MODULE 1

INTRODUCTION TO AUTISM SPECTRUM DISORDER (ASD) & SOCIAL – EMOTIONAL DEVELOPMENT

Upskilling Preservice Teachers to Support Young Children with Autism Spectrum Disorder through Digital Social Stories
2024-1-PL01-KA220-HED-000246304

Prepared by
Agnieszka Siedler, The Maria Grzegorzewska University
Anna Odrowąż- Coates, The Maria Grzegorzewska University
Krystyna Heland-Kurzak, The Maria Grzegorzewska University
Ewa Odachowska-Rogalska, The Maria Grzegorzewska University

2. MODULE 1 – Introduction to Autism Spectrum Disorder (ASD) & Social – Emotional Development

2.1 Module objectives & prerequisites

By the end of this module, students will be able to describe the key characteristics of ASD and explain how ASD influences social-emotional development in young children.
- Identify key traits of ASD.
- Explain the impact of ASD on communication, emotional regulation, and social interactions.
- Compare typical social-emotional milestones (ages 3–7) with atypical patterns seen in children with ASD.
- Design classroom strategies that nurture social skills and emotional literacy in neurodiverse learners.
- Establish and manage systems of mentoring, supervision, and peer support for ongoing professional growth.
- Create an individualized professional development plan tailored to teaching students with ASD.
- Implement the individualized professional development plan in classroom and instructional practices for students with ASD.
- Understand sensory processing profiles and their impact on learning, as well as age- and gender-related differences and how these influence student functioning and educational needs.
- Understand the teacher's role in fostering emotional literacy in children ages 2–7.

Before starting this module, students are expected to have:
- Basic understanding of child development: Knowledge of general developmental milestones in early childhood (ages 3–7), with a focus on cognitive, social, and emotional development.
- Familiarity with educational psychology: An understanding of foundational theories in education, including learning theories and behaviour management techniques.

	Contact hours		Self-study
Modul 1	Lectures	Workshops/Seminars	
	3	4	3

2.2 Module learning outcomes

Knowledge	**K4 - Describe DSM-5 criteria and cognitive profiles (e.g. Theory of Mind, executive function) associated with ASD.**
	K5 - Summarize leading theories of social-emotional development and explain their relevance to ASD.
	K6 - Explain sensory processing profiles, repetitive behaviours, and gender-related differences in children with ASD.
Skills	S6 - Analyse case studies to recommend evidence-based interventions for social-emotional challenges.
	S7 - Develop lesson-level activities that foster emotion recognition, regulation, and peer interaction.
	S8 - Construct and facilitate a peer-mentoring or supervision session for ongoing teacher support.
Competence	C6 - Integrate sensory-based strategies into daily classroom routines to support self-regulation.
	C7 - Implement and monitor an individualized professional growth plan.
	C8 - Collaborate effectively with colleagues to sustain a culture of inclusive practice for neurodiverse learners.

2.3 Syllabus & topics

	Type	Topic	Self-study activity	Resources	Hours
1	Lecture	Core characteristics of ASD - DSM-5 criteria - Cognitive profiles (Theory of Mind, EF, Central Coherence) -Gender differences & developmental changes	Case-study analysis	Craig, F., Margari, F., Legrottaglie, A. R., Palumbi, R., de Giambattista, C., & Margari, L. (2016). A review of executive function deficits in autism spectrum disorder and attention-deficit/hyperactivity disorder. *Neuropsychiatric disease and treatment*, *12*, 1191–1202. https://doi.org/10.2147/NDT.S104620 Rosello, B., Berenguer, C., Baixauli, I., García, R., & Miranda, A. (2020). Theory of mind profiles in children with autism spectrum disorder: Adaptive/social skills and pragmatic competence. *Frontiers in Psychology, 11*, Article 567401. https://doi.org/10.3389/fpsyg.2020.567401 Booth, R., & Happé, F. (2010). "Hunting with a knife and ... fork": examining central coherence in autism, attention deficit/hyperactivity disorder, and typical development with a linguistic task. *Journal of experimental child psychology*, *107*(4), 377–393. https://doi.org/10.1016/j.jecp.2010.06.003 Rubenstein, E., Wiggins, L. D., & Lee, L. C. (2015). A Review of the Differences in Developmental, Psychiatric, and Medical Endophenotypes Between Males and Females with Autism Spectrum Disorder. *Journal of developmental and physical disabilities*, *27*(1), 119–139. https://doi.org/10.1007/s10882-014-9397-x	1
2	Lecture	Social-emotional milestones vs. ASD patterns - Typical ages 3–7 - Atypical trajectories	Complete timeline chart	Malik, F., & Marwaha, R. (2022, September 18). *Developmental stages of social emotional development in children*. In StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK534819/ https://www.cdc.gov/ncbddd/actearly/milestones/index.html	1
3	Lecture	Sensory processing in ASD - Hyper-/hypo-reactivity - Regulation strategies	Analyse video Create sensory support plan	Bogdashima, O. (2016). Sensory Perceptual Issues in Autism and Asperger Syndrome, Second Edition: Different Sensory Experiences - Different Perceptual Worlds. London: Jessica Kingsley Publishers Guardado, K. E., & Sergent, S. R. (2023, July 31). *Sensory integration*. In StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. Retrieved July 2, 2025, from https://www.ncbi.nlm.nih.gov/books/NBK559155/	1

4	Workshop	Early red-flags & repetitive behaviours - First symptoms - Stereotypies & rituals	Fill up observation checklist Research articles analysis		2
5	Workshop	Teacher's role & emotional literacy - Social skills curricula - Emotion coaching	Design a mini-lesson on emotion recognition peer feedback	Schonert-Reichl (2017) Social and Emotional Learning and Teachers. The future of Children. VOL. 27 / NO. 1 https://files.eric.ed.gov/fulltext/EJ1145076.pdf Zinsser et al. Becoming a Social and Emotional Teacher The Heart of Good Guidance. Spotlight on Young Children: Challenging Behaviour https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/pubs/spotlight-challenging-behaviour-zinsser.pdf Jaja et. al (2025) Emotional Literacy as Curriculum: A New Paradigm for Resilient Classrooms. Front. Educ. Sec. Mental Health and Wellbeing in Education Vol.10 https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2025.1610746/abstract Sandel (2020) https://digitalcommons.hamline.edu/cgi/viewcontent.cgi?article=1597&context=hse_cp	2
6	Seminar	Systems for support, mentoring & supervision - Peer coaching models - Reflective practice	Co-create mentoring protocol (small groups)	Rouleau (2019)Tapping Into the Expertise in the Building The triad model of peer coaching takes advantage of a powerful professional learning resource available to teachers—their colleagues. EDUTOPIA https://www.edutopia.org/article/tapping-expertise-building/ Optional from Coach Foundation Blog: https://coachfoundation.com/blog/peer-coaching-model-benefits/	1
7	Seminar	Individualized professional growth planning - Goal setting - PDCA cycle	Draft individual professional development plan Set individual SMART goals	SMART: https://www.bitesizelearning.co.uk/resources/smart-goals-meaning-examples PDCA: https://www.bitesizelearning.co.uk/resources/pdca-plan-do-check-act	1

2.4 Teaching & learning methods

- Interactive lectures with multimedia
- Group discussions
- Workshops
- Video-based case analysis
- Sensory toolkit exploration (Hands-on trial of fidget tools, weighted vests, visual schedules)
- Review of research articles

2.5 Proposed assessment methods

Method	Description	Weight
Sensory support plan	Annotated collection of sensory strategies & rationale	30 %
Case study analysis paper	In-depth analysis (2,500 words) of one child's social-emotional profile	35 %
Professional growth plan	SMART-based PD plan with PDCA timeline	15%
Active participation	Assessment of active participation in workshops and group activities	20%

2.6 List of materials

*All materials are included in Module APPENDIX A

1. Presentations:
   - Core ASD Characteristics & DSM-5 (Appendix A.1.1)
   - Social-Emotional Milestones: Typical vs. Atypical (3–7 yrs) (Appendix A.2.1)
   - Sensory processing in ASD (Appendix A.3.1)
   - Early red-flags & repetitive behaviours (Appendix A.4.1)
   - Teacher's role & emotional literacy (Appendix A.5.1)
   - Systems for support, mentoring & supervision (Appendix A.6.1)
   - Individualized professional growth planning (Appendix A.7.1)

2. Worksheets:
   - Timeline Chart: Mapping Social-Emotional Milestones (Appendix A.2.3)
   - Video Analysis Worksheet (Appendix A.3.3)
   - Task: Create sensory support plan (case vignette and worksheet) (Appendix A.3.4)
   - Red Flags Worksheet (Appendix A.4.2)
   - Research Paper Analysis Worksheet (Appendix A.4.5)
   - Self-Reflection Worksheet (Appendix A.5.2)
   - Scenario Response Sheet (Appendix A.5.4)
   - Activity Planning Template (Anepdix A.5.5)
   - Personal Action Plan (Appendix A5.6)
   - Individual Reflection Worksheet (Appendix A.6.3)
   - Peer Coaching Triad Template (Appendix A.6.4)
   - Mentoring Protocol Template (Appendix A.6.5)
   - Reflection Prompts (Appendix A.6.6)
   - Create your SMART goals (Appendix A.7.3)
   - SMART - action plan (Appendix A.7.4)
   - Applying PDCA (Appendix A.7.5)
   - Drafting Individual Professional Development Plan (Appendix A.7.6)

3. Other:
   - DSM5 Criteria Handout (Appendix A.1.2)
   - Discussion prompt sheet (ToM, EF and Central Coherence) (Appendix A.1.3)
   - Case Vignette Handout (ASD Criteria) (Appendix A.1.4)
   - Discussion topics on atypical development trajectories (Appendix A.2.2)
   - Sensory Toolkit Description (Appendix A.3.2)
   - Case Vignettes (Early Red Flags) (Appendix A.4.3)
   - Red Flag or Not – Quiz (Appendix A.4.4)
   - Scenario Cards (Appendix A.5.3)

- Triad Peer Coaching Model Summary (Appendix A.6.2)
- SMART Goal Handout (Appendix A.7.2)
4. Digital Resources:
    - Video link: https://youtu.be/zxt3FBVq8Jg?si=W_v_dkjO4tq-cXVG
    - https://www.stortvalleyhealthcare.com/wp-content/uploads/SCQ_Lifetime_Ages-5-and-up.pdf
    - https://www.mchatscreen.com/
    - https://www.autismresearchcentre.com/tests/quantitative-checklist-for-autism-in-toddlers-q-chat/
    - Research paper: Early Identification of Autism: Early Characteristics, Onset of Symptoms, and Diagnostic Stability Sara Jane Webb, PhD and Emily J.H. Jones, PhD (link: https://pmc.ncbi.nlm.nih.gov/articles/PMC5232420/pdf/nihms799779.pdf
    - Article: Jarvis, R., Dempsey, K., Gutierrez, G., Lewis, D., Rouleau, K., & Stone, B. (2017). *Peer coaching that works: The power of reflection and feedback in teacher triad teams*. Denver, CO: McREL International (download from: https://www.mcrel.org/peer-coaching-that-works/)

2.7 Detailed class plan

2.7.1 Lecture - Core characteristics of ASD

Segment	Learning Activity	Materials & Resources
DSM-5 Criteria Overview	Review of the DSM-5 diagnostic criteria for ASD, illustrating social-communication and repetitive-behaviour domains with real-world examples. Students practice mapping observed behaviours onto the criteria.	Slides 1–12: DSM-5 criteria summary (Appendix A.1.1) DSM-5 criteria handout (Appendix A.1.2)
Cognitive Profiles in ASD	Students explore key cognitive differences in ASD—Theory of Mind and Executive Function—and discuss how these profiles impact classroom learning. The facilitator presents research findings and guides reflection.	Slides 13–18: Cognitive profiles (Appendix A.1.1)
Think-Pair-Share	Task: How might ToM or EF differences affect classroom learning? In pairs, participants discuss how Theory of Mind and Executive Function differences may affect students' learning experiences, then share their insights with the larger group. This promotes collaborative reflection on practical implications.	Discussion prompt sheet (Appendix A.1.3)
Gender differences & developmental changes	This segment examines how ASD presentations differ by gender and how core symptoms shift with age, using case examples to illustrate these developmental trajectories. Students compare typical versus atypical patterns over time.Presentation	Slides 19–25: Gender differenced & Developmental changes (Appendix A.1.1)
Self-study activity	Task: identify DSM-5 features & cognitive profile implications. Individually, students review a written case vignette and write a brief reflection identifying relevant DSM-5 features and cognitive profile implications.	Case vignette handout (Appendix A.1.4)

2.7.2 Lecture - Social-emotional milestones vs. ASD patterns

Segment	Learning Activity	Materials & Resources
Social communication milestones	Outline typical social communication skills from infancy early childhood.	Slides 27 – 39: Social communication milestones (Appendix A.2.1)
Emotional development milestones	Outlines typical emotional development from infancy through childhood.	Slides 40 – 41: Emotional development (Appendix A.2.1)
Atypical developmental trajectories	Participants explore patterns of development that diverge from typical trajectories using case vignettes in small groups. The session highlights how early signs may manifest differently and the importance of context. Discussion in small groups.	Slide 42 (Appendix A.2.1) Discussion Topics on Atypical Developmental Trajectories (Appendix A.2.2)
Self-study activity	Learners complete a developmental timeline chart individually, plotting key milestones.	Timelie Chart (Appendix A.2.3)

2.7.3 Lecture - Sensory processing in ASD

Segment	Learning Activity	Materials & Resources

Sensory processing in ASD	Present how children with ASD experience sensory input across different modalities and the effects of hypersensitivity or hyposensitivity. Participants learn to recognize common sensory profiles and discuss their impact on behaviour.	Slides 43-35 (Appendix A.3.1)
Regulation strategies	introduces evidence-based techniques to support sensory regulation in children with ASD, including environmental modifications and self-management strategies. Learners reflect on applying these approaches in educational settings.	Slides 46 -47 (Appendix A.3.1) Sensory toolkit (Appendix A.3.2)
Sensory behaviours connected to ASD	Video analysis - participants watch a brief video demonstrating sensory-related behaviours in children with ASD and use a guided worksheet to analyse the observed responses. They practice linking behaviours to sensory processing differences.	Video link: https://youtu.be/zxt3FBVq8Jg?si=W_v_dkjO4tq-cXVG Video analysis worksheet (Appendix A.3.3)
Self-study activity	Create sensory support plan - Learners create a comprehensive sensory support plan for a child described in a case vignette, selecting appropriate interventions based on the child's sensory profile. They complete a structured worksheet to justify their choices.	Create sensory support plan - Case vignette handout (Appendix A.3.4) Create sensory support plan – Worksheet (Appendix A.3.5)

2.7.4   Workshop - Early red-flags & repetitive behaviors

Segment	Learning Activity	Materials & Resources

Workshops Introduction	Overview of the workshop plan and objectives, followed by a brief review of typical social and emotional development. Participants revisit key milestones to frame the new content.	Slide 50 (Appendix A.4.1)
Repetitive bahaviours	Short presentation defining the four DSM-5 subtypes of repetitive behaviours, followed by video-based analysis to spot real examples.	Slides 51 – 55 (Appendix A.4.1)
Red flags in children up to 24 months	Participants work in small groups using the Red Flags Worksheet to pinpoint which behaviours are concerning at specific ages.	Red Flags Worksheet (Appendix A.4.2)
Red flags in children around 3-4 years old	Participants work in small groups to dissect detailed case vignettes, identifying subtle indicators of ASD within the context of typical preschool development. They then engage in a "Red Flag or Not?" quiz to apply their understanding to a wider set of behaviours.	Case Vignettes (Appendix A.4.3) „Red flag or not?" – quiz (Appendix A.4.4)
Screening Tools Overview	Introduce several standardized ASD screening instruments—M-CHAT-R/F for 16–30 months, Q-CHAT for toddlers, Social Communication Questionnaire (SCQ).	https://www.stortvalleyhealthcare.com/wp-content/uploads/SCQ_Lifetime_Ages-5-and-up.pdf https://www.mchatscreen.com/ https://www.autismresearchcentre.com/tests/quantitative-checklist-for-autism-in-toddlers-q-chat/
Self-study activity	Participants individually review a research on early ASD indicators (e.g., parental concern timelines, specific early behaviours) and complete guided questions to extract key findings, onset ages, and developmental distinctions.	Research paper: Early Identification of Autism: Early Characteristics, Onset of Symptoms, and Diagnostic Stability Sara Jane Webb, PhD and Emily J.H. Jones, PhD (link: https://pmc.ncbi.nlm.nih.gov/articles/PMC5232420/pdf/nihms799779.pdf) Research Paper Analysis Worksheet (Appendix A.4.5)

2.7.5   Workshop - Teacher's role & emotional literacy

Segment	Learning Activity	Materials & Resources
Introduction – Brain-Storm	Warm-up brain-storm – "How do you think a teacher's mood or reactions might affect young children?"	Whiteboard or flipchart for brain-storm notes.
Teacher's Role	Short lecture on emotional literacy definition & importance.	Slides 57–59 (Appendix A.5.1)
Self-Awareness Exercise: Teacher Emotions	Personal reflection on emotional triggers and coping; pair-share discussion of experiences.	Teacher Self-Reflection Worksheet (Appendix A.5.2) Slide 60 (Appendix A.5.1)
Strategies for Emotional Literacy in ASD Classrooms	Interactive discussion of strategies (teacher modeling, emotion coaching, visual supports); role-play scenario practice responding to a child's emotional episode.	Slide 62 (Strategies) (Appendix A.5.1) Scenario cards (Appendix A.5.3) Scenario Response Sheet (Appendix A.5.4)
Designing an Emotional Literacy Activity	Small-group activity – develop a simple activity or lesson plan to teach a feeling to children with ASD; groups share their ideas.	Activity Planning Worksheet (Appendix A.5.5)
Action Plan	Each participant writes a personal action plan for applying learned strategies.	Personal Action Plan (Appendix A.5.6)

2.7.6   Seminar - Systems for support, mentoring & supervision

Segment	Learning Activity	Materials & Resources
Seminar Introduction	Introduce goals and recap key terms: peer coaching, reflective practice, mentoring protocol	Slide 63-65 (Appendix A.6.1)
Triad Model Overview	Discuss triad peer coaching model: coach, coachee, observer. Explore benefits and expectations	Article: Jarvis, R., Dempsey, K., Gutierrez, G., Lewis, D., Rouleau, K., & Stone, B. (2017). *Peer coaching that works: The power of reflection and feedback in*

		teacher triad teams. Denver, CO: McREL International (download from: https://www.mcrel.org/peer-coaching-that-works/) Slide 66-68 (Appendix A.6.1) Triad Peer Coaching Model – Summary (Appendix A.6.2)
Activity: Individual Reflection	Participants complete a reflection worksheet about past coaching/mentoring experiences. Then, share in pairs	Individual Reflection Worksheet (Appendix A.6.3)
Hands-On: Peer Coaching Triads	In triads, participants rotate roles and practice a mini peer coaching session using structured template	Peer Coaching Triad Template (Appendix A.6.4)
Group Task: Create Mentoring Protocol	Small groups co-create a mentoring protocol draft based on their discussion and experiences	Mentoring Protocol Template (Appendix A.6.5)
Wrap-Up & Reflection	Short written reflection followed by group debrief: How can you implement peer coaching or mentoring?	Reflection Prompts (Appendix A.6.6)

2.7.7   Seminar - Individualized professional growth planning

Segment	Learning Activity	Materials & Resources
Introduction to Goal Setting and understanding SMART Goals	Instructor-led introduction to the importance of goal setting, defining SMART goals, and how they relate to professional development. Students learn about the SMART acronym	Slide 69-76 (Appendix A.7.1) SMART Goals Handout (Appendix A.7.2)
Individual SMART Goals	Students create their own examples for setting goals based on the criteria (Specific, Measurable, Achievable, Relevant, Time-bound) and action plan (based on their SMART Goals).	Create Your SMART Goals (Appendix A.7.3) Create Your SMART Action Plan (Appendix A.7.4)

Introduction to PDCA Cycle	Instructor-led introduction to the PDCA cycle (Plan-Do-Check-Act) as a continuous improvement tool.	Slides 77 – 78 (Appendix A.7.1)
PDCA Application Exercise	Students use the PDCA cycle to plan, do, check, and act on a specific professional goal. They will reflect on how to use PDCA for self-improvement.	Individual PDCA Cycle Template (Appendix A.7.5)
Drafting Individual Development Plans	Students draft their personalized professional development plans using the SMART and PDCA methods. Peer collaboration for feedback.	Individual Professional Development Plan Template (Appendix A.7.6)