

## IAN LOUGHLIN

Ian Loughlin is the Information Manager at Inclusive Technology.

"I'm quite overwhelmed by the amount of varied sessions available live - and plenty of prerecorded sessions to keep us occupied and learning. Such a lot of catching up to do. At least we have got until June to catch up!".

# ATIA 2021

The ATIA 2021 virtual event provided a wealth of presentations, both live and pre-recorded sessions, covering a wide range of areas, products and topics.

Due to the UK/US time difference, it meant that I was unable to attend full sessions as they were happening, so it was of great benefit that recordings of live events were also made available.

In order to identify which events would be of most benefit to my role of Information Manager, I divided sessions into three distinct learning principles:

**Learn** – gain knowledge of new and emerging technology

**Understand** – gain knowledge of established technology and working practices

**Expand** – further prior knowledge of established technology and working practices

#### Learn

## **Example:**

· Intro to eSight 4: A Life-Changing Medical Device for People with Low Vision

It is important in my role that I keep up to date on new and emerging technology. Inclusive Technology supply several different software solutions for users with visual impairment and we receive many queries regarding such products, so it was beneficial to learn what new visual enhancement hardware was available and how this type of technology would differ to software-based solutions.

## The aims of the session:

- · Learn how eSight's new technology benefits people with low vision or legal blindness
- · Understand and identify the new features of eSights next generation medical device
- · Hear case studies and learn first-hand how the technology has improved the lives of users

The background, development and features of eSight 4 were clearly presented. This was put into further context when statistics addressing the issue of visual impairment worldwide were discussed. There was also specific focus on exactly how the technology works and for what eye conditions and users it is effective and suitable for.

A demonstration of the product provided a clear understanding of its ease of use and functionality, in particular the products zoom, contrast and auto-focus features. This is of great benefit to my role when advising customer of the suitability of the product and how it works.

Several case studies were presented that highlighted the issues users had encountered when using alternative software and hardware-based solutions. It was proven that eSight 4 had enabled users to be more productive and confident in their work and life and had alleviated heath issues.

A video that included testimonials from several users highlighted the issues that those with a visual impairment encounter every day and how the product provided a solution for these issues and improve the lives of users considerably.

The insight into the eSight product range that I gained from the session proved to be of great value and is something that I can now inform customers of. The sessions takeaway that eSight 4 can empower individuals to achieve their goals, improve their independence and create a more inclusive society I felt was a strong message and delivered effectively.

### **Understand**

## **Example:**

• Effectively Implementing Alexa for Environmental Controls in the Home

In my role I am regularly asked for advice on products that we do not supply but I should be aware of. This was an opportunity to gain understanding of speech recognition technology and understand what benefit this type of technology was providing to assistive technology users.

The session described the benefits of Amazon Alexa and highlighted three important points to consider when purchasing a voice assistant device; ensure that it is readily available and affordable, easy to integrate and robust and accurate.

Examples of voice recognition systems and the devices available were presented as well as examples of what environmental control operations they would enable the user to do, such as lock doors, turn on lights and operate a television and thermostat. A video example was also presented of using voice recognition to operate a bed.

Devices and settings that would be of benefit to the assistive technology user were highlighted such as how to enable auditory feedback, change the wake word and create touch shortcuts for those unable to access by voice. Advanced setup procedures such as creating a routine for those who have difficulty speaking were also explored.

The presentation gave me a greater understanding of speech recognition technology and how this can be of benefit to our customer base, particularly regarding environmental control and increasing the users level of independence.

#### **Expand**

## **Example:**

· Smells Like Teen Spirit: Using gaming and social media to increase engagement

Acquiring and providing knowledge of access device such as eye gaze, alternative mice and switches is a large part of my role. As this session was to cover such devices it was of great interest to further my knowledge of these popular products and learn of working practices.

The presentation provided good examples of eye gaze technology, how it works and examples of the different eye trackers currently available. The video example of Brad playing games and using eye gaze to communicate via social media and draw pictures were of great benefit as it went to highlight what users can achieve with eye gaze access.

Head pointing access was presented with details of how this works, examples of head-mouse devices and the advantage of macOS compatibility. A video example from Boston Children's Hospital, demonstrating how to make a hands-free call using a text to speech app, was of great benefit.

A further video demonstrating computer control using head pointer on a Mac computer by user Christopher Hill was also beneficial in that it made me aware of the setup process and the extent of the accessibility options available.

The session also provided a good overview on adaptive mice and switches, looking at the advantages of using such devices, examples of them, demo videos and what specific benefits each device brings to the user.

Examples of ways to motivate and provide entertainment for users through using different access methods were presented (play fact or fib on Alexa, access YouTube player through eye gaze on Grid 3 etc).

The session concluded with several useful case studies which detailed users accessing an iPhone to dictate texts, using the Assistive Touch button, stylus and head mouse to operate an iPad and operate an Xbox adaptive controller and switches for gaming.

#### Conclusion

#### **Example:**

By approaching the sessions under three adopted learning principles I was able to effectively further my knowledge of assistive technology, gain an understanding of established products and learn of new and exciting developments.

Hearing first-hand accounts from AT professionals of the benefits of products and learning of the development of the users through the accompanying case studies illustrated the challenging work of those who continue to push the boundaries of assistive technology and proved to be both inspirational and motivational.

In addition to this, the presentation handouts that included a copy of the presentation and links to videos shown and websites referenced will continue to be a major source of reference.

I'd like to thank the British Assistive Technology Scholarship for giving me the opportunity to take part in the event and further my knowledge which will be of great benefit to the customers of Inclusive Technology.

Final words to Charles Lim, Chief Technology Officer at eSight:

'Innovation yields true advancement when the discussion switches from "what we can do for this population" to "what this population can do for the world with just the right tools and opportunities."