

Neurodevelopmental Conditions in Higher Education

Autism Spectrum Disorder (ASD)

Key Characteristics	Educational Strategies / Support Approaches
	<ul style="list-style-type: none">• Utilise strengths: Provide tasks that require a high level of accuracy, attention to detail and focus, such as quality control and data analysis. Alternatively, provide tasks that align with students' interests and require high-level reasoning or expertise.• Adapt educational material: Modify tasks so they are more manageable. Present information clearly and concisely, avoiding overly complex language, too much text, or excessive questioning. Avoid figurative language where possible.• Structured classroom: Establish clear rules and routines so students understand expectations. Create a predictable and consistent learning environment.• Social support: Support students with mentalisation by verifying rather than interpreting their thoughts. Encourage reflection on perspectives by asking clarifying questions such as "Why did you say this?" or "What do you think they meant?" Clearly explain types of conversations (e.g. intake, assessment, problem-solving). Be aware that some students may experience sensory sensitivities (e.g. discomfort from unexpected touch).• Visual aids: Use visual supports such as lists, tables, colour highlighting, and graphic organisers to help structure and organise information.• Positive attention: Provide regular positive feedback on effort and achievements to reinforce motivation.• Physical breaks: Include short breaks to support concentration and reduce fatigue or overload.• Communication: Clarify the purpose and type of conversations. Be explicit about topics and be mindful of vocabulary that may be confusing or ambiguous.• Technological solutions Use technology to support attention and simplify learning processes.

Attention-Deficit/Hyperactivity Disorder (ADHD)

Key Characteristics	Educational Strategies / Support Approaches
	<ul style="list-style-type: none"> • Utilise strengths: Increase student engagement and participation by using activities such as “Think-Pair-Share” and “Jigsaw.” Working in groups requires high energy levels, cognitive flexibility and good social skills. Provide opportunities for creative problem solving. • Active learning methods: Promote active learning techniques (e.g. asking students to summarise content) that keep them engaged. • Structured classroom: Establish clear rules and routines so students know what is expected of them. Create a predictable and consistent learning environment. • Visual aids: Incorporate visual supports such as lists, tables, colour coding, highlighting, and graphic organisers to help organise information effectively. • Positive attention: Provide regular positive feedback on learners’ effort and achievements to strengthen motivation and confidence. • Physical breaks: Include short breaks to improve concentration and reduce fatigue or cognitive overload. • Social & organisational support: Be mindful of time-management difficulties: provide shorter, clearer milestones and deadline reminders. Support task organisation by breaking tasks into smaller steps and checking in regularly on progress. • Technological solutions: Use technology to capture attention and simplify learning (e.g. apps, interactive tools, digital reminders). • Adapt educational material: Modify tasks to make them more manageable. Present information clearly and concisely, avoiding overly complex or lengthy text. Provide additional notes or guidance alongside materials such as PowerPoint slides.

Dyslexia

Key Characteristics	Educational Strategies / Support Approaches (to fill in)
	<ul style="list-style-type: none">• Provide materials in advance and in accessible formats Share slides, readings, and task instructions before lessons and in digital formats so students can adjust font, spacing, and background colour. This allows them to preview content, process at their own pace, and arrive prepared, reducing pressure on processing speed and memory.• Reduce working-memory: Clear learning objectives, modelling of strategies, step-by-step explanations, and repeated practice are strongly supported. Use structured handouts, key-point summaries, and allow audio recording. This helps students who struggle to listen, read, and write simultaneously to focus on understanding rather than copying• Multisensory and visual supports: Using diagrams, outlines, and animations alongside verbal explanation enhances comprehension and memory. Visual-verbal integration supports learners who struggle with rapid phonological processing.• Planned pauses and guided discussion Include short, structured breaks in lectures for discussion and note review. This improves immediate recall and note quality, supporting rehearsal and consolidation of information in memory.• Assistive Educational Technology: Text-to-speech, speech-to-text, digital note-taking, and lecture capture can reduce decoding load and support independent study, though effectiveness depends on training and consistent use.• Accessible instructions and feedback Provide instructions and feedback in both written and oral formats, using clear and straightforward language. Allow opportunities for clarification and review to support memory and self-regulation.• Design assessments flexibly and mark for meaning Offer extra time and, where possible, alternative ways for students to demonstrate learning (e.g. oral or structured responses). When marking, prioritise understanding, ideas, and structure over spelling and surface errors unless these are the specific learning objectives.

Neurodevelopmental Conditions in Higher Education

Dyscalculia

Key Characteristics	Educational Strategies / Support Approaches
	<ul style="list-style-type: none">• Task analysis: Break work into small steps, Teach one step at a time, Use a checklist and ensure understanding before moving on• Explicit instruction: Clearly explain what to do and why, Model thinking out loud• and Provide guided practice, Check understanding frequently• Multisensory teaching (CRA): Start with concrete materials (e.g. counters), Move to representational (drawings, diagrams), Then to abstract symbols and numbers• Scaffolding: Model a full example , Gradually remove support Build independence step by step• Use visual supports: Use number lines, diagrams, and colour coding, Highlight key information• Reduce cognitive load (working memory support): Provide written steps or formula sheets, Break down word problems, Avoid overloading with information• Allow extra time and flexible approaches: Reduce time pressure and Focus on understanding over speed

