

# Autism Information Sheet

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## What is Autism (ASD - autism spectrum disorder)?

Autism is a lifelong developmental condition that affects how a person communicates and relates to others and the world around them. Autistic learners experience differences in communication, and a lack of understanding of these differences can lead to miscommunication and increased anxiety for many autistic people.

Autism is classified as a spectrum condition, meaning that it can present in a variety of ways, ranging widely from person to person and even throughout an individual's life. A significant proportion of autistic individuals have average or advanced intellectual abilities and are academically capable, though some may also have additional learning disabilities. More than 1 in 100 people are on the autism spectrum.

The definition of autism has evolved over the years and may continue to change as society gains a better understanding of the condition. The most recent editions of the DSM (Diagnostic and Statistical Manual of Mental Disorders) and ICD (International Classification of Diseases) diagnostic manuals do not recognize Asperger Syndrome (AS) as a separate diagnosis; individuals who exhibit these characteristics are now diagnosed with ASD. However, many individuals still retain a diagnosis of Asperger Syndrome.

### More Information

Watch the following film narrated by Alan Gardner, the Autistic Gardener - [What is Autism?](#) Is available from the National Autism Society UK.

Watch the following [TED Talk by Ethan Lisi - What it's really like to have autism.](#)

## Students on the autistic spectrum have challenges with:

### Communication Differences.



Some autistic students can often be fluent in their speech but struggle to make conversation and small talk. This may indicate a lack of interest in what others are saying to neurotypical people. Good language skills may mask a deep misunderstanding of metaphors, sarcasm, and idioms.

### Social Understanding Differences.



Social Understanding of differences in social behaviour and the feelings of others informs the development of friendships and relationships. Understanding the unwritten social rules that neurotypical people take for granted is often hard for autistic learners. Communication difficulties may include initiating conversation, making eye contact, and understanding nonverbal signals such as facial expressions.

### Information Processing Differences.



Information processing differences in perception, planning, understanding concepts, generalising, predicting, managing transitions, passions for interests, and ability to absorb auditory or spoken information can make transitioning to a college environment challenging. Changes to timetables or deadlines or when things do not go to plan can cause heightened stress levels. It is not easy for autistic students to see alternative perspectives and understand the reasoning for something if it is not explicit.

### Sensory Processing Differences in perceiving sensory information.



Some autistic students may be hypo (low sensitivity), or hyper (high sensitivity) to touch, sight, hearing, smell, taste, vestibular inner ear (balance), proprioceptive (body awareness), and interception (internal body condition). Their ability to process these senses is not static and can vary daily depending on stress levels.

## How is an autistic student's college experience impacted?

- An autistic learner may seem unconcerned about a particular assignment but may experience higher anxiety levels if changes are made to the timetable or a deadline is changed. Autistic students may have a limited capacity to deal with unscheduled changes compared to the neuro-typical student population.
- It can be challenging for autistic students to get used to the conventions in lectures, seminars, group work, and studying independently.
- Group work is an unfamiliar learning method for many students and must be introduced to all students. Group members should be encouraged to set "ground rules" right from the start. Group leaders must intervene when communication fails, the division of work is unfair, or if others exclude any group member. Fellow students can take advantage of an autistic peer, especially if they are unaware of the condition.
- If room allocations change, autistic students, particularly stage one students, need as much notice as possible to familiarise themselves with the new location and how to get there.
- For students with autism, having access to lecture slides and handouts ahead of time can be immensely helpful as they prefer to have a clear idea of what to expect.
- Some autistic students may find it challenging to tolerate background noise, lighting, crowding or other sensory aspects of a college environment.
- Show a positive attitude towards arrangements and devices that allow autistic students to manage their anxiety, such as minimising sensory distraction, for example, always sitting in the same seat, wearing a hat, hoodie, or tinted glasses indoors, or handling stress gadgets - which may be referred to as stimming.
- Some autistic learners may need to use an alternative means of communication when they experience selective mutism.

## **Resource: The following paper is informative, with hints for group work.**

'The Development of Good Practice Principles for Supporting Students with Autism to Work with Their Peers' by Sharron Sturgess, Study Adviser for Autism and Asperger Syndrome University of Leicester UK.

### **Other differences**

- Independent living skills - living out of home for the first time. Managing life skills (e.g., cooking, cleaning, managing finances, transport, etc.) in addition to college work can be challenging.
- It can be challenging to handle the social isolation that often comes with living away from home, as neuro-typical communication can bewilder and baffle autistic students.
- It can be a challenge balancing time and organisation while creating a schedule that accommodates their college timetable if it changes frequently and irregularly.
- They may become so engrossed in a particular topic or activity that they neglect other aspects of their lives.
- It is common for autistic students to feel increased stress levels due to the need to conform and adapt to a predominantly non-autistic society.

### **Strengths - Autistic Learners may show resilience in the following areas:**

- Autistic learners can develop a particular interest in an area of study and be passionate about studying a programme of interest.
- Many autistic students can maintain intense focus, adopt unconventional angles in problem-solving, or spot errors others may overlook.
- Autistic students rarely judge others and live in the moment.
- They are not tied to social expectations and tend to answer questions honestly.
- Businesses worldwide increasingly acknowledge the valuable strengths that autistic people bring to specific professional fields.

## Famous and well-known autistic people

Many famous people throughout history have been diagnosed with autism, including Albert Einstein, Isaac Newton, and even Mozart. These individuals achieved incredible things despite their social communication and sensory processing struggles. Today, many successful individuals, such as [Temple Grandin](#), [Daryl Hannah](#), and [Greta Thunberg](#), are open about their diagnosis. These individuals serve as inspiration for those with autism and show that with the proper support, anything is possible.

The following YouTube highlights: [Some Famous People with Autism - Inspiring Success Stories - The Disorders Care](#)

View YouTube for [Kodi Lee: Blind Autistic Singer WOWS and Gets GOLDEN BUZZER! | America's Got Talent 2019](#)

## Routes to identification:

A report from an appropriately qualified consultant Psychiatrist or Psychologist or Neurologist or Paediatrician provides a diagnosis of ASD.

## Useful links and resources

- [AsIAM](#)  
[Information Line at AsIAM](#)  
If you would prefer to **speak**: Call 0818 234 234 on Tuesday and Wednesday from 9am-4pm.  
If you would prefer to **write**:  
Email [support@asiam.ie](mailto:support@asiam.ie)
- The [Autistic Guide to Starting College](#) ASIAM.ie
- [NeurodiversityHub](#)

## Assistive Technology, Digital Skills, and Study Strategies

This section guides third-level autistic students in utilising assistive technology, developing digital skills, and implementing study strategies. It covers time management, the Pomodoro technique, mind mapping, text-to-speech tools, speech-to-text technology, spelling and grammar aids, and the Assistive Technology (AT) Hive resource hub.

This section introduces various tools and resources to aid reading, writing, and note-taking, including Microsoft Immersive Reader, Natural Reader, Microsoft Lens, Acrobat Reader DC, Microsoft Dictate, and Microsoft Editor. It also highlights Glean, a notetaking tool, and emphasises the value of combining traditional and digital study methods to improve learning outcomes.

## Time Management

### Microsoft To-Do App



Microsoft To Do

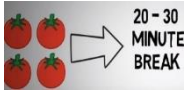
Microsoft To-Do Management app is a simple and intelligent to-do list that helps you manage all your tasks in one place. You can work through your tasks for the day in My Day and create any number of additional lists to organise your study, work, groceries, school drops, movies to watch—you get the idea! The Microsoft To-Do app is accessible in your Microsoft 365 college email account, and it syncs across iPhone, Android, Windows, and the web.

[Access information and download Microsoft To-Do.](#) Follow Kevin Startvert's [step-by-step tutorial](#) on YouTube to see how to use Microsoft To-Do to manage tasks on the go.

### The Pomodoro Technique



Discover the benefits of the Pomodoro technique in the [AT Hive section in Ahead](#). The Pomodoro technique lets students divide their work into achievable intervals with short breaks, helping them stay focused and empowered.



When you are ready to try the Pomodoro Technique, [start with a Pomodoro timer](#).



## Eliminate distractions from social media and smartphones.

### Flora Green Focus



Flora Green Focus is a gamified Pomodoro timer designed to help students stay focused and productive. The app encourages users to put down their phones and blocks distracting apps, such as Instagram, for a limited period. As users start a study session, a virtual tree begins to grow. However, the virtual tree dies if they leave the app to use their phones. Flora is a great motivator for staying on track and building positive habits. Flora offers an opt-in price to help organisations like Tree for Future and Eden Reforestation Projects plant trees in real life. Improve healthy study habits and help save the planet - It is a win-win!

Flora Green Focus App can be downloaded from the iOS App Store and Google Play; [visit Flora Green Focus for more information.](#)

## Mind mapping applications – by hand and digital software.



Autistic students frequently encounter challenges in organisation, planning, and cognitive flexibility. However, mind mapping can be a valuable method to overcome these obstacles and enhance cognitive abilities. It promotes visual learning, creativity, planning, problem-solving, and communication skills. The best part is that it is easy to use and can be integrated into everyday life.

To begin mind mapping by hand or by software, it is essential to first grasp the theory behind it. Check out [Mindmap's Unleashed Practical Induction Guidelines](#). Mind mapping is a personalised learning technique, so it is crucial to have a good understanding of the fundamentals.

### Xmind

Xmind is a full-featured mind-mapping and brainstorming app. It now offers two plans for users: the Xmind Free Plan and the Xmind Pro Plan. Below are the differences between the Free Plan and the Pro Plan in Android Xmind. In the Free Plan, users can insert notes, markers, stickers, hyperlinks, labels, and images into the topics. They can also access [downloads from Xmind](#).

Currently, there is no time restriction for using the free version, and you can get access to most of the features of Xmind for Desktop. However, keep in mind that the free version is available for personal use as all the exported files will have a watermark of Xmind trial mode. Access [XMind templates, tutorials, and training from Biggerplate](#).

## MindMeister

MindMeister is an easy-to-use mind-mapping tool. Loads of different templates and images to help visualise your plan. If you want to learn how to set up a free account, check out the [MindMeister tutorial Step-by-Step Beginners Guide 2023](#), available on YouTube. This tutorial, presented by [Sharon's Tutorials, provides an excellent overview of the features of the free version of MindMeister](#).

MindMeister offers a Basic free plan without time limitations. You can work on a maximum of 3 mind maps. If you delete one mind map, you can create another one. If you like the software, an educational plan on a subscription basis costs €3 monthly. You can check out the [MindMeister tutorial playlist](#) for more in-depth product functionalities.

For further Mind Mapping resources, search the 'Assistive Technology / Digital Skills Workshops' section on Moodle and scroll down to find the How to Mind Map section for mind mapping resources/guides.

## Technology for Reading (Text to Speech)



### How to access Immersive Reader in Microsoft 365

#### Step 1

Sign in to your Microsoft 365 college account email (student number@carlowcollege.ie).

#### Step 2

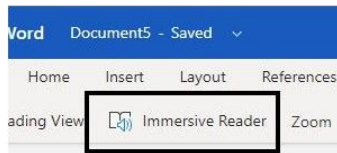
Open a Microsoft Office Word document.

#### Step 3

Click the 'View tab' at the top of the Word document.

#### Step 4

Click "Immersive Reader"



### Text-to-Speech

Text-to-speech technology is not new, but it is not as widely known or used as it should be. A "text-to-speech" program, or "text reader," on your computer or tablet can read text from a document or web page to you using a computer voice. This technology can read Word documents, PDFs, web pages, emails, and more. Many applications provide text-to-speech and built-in functionality across devices. The main types of assistive technology (AT) that students may use are explained below.

#### Immersive Reader (IR)

When you sign in with your Microsoft 365 college account email (student number@carlowcollege.ie), you have access to a helpful text-to-speech (TTS) reading tool called Immersive Reader (IR) in Word online. This tool allows you to have Word online and webpages read aloud to you, adjust text size, change the background colour for easier reading, and even translate information.

Auditory and visual senses can improve memory retention and make proofreading assignments easier. Best of all, this tool is entirely free to use. IR is also available in the Edge browser. Check out [AHEAD AT Hive - Demo Immersive Reader in Action](#). Discover more about [IR on Use Immersive Reader in Word by Microsoft](#).

## Natural Reader 16

Natural Reader 16 is a free screen reader software with free and paid subscriptions, a text-to-speech technology that reads text aloud. It is available as a web version and Chrome browser extension (both require an Internet connection).

Natural Reader can read highlighted text from Microsoft Word and PDFs, including digital exam papers, webpages, and emails. For more information or to download the Natural Reader free software, visit the [Natural Reader Introduction video](#)

## Microsoft Lens (formerly Microsoft Office Lens)

Microsoft Lens is a free scanning app. It works on iPad, iPhone, Android, and Windows devices. Students can capture and crop a picture of a whiteboard, blackboard, or text. They can read the scanned text aloud using the features within the Microsoft Lends Reader Tool (uses Optical Character Recognition (OCR)) to manipulate the text or words to suit their learning needs. Learners can choose to convert images to Word (.docx), PowerPoint (.pptx) or PDF (.pdf) files and save them to OneDrive or their local device. See how to use [Office Lens on a mobile device iOS or Android](#)

## Acrobat Reader DC free PDF viewer



Acrobat Reader DC is a free PDF viewer. It is a stand-alone application for opening, viewing, signing, printing, annotating, searching, and sharing PDF files. Adobe Reader can be downloaded [here](#). Please do not check the box for a McAfee security scan or anything else (our IT Department has advised against those). The link will download the free version, though it has ads for premium features.

How to have a PDF file read aloud within Acrobat Reader DC Adobe Reader read aloud feature will enable you to have your files read aloud. To find out how to listen to PDF files being read aloud visit [Conveniently hear PDF files read aloud](#).

## LookOut - Android



[LookOut](#) is an Assisted Vision FREE App on Google Play for Android (is Android's answer to [Apple's Seeing AI](#) (Artificial Intelligence)). Lookout uses computer vision to assist people with low vision or blindness in identifying objects and text using the camera and sensors on their Android devices. It can recognise and speak text and identify currency notes, making everyday tasks like sorting mail and putting away groceries faster and easier.

The following [YouTube video from Vision Forward](#) will lead you through the primary functions of the Lookout AI app.

Seeing AI is for iPhone



Seeing AI is a free app that narrates the world around you. It was designed with and for the blind and low-vision community.

- Seeing AI provides tools to assist with a variety of daily tasks, for example:
- Short Text - Speaks text as soon as it appears in front of the camera.
- Documents - Provides audio guidance to capture a printed page and recognise the text and its original formatting.
- Products - Scans barcodes, using audio beeps to guide you; hear the name and package information when available.
- People - Saves people's faces so you can recognise them and get an estimate of their age, gender, and expression.
- Currency - Recognises currency notes.

The above is not a conclusive list of Seeing AI features, but it continues to evolve. Explore [a tutorial on Seeing AI on their YouTube playlist](#). For more information, [visit SeeingAI.com](#)

## Technology for Writing (Speech to Text)

Speech-to-Text / Dictate in Microsoft 365



Speech-to-text technology, also known as dictation or voice recognition, converts spoken language into written text. It allows learners to speak naturally; the software or dictate feature interprets their thoughts and transcribes them into text on their screen. It is good to know Dictate is accessible to all students in Word Online in Microsoft 365.

Dictate in Microsoft 365 Word online - Typing is one way to write in a Word document, but the dictate feature can also type your voice. For People who may have slow typing speed, issues with spelling dictate is an alternative way to approach essay writing.

Figure 1Speech-to-Text image

Select the 'Dictate' option in Word online and speak; your thoughts to them typed. Explore how to switch on the [Dictation Tool in Microsoft 365 Word online](#) from the AT Hive hub hosted by AHEAD.

Gaining confidence in using speech-to-text technology can take time.

**Here are some tips to consider when dictating your thoughts:**

- Start by using speech-to-text on topics you are familiar with or comfortable discussing. This can reduce the pressure and make the process feel more natural.
- Practice regularly: like any skill, practice is essential. The more you use speech-to-text, the more confident you will become. Try dictating notes, emails, or text messages regularly.
- Speak at a steady pace and in complete sentences. Avoid speaking too fast or slow, which can affect recognition accuracy.

Here is a guide for writing using dictate / speech recognition:

- Think about what you want to say.
- Say it aloud - some students prefer not to look at the screen as they dictate.
- Check the text for errors.
- Fix errors - you can use a mix of typing and dictating.
- Do not hesitate to make corrections if the system misinterprets your words.
- Use punctuation and formatting commands: Learn how to use voice commands for punctuation (for example, 'comma', 'full stop', and 'question mark') and formatting (for example, 'new paragraph', 'new line'). This can help make your transcriptions more accurate and readable.
- Use a quiet environment: minimise background noise when using speech-to-text to ensure the system can capture your voice accurately.
- Learn the specific commands and features: familiarise yourself with the speech-to-text application or software you use. Many platforms have specific voice commands and features that can enhance your experience.
- Gradually increase complexity: as you gain confidence, start dictating longer and more complex pieces of text. This will challenge your skills and help you improve.
- Review and edit: review the text for errors and make necessary edits after transcribing.
- Be patient and persistent. Adjusting and improving your skills takes time, like any new technology. Stay patient and persistent, and you will notice progress over time.

## Boost your Word skill with video and text resources for Dictate in Word

- View a quick overview '[Learn more about using Dictate with Word online](#)' from Dyslexia Ireland.
- How to use Dictation in Microsoft Word for the Web with Microsoft 365's video.
- Quick guide resource to [Dictate in Microsoft 365, Dictate in Windows 10 and Windows Speech Recognition](#) from Call Scotland

## Spelling and grammar in Word



Word in Microsoft 365 can help improve your documents by checking and highlighting spelling and grammar errors and will prompt you to review and make necessary corrections. Additionally, it may suggest ways to improve the clarity of your writing by using more concise language. View the following Microsoft Support video on [Spelling and grammar in Word](#).

## Microsoft Editor



Microsoft Editor uses Artificial Intelligence (AI) to recognise and offer corrections for spelling and grammar mistakes in Office 365, (available via Carlow College Office 365), for example, Word, Outlook and Word Online. The key features of Microsoft Editor are Spelling checker, Grammar checker and refinements such as clarity, conciseness, and punctuation.

For more information about Editor in Word for Microsoft 365, see [Check grammar, spelling, and more in Word](#).

The Microsoft Editor free browser extensions can be downloaded [for Edge](#) and [for Chrome](#). It is free to use for spelling and grammar on a range of web applications such as Gmail and social media.



## LightKey



Lightkey's AI-Powered spelling correction technology works for users by learning from their typing habits and offering spelling corrections based on their unique vocabulary.

[This LightKey video](#) overviews LightKey, a free AI-powered text prediction software for Windows. [How to type faster using Lightkey's AI-Powered writing assistant for Windows](#) will show five different ways to speed up your typing and be more productive using Lightkey's text prediction software for Windows.

1. Personalised Predictions
2. Real-time Corrections.
3. Smart Greetings in Outlook.
4. Punctuation and Math Expressions.
5. Sound Assistance.

This [website](#) offers a free version of LightKey, which allows for up to 1,000 keystrokes per month. You can visit their website to upgrade to the full version for unlimited use. Additionally, they provide helpful [guides and tutorials](#) that you can access there.

## Glean



Glean - a notetaking tool (subscription-based). Notetaking can be challenging for autistic students as they struggle to switch between tasks and have difficulty deciding where to direct attention. This may lead to a high cognitive overload and the risk of not processing essential information during a lecture. Glean will enable a student to focus on processing the information for understanding and remove the need to listen and write simultaneously. Glean enables students to use their laptop or mobile device to use Glean's key features to personalise their lecture notes, seminars and other study sessions delivered on campus and remotely over the internet. Glean is a subscription-based tool for students registered with ARO (Academic Resource Office) who have been granted this support at their Needs Assessment.

[Watch this 3-minute explainer video to see how Glean can help you take better notes.](#)

Glean is a subscription-based notetaking tool accessible to students registered with the Academic Resource Office (ARO) who meet reasonable accommodation eligibility criteria.

Try using one or two of the above digital assistive technologies each semester to improve your academic skills. Avoid overwhelming yourself with too many features at once.

## Tips for improving organisation and concentration

Using pen-and-paper techniques and assistive technology tools is recommended to enhance your study skills.

### Semester Plan

From the start of the semester, keep track of all assignments, in-class assessments, group work activities, presentations, end-of-semester exams, etc. Use your Schedule of Assessments to help you track your academic workload. You can use a digital or physical diary to help you stay organised throughout the academic year. Planning in advance will help you break down tasks into smaller, manageable chunks. Using a planner or a to-do list, whether digital or paper, will also help you stay organised.

### Planning and Scheduling

Develop a **realistic plan** for the week ahead every weekend. Include:

- Short-term tasks in your diary
- Assignment due dates
- In-class assessment dates
- Work commitments
- Social activities

### Nightly Review

Complete a **plan** for the next day and set achievable study goals.

For example, plan to read the ten recommended pages for philosophy during your study session on Tuesday. Knowing the amount of work you need to complete within a specific time frame can help you stay accountable to yourself.

### Physical and Visual Aids

A physical copy of your timetable and Schedule of Assessments is a good idea for quick and easy reference. Consider keeping one on your bedroom door and another in your college bag. This can reduce anxiety and increase focus.

## Lecture Seating Strategy

- It is also a good idea to sit near people who will not be distracting or annoying and avoid sitting near the window.
- If you need something to occupy your hands during a lecture, consider bringing a small squeezable ball or a fidget spinner instead of using screen time.

## College quiet room

- Consider using the college's quiet room when you need quiet time.
- Identify safe and supportive social spaces on campus where you feel comfortable interacting with others.

## Comfortable Study Space

- Create a study space that minimises sensory distractions like bright lights and loud noises.
- Use noise-cancelling headphones, earplugs, or white noise apps to manage sensory overload.
- A consistent study environment helps your brain recognise when to focus.

## Breaks & Reminders

Take regular breaks during your study sessions to avoid burning out and maintain your concentration. Consider using techniques like the Pomodoro Technique, which involves 25 minutes of focused work followed by a 5-minute break, to enhance your productivity. Use tools such as planners, to-do lists, a paper diary or online calendars to keep track of your tasks. Set alarms or reminders on your phone to ensure you do not miss appointments, deadlines, or scheduled study sessions. This will help relieve your mind from worrying about the details.

## Summary

Autistic students may be over-focused on their preferred interests and lack balance in time management and organisational skills. Interacting with Assistive Technology can assist a student in achieving a balance to work on all tasks and meet deadlines effectively. Key tools like Microsoft To-Do, Pomodoro timers, mind mapping applications, text-to-speech, and speech-to-text features in Microsoft 365 enhance productivity and foster confidence and independence.

Adopting habits such as creating semester plans, completing nightly reviews, establishing comfortable study spaces, using visual aids, taking breaks, and practising self-care ensure a balanced and sustainable approach to achieving academic success.