognise your own thoughts and feelings, understand that others have different perspectives and predict how others may think and respond. Children with hearing loss typically display delay in the development of theory of mind and frequently experience difficulties managing social situations and friendships (Westby & Wilson-Taber, in Moeller et al. 2016). Although few professionals chose to use My World specifically with the goal of developing theory of mind; the tool provided a shared reference point for discussion from different perspectives, giving insight into how they perceive and manage social situations and the opportunity to put themselves "in another's shoes". Working in this way helped professionals support children to think and talk about other views, opinions, feelings and experiences; to think through and practice for real-world situations, helping children to learn and generalise skills; and to provide the linguistic input to put these more abstract concepts into words.

Successful use and meaningful outcomes encourage repeated use and many professionals talked about their specific plans for continued use of My World and their intention to encourage others to use it too. Interestingly, the language of the professionals in their responses (for example, "I think", "It made me realise", "I began to wonder") suggests that My World encouraged self-reflection, which may develop their wider professional practice.

Although no professionals used My World in a group of more than three children; this may in part have been due to the short length of the trial period providing limited opportunity, perhaps choosing to develop confidence with the tool first.

Recommendations

- Professionals working with children with hearing loss need to be more aware of the importance of play and its role in longer-term outcomes for the child
- Many participants did not appreciate or anticipate the value of My World until they used it. More widespread awareness and use of My World should be promoted using professional testimony to support the message
- Training plays a key role in using My World effectively. Development of the training package to reflect the professional testimony and outcomes should be offered to professionals considering using My World
- Longer term outcomes and evidence of sustained change would also support use of My World

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