



Powerful Writer

Chelsea Hagen does not write with pen and paper in hand, nor type with a keyboard at her fingertips, nor dictate to a machine with her speech. But that couldn't stop her from composing and submitting one of the top student essays in the Government of Canada's 2015 "Canada Day Challenge." How does she do it? Chelsea taps out messages using two switches located on her wheelchair headrest. Using her head in a back-and-forth motion, Chelsea alternates between one switch and the other, picking and selecting from an electronic communication device her choice of letters, words and sentences. Once her thoughts are conveyed in writing, Chelsea uses the communication device to speak them aloud or share them as text.

In her 500-word essay "My Beautiful Life in Canada", Chelsea tells how liberating assistive technology can be: "With all the technology Canada has, the great funding programs to help pay for my equipment.... I soon had an electric wheelchair and was using picture symbols to help me communicate. I was able to attend a regular school and make new friends." Chelsea says that her speech generating communication device "...opened up the world for me I finally had a voice. Free to say anything. I could talk to my friends and family. I could do what I love to do, writing, all this made me feel like a proud Canadian."

As a high school student and aspiring writer, Chelsea credits the support and expertise of the I CAN Centre for Assistive Technology. "The I CAN Centre is like a part of my family. In a way they helped raise me. The people that work there are supportive when helping me reach my goals. It is because of their great knowledge of communication and [power] mobility, along with their exceptional dedication and guidance, that I have become the independent person I am today. For that I will always be grateful."

Chelsea did well in the "Canada Day Challenge" and was told she was among the finalists in the essay contest. "I'm sure I was in the top 10 for hard work and hours doing the writing. I had to write only 500 words it was really hard I had so much more I want to say." Although the winner's circle escaped her this time, Chelsea's spirit remains positive and strong. "I guess I

wasn't the one they were looking for. But I am still young yet and I am going to keep on writing." Chelsea's optimism and pride resound in the final words of her essay: "I will always be thankful that I was born in Canada. Canada has strongly supported me my whole life. This year I will be graduating with my classmates and continue my journey to be a writer. This is why I am proud to be a Canadian because Canada has helped me to be proud of myself."

As proud as you are to be Canadian, the I CAN Centre team is proud of you, Chelsea Hagen.

When Patients with Communication Disabilities Talk with Health Care Providers

[The following article is edited from *When Words Fail: What Non-Speaking Clients Tell Us*, an AHS "Practice Wise" webinar presented by River Wilson and Bruce Helmbold on May 28, 2015.]

James Hall was able to hear, but could neither move nor speak. A mechanical ventilator allowed him to breathe. As he lay on the hospital bed, he heard--but could not turn to see--his wife, his doctor, and his friend talking. They talked *about* him, but not *with* him. They discussed how James was and what had happened to him. They said James had experienced a brainstem stroke, resulting in 'locked-in syndrome.' Those around James talked about him in the past tense, in the third person. Finally, a doctor approaches Hall's bed, clears his throat and asks: "Blink once for yes, twice for no. Here is the question: Do you choose to live in this condition? Whichever way you choose, we will do all we can for you and will keep you comfortable." James blinks once. Then, unintentionally, his eyes blink again. He panics, believing that he is within a hair's breadth between life and death. He recalls his friend's voice saying: "Wait. I think that second blink was involuntary." They ask the question again, and James blinks once. He chooses life. James was 57 years old. (Wedemeyer, D. (2015). *His Life Is His Mind*. Nytimes.com. Retrieved 20 May 2015, from <http://www.nytimes.com/1996/08/18/magazine/his-life-is-his-mind.html?pagewanted=1>)

Melinda was a girl who had been diagnosed with genetic syndrome and a moderate-severe cognitive disability. She was admitted to the hospital's intensive care unit with a severe infection and a high fever. Normally, Melinda could make vocal sounds to seek and gain her mother's attention and comfort. Now, with fitted with a breathing tube for the extra oxygen she needed, Melinda temporarily lost the ability to call with her voice. Whenever her mother moved from her bedside, Melinda showed great distress and agitation. She thrashed about. Her blood oxygen levels plummeted. Eventually, staff placed a 2" round talking switch within reach of Melinda's left hand. The simple voice output button was recorded with the single message, "Mom, I need you." Having regained control over when and how to call out, Melinda was comforted, she stopped thrashing, and her oxygen levels returned to baseline. Melinda was 7 years old. (Santiago, R., & Costello, J. M. (2013). AAC Assessment and Intervention in Pediatric ICU/Acute Care: From Referral Through Continuum of Care. SIG 12 *Perspectives on Augmentative and Alternative Communication*, 22(2), 102-111.)

James and Melinda—two people very different from each other—shared in common the experience of being a communicatively vulnerable patient. "Communication Vulnerability" broadly refers to communication breakdowns between patients and medical staff in health care settings. Patients who can't speak clearly—either for short periods of time or long—risk being unheard and misunderstood by medical providers, doctors, nurses, and clinicians. Patients with communication difficulties also risk neither hearing nor understanding what they are told. Their questions may go unanswered, their anxieties and fears unaddressed. What is it like to be a person with a communication disorder? What is it like to have speech and language difficulties, and yet require health care services? We can gain insight about communication vulnerability from listening to non-speaking patients. Here are several themes that commonly arise:

- 1) Non-speaking patients may be perceived as less than intelligent. Snap judgments based on appearances may bias health care providers.
- 2) Lack of time spent in communication with providers is a commonly cited complaint of non-speaking hospital patients. In one study, mechanically ventilated patients found lack of communication more annoying than experiencing thirst, suctioning, and dependency.
- 3) Communication vulnerability is closely linked to feelings of frustration, resentment, and passivity.

Successful patient-provider communication, on the other hand, correlates with patients' feelings of well-being and shorter recovery times.

A seemingly small, positive interaction can make such a surprising significant positive difference. Here are some simple steps that we can take for improving patient-provider communication:

- 1) **Presume competence** – just because a person cannot speak doesn't mean they cannot communicate. Begin with speaking in a normal tone and volume. Speak clearly and concisely at the language level right for the person's age. Modify your speech or provide visual supports as required.
- 2) **Give time to save time.** It can easily take more than 10 seconds for a patient to respond to a question, or scroll through a list of choices, or spell a message on a letterboard. Don't fill the uncomfortable empty space with more questions or talking—wait patiently and quietly count to 10.
- 3) **Learn how the patient communicates.** When possible ask the patient how they signal "yes" and "no". Get to know their communication system if they have one. Ask them to be patient with you as you learn to communicate with them.
- 4) **Confer with Partner, Confirm with Patient.** Find who else knows the patient best. Ask the patient if it's OK to interview their familiar careproviders, relatives and friends. When using family members as informants, make efforts to speak with them in the same room as the patient. Confirm the accuracy of the information by asking the patient, "Is that what you are experiencing?"
- 5) **Use Different Strategies for Different Stages.** Match your level of communication with the patient's stage of recovery. Acknowledge that at different stages, the patient's capacity and needs for communication will be at different levels. Upon initially regaining consciousness, getting the attention of healthcare staff and family is the first priority. At some point, however, the patient will wish to discuss topics well beyond "Positioning, Potty, Pain and Possessions"—four questions typically asked by nurses doing the rounds. As patients advance in their recovery, provide them with a broad and diverse vocabulary.
- 6) **Ask Simple Questions. Ask Single Questions.** It doesn't make sense to ask, "Do you want water or

juice; yes or no?” Instead one question and allow time for the patient to answer.

7) Prepare in Partnership for Communication.

Communication is a shared responsibility. Encourage health providers to collaborate with the patient, the patient’s social network, and the patient’s daily communication partners. Assist persons with communication difficulties in pre-planning and anticipating how to communicate in healthcare settings.

For additional information and resources:

- Contact your local Speech Language Pathologist and Occupational Therapist.
- Alberta Health Services has posted information about communication access for patients with communication disorders or communication barriers. Search for “Communication Access” on Alberta Health Services’ website: www.myhealth.alberta.ca
- The Patient Provide Communication Forum website shares knowledge and resources on the need to overcoming existing communication barriers and to increasing communication access across health care settings. www.patientprovidercommunication.org
- *Patient-provider communication roles for speech-language pathologists and other health care professionals* (2015, Blackstone, S., Beukelman, D., Yorkstown, K. San Diego, CA: Plural Publishing) This new publication focuses exclusively on patient-provider communication, with a focus persons with complex communication needs.

Controlling Your Smart Phone With Your Voice

At the I CAN Centre, we often have people asking if they can control their smartphone with their voice. The answer is a qualified yes. It depends upon which phone you have and what you want to do with it.

What do you want to do with your phone?

Gone are the days when a cell phone was only used for telephone calls. Text messaging, email, social networking, watching video, and listening to music or podcasts are important today.

What kind of phone do you have?

The two most used smart phone platforms are Google Android and Apple iOS. These two make up over 90% of the market.



Siri

Siri (Apple iOS) and Google Now Voice Commands (Android) are the main ways to use your voice to give commands to your phone. They have similarities, but have different purposes. Siri is about voice control. Google Now is an assistant that gives you Google search-based answers to voiced questions. The web has lots of information about Siri and Google Now. Search on “what is Siri” or “what is Google Now”.



Google Now

Here are some things we have learned about speech recognition and voice control in iOS and Android.

Note: Both platforms require some information to be sent to Apple or Google to work as designed, and you must be connected to the internet for either to work. Siri sends your voice to Apple for recognition. Google Now uses your contact list for texts, phone, and email, but you have to let Google upload and store it. And Google Now can send you information you may want, but you have to let Google track what you search and where you go.

What can you do with Apple iOS/Siri and Android/Google Now?

Access Siri by pressing and holding the Home button. Depending on your device, you can access Google Now Voice Commands in different ways. Most common: tap the Google Search Bar the microphone icon or perform a long press on the home button.

On both platforms you can:

- Send and receive text messages to a number or a contact (or nickname). Siri will read unread text messages to you, and let you reply to them. Android will do this too, if you add Commandr for Google Now, a free Android App.
- Make phone calls to a number or a contact.
- Listen to your unheard voicemail
- Send emails to your contacts. Siri will check, read, and respond to emails and will search for emails

from people in your contact list, but it may not be reliable if you have several contacts that start out with the same words. With Commandr, Google Now will read unread gmail.

- Play music: ask for the name of the song or band or the top song of the year
- Schedule appointments and make notes and reminders to yourself
- Read your schedule. Siri will read details about appointments
- Ask questions like, what is the weather, or, what time is it?
- Get calculations, like, “how much is 68 pounds in kilograms?”
- Search the web for articles, but you have to select them by touch.

Completely Hands Free?

In general, Siri and Google Now require you to touch the phone to start up voice control. There are exceptions to this:

- In Apple iOS, you can turn on “Hey Siri” in the Siri settings; this lets you start voice control by saying “Hey Siri”—but ONLY if your iPhone (or iPad or iPod Touch) is connected to power.
- In Android, some phones allow the Google Now Launcher to be activated by the user saying, “OK Google”. You can enable this in the Google App Settings. It uses lots of battery power because it is always listening for commands..

In either platform you can use a third party device such as the Saje EasyBlue to answer the phone and to make phone calls to contacts or phone numbers. The EasyBlue is a switch adapted bluetooth headset.



EasyBlue

- You can use the Saje EasyBlue to access Siri by pressing an ability switch. This gives you access to any of Siri’s functions. You can also press the ability switch to answer the phone.
- On an Android phone, you can use the Saje EasyBlue and an ability switch to answer the phone and to make phone calls to contacts or phone numbers. It is easy to do. However, the EasyBlue does not provide access to other GoogleNow

commands such as SMS or searches. However, “OK Google” does work through the EasyBlue.

What’s the difference between Siri and Google Now?

So yes, you may be able to control your smart phone by voice, depending on what you want to do.

Either platform will allow you to make and receive phone calls, and send and read texts and emails, and get basic information like weather from the web. Both require you to be connected to the web. Siri will read back messages before you send them, and gives better feedback than Google Now. Google Now is better at deciding what information you want and sending it before you ask. Because there are so many models of Android phones, there will be more differences between them than between Apple phones. If you want greater hands-free control over your phone, Apple and Siri are your best bet. If you want to use your voice to find information, Android and Google Now might serve you better.

<http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/>: U.S. Smartphone Use in 2015

<http://www.idc.com/getdoc.jsp?containerId=prUS25450615>

<http://www.cnet.com/how-to/how-to-get-started-with-google-now/>

<http://fieldguide.gizmodo.com/ios-vs-android-the-2015-edition-1700461435>

http://www.saje-tech.com/mobile_info.html

Descriptions of products in the TechTalk Newsletter do not imply endorsement by the I CAN Centre for Assistive Technology. The Centre has no commercial links with any company or manufacturer.

I CAN Centre for Assistive Technology

www.albertahealthservices.ca/icancentre.asp



I CAN Centre for Assistive Technology Education Calendar

OCTOBER 2015

Power Mobility Stealth Boot Camp - Using Alternative Drive Controls Effectively

Course Number: 151015

Date: Thursday October 15, 2015

Time: 9:00 a.m. - 4:00 p.m.

Presenter: Mark Scott, Education and Business Development Manager Stealth Products

Fee: None – Registration required

Registration Deadline: October 1, 2015

Target Audience: Available to Therapists that focus on, and prescribe Alternative Drive Controls, and Advanced Seating.

Participants will learn about

- **Positioning for Alternative Drive Controls-** The most common means to drive a powered wheelchair is an arm support mounted joystick. Users with limited hand function may not be able to use a standard control, and may need an alternative solution to control their chair to drive a powered wheelchair. This session covers assessment and solutions for positioning the person and alternative drive control solutions to achieve optimal function.
- **Alternative Drive Control Solutions-** There are various proportional and non-proportional alternative drive control solutions in the marketplace as well as switch types such as head, finger, chin, sip-and-puff controls, etc. This session will evaluate and compare these drive control solutions on the basis of their uses in relation to the body, their ease of use, mounting options, and their ability to deliver a smooth drive.
- **Introducing the iDrive System** - Driving and controlling a powered wheelchair with jerks and stops, requires high energy, which could be tiring for the user. Hence it is important to ensure that drive controls interact with the user in real-time, and are not jerky. It is also important that drive controls provide accuracy in direction, good control, and stability. It is also important to ensure the electronics are mounted in a location that is easy for an end user to access. This session will focus on the advanced technology engineered in Stealth's iDrive system, its real-time interaction with the end user, and its compatibility with other secondary supports.
- **Hands-on Session** – Participants will have the opportunity to try the iDrive Head Array System.

Questions about the session can be directed to Mike Nantais at mnantais@pridemobility.com

AAC EXPO

Course Number: 221015

Date: Thursday October 22, 2015

Time: 9:00 a.m. - 3:30 p.m.

Presenters: Representatives from AROGA (Saltillo, Prentke Romich Co), Bridges-Canada (Attainment Co, Ablenet, AMDI, Jabbla, Smart Box, Tobii Dynavox (Toby Churchill)

Fee: None – Registration required

Registration Deadline: October 9, 2015

Target Audience: SLPs, families, professionals and educators who would like to learn more about speech generating communication devices.

Plan to attend this special one-day event at the I CAN Centre to learn more about speech generating communication devices. We have invited all of the key manufacturers and suppliers across Canada to participate in this full-day event. This is a Drop in session, come and go between 9:00 a.m. – 3:30 p.m. to see the vendor displays and meet the representatives and have your questions answered.

DECEMBER 2015

Boardmaker Studio for Beginners

Course Number: 101215

Date: Thursday December 10, 2015

Time: 1:00 p.m. - 3:00 p.m.

Presenters: I CAN staff

Fee: \$50.00

Registration Deadline: November 26, 2015

Target Audience: SLPs, families, professionals and educators who would like to learn more about Boardmaker Studio

Interested in learning about the new Boardmaker Studio, then join us as we explore the features of the program. Boardmaker is a design program that lets you make and adapt curriculum materials for students who need symbols. Make professional looking communication displays or use the program to create colorful and interactive worksheets, picture instruction sheets, reading books, journals, schedules and communication displays. Join us as we explore the features of Boardmaker Studio, including pre-programmed features and easy to use template that support instructional activities. This session includes hands-on training using Boardmaker Studio. Participants already owning this software, may wish to work from their own laptop with the software installed.

* PLEASE NOTE that Boardmaker Studio is the newest online version of Boardmaker. We will NOT be reviewing older versions of the software in this workshop.

Prerequisites: Basic computer skills including mousing

JANUARY 2016

Boardmaker Studio Advance

Course Number: 140116

Date: Thursday January 14, 2016

Time: 1:00 p.m. - 3:00 p.m.

Presenters: I CAN staff

Fee: \$50.00

Registration Deadline: December 23, 2015

Target Audience: SLPs, families, professionals and educators who would like to learn more about Boardmaker Studio

This workshop will cover all the features of the new Boardmaker Studio online. Topics covered in the workshop will include using and modifying existing templates, creating your own template, creating an activity series, using gadgets and project tools, downloading and uploading projects to/from the web, and general overview of program tools and features.

This workshop is for those who are ready to work with Boardmaker Studio, including therapists who are already very familiar with previous versions of Boardmaker, school staff who work in districts or schools who have already purchased Studio.

PLEASE NOTE that Boardmaker Studio is the newest online version of Boardmaker. We will NOT be reviewing older versions of the software in this workshop.

Users are welcome to bring their own devices if you already have access to Studio.

Important Information

- All sessions held at the I CAN Centre GRH Room 38
- Arrive 15 minutes before start time
- Deadline for course registrations is two weeks prior to the course date. We reserve the right to cancel a workshop if there is insufficient registration. Courses will be offered if there are ten or more registrants. The registration receipt will be the email invoice that you receive when you do the online payment. Registration is not guaranteed, unless payment is received prior to the event.
- Notice of cancellation must be provided in writing 5 business days prior to the date of the session. Registrants who fail to attend the program or cancel after the deadline date shall be liable for the entire fee. Substitutions are welcome.
- Please advise the Centre if you need accommodations for special needs.



Registration Form

- All attendees must register even if there is no fee

Name: _____	Agency Name: _____
Address: _____	City: _____ Prov: _____ - P. Code: _____
Phone: _____	Fax: _____
Email: (print email address legibly) _____	
<input type="checkbox"/> Please add my email address (above) to the I CAN mailing list	

Course Name: _____
Pay online by credit card at www.albertahealthservices.ca/pay . When paying online use routing code 5600 .
Submit this form after paying online and enter the transaction ID found on your e-mail invoice here _____ for ease of tracking payment to your request. Forms to be returned to the I CAN Centre.
*We cannot accept cash or cheque payments. Payment by credit card can only be done online.
Mail, fax or email registration form to: I CAN Centre, Room GE38 Glenrose Rehabilitation Hospital 10230 - 111 Avenue Edmonton, AB T5G 0B7 Phone: 780-735-6070 • Fax: 780-735-6072 Email: icancentre@albertahealthservices.ca .

I understand that all photos taken during any I CAN workshops may be used on the I CAN Centre website or for educational activities. Initial: _____
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Parking Glenrose Underground Parkade on 111th Avenue Credit card/coin: \$2.25/half-hour Daily parking passes for 8 hours: \$14.25 from the Pay and Display Machine in the Underground Parkade There is limited onsite parking. Please use public transport if possible
