

# CDP Update

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Season YEAR

Device Spotlight  
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## Communication Device Spotlight

**tobii**  
**dynavox**

### Introducing the I-13! Latest in EyeGaze Tech!

We had no idea there would be a new EyeGaze device as soon as this. The I-12+ has been ,and will continue to be a wonderful and effective device for clients who require a large screen with or without Eye Gaze control.

The I-13 is the updated version of that device. What are some of the differences you ask? Well, let me tell you:

### NEW FEATURES

1. The I-13 is slightly larger than the I-12 (the names refer to the screen size). Tobii DynaVox also sells the I-16 (and previously the I-15), but CDP has not found the need to have devices with screens as large as that.
2. The front of the I-13 has customizable eye gaze accessible adaptive buttons.
3. The camera has been updated to the latest IS5 technology, meaning faster and more accurate eye gaze access.
4. Streamlined design, that is lighter in weight than it's predecessor, while maintaining battery life AND powerful speakers.
5. Reduced screen glare for easier use outdoors.



6. A rear facing 'partner window' on the back of the device, allowing for face to face conversations. (You can control whether this screen is on, types as you go, or waits for you to speak the message).

### SAME GREAT FEATURES from I-12+

1. Offers multiple access method options (touch, scanning, etc)
2. Powerful, clear speakers and good battery life
3. Built to be more durable than a standard tablet
4. Easily mounts to some of the most common mounting equipment (including Daessy)



### Consider the I-13 for clients who:

- Require a large screen with advanced eye tracking as an access method
- Have very specific positioning needs and have support/a team that can manage a large device

# Access and Selection Method Spotlight

## Computer Control - Eye Tracking

In conjunction with the Tobii DynVox I-13, a new way to control the desktop was released. The software is called Computer Control and it's a whole new way of using eye gaze to control the desktop of your computer.

Previously having used the Windows Control version of the program, I can say that I think the changes are fantastic! This software is for those clients who not only need access to a device with Speech Generating software, but also require access to external programs such as the internet, notepad, etc.



One of the main differences is that Computer Control is intuitive and works on a radial menu format. The radial menu allows the user to look at a target and a small round symbol with a circle and 6 dots shows up (see image to the left), once you glance at that symbol you get access to all the options in the menu (see image below). This menu allows you to have more control over your selections. Some of the main features are explained below:



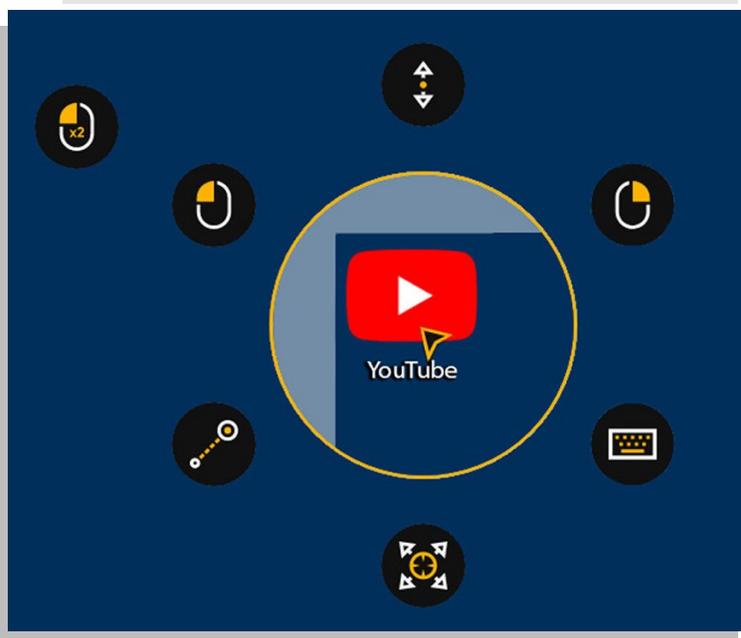
Scroll - set the scroll wheel in the centre of your page and then look up, down, left or right, to control directional movement on your page

Left click & Double click - functions in the same way as a left mouse button

Right click - functions in the same way as a right mouse button

Click 'n Drag - allows the user to select an item, then place it somewhere else on the screen, just like a left click and drag with the mouse.

Keyboard - used for all your text input needs!



Tuning - allows the user increased fine control of the position of the cursor. This feature helps when trying to select very small targets.

### Consider Computer Control for those clients that:

- Require eye tracking as an access method, AND
- Desire the ability to control the entire computer (outside of the Speech Generating Software)
- Have the cognitive and technical skills to be able to do so.

# Clinician's Corner - Simpler Spelling

## The case for Simpler Spelling - this is not new, but it was new to me!

We came across an interesting article titled: [Simpler spelling may be more relevant than ever](#). It was written by Christine Ro, and published by BBC Worklife in June 2019. The article starts by asking:

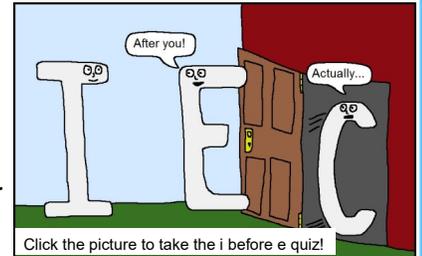
***“Are you okay/ok with spelling shortcuts? If not, ur 100s of years 2 l8”***. I thought it was worth looking into, to see what simpler spelling is really all about. What I found out surprised me and might surprise some of you as well!



**\* See below for excerpts from the above mentioned article:**

*“The complexity of English spellings has been bothering people for nearly as long as English has been written down. They argue that inconsistent spellings make English unnecessarily hard to learn. The English Spelling Society, a UK organisation (teehee - spell check wants me to change the 's' to a 'z', AND it also doesn't like teehee) pushing for easier spellings, [even argues](#) that there's a link between difficult spelling and higher crime, with illiteracy pushing people into a life of illegality. While that argu-*

*ment might be a stretch, it's clear that non-traditional spelling does [create a bad impression](#). Compared to the UK variants, US spellings are easier for non-native speakers to learn, being shorter and slightly more phonetic. These US spellings are a legacy of dictionary pioneer Noah Webster's movement for simplified spelling. This movement sought to cleanse English of double and silent letters, as well as other inefficiencies related to orthography (the system of writing and spelling words). There was a practical as well as a political element to this. Not only would learners find it easier to master simplified spellings, Webster reasoned, but humbler spellings were actually more democratic, and would help differentiate the Americans from their recent colonial masters across the pond”. “One group that might be helped by simpler spellings are people with [dyslexia](#). In linguistic terms, English is opaque, meaning that there's little correlation and consistency between its spoken and written forms. What you read and what you say can seem very different. Finnish and Spanish, in contrast, are more transparent. So “kids learn to read English slower than kids who learned transparent languages like Spanish, Italian, Czech, German”, says Liory Fern-Pollak, a cognitive neuroscientist at University College London”.*



*“In the early days of the internet, there were neo-Websterian attempts to rationalise English spellings [as part of “netspeak”](#). This gave the world “LOL” and some phonetic respellings, e.g. “luv u” and “cuz”, though abbreviations like “hi school” haven't endured. Of course, some of this predated online culture. **Prince, that orthographic pioneer, insisted in 1984 that Nothing Compares 2 U**”.*

Would you be surprised to learn that this is a debate that has been ongoing for ages?! I was able to find an article from **1914** written by W. H. Wilcox, titled, [The Teaching of Simplified Spelling in Normal and Elementary Schools](#). So, what was the plan in the early 1900's? *“One thing, at least, elementary schools can do at once. They can teach the simpler forms that are already recognized, in the dictionaries, practically “the three hundred list”... “This seems to be all that public sentiment with tolerate at the present time. Any teacher that finds public sentiment in [their] community more liberal can go further. For the present however, the work must be primarily agitation and education. If the rising generation is inoculated the final victory is assured, but the issues at stake are too tremendous to be sacrificed to haste or yielded to unreasoning opposition”.*

For those of you interested in “the three hundred list” you can find it here: [1906 Simpler Spelling](#) or click here, for the [Handbook of Simplified Spelling \(1920\)](#). **Even tho you may have wished to be present when it was discust in the past, turns out, you haven't mist your chance. The debate rages on. Good-by for now, CDP.**



## ISAAC Canada - UPDATE

So, we've done it. We submitted our proposal to be the host city for ISAAC 2024. Thank -you to everyone who took the time to complete our brief survey. It looks like there are many folks interested in attending and helping out! That's great. And for those of you who have laundry to do, I get it. I TOTALLY get it.

As soon as we are able, we will post a copy of the submission on our website. Feel free to take a look if you like! Fingers crossed we get a call back!

**CDP Update Winter 2020**



# Education and Resources - Free Webinar from CDAC

## Supporting Patients with Vulnerable Communication in Healthcare Settings

I came across this webinar not that long ago, and even though it's a couple years old (June 2017), I thought it was valuable to share. This is an issue that has been of particular interest to me and the Communication Devices Program.

As described in the content summary for the webinar: *“Current research documents causal relationships between poor patient-provider communication and poor patient outcomes, medical errors, and increased healthcare utilization. In addition, there is ample evidence to demonstrate that effective patient-provider communication increases the likelihood that a patient’s problems are diagnosed correctly, patients understand and adhere to recommended treatment regimens, and patients and their families are satisfied with the care they receive. Effective communication between patients and providers is increasingly being viewed as an essential component of quality healthcare and patient safety, as well as the basic right of every patient. This webinar will discuss and illustrate the role that communication tools, technologies and strategies can play in addressing patient-provider communication issues across healthcare settings. We will consider ways in which members of the professional community can support effective communication with vulnerable patients using case illustrations”.*

The webinar is hosted by [Communication Disabilities Access Canada \(CDAC\)](#), and is presented by: Sarah W. Blackstone Ph.D., CCC-SP. President, Augmentative Communication Inc.

If you are interested in more information about this issue, you can also click the following link for a 2008 article titled: [Impact of patient communication problems on the risk of preventable adverse events in acute care settings](#). Written by: Gillian Bartlett PhD, Régis Blais PhD, Robyn Tamblyn PhD, Richard J. Clermont MD, Brenda MacGibbon PhD. Article **BACKGROUND**: up to 50% of adverse events that occur in hospitals are preventable. Language barriers and disabilities that affect communication have been shown to decrease quality of care. We sought to assess whether communication problems are associated with an increased risk of preventable adverse events. Article **INTERPRETATION**: Patients with communication problems appeared to be at highest risk for preventable adverse events. Interventions to reduce the risk for these patients need to be developed and evaluated.



## Have you met Q? The First Genderless AI Voice

[This is what a genderless AI voice sounds like - and this is why it matters](#), an article posted on WeForum, featuring the voice called Q. It was created by Virtue Nordic, in collaboration with [Copenhagen Pride](#), academic researchers, the public interest group [Equal EI](#), and an assortment of production and sound studios. **The following was taken directly from the article:** "...Q is also a significant step forward. [Wired magazine](#) rightly called it “the genderless digital voice the world needs right now.” And, according to Emil Asmussen, associate creative director at Virtue Nordic, and Ryan Sherman, senior creative, the world may even get Q on devices soon. The team is “currently in dialogue with several companies—including some of the big four”... “Adding a voice like Q’s to a menu of audio options would address more than one ethical dilemma. As Q articulates in its introductory recording, it would make tech more inclusive by recognizing people who identify as non-binary, a population that’s becoming increasingly visible as social norms change. “It’s because Q is likely to play with our minds that it is important,” Kristina Hultgren, a linguist who was not part of the project, told Wired. “It plays with our urge to put people into boxes and therefore has the potential to push people’s boundaries and broaden their horizons.”

Click the picture to the right for an example of what Q sounds like. You are able to slide the voice up and down between 106 and 175 Hz, with the perceived neutral frequency, and Q being at 153 Hz.

This is very exciting, and it makes me wonder if genderless synthetic voices for people using AAC will be next?

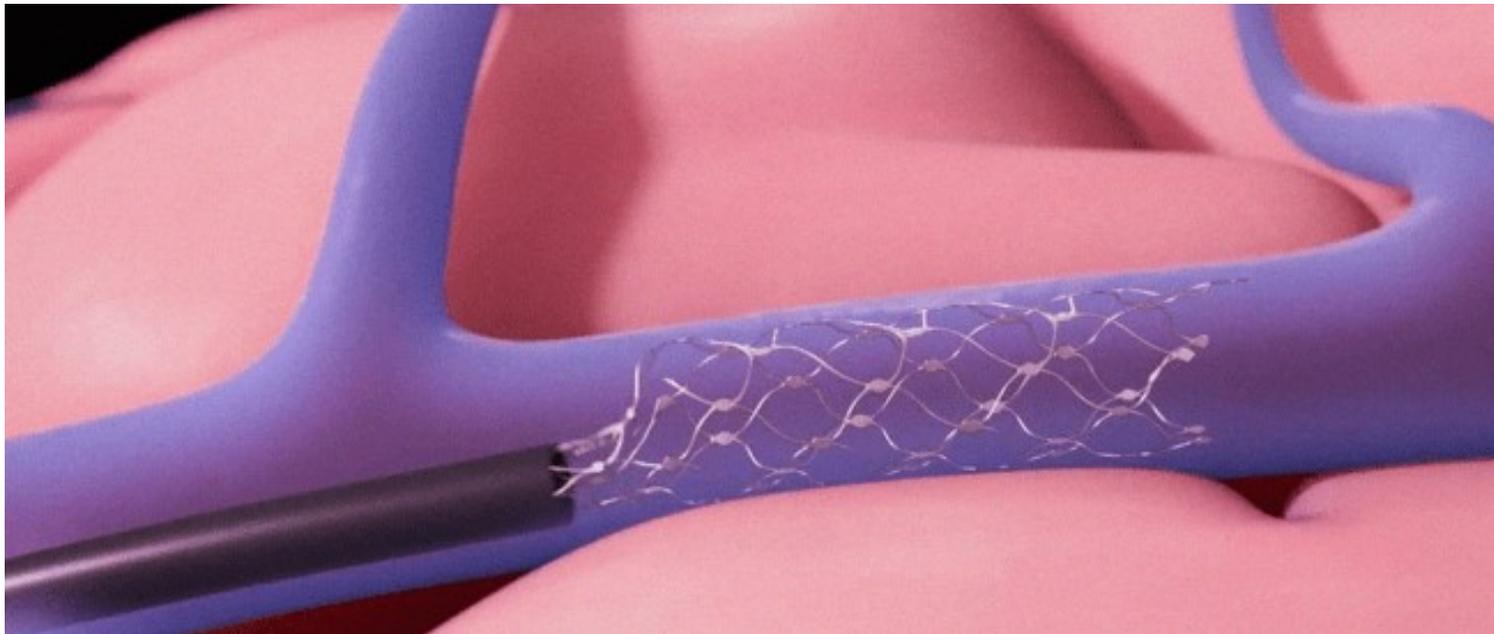
A brown rectangular graphic with white text. At the top, it says "Meet Q The First Genderless Voice". Below the text is a stylized, light-colored sound wave. At the bottom, it says "Please Use Headphones" and "Press To Meet Q".

Meet Q The First Genderless Voice

Please Use Headphones  
Press To Meet Q

# Odds and Ends - Stentrode BCI

## STENTRODE - Brain Computer Interface (BCI)



We continue to get closer and closer to BCI that actually serves the needs of our clients. I have to admit, I still have skepticism around the functional use of something like the Stentrode, but what I can really get behind is the ongoing research and development that is taking place. This can only mean greater and greater control and independence for clients that are locked-in their bodies.

[Venkat Rao](#), who created [Assistive Technology Blog \(@ATBlog2\)](#) posted an article on 7 July 2019 titled: **STENTRODE PROVIDES BRAIN COMPUTER INTERFACE (BCI) THROUGH JUGULAR VEIN TO PERFORM ACTIONS WITH THOUGHT**. Now, I thought this was going to be just like all the other BCI hype that we've seen before, but this was different, very different! Typically BCI is either achieved through risky invasive brain surgery, or through less than accurate external sensors. This process is different and it's offering different results. Following excerpt taken directly from article: "Stentrode, created by [Synchron](#), is a neural implant that is delivered to the brain via a catheter through the jugular vein, without the need for an open brain surgery. The sensors are placed immediately adjacent to the control center in the brain called motor cortex. These sensors have the ability to [convert thoughts into electric signals](#) that are sent through the vein to a device implanted under the skin of the person's chest. This device continuously receives brain signals and transmits them to another device, like a computer. Because of this direct connection to an external device, a person can control it using just their thoughts".

I would encourage anyone who is interested in learning more about BCI (and has about 16 minutes to spare), to watch the following YouTube Ted<sup>x</sup> talk in Sydney 2018 by: [Dr. Thomas Oxley](#)

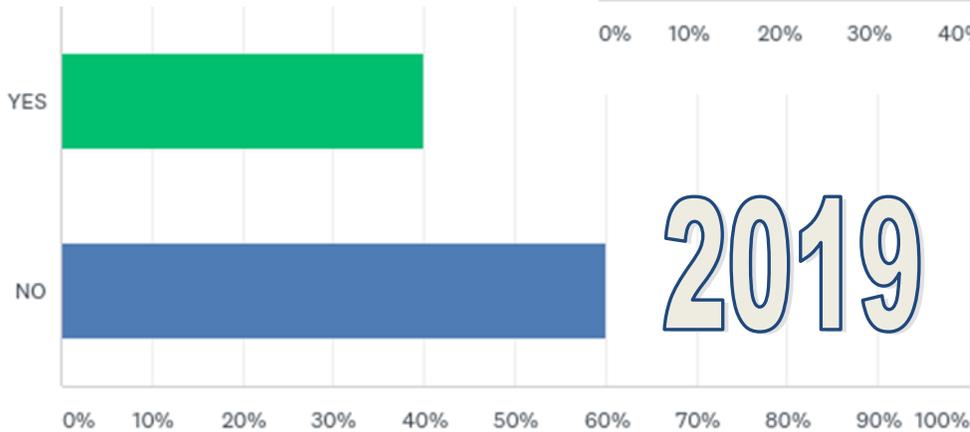
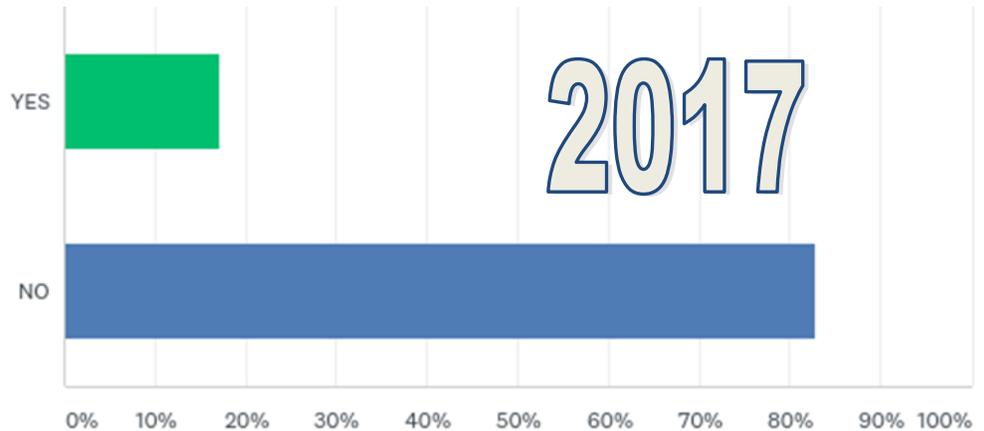
(neurologist). He is able to do a great job of simplifying the science behind BCI. If you are a little pressed for time, but want a quick glimpse at what the Stentrode is all about, you can watch a little promotional video here: [Stentrode](#)



# Post-Awareness Survey Results

## We are making progress people!

When we completed the awareness survey back in 2017 we had 18% of people indicate that they had heard of the CDP, now 2 years later during the 2019 Post-Awareness Survey we had 40% of people indicate that they had heard of the CDP. I'd like to think that we can call that a successful first step! But, we still have lots of work to continue to do.



Some of the valuable feedback we received included comments about being unsure of how to refer, & whether services were available to students 18+ (YES) and people outside the city of Winnipeg (YES). We will continue to try and spread the word about CDP, how to and who can access our services.

If there are any ideas on how to best get the message out there, we are all ears!! [cdp@wrha.mb.ca](mailto:cdp@wrha.mb.ca)

## What's New in CDP

We thought we would let you all in on some exciting news, even if it is a little old now! Like about 18 weeks old, likely more when this is published!. Our very own OT, Amy McDougall, had a baby girl!

We were so excited to meet the little peanut. If she grows up to be anything like her momma, she'll be a teeny tiny little firecracker, and loved by all. We wish Amy and family all the best in this new phase of their lives.

What this also means is that we have exciting news about the OT who has joined the CDP team during Amy's maternity leave. Please join us in welcoming, **Marlee Mayer**. She has experience working with AAC and AT from her time at Riverview Health Centre! We are excited to have her join us, & we already know she fits right in with our crew!

You can contact Marlee at [mmayer@deerlodge.mb.ca](mailto:mmayer@deerlodge.mb.ca) or at 204-831-3494.

