

iPad – a Tool to Improve Quality of Life for the Child and the Family

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Foreword

In recent decades there has been an accelerated revolution in the field of technology. This revolution already has, and certainly will have in the future, far-reaching implications for the quality of life of people with disabilities.

For most people, technological devices make everyday activities easier and our lives more efficient. But for people with disabilities, technology turns reality around. For some people with disabilities the iPad can be the difference between living in the community and being socially isolated.

The iPad has advantages that make it popular with millions of users around the world. These advantages include portability, the possibility of using the device in different places, simplicity of operation, the sensitive touchscreen, flexibility of use, and the ability to adapt it to the required accessories.

The iPad can be used to help children and adults with communication problems, motor difficulties, or cognitive difficulties. By using the iPad they can progress by acquiring personal and social skills, and integrate in the community in a normative way.

Use of the iPad by people with disabilities has two main advantages:

- 1) Promoting inclusion – use of a normative, accepted and interactive device promotes good connection with the individual's family members and with other people in the community, thus advancing inclusion in society.
- 2) Personal adaptation of aids - the device, accessories and applications – to the unique ability and needs of the user.

- 3) The iPad offers a wide range of possibilities for use. It can be adapted for personal use by children or adults with different disabilities. It is possible that a particular user will have need of certain adaptations, or that in a particular environment, different people will need different adaptations.

The iPad as a means of self-expression for the child

“The iPad was love at first sight!”, write Yifat and Amir, the parents of 11-year-old Itamar who attends the special education school at Beit Issie Shapiro¹. Itamar began using the iPad two years ago, and in this time he has learned to communicate better with his environment, significantly expanded his vocabulary, and even learned to create sentences. “You could say that the iPad is much more than just a device; it is his mouthpiece, his spokesperson, and the thing that he loves best. Through it, Itamar experiences himself as having value and a major presence, both at home and in the family.”

Implications of use of the iPad on the family

Many parents talk about the change in their families brought about by use of the iPad: in the family dynamic, daily routine, and quality of their lives. This change is manifested in a number of ways:

- The child’s feeling of self-importance and efficacy is reinforced, and as a result, his or her independence increases.
- Children and adults with disabilities learn to occupy themselves in their leisure time with apps that are adapted to their age and abilities. They demonstrate involvement, motivation and interest. This also gives their parents more free time to themselves.
- Use of the iPad offers many more opportunities for family entertainment. The iPad helps some children to communicate, occupy themselves, and calm down, and as a result they are able to take part in family events and go out with their families to places they could not previously be taken.

¹ Yifat and Amir Shuster (2013). The impact of use of the iPad on the connection between Itamar and his brothers - Augmentative and Alternative Communication: Isaac Israel Yearbook, issue 29.

Professionals and parents often use the iPad as a tool for alternative communication, but it is important to understand that the iPad is an essential tool, enabling the child to create routine communication with family members and integrate optimally in the family.

Itamar's parents say that the iPad allows Itamar to have a variety of interactions with his two younger siblings. Seven-year-old brother Yoav says: "On the one hand, it's not much fun having a brother who is not typical, who can't talk to me or play with me very much. I'd like to hear his own voice. But on the other hand he can talk to me through the iPad, and I record new things for him for school."

The iPad offers family members opportunities for interaction and playing together.

iPad and leisure

The iPad allows people with disabilities to enjoy appropriate and independent leisure activities. When children can use apps that are adapted to their special abilities, they can make progress and develop in many areas of life, in particular in the social sphere; they develop greater independence, and are not dependent only on others to "set them in motion".

Hanni, a teacher at the school, says: "During a class visit to a café in the community, the students spent an hour and a half in the café, and use of the iPad was one of the tools that helped us during this outing. The students used the iPads to communicate, and also to order refreshments. They also used the iPads to play a game with the staff (taking turns), and to play by themselves. There was a pleasant and leisurely atmosphere in the group. The students were calm and relaxed, and most importantly – happy! This experience in the café proved to the parents, as well as to me as a teacher, that the students could participate in family outings and feel that they are part of regular society, because, like everyone, they too enjoy eating and drinking in a café, and like everyone, they too are addicted to modern technology..."

Betty, the mother of Roni who attends the Aaron De Lowe Early Intervention Center at Beit Issie Shapiro, says: "The iPad came into our lives about 18 months ago, and it brought about a substantial change for Roni and the family as a whole. Before, Roni needed her team of carers or us, her parents, in order to play. Because of the motor



disability in her hands, she needs assistance in holding and playing with toys. A year and a half ago we received an iPad as a gift. We immediately identified the potential of this device, and, with the advice of the professional team caring for our daughter at Beit Issie Shapiro, we offered it to Roni for her use. On the team's recommendation we downloaded a number of

children's game apps that were suitable for Roni. Roni, with her natural curiosity, immediately connected with the screen and began to develop the ability to play independently. Despite her motor disability, and thanks to the simplicity of use of the device and the interest it generated, Roni began to use her hands for the games and apps. The games increased her motivation to use her hands, and so also improved her motor function. Another significant advantage was that Roni was able to play with the iPad by herself. So it reinforced her sense of independence and allowed the rest of the family to do other things. Because Roni is so smart and quick, we discovered that she quickly utilizes the games to their full, and from time to time she asks for new games to try. Unfortunately, it is difficult for us to comply with Roni's request, as games adapted for children with special needs are very few, and even fewer are in Hebrew. We have no doubt that the need for games and apps that are accessible to children with special needs exists, and Roni is just one example of this."

Use of the iPad in the education system and other frameworks

Noa, an occupational therapist and technology coordinator at the Technology Consulting Center at Beit Issie Shapiro, says: "Over the past three years we have seen many advantages to using the iPad, and in practice, in many ways it has been a revolution. This revolution has been manifested in improved skills, initiated playing, improved interactions both between the children and the staff and among the children themselves, and more.

One of the most important advantages of the iPad is that it is normative and popular. In the past we used "special" tools that had to be purchased in "special" places, and required explanation and instruction before use. This resulted in

difficulty in assimilation among the staff, and it was often necessary to enlist the parents in the task.

The iPad, as a normative and accepted tool, helps strengthen the connection between the staff and the family, and parents take the initiative and willingly join the instruction sessions. In the course of our work we have found that we can use the iPad in order to share school experiences with the parents. This is important and meaningful for the successful treatment of the child.”

Hanni, a teacher at the school, says: “As a teacher, the iPad has opened up a channel of communication with the families of the children in the class, and this means the whole family – both parents and siblings. Use of the iPad enables me to share part of the child’s experiences during the day with the family. We keep photographs and albums on the iPad, and also a database of the material studied in school, meaning that the family can be part of the school experience. With the iPad, we can keep an “audio notebook” for the families, a lively solution that is far more attractive than the usual notebook. We regularly send a daily message which promotes working together and increasing family involvement.”

The behavior of the staff differs between a child or adult with disabilities, and is intended to enable the development of a more direct connection with the community and society. At school, the iPad and “typical” apps are used, and the children take the device wherever they go, even outside the school framework. In this way, they don’t feel different and they are just like all the other children. In the frameworks in which people with disabilities live, learn and work, it is important for them to be engaged in age-appropriate activities. The iPad makes this possible, because it has no age limit.

We are certain that the fact that this is a normative device is meaningful to the family and the child, and even more so with regard to an adult.

At the Passover holiday, for example, the students received an interactive Passover Haggadah, built with the Tiny Tap app. After studying the Haggadah ahead of time with the iPad, the students showed an interest in the subject and were able to participate in the Seder service with their families.

iPad as a tool for inclusion

Eitan, of the De Lowe Center at Beit Issie Shapiro, takes part in an inclusive activity. Every week he goes to a typical kindergarten near his home, and is included in social activities with the other children of the kindergarten. Eitan goes to the kindergarten equipped with his iPad, and uses it to communicate with the children.

Inbar, Eitan's mother, says: "The iPad, as a normative device, blends in very well with the surroundings. It is light and easy to carry, and Eitan takes it around with him everywhere. In order to protect the iPad we bought a special cover to protect it from damage, and a stand that allows it to be put down in different positions. The iPad is very easy to use, everything is simple and interactive – from the operating system to the communication app.

Eitan uses the TouchChat app, which is an AAC device - Augmentative and Alternative Communication. He can use the app to put across complex messages: make his voice heard, express his opinions, and share experiences with those around him. For Eitan, the iPad is mainly a communication tool, but he also uses it for learning and play. All these properties are contained within one small device.

The fact that Eitan talks by means of the device provokes considerable interest at the kindergarten. At the encounters, it is clear that the children are waiting to hear him speak. They really enjoy hearing Eitan's experiences recorded on the iPad, and love hearing him use it to call their names. Some of the children have even recorded their names for themselves. In this way, they feel a partnership with Eitan."

Inbar adds: "A few months ago, I joined a trip with all the children of the kindergarten. During the trip I took photographs of Eitan and the children, and then I wrote a story describing the experience through a special iPad app. A few days later, Eitan went to the kindergarten and shared the story with everyone. The children gathered around him, and really enjoyed hearing about their joint experience and seeing their photographs together with Eitan."

Another special experience Inbar shared with us: "One day, when I arrived at the kindergarten with Eitan, I heard one of the children asking his mother if he could come over to us in the afternoon, or in his words: 'Mum, can I visit Eitan with the iPad?' I was very moved to hear his request!"

Other children and youngsters learning in special education frameworks or mainstreamed in regular education also benefit, like Eitan, from better integration in the regular frameworks and activities intended for the entire community. The iPad is an important and essential tool enabling them to break through the restrictions of their disability and be part of society. It can be taken wherever they go, and used with relative ease. At Beit Issie Shapiro, the children use the iPad even in the swimming pool – with the necessary adaptations, of course.

The Technology Consultation Center at Beit Issie Shapiro

Beit Issie Shapiro, with the support of the Ruderman Family Foundation and others, has undertaken to develop a center of expertise in use of the iPad for people with disabilities, their families, and the professionals treating them. The center was established in order to improve the quality of life of children and adults with special needs, and promote their inclusion in the community. This is achieved by developing and adapting touchscreen solutions, evaluation, research, pooling and developing know-how in the field, developing modules for adapting use to the individual's special needs, and assimilating use of the iPad in different frameworks and environments: at home, in educational frameworks, in the community, in housing and employment.

The center operates in a number of spheres:

1. Consultation and guidance for families in the field of technology.
2. Developing a system for training, instruction and accompaniment of professional staff in different frameworks.
3. Adapting existing apps for children with various disabilities.
4. Consultation and guidance for app developers, to increase awareness and partnership in developing adapted and accessible apps.
5. Setting up a website and blog on the subject intended for professionals and families.