

ASD-EAST



Co-funded by the
Erasmus+ Programme
of the European Union

Module 5
**Modifications and
adaptations**
Mainstream schools



Learning objectives

- To identify curriculum issues, in particular differentiation, adaptation and modification linked to learning style and intellectual level
- To Identify ways to assess the level of support pupils require and to measure the success of this input
- To make appropriate adaptations to the learning environment and to the ways in which information is communicated
- To know the key elements of structured teaching and be able to adapt them according to a pupil's profile of need.

Content



Teaching
methods



Content of
teaching



Learning
Environment



Learning
outcomes



We are here to help

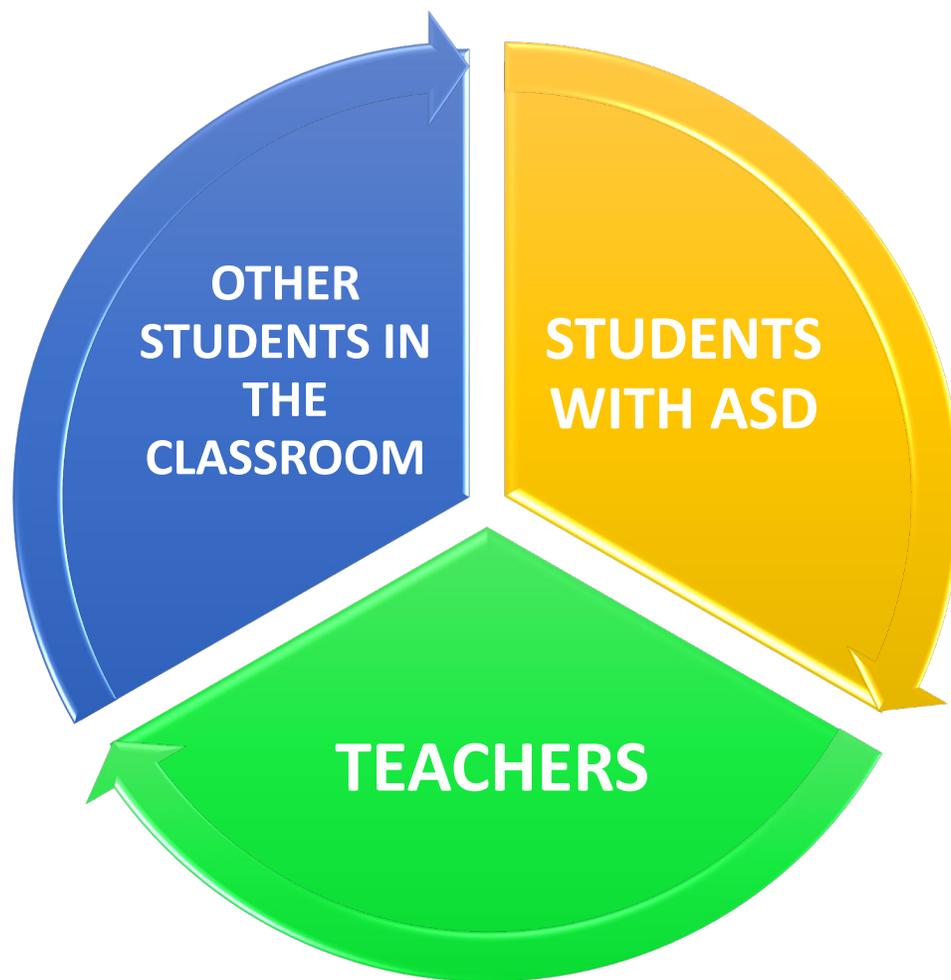
Modifications and adaptations meet students' needs by

- Individualising materials and methods
- Using individual interests or strengths

Modifications and adaptations provides a systematic approach to learning and teaching through:

- Organisation of the learning environment
- Routine, structure and visual clarity

Benefits for all



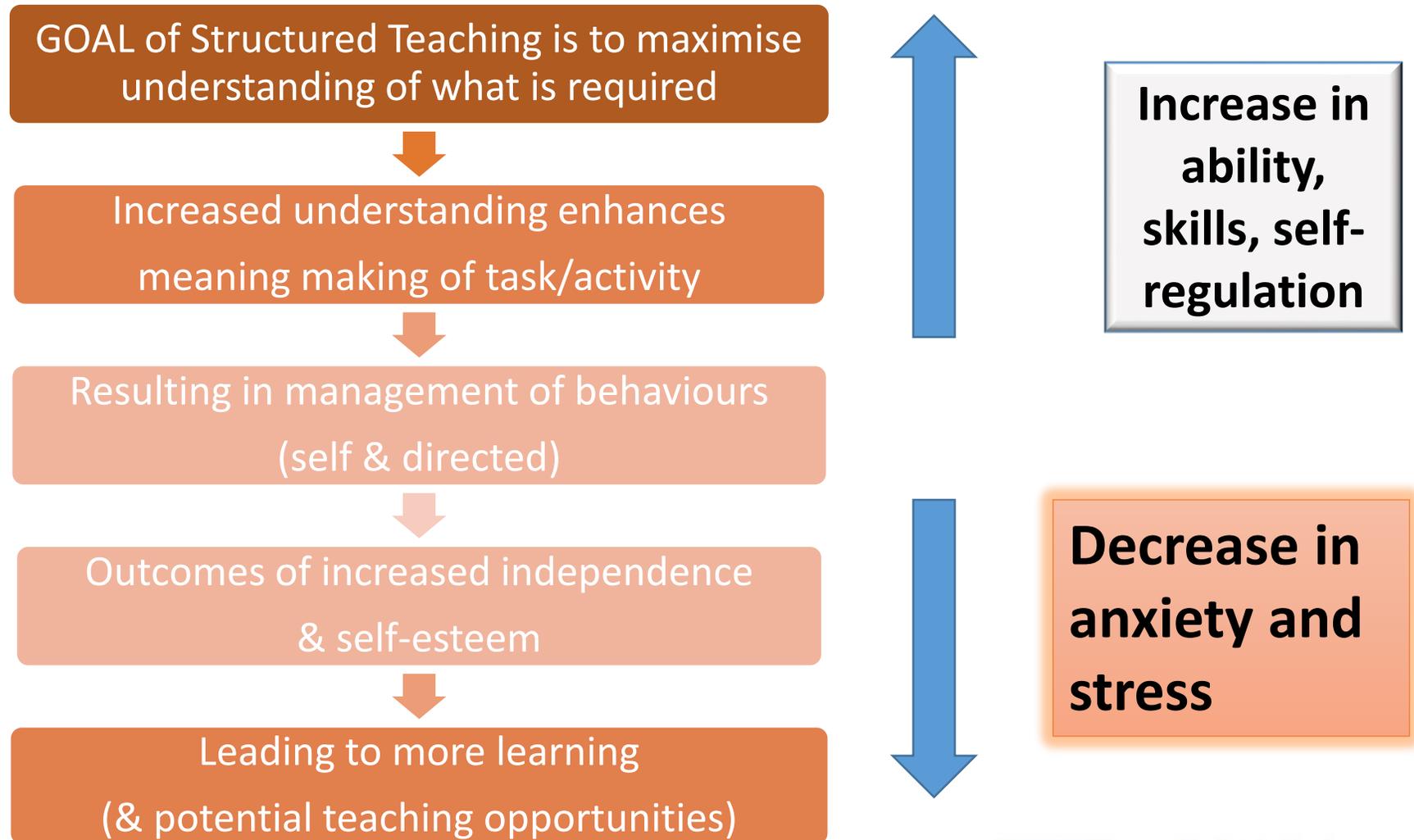
Teaching Methods

ABA
(Applied Behavioral Analysis) (Lovaas)

Using components of different structured teaching methods may be necessary to ensure success for students with autism (TEACCH or ABA). Individualised adaptations may be necessary based to meet the needs of a particular student and may be different from others in the classroom.

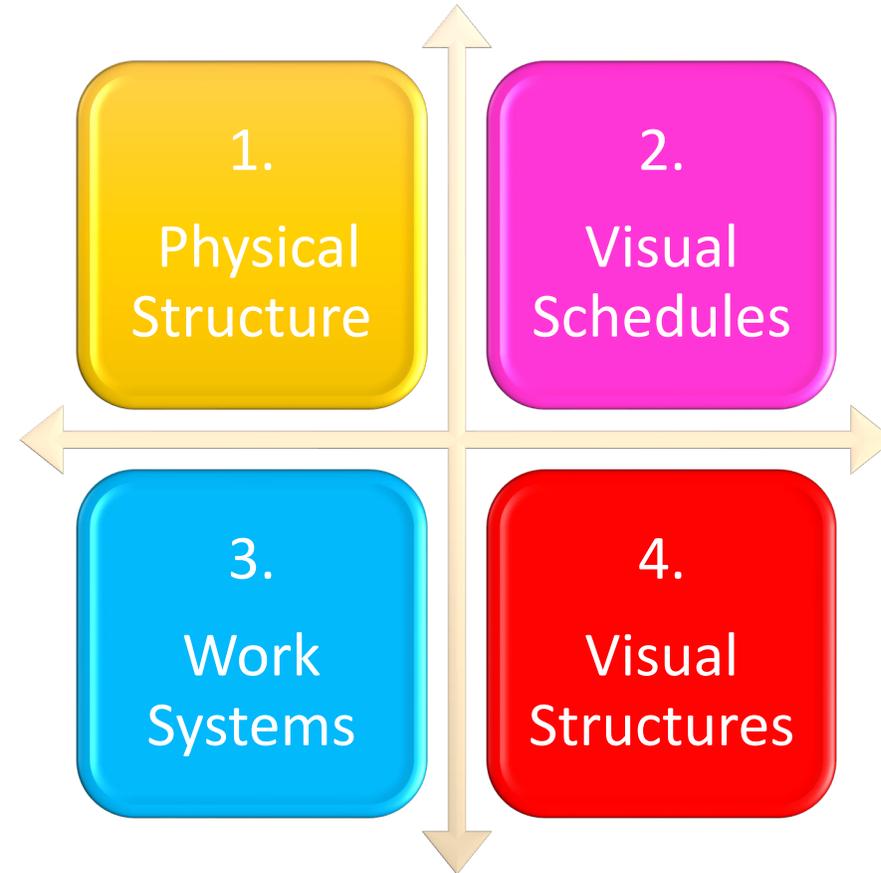
TEACCH
(Treatment and Education of Autistic and related Communication handicapped Children) (Schopler and Mesibov)

How does structured teaching work?



Elements of structured teaching

There are 4 main elements of Structured Teaching that provide a framework in supporting students.



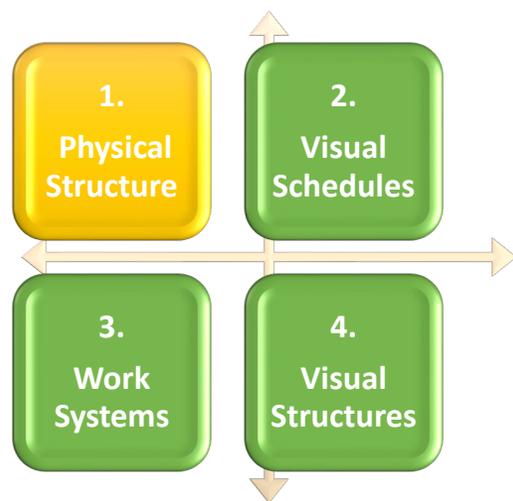
1. Physical structure

- Physical structure provides environmental organisation for people with autism.
- Clear physical and visual boundaries help the person to understand where each area begins and ends
- Physical structure minimises visual and auditory distractions

1. Physical Structure

Organisation of classroom

- Minimise visual & auditory distractions



Reduce the distractions hanging from the roof, on walls or around the room.

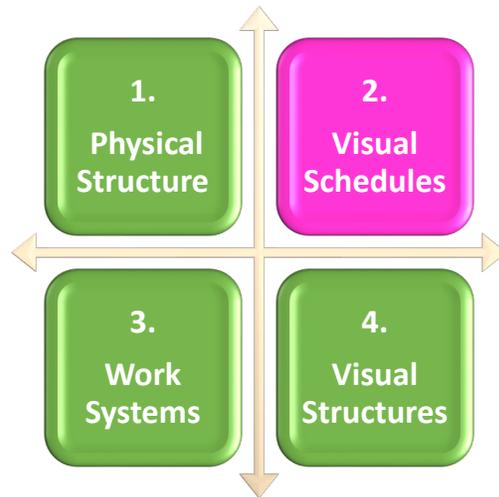


Clearly marked areas using equipment, carpet & walkways to organise classroom

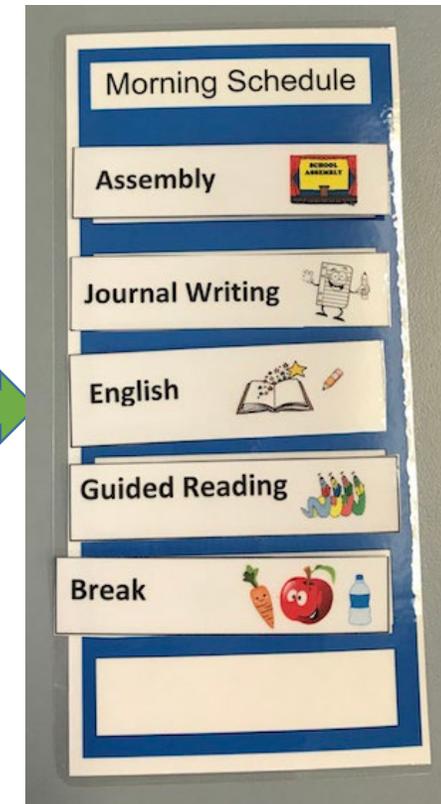
2. Visual schedules

Visual information depicting the

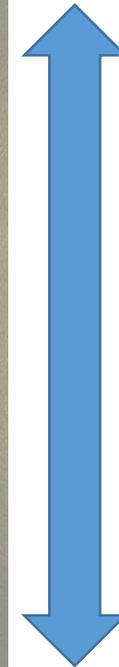
- 'where'
- 'when'
- 'what' of an activity



What



Where
And
When



Visual schedules (continued)

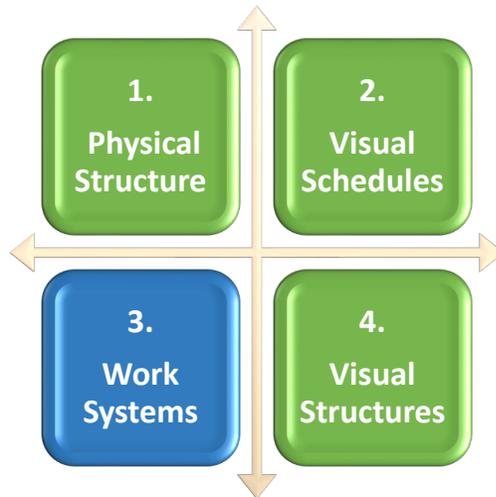
- ✓ Can increase a student's motivation to complete less desired activities by strategically alternating more preferred with less-preferred activities on the student's individual visual schedule.
- ✓ In general, schedules should be arranged from a "top-to-bottom" or "left-to-right" format, including a method for the student to manipulate the schedule to indicate that an activity is finished or "all done" .
- ✓ A minimum of two scheduled items should be presented at a time so that the student begins to understand that events and activities happen in a sequential manner, not in isolation.



3. Work systems

Visual information informing

- 'what to do'
- 'how much'
- 'when it is finished'
- and 'what next'



What to do

Year 1 2D Shapes

Order	To Do	Circle when Finished
1	Matching 2D Shapes	★
2	Finding 2D Shapes	★
3	Sorting 2D Shapes	★
Reward Activity	Create a picture using 2D shapes	

How much

When it is finished

What next

4. Visual structures

Visual clarity

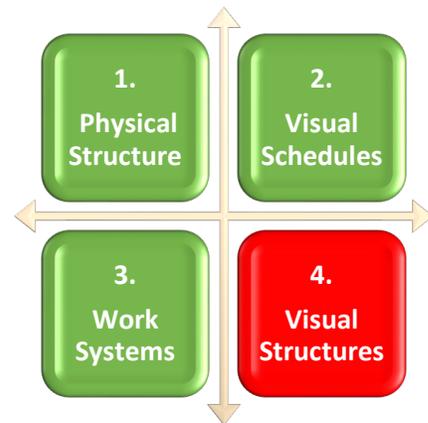
colour coding, highlighting, labelling

Visual organisation

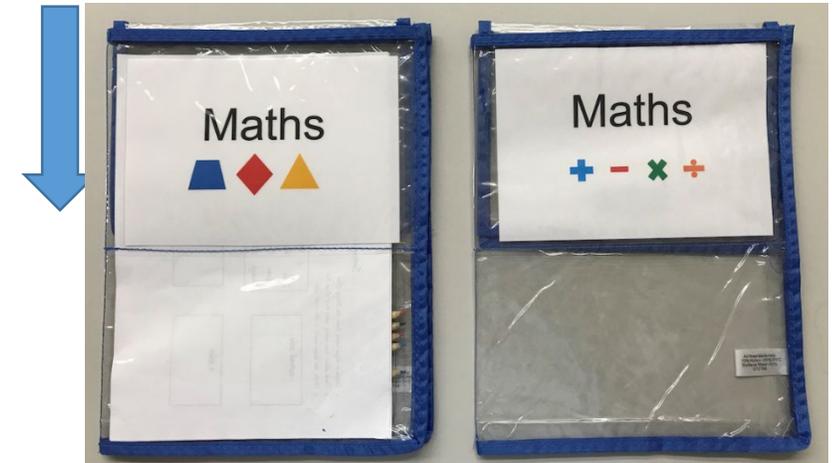
arrangement of materials and space

Visual instructions

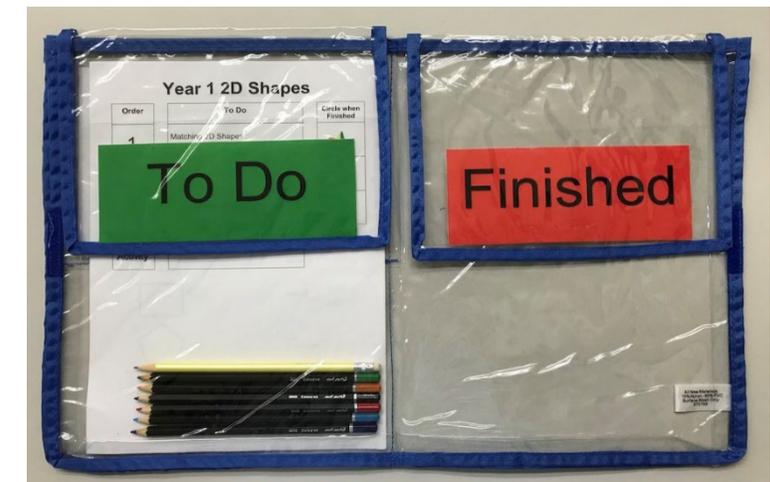
clear information on where to start and to finish
and the sequencing of steps



Clear labelling with supporting images to match subject of activity



Instructions on starting in **To Do** and moving work to **Finished**



Teaching Content

The content: The depth or breadth of the information or skills to be taught.



The processes: The instructional approaches used with the student, as well as the materials used to deliver or illustrate the content.



The products of the learning situation: What the end product will be or look like. This product may be tangible (*a worksheet, project, composition*), a skill that has been acquired, or knowledge that has been gained.

Break up the task / Limit the amount of information you give.

The more information you give, the more the child's brain will 'overload', which can lead to an outburst or stress. Giving short sentences with bullet points - maybe even a checklist, can allow the child independence whilst still achieving the tasks set :

- Write the date
- Write the title
- Underline my title
- Complete sums 1-4
- Call my teacher to see how I am doing

To determine the most effective strategies for students in a learning situation, it is necessary to consider the learning goals for the student in the context of the following questions:

What do we want the student to learn?

What essential skills or understandings do we want the student to acquire?

Why is the student learning this?

How does the learning goal fit into the goals outlined in the IEP for the student?

How will the student best learn this?

What type of activities, materials, and supports are appropriate and effective for the student?

How will the student demonstrate learning?

Books & reading materials

Possible challenges

- Due to the wide spectrum of ability level of children with autism, reading profiles may appear very different.
- Some students with ASD have little to no difficulty with reading.
- Others are excellent at decoding, but have challenges in comprehension, differentiating details from the main idea, and understanding the complex nuances in literature.
- There are also students who have more significant impairments and read greatly below their age.

How to modify books & reading materials

- To guide students and keep them focused, create check off lists of facts students must find as they read through their books to help maintain focus
- Have the student document which page he found that information and highlight it in the book, if allowed
- Create fact sheets of the main concepts and ideas students must know about a topic to read as an alternative to reading entire chapters
- Make a modified book for your student to use that includes simplified text and pictures

Writing and Recording Ideas

Possible Challenges

- Writing is a common area of difficulty for students with ASD
- They often attempt to avoid having to participate in writing assignments by demonstrating inappropriate behaviours
- Thinking of ideas, poor fine motor skills and difficulty organising their thoughts can all result in a reluctance to write. Individual support programmes in any one or more of these areas may be needed
- They may not know where to begin, how much to write, what they are supposed to write about, know how to form sentences or paragraphs, etc.

Writing and recording ideas

- Use semantic maps, diagrams, and story webs
- Use a template at the beginning to get the student started
- Provide an example of what you want it to look like
- Be specific (how many paragraphs with how many sentences in each paragraph) for each assignment given so the student knows exactly what he needs to do and how he will know he has finished

How to modify written tasks

- Highlight or underline the main idea in questions that require longer answers.
- Provide various adjustments of writing tools for students to address their specific needs e.g. pencil grips, felt-tip pens.
- Avoid corrections in the mechanical aspects in early stages of writing to concentrate on idea development.
- Teach the use of graphic organisers/outlines/mapping skills to help students learn to visualise the parts of the paragraph/essay/story.
- Teach importance of beginning, middle and end of stories.
- Teach keyboard skills so that the child can type their ideas on a laptop.

How to modify for materials for maths

- Identify your child's interest and use it to teach maths concepts
- Capitalise on their visual-spatial learning style by using multimedia teaching tools
- Create a list of mathematical facts so the child can easily refer to it whenever they need
- Teach maths concepts through visual examples
- Make learning maths fun by playing games with flash cards, apps, or use of technology
- Provide praise as often as possible to keep students motivated

How to modify for materials for maths

- Model maths problems using concrete resources (coins, counters etc.)
- When teaching the use of number lines, use tape or draw a number line on the floor and get child to physically walk up and down the line
- Enlarge worksheets/assignments to give more writing space
- Put boxes around each problem to visually separate them
- Allow use of number lines
- Allow use of a multiplication chart
- Use large graph paper to assist with proper alignment of columns of numbers
- Reduce the number of practice or test problems on a page
- Allow additional time to complete assignments
- Simplify and rephrase vocabulary in word problems
- Have students verbalise the process to you

How to modify materials for other subjects

Provide page numbers to locate answers

Keep questions in the order of reading material

Reduce the volume of the assignment

Highlight or underline answers

Provide a word bank

Break material into smaller parts

Allow students to work with a responsible partner

Take turns – you do a problem, the student does a problem

If you use crossword puzzles, provide a word bank

Make assignment more visually organised (refer to visual organisation strategies)

Provide multiple choice answers

Examples of choice strategies:

- Science – Circle one way Mary could improve her experiment.

Pieces of cloth need to be the same size /Use more clothing

- Social Studies – Circle 2 things that are alike because they are both models of the real thing.

Globe State Dollhouse

- Maths – $5 \times 5 =$ _____
20 25 30

- Language skills – What might be two good pets for Connor?

Bird Puppy Fish

How to modify worksheets

Worksheets are a way of supporting content and allowing students to practise their newly learned skills.

- Most students with autism can benefit from modifications and expectations being made to their worksheets
- Reasons for this may include: fine motor challenges, attention issues, reading level, cognitive differences, perfectionism, and challenges with forming answers for longer questions

How to modify worksheets

- Put fewer questions on a page and increase font size
- For matching questions, reduce the amount of items to match. For example, have one section where there are 5 items to match and another section with 5 items to match, rather than having 10 items which must be matched
- De-clutter worksheets by taping over extraneous pictures, blocking the page up to make expectations more clearly, fold into sections, cut in half
- Use pictures that will support concepts and ease understanding

How to modify worksheets

- If the worksheet is not directly related to spelling, consider allowing for spelling errors
- Remove open-ended questions and instead reword questions so the student may respond with a closed answer
- Complete a few problems to be used as examples
- Use highlighters to draw attention to important information on worksheets or to indicate the items you would like the student to complete, if you are modifying the amount of problems required
- Circle items on the worksheet which best represent the skills or content which the worksheet is designed to support and require the student to complete only those
- Allow student to answer questions on a separate sheet of paper or by word processing, if handwriting is the barrier to completion
- Mark steps on the worksheet

Provide precise, positive praise while the student is learning

Give students precise information about what they do right or well; for example, “great colouring,” or “good finishing of that maths problem.”

Generalised praise may result in unintended learning that is hard to reverse. Students with autism may learn on one trial, so directing the praise to the very specific behaviour is important: “Emily, you are doing very well at multiplying these numbers.” If students mistakenly connect something they are doing with the praise. Saying “Emily, you are doing very well” when she is also swinging her feet might mean that she connects the feet swinging with the general praise.

Plan tasks at an appropriate level of difficulty

Students with autism may be particularly vulnerable to anxiety and intolerant of feelings of frustration if they cannot perform the tasks assigned. Increasing the level of difficulty gradually and scaffolding or supporting learning (particularly with visual information rather than just oral explanations) will assist in minimising the student’s frustration.

Break down instructions into small steps

Avoid long strings of verbal information. Supporting oral instruction with visual cues and representations will help students to understand.

Pay attention to processing and pacing issues

Students with autism may need longer to respond than other students. This may be linked to cognitive and/or motor difficulties.

Students with autism may need to process each discrete piece of the message or request, and therefore need extra time to respond. Providing extra time generally, and allowing for ample time between giving instructions and student responses are both important tactics for supporting students with autism. Use concrete examples and hands-on activities

Use meaningful reinforcements

Reinforces can be anything from praise to tangible objects that increase the behaviour the student is to learn

some time spent alone,

time to talk to a preferred staff member,

an exercise routine (such as going for a walk),

time to play with a desired object,

music, playing in water,

getting to perform a favourite routine,

items that provide specific sensory stimulation

sitting at the window.

Adaptation and modification of space and materials

Physical Structure in the classroom

What can we achieve with getting the correct environment?

Helps to minimise
visual and auditory
distractions

Helps the young person to
understand what activity
will take place in an area.

Helps to focus
attention

Makes rules clear

Helps the young person to
understand where each
area/activity
begins and ends

Provides
environmental
organisation for the
young person

Minimising distractions in the classroom

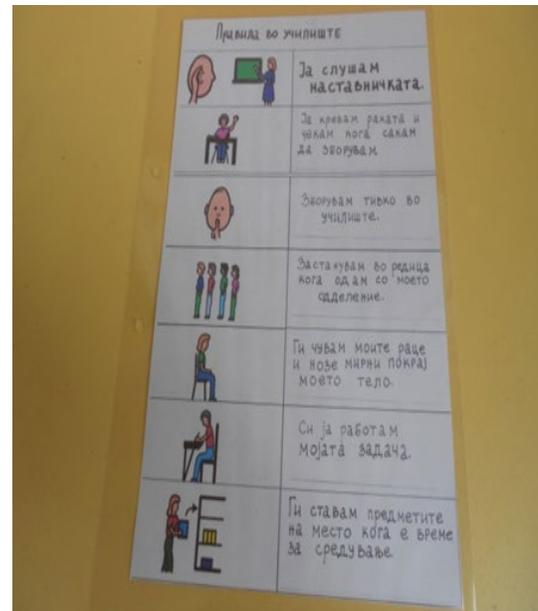
- Stand in front of neutral backgrounds when teaching
- Remove colourful posters from around the room
- Check for flickering light bulbs
- Swap fluorescent lights for lamps or natural light
- Place dividers between desks and work spaces
- Cover up shelves and computers
- Store equipment inside cupboards
- Avoid air fresheners and chemical smells
- Choose low-odour craft supplies
- Cover tiled floors with carpet squares
- Put foam or rubber soles on the chair and desk legs
- Use headphones at computer and multimedia stations
- Cover windows to remove outside distractions

Modification and adaptation of space and materials

Visually presented in a positive manner and representing the expected behaviour

Placed in a visible and easily accessible place so that they can be accessed whenever needed.

Visual structure – Rules of conduct



Modifying learning outcomes

What kind of learning outcomes do we expect?

Educational / cognitive – acquiring knowledge of the school subject depending on the set goals and the capabilities and abilities of the student

Affective – encouraging interest and attention, positive emotions, relaxation, encouraging independence and self-confidence, work habits, socialization

Functional and corrective – development of fine and gross motor skills, motor control, orientation in space and time, development the sense of rhythm, development of static and dynamic balance, focusing attention, lateralization, development and correction of speech, development of thinking , remembering, classification, etc.

Reflection time

- 1) Write down at least three strategies or techniques or supports that you can start using or working on straight away with your students.
- 2) Write down what you would like to implement in the longer-term with your students.
- 3) What are the most important things you would like to share with colleagues straight away?

The ASD-EAST partnership



University of Zagreb
Faculty of Education and
Rehabilitation Sciences



2018-1-UK01-KA201-047872



Co-funded by the
Erasmus+ Programme
of the European Union

Disclaimer

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.