# OrCam Learn DSA

# Assessor Recommendation Guide

# Introduction

The **OrCam Learn DSA** is an AI-powered portable handheld text to speech device, which can be used to convert text to speech from all text-based sources.

**For example:**
- Hard copy
- Magazines
- Computer screens
- PowerPoint slides
- Projection screens
- Wall mounted signs
- Bus timetables

The **OrCam Learn DSA** helps students overcome the barriers created by various conditions that result in language and processing difficulties, as well as other reading challenges.

The **OrCam Learn DSA** puts students who have reading difficulties on a more level playing field with their peers. The **OrCam Learn DSA** also helps students enhance their comprehension, build self-confidence, and in turn motivation to engage with reading tasks.

# OrCam Learn DSA main features and benefits

- The **OrCam Learn DSA** is able to read coloured text on coloured backgrounds, which other portable OCR devices struggle with.

- The **OrCam Learn DSA** can read very small as well as very large text. Other portable OCR devices typically only read font sizes between 6.5 to 22pt font limiting the students ability to read all of the content.

- When in use, the **OrCam Learn DSA** does not connect to the internet, and is completely self contained, ensuring the security of information, and not giving an unfair advantage in an exam situation.
- The **OrCam Learn DSA** meets the Joint Council for Qualifications examination requirements. Therefore, it can be used in exam settings to help students overcome reading difficulties.

- The **OrCam Learn DSA** can capture an A4 page of text in less than 3 seconds, whereas other portable OCR devices take the same time to read just one sentence. Essentially, the **OrCam Learn DSA** speeds up the reading and learning process for students.

- The **OrCam Learn DSA** gives students the ability to capture and listen to the whole page of text instantly, whilst simultaneously making their own notes. This strategy is not possible with other portable OCR devices, as it takes minutes to scan each page, severely slowing down the note-taking process.

- The **OrCam Learn DSA** inbuilt voice commands feature, allows the student to quickly and easily adjust the following settings:
    - Volume Up
    - Volume Down
    - Reading Speed Up
    - Reading Speed Down
    - Enter the User Menu
    - Change the Voice

# ORCAM

- ○ Change the Auto Suspend Time
- ○ Increase Word Spacing
- ○ Decrease Word Spacing
- ○ Connect to the Bluetooth Audio Device
- ○ Disable the Auto Flash
- ○ Enable the Auto Flash

# ⊙ORCAM

# Who is the OrCam Learn DSA for?

The **OrCam Learn DSA** can be recommended for students who have general difficulty accessing, or processing text based information. This could be as a direct result of a diagnosed specific learning difference (SpLD), a physiological, or psychological diagnosis. All of these conditions have an impact on cognition, neurological pathways, and executive functioning skills.

**For example:** *(Click on the links to jump straight to the recommendations guide)*

- **Specific Learning Difference (SpLD)**
  - Dyslexia
  - Dyspraxia or Developmental Coordination Disorder (DCD)
  - Dyscalculia
  - Dysgraphia
  - Speech and language difficulties
  - Attention deficit hyperactivity disorder (ADHD)
  - Attention deficit disorder (ADD)

- **Autistic Spectrum Disorder (ASD) / Aspergers**

- **Mental Health**
  - Anxiety
  - Depression
  - Post Traumatic Stress Disorder (PTSD)
  - Obsessive Compulsive Disorder (OCD)
  - Borderline Personality Disorder (BPD)
  - Dissociative disorder
  - Attention deficit hyperactivity disorder (ADHD)
  - Attention deficit disorder (ADD)

- **Physical**
  - Arthritis
  - Scoliosis
  - Sciatica
  - Raynaud's syndrome

- ○ Fibromyalgia

- **Unseen / other**
  - ○ ME / Chronic Fatigue Syndrome (CFS)
  - ○ Sickle cell anaemia
  - ○ Long Covid
  - ○ Multiple Sclerosis (MS)
  - ○ Brain injury
  - ○ Sickle cell anaemia
  - ○ Postural orthostatic tachycardia syndrome (POTS)

**ORCAM**

# Areas of study where the OrCam Learn DSA can be recommended.

## Specific Learning Difference (SpLD)
- Dyslexia
- Dyspraxia or Developmental Coordination Disorder (DCD)
- Dyscalculia
- Dysgraphia
- Auditory Processing Disorder
- Attention deficit hyperactivity disorder (ADHD)
- Attention deficit disorder (ADD)

The **OrCam Learn DSA** can help students who have general difficulty processing text-based material, which is as a direct result of a diagnosed specific learning difference. By converting text into speech, the **OrCam Learn DSA** also supports students' who process auditory information more effectively.

| Research and Reading |
|---|
| <ul><li>In the absence of text to speech software, the **OrCam Learn DSA** can be used to read texts from multiple sources (e.g. screens, books, or newspapers).</li><li>The **OrCam Learn DSA** interprets and recognises punctuation, so the student can capture the flow of the sentence as it was intended to be read.</li><li>The **OrCam Learn DSA** can be used to adopt a multisensory approach to learning. As the student can read whilst listening at the same time; a process which aids concentration, and improves retention of information.</li><li>The **OrCam Learn DSA** single pointer feature is designed to help students overcome phonological processing issues with unfamiliar words, which is often associated with conditions such as dyslexia or dysgraphia.</li><li>The **OrCam Learn DSA** can be used in environments such as the library, where text-to-speech or word finding software is not available.</li></ul> |

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, improving concentration, and in turn their ability to follow auditory information more effectively.
- This will be particularly useful if the student is easily distracted in the presence of situational noise

- The **OrCam Learn DSA** can be used to scan entire sections of text, or full pages (landscape or portrait), thereby speeding up the reading process.

- The **OrCam Learn DSA** can scan multiple pages at any one time, which will aid the process of continuous reading.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination. These symptoms are often associated with conditions such as dyspraxia, or developmental coordination disorder (DCD).
- *Other portable OCR devices would not be suitable, as they require the user to have good fine motor control. This can leave the student at risk of scanning the same line twice, which affects the students ability to build and maintain momentum with reading tasks.*

- For students who experience pain and cramping in their hands when handling objects (such as a pen) for extended periods, the **OrCam Learn DSA** requires minimal operation, making the process of scanning text a more comfortable experience.
- These symptoms are often associated with conditions such as dyspraxia, or developmental coordination disorder (DCD).

- The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- In the absence of text to speech software, the **OrCam Learn DSA** can be used to overcome problems with visual disturbance (eye fatigue, blurred vision), when reading from black text printed on white paper.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

- Students who learn more effectively by adjusting their working environment, they can use the **OrCam Learn DSA** to have text read out loud whilst on the move.
- This is particularly useful for students diagnosed with ADHD, or have concentration issues, as movement or other sensory input whilst listening to information can improve their overall engagement with reading.

- The **OrCam Learn DSA** can be used in dimly lit areas as well as under bright lights.
- The **OrCam Learn DSA's** ambient light sensor and integrated LED allow it to read accurately in multiple lighting conditions. This is particularly useful where a student experiences a form of visual disturbance that impacts on reading.
- *For example; where facets of specific learning differences cause blurred vision, or words to move, merge or jump on the page.*

- Students can control the pause between words on the **OrCam Learn DSA** to suit their individual auditory processing requirements.

## Writing and Reviewing Academic Work

- The **OrCam Learn DSA** can be used as a proofreading tool where students do not have access to text to speech software when working from a computer screen. The **OrCam Learn DSA** can also be used where a student has preference to work from a draft hardcopy.
- This will make it easier for students to identify mistakes within their work, particularly when they are experiencing issues with attention and concentration.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Note-taking in Lectures and Seminars

- The **OrCam Learn DSA** can be used to read text or hand outs which have not been printed on coloured paper, or in an accessible font (i.e Open dyslexic, Arial, Comic Sans).

- The **OrCam Learn DSA** can be used where students are given text-based information to read and provide analysis or feedback at short notice. As the **OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Time management and organisation

- The **OrCam Learn DSA** is an efficiency tool to help students access a wide range of printed text in various scenarios; thereby negating the need for the student to convert information into a digital document for use with a text to speech software.

- The **OrCam Learn DSA** can be synced with the students iOS device (phone/tablet) through the [OrCam Read Smart app](). This is beneficial, as if the student were to misplace the **OrCam Learn DSA**, the device can be located through the app by selecting the 'Find' feature.
  - When the student selects the *'Find'* feature, the **OrCam Learn DSA** will send out an auditory signal which the student can follow to locate the device.

## Practical Sessions, Placements, Field Trips and Additional Course Activities

- The **OrCam Learn DSA** can be used during study placement to read handouts, or text based information. This is particularly useful if it is not possible to use or access text-to-speech software in this environment.
- Examples of where the **OrCam Learn DSA** can use used on study placement:
  - Nursing:
    - Reading signs at hospitals, or names of medication.
  - Engineering:
    - Reading machinery operating instructions either on screen on printed
  - Arts and Humanities:
    - Visiting galleries and reading art piece information signs on-site
  - Or any course where the student might visit a company and be asked to read something on site; *e.g. Accounting, Business and Management, Counselling, Criminology, Design, Film and Media, Health Sciences,*

*International Studies, Law, Marketing, Mental Health, Politics, Social Sciences, Statistics.*

- Where students have difficulty reading text printed in a smaller format, the **OrCam Learn DSA** is able to recognise text printed in font size 4.
- This is particularly useful for students on study placement, where they are expected to read instructions which are printed in small font. Such information is often found on the side of medicine boxes.

- The **OrCam Learn DSA** can be used where students are given text-based information to read and provide analysis of feedback at short notice. As the **OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Examinations and Timed Assessments

- The **OrCam Learn DSA** meets the Joint Council for Qualifications examination requirements. Therefore, it can be used in exam settings to help students overcome reading difficulties.
- The **OrCam Learn DSA** offers an exam setting where the Wi-Fi and Bluetooth can be completely disconnected.
- The **OrCam Learn DSA** does not store any data, thus protecting the student from any potential GDPR infringement, and an added benefit for exam use.

- Students can use the **OrCam Learn DSA** during study as well as during exams. This removes the uncertainty or anxieties of using an unknown device perhaps with different settings, slightly unfamiliar behaviour which can exacerbate these issues.
- Other portable OCR devices do not have inbuilt exam modes, and can only be used during study. (e.g. mobile phone solutions).
- Furthermore, there is a cost difference reduction due to only having to own a single device.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, thereby minimising any distraction to the other students.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination. This is often associated with conditions such as dyspraxia, or developmental coordination disorder (DCD).

## Social Interaction and Communication

- The **OrCam Learn DSA** can be used to prepare for a presentation, by reading the slide deck or presentation notes out loud. The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Travel and Access to Higher Education Environment

- The **OrCam Learn DSA** can be used to read printed timetables, or notification screens at bus or train stations.

- Students can use the **OrCam Learn DSA** to aid navigation around the higher education establishment by reading signs, posters etc.
- This will be particularly useful for students who are not able to read at all, and therefore cannot navigate to new places without help. The **OrCam Learn DSA** will help students develop greater independence.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Additional Information

- *Watch this space!*

## Autistic Spectrum Disorder (ASD) / Aspergers

Students who are diagnosed with autistic spectrum disorder or Asperger's, often are diagnosed with comorbid conditions such as anxiety, hypermobility, sensory processing issues, auditory processing issues, obsessive-compulsive disorder, or specific learning differences.

The **OrCam Learn DSA** can help students who have sensory or auditory processing difficulties, access text-based information more effectively.

| Research and Reading |
| --- |
| <ul><li>The **OrCam Learn DSA** can be used to read texts from multiple sources (e.g. screens, books, or newspapers), and can be useful in the absence of text to speech software.</li><li>This is particularly useful where students have sensory processing issues, which can make it difficult for individuals to touch or handle specific items or materials.</li><li>The **OrCam Learn DSA** interprets and recognises punctuation, so the student can capture the flow of the sentence as it was intended to be read.</li><li>Where facets of a student's condition affects cognitive processing, the **OrCam Learn DSA** will convert information into an auditory format which is easier to access.</li><li>The **OrCam Learn DSA** can be used to adopt a multisensory approach to learning. As the student can read whilst listening at the same time, a process which aids concentration, and improves retention of information.</li><li>The **OrCam Learn DSA** single pointer feature is designed to help students overcome phonological processing issues with the recognition of unfamiliar words.</li><li>For students who have auditory processing difficulties, the student can increase the pause length between words within the **OrCam Learn DSA** settings. This will make it easier for students to follow the information when it is read aloud by the **OrCam Learn DSA**.</li></ul> |

- Wearing wired earphones *(one set supplied)* or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, improving concentration, and in turn their ability to follow auditory information more effectively.
- This will be particularly useful if the student is easily distracted in the presence of situational noise

- The **OrCam Learn DSA** can be used to scan sections of text, or full pages, (landscape or portrait), thereby speeding up the reading process.

- The **OrCam Learn DSA** can scan multiple pages at any one time, which will aid the process of continuous reading.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination, which is often associated with comorbid conditions such as dyspraxia, or developmental coordination disorder (DCD).

- Due to the discrete nature and operative ease of the **OrCam Learn DSA**, the student can use this device without drawing too much attention to themselves when reading in public.

- The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- The **OrCam Learn DSA** can be used to overcome problems with visual disturbance (eye fatigue, blurred vision) when reading from black text printed on white paper.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

- For students who experience pain and cramping in their hands when handling objects (such as a pen) for extended periods, the **OrCam Learn DSA** requires minimal operation, making the process of scanning text a more comfortable experience.
- These symptoms are often associated with comorbid conditions such as

hypermobility.

- *Other portable OCR devices would not be suitable, as they require the user to have good fine motor control. This can leave the student at risk of scanning the same line twice, which affects the students ability to build and maintain momentum with reading tasks.*

- The **OrCam Learn DSA** can be used in dimly lit areas as well as under bright lights.
- The **OrCam Learn DSA's** ambient light sensor and integrated LED allow it to read accurately in multiple lighting conditions. This is particularly useful where a student experiences heightened sensory issues in relation to light.

## Writing and Reviewing Academic Work

- The **OrCam Learn DSA** can be used as a proofreading tool where students do not have access to text to speech software when working from a computer screen.
- The **OrCam Learn DSA** can be used where a student has preference to work from a draft hardcopy.
- This will make it easier for students to identify mistakes within their work, particularly when they are experiencing issues with attention and concentration.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

- Students can control the pause between words on the **OrCam Learn DSA** to suit their individual auditory processing requirements.

## Note-taking in Lectures and Seminars

- The **OrCam Learn DSA** can be used to read text or hand outs which have not been printed on coloured paper, or in an accessible font (e.g. Open dyslexic, Arial, Comic Sans).

- The **OrCam Learn DSA** is particularly useful where students have sensory processing issues, or comorbid conditions such as obsessive-compulsive disorder, or germ phobia. As these conditions can make it difficult for students to touch or handle specific materials, or use shared documents.

- The **OrCam Learn DSA** can be used where students are given text-based information to read, and provide analysis or feedback at short notice. As the **OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Time management and organisation

- The **OrCam Learn DSA** is an efficiency tool to help students access a wide range of printed text in various scenarios; thereby negating the need for the student to convert information into a digital document for use with a text to speech software.

- The **OrCam Learn DSA** can be synced with the students iOS device (phone/tablet) through the OrCam Read Smart app. This is beneficial, as if the student were to misplace the **OrCam Learn DSA**, the device can be located through the app by selecting the 'Find' feature.
  - When the student selects the *'Find'* feature, the **OrCam Learn DSA** will send out an auditory signal which the student can follow to locate the device.

## Practical Sessions, Placements, Field Trips and Additional Course Activities

- The **OrCam Learn DSA** can be used during study placement to read handouts, or text based information. This is particularly useful if it is not possible to use or access text-to-speech software in this environment.
- Examples of where the **OrCam Learn DSA** can use used on study placement:
  - Nursing:
    - Reading signs at hospitals, or names of medication.
  - Engineering:
    - Reading machinery operating instructions either on screen on printed
  - Arts and Humanities:
    - Visiting galleries and reading art piece information signs on-site
  - Or any course where the student might visit a company and be asked to read something on site; *e.g. Accounting, Business and Management,*

*Counselling, Criminology, Design, Film and Media, Health Sciences, International Studies, Law, Marketing, Mental Health, Politics, Social Sciences, Statistics.*

- Where students have difficulty reading text printed in a smaller format, the **OrCam Learn DSA** is able to recognise text printed in font size 4.
- This is particularly useful for students on study placement, where they are expected to read instructions which are printed in small font. Such information is often found on the side of medicine boxes.

- The **OrCam Learn DSA** can be used where students are given text-based information to read and provide analysis of feedback at short notice. As the **OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Examinations and Timed Assessments

- The **OrCam Learn DSA** meets the Joint Council for Qualifications examination requirements. Therefore, it can be used in exam settings to help students overcome reading difficulties.
- The **OrCam Learn DSA** offers an exam setting where the Wi-Fi and Bluetooth can be completely disconnected.
- The **OrCam Learn DSA** does not store any data, thus protecting the student from any potential GDPR infringement, and an added benefit for exam use.

- Students can use the **OrCam Learn DSA** during study as well as during exams. This removes the uncertainty or anxieties of using an unknown device perhaps with different settings, slightly unfamiliar behaviour which can exacerbate these issues.
- Other portable OCR devices do not have inbuilt exam modes, and can only be used during study. (e.g. mobile phone solutions).
- Furthermore, there is a cost difference reduction due to only having to own a single device.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, thereby minimising any distraction to the other students.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination, which is often associated with comorbid conditions such as dyspraxia or developmental coordination disorder (DCD).

## Social Interaction and Communication

- The **OrCam Learn DSA** can be used to prepare for a presentation, by reading the slide deck or presentation notes out loud. The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Travel and Access to Higher Education Environment

- The **OrCam Learn DSA** can be used to read wall mounted signs, printed timetables, or notification screens at bus or train stations, Helping the student gain greater independence when travelling to and from university, or study placement.

- Students can use the **OrCam Learn DSA** to aid navigation around the higher education establishment by reading signs, posters etc.
- This will be particularly useful for students who are not able to read at all, and therefore cannot navigate to new places without help. The **OrCam Learn DSA** will help students develop greater independence.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Additional Information

- *Watch this space!*

## Mental Health

- Anxiety
- Depression
- Post Traumatic Stress Disorder (PTSD)
- Obsessive Compulsive Disorder (OCD)
- Borderline Personality Disorder (BPD)
- Dissociative disorder
- Attention deficit hyperactivity disorder (ADHD)
- Attention deficit disorder (ADD)

The **OrCam Learn DSA** can help students who have been diagnosed with a mental health condition, access research material in an alternate format.

By converting text into speech, this can help students who experience considerable difficulties with fatigue, anxiety, and concentration, to access text based information with relative ease.

| Research and Reading |
|---|
| <ul><li>In the absence of text to speech software, the **OrCam Learn DSA** can be used to read text from multiple sources (i.e books, screens, newspapers).</li><li>This is particularly useful where students have obsessive compulsive disorders around cleanliness, or germ phobias, which can make it difficult for individuals to use shared material.</li><li>The **OrCam Learn DSA** allows the student to engage with research in any location, particularly where it is difficult to set up a computer to use text-to-speech software. Thereby allowing the student to move to alternate environments more conducive to learning.</li><li>The **OrCam Learn DSA** interprets and recognises punctuation, so the student can capture the flow of the sentence as it was intended to be read.</li><li>Where facets of a student's condition affects cognitive processing (e.g. fatigue and tiredness), the **OrCam Learn DSA** will convert information into an auditory format which is easier to access.</li><li>The **OrCam Learn DSA** can be used to adopt a multisensory approach to</li></ul> |

learning. As the student can read whilst listening at the same time, a process which aids concentration, and improves retention of information.

- The **OrCam Learn DSA** single pointer feature is designed to help overcome acquired phonological issues as a result of brain fog, which can make it difficult for students to recall the correct pronunciation of words.
- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, improving concentration, and in turn their ability to follow auditory information more effectively.
- This will be particularly useful if the student is easily distracted in the presence of situational noise.

- The **OrCam Learn DSA** can be used to scan sections of text, or full pages, (landscape or portrait), thereby speeding up the reading process.

- The **OrCam Learn DSA** can scan multiple pages at any one time, which will aid the process of continuous reading.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination, which is often associated with heightened anxiety, or side effects of mood stabilising medication.
- *Other portable OCR devices would not be suitable, as they require the user to have good fine motor control. This can leave the student at risk of scanning the same line twice, which affects the students ability to build and maintain momentum with reading tasks.*

- Due to the discrete nature and operative ease of the **OrCam Learn DSA**, the student can use this device without drawing too much attention to themselves when reading in public.

- The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- The **OrCam Learn DSA** can be used to overcome problems with visual disturbance (eye fatigue, blurred vision), which is brought about by heightened levels of fatigue and tiredness, and affects the students ability to accurately read text-based material.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

- Students can control the pause between words on the **OrCam Learn DSA** to suit their individual auditory processing requirements.

## Writing and Reviewing Academic Work

- The **OrCam Learn DSA** can be used as a proofreading tool where students do not have access to text to speech software when working from a computer screen. The **OrCam Learn DSA** can also be used where a student has preference to work from a draft hardcopy.
- This will make it easier for students to identify mistakes within their work, particularly when they are experiencing issues with anxiety, fatigue, and concentration.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Note-taking in Lectures and Seminars

- The **OrCam Learn DSA** is particularly useful where students have been diagnosed with conditions such as obsessive-compulsive disorder, or experience germ phobia. As these conditions can make it difficult for students to touch or handle shared documents.

- The **OrCam Learn DSA** can be used where students are given text-based information to read, and provide analysis or feedback at short notice. As the **OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Time management and organisation

- The **OrCam Learn DSA** is an efficiency tool to help students access a wide range of printed text in various scenarios; thereby negating the need for the student to convert information into a digital document for use with a text to speech software.

- The **OrCam Learn DSA** can be synced with the students iOS device (phone/tablet) through the OrCam Read Smart app. This is beneficial, as if the student were to misplace the **OrCam Learn DSA**, the device can be located through the app by selecting the 'Find' feature.
  - When the student selects the *'Find'* feature, the **OrCam Learn DSA** will send out an auditory signal which the student can follow to locate the device.

## Practical Sessions, Placements, Field Trips and Additional Course Activities

- The **OrCam Learn DSA** can be used during study placement to read handouts, or text based information. This is particularly useful if it is not possible to use or access text-to-speech software in this environment.
- Examples of where the **OrCam Learn DSA** can use used on study placement:
  - Nursing:
    - Reading signs at hospitals, or names of medication.
  - Engineering:
    - Reading machinery operating instructions either on screen on printed
  - Arts and Humanities:
    - Visiting galleries and reading art piece information signs on-site
  - Or any course where the student might visit a company and be asked to read something on site; *e.g. Accounting, Business and Management, Counselling, Criminology, Design, Film and Media, Health Sciences, International Studies, Law, Marketing, Mental Health, Politics, Social Sciences, Statistics.*

- Where students have difficulty reading text printed in a smaller format, the **OrCam Learn DSA** is able to recognise text printed in font size 4.
- This is particularly useful for students on study placement, where they are expected to read instructions which are printed in small font. Such information is often found on the side of medicine boxes.

- The **OrCam Learn DSA** can be used where students are given text-based information to read and provide analysis of feedback at short notice. As the

**OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Examinations and Timed Assessments

- The **OrCam Learn DSA** meets the Joint Council for Qualifications examination requirements. Therefore, it can be used in exam settings to help students overcome reading difficulties.
- The **OrCam Learn DSA** offers an exam setting where the Wi-Fi and Bluetooth can be completely disconnected.
- The **OrCam Learn DSA** does not store any data, thus protecting the student from any potential GDPR infringement, and an added benefit for exam use.

- Students can use the **OrCam Learn DSA** during study as well as during exams. This removes the uncertainty or anxieties of using an unknown device perhaps with different settings, slightly unfamiliar behaviour which can exacerbate these issues.
- Other portable OCR devices do not have inbuilt exam modes, and can only be used during study. (e.g. mobile phone solutions).
- Furthermore, there is a cost difference reduction due to only having to own a single device.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, thereby minimising any distraction to the other students.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination, which is often associated with conditions such as anxiety, or side effects of mood stabilising medication.

## Social Interaction and Communication

- The **OrCam Learn DSA** can be used to prepare for a presentation, by reading the slide deck or presentation notes out loud. The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Travel and Access to Higher Education Environment

- The **OrCam Learn DSA** can be used to read wall mounted signs, printed timetables, or notification screens at bus or train stations. This will be particularly useful when facets of a student's condition impact on vision, making it much harder for them to recognise or read information.
- Symptoms such as heightened levels of fatigue and anxiety can cause visual disturbance, making it much harder for the student to view information.

- Students can use the **OrCam Learn DSA** to aid navigation around the higher education establishment by reading signs, posters etc.
- This will be particularly useful for students who are not able to read at all, and therefore cannot navigate to new places without help. The **OrCam Learn DSA** will help students develop greater independence.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Additional Information

- *Watch this space!*

**Physical**
- Arthritis
- Scoliosis
- Sciatica
- Raynaud's syndrome
- Fibromyalgia

**Unseen / other**
- ME / Chronic Fatigue Syndrome (CFS)
- Sickle Cell Anaemia
- Long Covid
- Multiple Sclerosis (MS)
- Brain injury
- Sickle cell anaemia
- Postural orthostatic tachycardia syndrome (POTS)

The **OrCam Read DSA** can be recommended for conditions which have a direct impact on cognition, processing speed, concentration, and executive functioning skills. Often side-effects of students' medication can exacerbate these issues.

Facets of many physiological conditions can have a detrimental impact on students' neurological state. For example, conditions such as chronic fatigue syndrome, postural orthostatic tachycardia syndrome or fibromyalgia, can leave students experiencing brain fog, or fibro fog (fibromyalgia).

Even Long Covid is known to have a detrimental impact on executive functioning skills, also affecting individuals' neurological pathways.

| Research and Reading |
| --- |
| <ul><li>The **OrCam Learn DSA** can be used to read texts from multiple sources, and can be useful in the absence of text to speech software. This is particularly useful where students have particular difficulty handling or manipulating hardcopy materials.</li></ul> |

- The **OrCam Learn DSA** interprets and recognises punctuation, so the student can capture the flow of the sentence as it was intended to be read.

- Where facets of a student's condition affects cognitive processing (e.g.. brain fog / fibro fog), the **OrCam Learn DSA** will convert information into an auditory format which is easier to access.

- The **OrCam Learn DSA** can be used to adopt a multisensory approach to learning. As the student can read whilst listening at the same time, a process which aids concentration, and improves retention of information. This is particularly useful when students are experiencing elevated levels of fatigue or physical discomfort.

- The **OrCam Learn DSA** single pointer feature is designed to help overcome acquired phonological processing issues, which are as a direct result of problems with memory caused by symptoms such as brain fog, or fibro fog.

- Wearing wired earphones *(one set supplied),* or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, improving concentration, and in turn their ability to follow auditory information more effectively.

- The **OrCam Learn DSA** can be used to scan sections of text, or full pages (landscape or portrait), thereby speeding up the reading process.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or trembling, which is often associated with conditions such as arthritis, Raynaud's syndrome, or fibromyalgia.
- *Other portable OCR devices would not be suitable, as they require the user to have good fine motor control. This can leave the student at risk of scanning the same line twice, which affects the students ability to build and maintain momentum with reading tasks.*

- For students who experience pain or cramping in their hands when handling objects (such as a pen) for extended periods, the **OrCam Learn DSA** requires minimal operation, making the process of scanning text a more comfortable experience.

- The **OrCam Learn DSA** can scan multiple pages at any one time, which will

aid the process of continuous reading, and limit the need for the students to operate the device. This will be particularly useful to avoid instances of more frequent use, which could exacerbate the student's symptoms.

- The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- The **OrCam Learn DSA** can be used to overcome problems when students experience symptoms such as visual disturbance (eye fatigue or blurred vision) when reading for extended periods. This can be as a direct result of conditions such as fibromyalgia, or chronic fatigue syndrome.

- The **OrCam Learn DSA** allows the student to engage with research in any location. This will be particularly useful when students need to adjust their working environments in order to alleviate physical discomfort.
- Furthermore, when pain and physical discomfort are at their most severe, the **OrCam Learn DSA** Can be used to access material when students need to stand, stretch, or lie in bed.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

- The **OrCam Learn DSA** can be used in dimly lit areas as well as under bright lights.
- The **OrCam Learn DSA's** ambient light sensor and integrated LED allow it to read accurately in multiple lighting conditions. This is particularly useful where a student experiences heightened sensory issues in relation to light.
- *For example; ME / CFS where students prefer to work in a darkened room.*

- Students can control the pause between words on the **OrCam Learn DSA** to suit their individual auditory processing requirements.

## Writing and Reviewing Academic Work

- The **OrCam Learn DSA** can be used as a proofreading tool where students do not have access to text to speech software when working from a screen, or where a student has preference to work from a draft hardcopy.
- This will make it easier for students to identify mistakes within their work, particularly when they are experiencing issues with pain, fatigue and

concentration.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Note-taking in Lectures and Seminars

- The **OrCam Learn DSA** can be used to read text or hand outs, where the student has difficulties handling or manipulating hardcopy.

- The **OrCam Learn DSA** can be used where students are given text-based information to read and provide analysis of feedback at short notice. As the **OrCam Learn DSA** will convert text into an auditory format, which many students find easier to access, and process.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Time management and organisation

- The **OrCam Learn DSA** is an efficiency tool to help students access a wide range of printed text in various scenarios; thereby negating the need for the student to convert information into a digital document for use with a text to speech software.

- The **OrCam Learn DSA** can be synced with the students iOS device (phone/tablet) through the [OrCam Read Smart app](). This is beneficial, as if the student were to misplace the **OrCam Learn DSA**, the device can be located through the app by selecting the 'Find' feature.
  - When the student selects the *'Find'* feature, the **OrCam Learn DSA** will send out an auditory signal which the student can follow to locate the device.

## Practical Sessions, Placements, Field Trips and Additional Course Activities

- The **OrCam Learn DSA** can be used during study placement to read handouts, or text based information. This is particularly useful if it is not possible to use or access text-to-speech software in this environment.

- Examples of where the **OrCam Learn DSA** can use used on study placement:
  - Nursing:
    - Reading signs at hospitals, or names of medication.
  - Engineering:
    - Reading machinery operating instructions either on screen on printed
  - Arts and Humanities:
    - Visiting galleries and reading art piece information signs on-site
  - Or any course where the student might visit a company and be asked to read something on site; *e.g. Accounting, Business and Management, Counselling, Criminology, Design, Film and Media, Health Sciences, International Studies, Law, Marketing, Mental Health, Politics, Social Sciences, Statistics.*

- Where students have difficulty reading text printed in smaller format due to visual disturbance, the **OrCam Learn DSA** is able to recognise text printed in font size 4.
- This is particularly useful for students on study placement, where they are expected to read instructions which are printed in small font. Such information is often found on the side of medicine boxes.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Examinations and Timed Assessments

- The **OrCam Learn DSA** meets the Joint Council for Qualifications Qualifications examination requirements, therefore it can be used in exam setting to help students overcome reading difficulties.
- The **OrCam Learn DSA** offers an exam setting where the Wi-Fi and Bluetooth are completely disconnected.
- The **OrCam Learn DSA** does not store any data, thus protecting the student from any potential GDPR infringement, and an added benefit for exam use.

- Students can use the **OrCam Learn DSA** during study as well as during exams. This removes the uncertainty or anxieties of using an unknown device perhaps with different settings, slightly unfamiliar behaviour which can

exacerbate these issues.
- Other portable OCR devices do not have inbuilt exam modes, and can only be used during study. (e.g. mobile phone solutions).
- Furthermore, there is a cost difference reduction due to only having to own a single device.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, thereby minimising any distraction to the other students.

- The **OrCam Learn DSA** is easy to use for students who have problems with dexterity, fine motor control, or poor hand eye coordination. These symptoms are often associated with conditions such as arthritis, Raynaud's disease, or side effects of medication.

## Social Interaction and Communication

- The **OrCam Learn DSA** can be used to prepare for a presentation, by reading the slide deck or presentation notes out loud. The **OrCam Learn DSA** compliments students' learning styles, particularly if they process information more effectively in an auditory format.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

## Travel and Access to Higher Education Environment

- The **OrCam Learn DSA** can be used to read wall mounted signs, printed timetables, or notification screens at bus or train stations. This will be particularly useful when facets of a student's condition impact on vision, making it much harder for them to recognise or read information.
- Conditions such as chronic fatigue syndrome or fibromyalgia, can cause students to experience elevated levels of fatigue and tiredness. These symptoms can cause visual disturbance, making it much harder for the student to view information.

- Students can use the **OrCam Learn DSA** to aid navigation around the higher education establishment by reading signs, posters etc.

- This will be particularly useful for students who are not able to read at all, and therefore cannot navigate to new places without help. The **OrCam Learn DSA** will help students develop greater independence.

- Wearing wired earphones *(one set supplied)*, or bluetooth headphones when using the **OrCam Learn DSA** will direct the audio into the students' ears, allowing for private or discrete listening in all study environments.

**Additional Information**

- *Watch this space!*