

Supporting special education needs in the classroom using AI tools

LEARNING STORY – ITALY

Author: Antoine Selim Bilgin, European Schoolnet

30 June 2025

Summary

Roberta Falchi, a special education needs (SEN) teacher at Liceo Classico D. A. Azuni in Sassari, Italy, integrates inclusive practices for students with disabilities. With five SEN students in her classes, she adapts assessments and assignments while organizing collaborative tasks based on student abilities. Using various AI tools like Algor Education Maps, Natural Reader, and ChatGPT, Roberta enhances learning accessibility. Students benefit from personalised support and gain confidence in their writing abilities through AI assistance. However, Roberta emphasises that AI is a supplementary tool, not a replacement for authentic learning. Despite challenges, she advocates for individualised approaches, recognising the unique strengths and pathways of SEN students.

Quick reference sheet

Country	Italy
For whom is the learning story?	Teachers
What is it about?	Using AI tools and digital tools to adapt lessons and assessments to students with special education needs
Target group in the learning story	Secondary education
The focus of the learning story	Data in use for teaching and learning
Keywords	Generative AI, concept map, special education needs, mixed-ability grouping, artificial intelligence

Background

Roberta is a History teacher, teaching 18-19 year olds and a special education needs support (SEN) teacher at the [Azuni Classical School in Sassari, Italy](#), the second largest city in the island of Sardinia. The school is known as a "Liceo Classico," which typically offers a curriculum focusing on classical studies, including Latin and ancient Greek languages, literature, history, and philosophy. As with many schools of this type in Italy, Liceo Classico D. A. Azuni likely prepares students for university education, particularly in fields related to humanities and social sciences. Established in 1861, Liceo Classico D. A. Azuni has a long history of providing quality education in the region.

A [recent legislation in Italy](#) requires that schools in Italy accept students with disabilities as full members of their school community who learn in the same educational setting as their non-disabled peers whenever appropriate. Inclusive education legislation covers not only students with learning disabilities but also gifted children. The implication is that Roberta must adapt class assignments and tests for all students. Roberta has five students with SEN in her regular classes, experiencing dyslexia, Attention Deficit and Hyperactivity Disorder (ADHD). Therefore, she uses

the same assessment for all students but makes adaptations to the assessment questions and assignments for SEN.

The implementation

When doing collaborative tasks in class Roberta organises groups by ability. While a normal ability group might be conducting research within an hour on their own, Roberta works more closely with another group of lower ability.

Roberta uses multiple AI-based digital tools and platforms for different purposes:

- [Algor Education Maps](#) is a tool (Available in Italian, English, French, Portuguese and Spanish) that creates editable concept maps from text, photos, PDFs and notes.
- [Eleven Labs](#) and [Natural Reader](#) generate realistic speech from any text
- [Clipdrop](#) and [Scribble](#) are AI tools that facilitate visual learning through image manipulation and annotation.
- [CBoard](#) uses icons, allows you to listen, create sentences and communicate in various languages.

Roberta also regularly uses ChatGPT. For instance, she gives a list of assessment questions and asks ChatGPT to make the language and style more accessible to students with disabilities.

MagicSchool can also be used for the same purpose, for instance, by using the "[Accommodation Suggestion Generator](#)".

An example prompt for ChatGPT can be as follows:

Assistance in Adapting Tests for a Student with SEN:

1. General information - Include a brief description of the student's diagnosis, a general information about the diagnosis without going into personal details. For example, if the student has a diagnosis of dyslexia, dyscalculia, attention disorder, etc.
2. SEN Goals - List specific SEN goals related to learning or adapting tests. This may include aspects such as increasing the readability of the text, using multiple choice questions instead of open-ended questions, etc.
3. Characteristics of the original test - Provide a brief description of the test that needs to be adapted. Include the difficulty level, subject, test format (multiple choice, open-ended, true or false, etc.), and any other relevant details.
4. Specific student preferences or needs - If there are specific preferences or needs highlighted in the special education need that should be considered in adapting the test, include them here. This may concern, for example, the format of the text, the length of the questions, or the presence of visual aids.

She also asks her students to use ChatGPT for their assignments. Students with SEN can benefit from language models like ChatGPT to overcome typical challenges, such as formulating complex sentences or articulating ideas. Thanks to artificial intelligence, students can benefit from an individualised learning environment, because language models like ChatGPT can adapt to the specific needs of each student, allowing everyone to explore different ideas and improve their expression skills more effectively.

The use of ChatGPT can increase students' confidence in their writing skills: knowing that they can count on technological support helps reduce writing-related anxiety and encourage students to explore new ideas without the fear of making mistakes. To illustrate this she wrote an [article](#) (in Italian) about how her students wrote a screenplay with the support of ChatGPT.

A student with specific learning disability used ChatGPT to write a screenplay in a project on inclusion. The student formulates a prompt with the help of the teacher, so that the AI exactly respects the given parameters, such as the number of characters and the topic related to a specific problem. Based on the data provided, ChatGPT generates a basic script. However, the screenplay still needs to be edited because it has an unrealistic style and vocabulary for the characters in the screenplay who are supposed to represent teenagers.

The student realised that it is important to involve a human factor in this creative writing exercise. Therefore, he engaged two classmates who are participating in theatre plays and drama and asked them to make changes and improvements to the text. Together, the three students worked on creating a compelling screenplay, while maintaining adherence to the project's outline.

Once this revision phase was complete, the text was submitted back to ChatGPT for initial evaluation and to make further formal corrections. This cycle of revision and iteration allows the student to obtain a final text that combined human creative input with the consistency and accuracy provided by artificial intelligence.

Teachers can implement a similar assignment to emphasise that artificial intelligence cannot replace students' creativity and personal elaboration but can be a valuable study companion that can offer ideas and suggestions to enrich their learning process.

In another example from her History class, students used AI tools for the topic of World War II. They were divided into small groups of 2-3 students. Each group had to represent one of countries. They did some research on the country they selected (the teacher required them to cite their sources for everything they wrote down). They then wrote a short monologue impersonating a person from their country and explain what happened from their perspective.

At this point, they could use their first AI tool: they created an avatar combining the use of GPT and DALL-E offered by Copilot. They learned that creating the right prompt is not as simple as they thought. Next lesson, they began using another great AI tool, [Eleven Labs](#), a text-to-speech tool which transforms a script in a human like sound. They also used [Heygen](#), which is a video editing tool that can create a video by animating a photo or a picture, as if students' avatar was really speaking.

Conclusion

Roberta observes that the AI tools have enabled her students to express themselves in different ways and they sometimes obtain positively surprising results. The example of the student writing a screenplay indicates that working with AI can help developing creative writing skills in a safe environment and increase the engagement of students with disadvantages.

It is important that AI is used as a support tool and not as a shortcut to evade authentic learning. The example given clearly demonstrates that the use of ChatGPT as a creative writing support tool should not be understood as a shortcut to evade the fatigue of learning, but rather as an aid to overcome specific obstacles. Roberta recognises that there are more options of digital tools and AI tools to help students with milder disabilities, and it is more challenging to support students with more pronounced learning disabilities. This being said, many students with SEN are proficient in using digital technologies because they are often intuitively designed.

Roberta believes that teachers should listen to their students to understand what works best for them. SEN students can do anything; they have a special approach and answer when learning in class and have intuitions that are unique. They can reach the same results by going through different pathways.

Appendix - Greek Literature Test – Adapted for Different Learning Needs

Below is an example for how generative AI can be asked to suggest special educational needs adaptations for a medium-difficulty Greek Literature Test usually assigned in the final year of Liceo Classico to neurotypical students.

Questions

1. **In 20 lines**, indicate into which groups Plutarch's *Moralia* can be divided and why they are collectively called *Moralia*. (2 points)
2. **In a maximum of 20 lines**, explain the theory of *anacyclosis*. (2 points)
3. **In a maximum of 40 lines**, describe the structure of the *Parallel Lives*, specifying the literary genre, the type of characters and events narrated, and the purpose of the work. (4 points)
4. **Polybius and the Roman Constitution** (20 lines). (2 points)

The test requires some advanced skills, such as:

Area	Specific Skills	Why They Are Essential for This Test
Subject Knowledge	<ul style="list-style-type: none"> – Mastery of the Greco-Roman canon (Plutarch, Polybius, technical terms like <i>anakyklosis</i>) – Historical-cultural context of 1st–2nd century CE 	Without solid content, it's not possible to summarize the essentials in 20–40 lines.
Text Comprehension	<ul style="list-style-type: none"> – Quick reading of complex prompts – Decoding key terms (“groups of works”, “literary genre”, “purpose”) 	The questions combine multiple demands in a single sentence; all must be addressed.
Discourse Organization	<ul style="list-style-type: none"> – Idea selection (what fits into 20 lines?) – Logical structure: definition → example → reasoning 	Each answer has a line limit: requires both synthesis and cohesion.
Specialist Vocabulary and Register	<ul style="list-style-type: none"> – Use of literary-technical terminology (<i>ἑγκώμιον</i>, <i>anakyklosis</i>, “parallel biography”) – Argumentative-academic tone 	Helps maximize the 2–4 points assigned per question.
Writing and Execution	<ul style="list-style-type: none"> – Legible handwriting/typing – Time management (5–6 min per 20-line question, 10–12 min for the 40-line one) 	The test lasts 50–60 minutes; physical execution affects performance.
Metacognition	<ul style="list-style-type: none"> – Monitoring coherence and length while writing – Self-assessment (“Did I answer every part?”) 	Omission or going over the line limit leads to penalties.

Challenges for Students with Special Educational Needs (SEN)

Profile	Potential Obstacles	Example (per test prompt)
Specific Learning Disorders (SLD) – dyslexia, dysgraphia, dysorthography	<ul style="list-style-type: none"> – Slower reading → less time for planning – Fatiguing handwriting → slows down after 15–20 lines – Orthographic errors penalized in “academic” register 	40-line question on <i>Parallel Lives</i> : risk of finishing only half or making many mistakes

Profile	Potential Obstacles	Example (per test prompt)
ADHD / Attention Disorders	<ul style="list-style-type: none"> – Difficult to focus on four mini-essays – Struggles with structure → digressions/incomplete answers 	May skip the “mixed constitution” part in the Polybius answer, losing half the points
High-functioning Autism / Asperger’s	<ul style="list-style-type: none"> – Over-focus on minor details, difficulty with scope (“20 lines”) – Pragmatic complexity of prompts (implicits, metadiscourse) 	Might meticulously list <i>Moralia</i> titles but miss the etymology of “Moralia”
Language Disorder / Verbal Dyspraxia	<ul style="list-style-type: none"> – Technical vocabulary hard to access → long paraphrasing – Slow written output due to phonological planning 	May spend too long recalling “anacyclosis” and run out of space
Performance Anxiety / Anxiety Disorders	<ul style="list-style-type: none"> – Executive blocks, impaired working memory – Perceived lack of time 	Points/rule constraints increase pressure → frequent omissions
Fine Motor Disabilities	<ul style="list-style-type: none"> – Painful/very slow handwriting 	On paper: may not complete; needs PC or typing option

After Asking ChatGPT this prompt:

"There are 3 SEN students in class: one with Level 2 autism (no cognitive impairment, strong language and memory, good processing speed); one with mild dyslexia, moderate dysorthography, and low-average working memory (82), despite high IQ; and one gifted student (IQ 130) with ADHD and anxiety. Please prepare an equivalent test for each, with an evaluation rubric."

AI Response:

Adapted Tests

Each test covers the same topics: *Plutarch’s Moralia*, *anacyclosis*, *Parallel Lives*, *Polybius*. Score out of 10.

1. Student with Level 2 Autism (normal cognition)

Key Adaptations:

- Instructions segmented with bullet points and keywords
- Outline guide provided
- No line reduction (the student can already summarize well)

Test Format:

- Fill-in table (group + example for *Moralia*)
- Short 4–6 line explanation of the term *Moralia*
- Guided outline on *anacyclosis*, *Parallel Lives*, and *Polybius*

Scoring Rubric: 0–10 scale based on content accuracy, outline completion, use of technical terms, line compliance.

2. Student with Dyslexia + Dysorthography**Key Adaptations:**

- Digital test + text-to-speech
- Extra time, computer with spelling check
- Mostly closed-ended responses; spelling errors not penalized

Test Format:

- Matching, multiple-choice closed tests
- Word bank, drag-and-drop, short answers under 40 words

Scoring Rubric:

- 6 points closed answers, 2 points brief open answers, 2 points closed
 - No penalty for spelling
-

3. Gifted Student (IQ 130) with ADHD + Anxiety**Key Adaptations:**

- Choice between 3 tasks (motivational boost)
- Timed micro-tasks, optional oral/multimedia format

Task Options (choose 2 of 3): A. Essay comparing *anacyclosis* and Roman constitution (3 min audio or 25–30 lines)

B. Infographic linking *Moralia* and *Parallel Lives*

C. Guided oral on *Parallel Lives* as moral education

Scoring Rubric:

- 5 points per task for content, originality, coherence, media/format use
-

Final Tips:

- Timing: Autism = standard; Dyslexia = +30%; ADHD/anxiety = split sessions
- Setting: Quiet room or headphones for profiles 2–3
- Tools: PC with spelling check/tex-to-speech, visual timers
- Feedback: Share rubric beforehand to reduce anxiety.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.