Personalising student devices

Developers are working hard to make devices easier to use and more accessible, but most people don't even scratch the surface when it comes to using all the features their device offers.

The inbuilt options are not just for those with specific disabilities. Just as we would adjust a car seat to suit our individual needs, our devices can be personalised for a best fit with an individual profile as unique as a fingerprint. A device can be personalised by the user themselves and/or set up for them by someone who knows them well and is aware of the options available.

Personalisation can help to make the experience of using technology more enjoyable and efficient. It can affect a student's emotional state by reducing stress and addressing access and learning barriers. These, in turn, can make a big difference to productivity and behaviour.

Standard devices now include options that mean that they work well for many more users than they did in the past. People who would have traditionally needed quite specialised devices can now use the inbuilt features in standard devices to work alongside their peers.

PERSONALISE THE LOOK AND FEEL

For some people, a piece of technology can act as an important personal item. By adding coloured cases or covers, keyboard overlays, and other 'bling', you can make the item feel like an old friend.

I recently visited a year three BYOD (bring your own device) class where each student had their own device. One student had a particular sensitivity to a variety of sounds, colours, and textures. For her, the colour of her headphones, laptop, or iPad case was an incredibly important factor in her use of those devices. Without this, the discomfort for some learners (including, but not limited to, those with autism spectrum disorders), can be more than just preference — it can be a key to positive learning behaviours.

Image source: Ministry of Education
video: Using digital technologies for all learners

USER-FRIENDLY ACCESS TO LEARNING MATERIALS

To make devices user-friendly, encourage students to think about their own needs and make sure they (and those working with them) know what can be adjusted and how to make changes. To help you identify important features for learning, use the Universal Design for Learning framework. It provides a scientifically based approach for personalising learning.

You might consider:

1. Does the mouse or keyboard interface work well? These are all configurable. So, for example, you can slow mouse movement, make it click automatically (dwell click), or set the keyboard up for one-handed use.
2. Does the visual profile work well? You can change theme colours, increase font, icon, and cursor sizes or magnify the screen.
3. Can the student access sounds, notifications, and speech? You can activate visual alerts and text for some sounds.
4. Have I enabled features specific for New Zealand users? The language and spelling support can be set to NZ or UK English, and macrons should be enabled so students can type Māori words correctly (See the VLN post Customising your keyboard and mouse for more information. It includes instructions on enabling macrons).
5. Is it all too confusing? Think about simplifying home screens and desktops, creating easy pathways needed to find folders, work, or web pages, adding shortcuts and bookmarks.
6. Is the font appropriate? Younger students may like larger more well-spaced font settings, while others may require specific fonts (such as dyslexia friendly fonts).

7. Can the student access and understand reading material? Text on documents or web pages can be read aloud with free text to speech (or speak selection) options. For more information see VLN Post Text to Speech

Many of the options can be selected and used when, and if, the students want them. It can give them choices about the way they work and interact with curriculum materials.

USE YOUR VOICE

Voice typing software allows you to type by speaking, and has developed significantly in the past couple of years. As most people find speaking much easier than typing and speak significantly faster than they type, the software has huge potential for simplifying and streamlining some tasks. It is useful for many people, but is particularly significant for those who have difficulty using a pen or keyboard and those who require support with writing fluency or spelling.

Most phones now have voice typing capability, which is useful in smaller devices where the keyboard tends to be quite difficult to use. Google offers voice typing via the tools menu in Google Docs, so that it is available to students whenever they want to use it. The embedding of this type of universal support exactly where it is most needed is, in my opinion, one of the more encouraging moves by a software developer for some time.

Both Apple and Microsoft have included voice typing in their operating system for a while now, although, to date, my tests of the Microsoft tool have yielded quite poor results. Refer to my VLN Voice Typing post for instructions on how to enable voice typing over a variety of operating systems. For more on the topic, please see our earlier post: Is it time to ditch the pen and speak your writing?

Voice command software, for example, Siri, or Android Voice Access, allows users to complete tasks, find answers, and command their computer by speaking. OK Google allows you to search and ask questions using your voice, and answers are spoken aloud by the computer. For example, you can ask the computer, “How do you spell …?”, and Google will answer by restating the word and then spelling it out loud. Voice command software completely sidesteps the use of the mouse, keyboard, or touch interface and the idea of hands-free computer use is becoming a reality 1.

SHARED DEVICES

If your school is using a Cloud platform such as Google Apps for Education (GAFE) or Office 365, each user has an individual sign on. Some user preferences are configured so that each time students log in they get the tools, bookmarks, and preferences associated with that user profile. This means that no matter which device they use, their preferences are retained.

When laptops are shared, it is possible to create individual user profiles to cater for each student (although this is quite complicated on Mac computers, so a generic student account is typically used). User profiles are added through the control panel and, once created, you can add a password to the account and set the account type (including creating restrictions).

Tablets are more complicated, as, to date, most still operate with only one user profile. Apple is trialling a system designed for schools for enabling multiple accounts on iPads, but until that is in place, iPads can only be used with one Apple ID. Some Android devices support multi-users, but this is very specific to particular devices and the version of Android they run.

ONE SIZE FITS…. ONE

The days of 'one size fits all' industrial style education are becoming a thing of the past in most New Zealand classrooms. We are now in an age where diversity is valued, and we embrace each unique student and what they bring to our schools and classes. Personalising a device is just one small way to support each and every unique learner and celebrate diversity.

LINKS

Microsoft, Apple and Google continue to update operating systems, and each new version offers a variety of accessibility options. To locate and utilise the available features please refer to their accessibility websites:

Microsoft accessibility

Android Accessibility

Mac Accessibility and iPad Accessibility

1Dragon Naturally Speaking already provides software that enables hands free access, but at this stage the software is still quite specialised.

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Lynne Silcock is a facilitator for Learning with Digital Technologies and Connected Learning Advisory. Lynne has a background in secondary teaching and sports leadership. Her teaching experience is primarily in special education, but includes secondary maths, geography, and outdoor education. Prior to joining CORE, Lynne worked in the Ministry of Education as the national coordinator for the NZ assistive technology team. She has expertise in how specialised and standard technologies can be used to support all learners, but especially those with disabilities or special learning needs. She has been an advocate of Universal Design for Learning for many years as she sees the potential for this framework to help teachers support those who have failed to thrive in traditional classrooms.