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SURVEY - ROMANIAN REPORT

**ERASMUS+ PROGRAMME : UPSKILLING PRESERVICE
TEACHERS TO SUPPORT YOUNG CHILDREN WITH AUTISM
SPECTRUM DISORDER THROUGH DIGITAL SOCIAL STORIES**



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DOI:

<https://doi.org/10.5281/zenodo.15491059>

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Table of Contents

INTRODUCTION	4
TRAINING	6
In-service teachers	6
Pre-service teachers	9
WORKING WITH ASD / PRACTICE	12
PARTICIPANTS PREPAREDNESS	15
In-service teachers	15
Pre-service teachers	16
ASSISTIVE TECHNOLOGIES - EXPERIENCE, PRACTICE AND TRAINING	18
Pre-service teachers	18
In-service teachers	18
NEEDS.....	22
Pre-service teachers	22
In-service teachers	24
CONCLUSION.....	27

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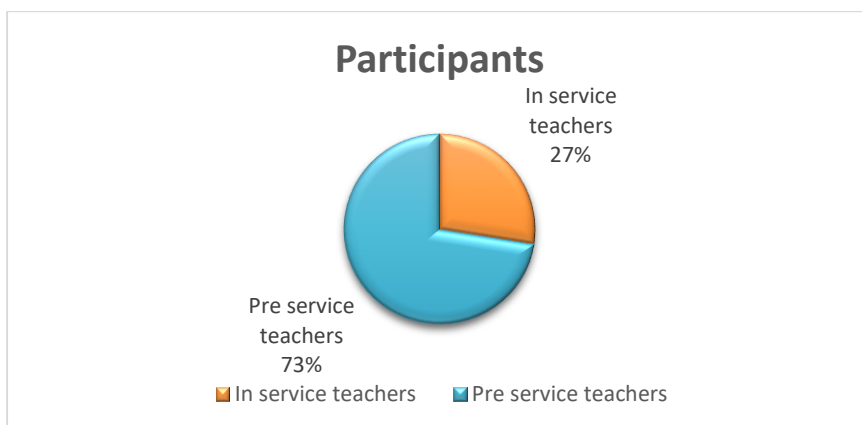
INTRODUCTION

Romania places inclusive education at the core of its educational system, recognizing it as a fundamental principle for ensuring equal opportunities and active participation for all learners, regardless of their abilities or background. National policies and strategies emphasize the importance of developing inclusive practices in schools, providing support services, and fostering teacher competencies to respond to diverse educational needs. In recent years, there has been growing attention on equipping educators with the necessary skills to support students with developmental disorders, including Autism Spectrum Disorder (ASD), particularly in early childhood and special education settings.

Within the framework of the EARLY-ASD Project, we aimed to gather insights and examine the challenges related to the training of Romanian in-service and pre-service teachers in using assistive technologies to support the socioemotional development of children with Autism Spectrum Disorder (ASD). Our focus was specifically on teachers currently working or preparing to work in Early Childhood Education (ECE) and Special Education (SE).

To achieve this objective, in collaboration with other project partners, we co-designed a general survey. The questionnaire was administered in Romania during February and March 2025 via Google Forms and was distributed to a convenience sample of practising and future teachers. For the in-service teacher sample, incidental sampling was employed, and the survey was sent to various educational institutions across the Bucharest region. A total of 89 invitations were distributed, yielding 22 valid responses. The pre-service teacher sample consisted of 58 students from the Faculty of Psychology and Educational Sciences at the University of Bucharest.

Graph 1. Participants.



The group of pre-service teachers who responded to the survey consisted of 58 individuals, with a notable gender imbalance: 57 were women and only one was a man. This reflects a strong female dominance in the fields of early childhood and special education, which is consistent with broader trends in these educational areas. In terms of age, the vast majority of respondents—57 individuals—were between 18 and 22 years old, while only one respondent was over the age of 28. This age distribution suggests that most participants may be at the very beginning of their teaching careers or possibly still in training, raising the possibility that some were misclassified as in-service rather than pre-service teachers.

When it comes to their field of study, 48 of the respondents indicated they were enrolled in special education, while 10 reported a focus on preschool education. This indicates that the data collected will largely reflect perspectives from the special education domain, with limited input from those working in or preparing for roles in preschool education. Overall, the sample is highly homogeneous in terms of both age and gender, which may limit the diversity of perspectives and affect the extent to which the findings can be generalized to the wider population of Romanian pre-service teachers.

The group of in-service teacher respondents is composed of 22 women, all aged between 27 and 43 years, indicating a mature and professionally active cohort with likely experience in early childhood or special education settings. In terms of the age groups they work with, two respondents teach children over the age of seven, while the remaining twenty work with children between the ages of three and six, which reflects a strong focus on early childhood education.

Regarding their institutional affiliation, twenty respondents are employed in public



kindergartens, one works in a private kindergarten, and one is employed at a special school. This distribution shows a clear predominance of public sector employment, with minimal representation from private or specialized institutions.

When examining the type of class settings, those teaching in regular or inclusive classrooms report class sizes ranging from 20 to 28 children. In contrast, those working in special or therapeutic education environments report significantly smaller groups, typically ranging from 5 to 10 children. This difference in class size highlights the contrasting demands and support structures required in inclusive versus specialized settings, with smaller groups allowing for more individualized attention and tailored interventions in therapeutic or special education contexts.

TRAINING

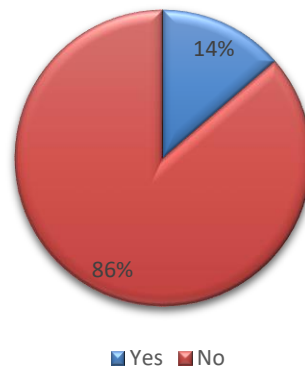
In-service teachers

The first graph reveals a concerning picture regarding the preparedness of educators to use assistive technologies when working with children with Autism Spectrum Disorder (ASD). Only 14% of the respondents indicated that they had received any form of training in this area, while the remaining 86% reported having no such experience. This overwhelming lack of exposure to assistive technologies suggests that Romanian teacher education programs and ongoing professional development opportunities may not yet fully reflect the practical realities of inclusive classrooms. In today's educational landscape, assistive technologies play a vital role in enabling access to learning, communication, and social participation for children with ASD. The fact that such a small proportion of teachers are equipped with this knowledge indicates that inclusive education is not yet being supported by the systemic infrastructure needed to implement it effectively in everyday practice. It points to an urgent need to embed training on assistive tools not only in pre-service curricula but also within continuous professional development programs for in-service teachers.

Graph 2.



**Have you received any form of training in the
use of assistive technologies when working with
children with ASD?**

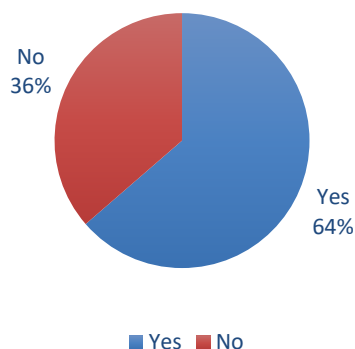


The second graph provides a broader view, showing that 64% of respondents have received some form of training related to ASD, while 36% have not. This suggests a partial recognition within the educational system of the importance of understanding autism, but also reveals a substantial gap in access or emphasis. While it is encouraging that nearly two-thirds of educators have received at least some training, the fact that more than a third still lack basic exposure to ASD-related knowledge is a matter of concern. This uneven distribution of training points to inconsistencies across institutions and programs. It may reflect the absence of national standards or policies requiring all teachers—regardless of specialization—to be prepared for working with neurodiverse learners. Consequently, students with ASD may receive vastly different levels of support depending on the individual teacher’s training background, which undermines the goal of equitable and inclusive education.

Graph 3.



**Have you ever received any training related to
Autism Spectrum Disorder (ASD)?**



The third graph narrows the focus further to the social and emotional development of children with ASD—an area that is foundational to their learning and well-being. Here, only 41% of respondents reported receiving relevant training, while 59% had not. These findings highlight a particularly vulnerable aspect of teacher preparation. Social and emotional development is often one of the most affected areas for children with autism, and supporting it requires specialized strategies and a deep understanding of individual differences. The fact that less than half of the respondents feel equipped in this domain suggests that the educational system may still be prioritizing academic instruction over the holistic development of learners with special needs. Moreover, it indicates that many teachers are entering classrooms without the emotional and pedagogical tools necessary to foster a safe, responsive, and supportive environment for children on the spectrum.

Taken together, the data from all three graphs underscore a broader systemic issue: while inclusive education is emphasized at the policy level, the practical training of educators is not yet aligned with this vision. The limited exposure to assistive technologies, the inconsistent access to ASD training, and the lack of focus on socio-emotional development reflect a fragmented approach to inclusion. For Romania's educational system to truly embody inclusive principles, a comprehensive restructuring of teacher education and professional development frameworks is required—one that ensures all educators are not only aware of, but also confident and competent in addressing the diverse needs of students with ASD.



Graph 4.



Pre-service teachers

The key findings show that 69% of respondents gained knowledge through both theoretical courses and practical training, 16% received only theoretical instruction, and 12% had exclusively practical training. A small minority (3%) reported no exposure to ASD-related education.

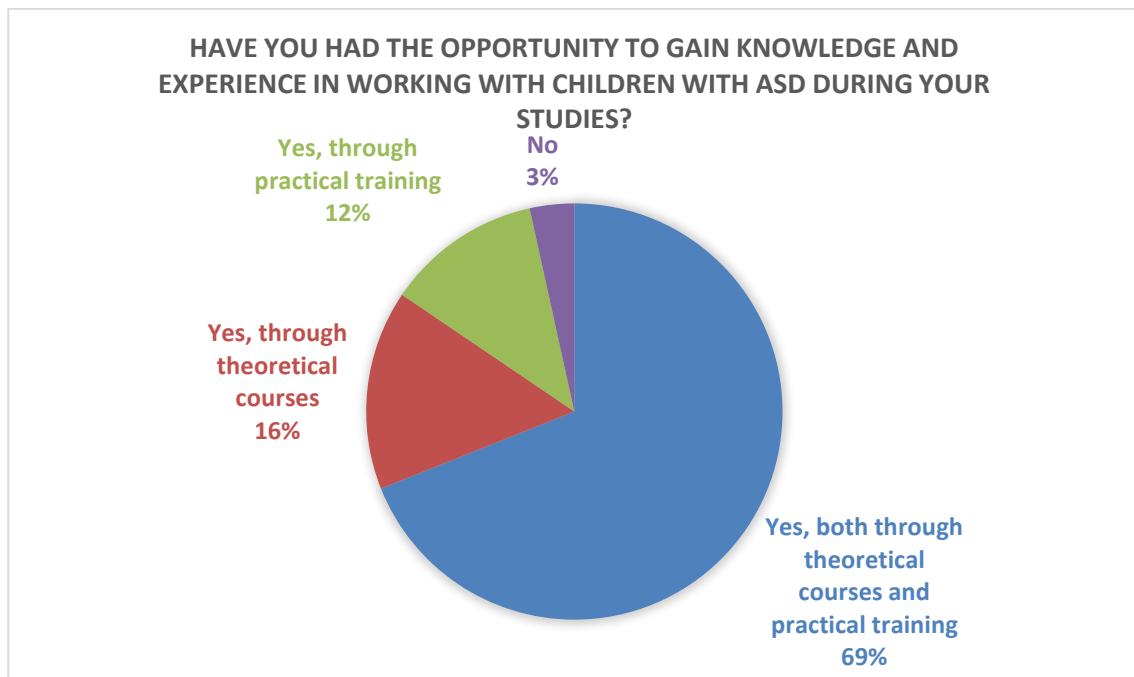
The dominance of combined theoretical and practical training aligns with evidence that integrated approaches improve competency in ASD care. Research consistently supports the notion that combining theoretical knowledge with practical experience enhances the ability of educators to manage real-world scenarios. This dual approach allows learners to understand both the academic principles of ASD and the hands-on skills necessary for addressing challenges like behavior management and communication. For example, studies such as one from Jordan demonstrate that structured programs incorporating evidence-based practices significantly improve students' abilities to support children with ASD.

The 16% of respondents who relied solely on theory may face challenges in developing the practical skills needed for managing ASD-specific difficulties, such as addressing sensory sensitivities or implementing specific interventions. On the other hand, the 12%



who had only practical training may lack the foundational knowledge of ASD's neurodevelopmental basis or effective, evidence-based interventions. The 3% who reported no exposure to ASD-specific training highlight gaps in certain programs, which could ultimately affect the quality of care provided to individuals with ASD.

Graph 5.



The key finding indicates that 100 hours of practical training were completed, but the specific distribution across categories is not provided.

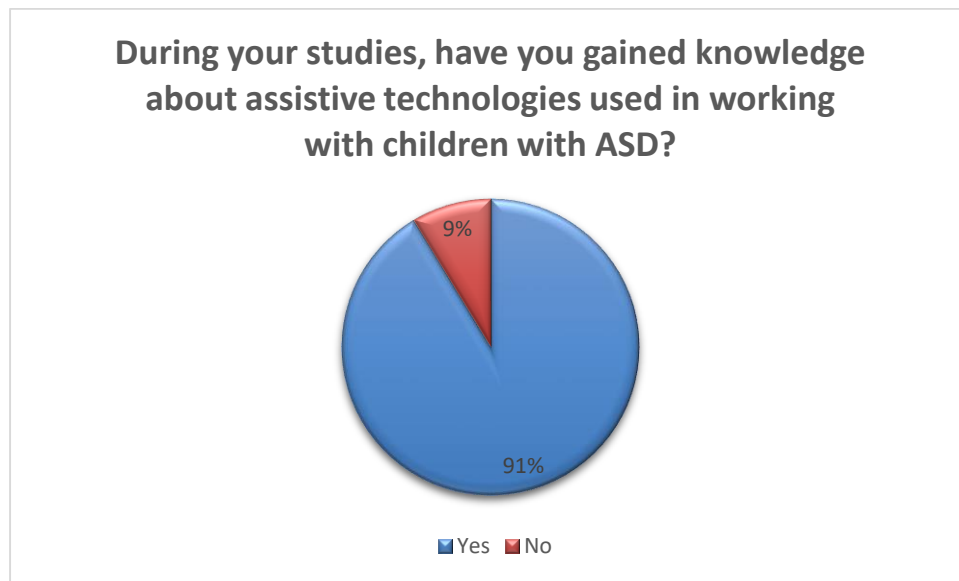
The emphasis on 100 hours of practical training underscores the importance of hands-on experience in developing the competencies necessary for working with students with ASD. Research has shown that longer training periods correlate with higher confidence and better retention of skills. For instance, in the Jordanian study, students who participated in a four-month field experience showed significant improvement in applying evidence-based methods like Pivotal Response Training.

However, the lack of data on how these 100 hours are distributed raises questions about whether they are sufficient to develop the full range of necessary skills for ASD education. While 100 hours may seem like a reasonable amount of time, it is essential to consider



whether this period includes adequate exposure to all the key areas, such as behavioral interventions, sensory supports, and communication strategies. Some programs might need to expand practical hours or incorporate simulated experiences to ensure that students are adequately prepared for real-world challenges.

Graph 6.



The findings suggest that integrated training is crucial for effective ASD education. The majority of respondents benefited from both theoretical and practical preparation, which aligns with best practices. However, some programs still lack the necessary balance, particularly for students who only received one type of instruction. Programs should ensure that all students have access to both theoretical and practical training.

The high rate of knowledge about assistive technologies is promising, but the 9% gap indicates that universal training is still needed. It is vital that all educators are well-versed in the use of assistive tools to create truly inclusive learning environments for students with ASD.

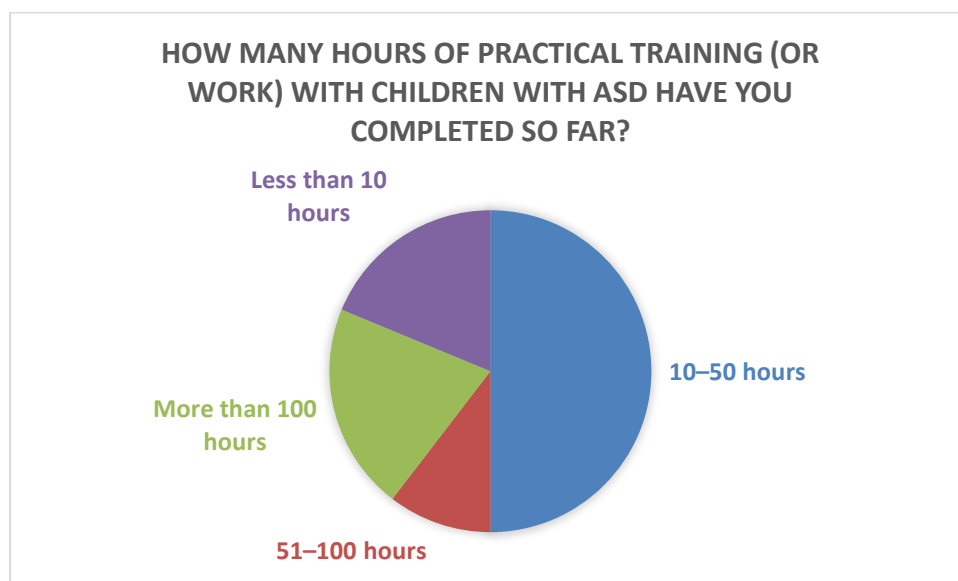
Although 100 hours of practical training is a good start, the lack of clarity regarding its distribution suggests the need for more detailed analysis. Standardizing a minimum threshold for practical hours and ensuring that they are distributed across all necessary areas



could help enhance educator readiness.

These insights point to the need for structured, evidence-based curricula that prioritize hands-on experience, technological proficiency, and equitable access to training opportunities.

Graph 7.



WORKING WITH ASD / PRACTICE

The strategies used by a higher proportion of practicing in-service teachers are wide. The content analysis of the responses to the question "What strategies do you use to develop social and emotional skills of children with ASD?" reveals various strategies used to foster social and emotional development in children with Autism Spectrum Disorder (ASD). These strategies mainly focus on teaching appropriate social behaviors, emotional regulation, and social integration.

A common strategy identified is modeling appropriate social behaviors through personal example. Many respondents mention demonstrating behaviors like initiating conversations, managing conflicts, or showing how to interact in various social settings. This approach helps children understand what behaviors are acceptable and how to respond appropriately to social cues.



Role-playing and interactive activities are also frequently mentioned as methods to practice social interactions. These activities allow children to rehearse different social scenarios, helping them understand how to react in various contexts. Additionally, there are references to educational games and activities that promote integration into peer groups, facilitating communication and cooperation skills.

The use of social stories and visual scenarios is another widely used technique. Social stories are utilized to help children understand and anticipate different social situations, such as initiating conversations, asking for help, or managing emotions. These visual tools aid in making abstract social concepts more concrete, allowing children to visualize and better understand social norms and expectations.

Teaching emotional regulation techniques is another essential aspect mentioned in the responses. Strategies such as deep breathing, sensory breaks, and emotional validation are highlighted. These techniques help children manage their emotions, enabling them to respond calmly and effectively in stressful situations.

Socialization activities and group integration exercises are also key strategies. Structured socialization activities, such as group games and therapeutic play, are used to help children interact with peers and develop interpersonal skills. These activities offer opportunities for children to learn cooperation, sharing, and social norms in a safe and engaging environment.

Positive reinforcement plays an important role in encouraging social behaviors. Many respondents highlight the use of praise or rewards to reinforce appropriate social actions, promoting the repetition of these behaviors.

Interactive play and structured games are integral to practicing social interactions. These activities not only engage children in a fun manner but also provide them with the opportunity to practice social skills in a relaxed setting, fostering learning through play.

The responses suggest a holistic approach to social and emotional skill development in children with ASD, combining direct interventions, self-regulation strategies, and social integration activities. The diversity of techniques mentioned, such as role-playing, social stories, and positive reinforcement, highlights the importance of offering children multiple opportunities to learn and practice appropriate social behaviors in various contexts. These strategies emphasize the significance of peer interaction and emotional



regulation as fundamental components in supporting children with ASD.

The content analysis of responses to the question *"Based on your experience, which social and emotional skills should be the highest priority for development in children with Autism Spectrum Disorder (ASD)?"* Romanian participants highlight a clear emphasis on core competencies that support functional communication, emotional regulation, and social integration.

A central theme across the responses is the prioritization of **emotional self-regulation**. Many respondents emphasize the importance of helping children recognize, express, and manage their emotions. This includes managing frustration and anxiety, which are common challenges in children with ASD. Teaching techniques that promote emotional awareness is seen as foundational for enabling appropriate behavior and reducing problematic responses.

Another key priority is **functional communication**, both verbal and non-verbal. This includes the ability to express basic needs, desires, and emotions effectively. Respondents stress that communication is not only a means of interaction but also a tool for emotional expression and social connection. Enhancing functional language can reduce distress and improve the child's ability to participate in everyday environments.

Social interaction skills are also seen as critical, including spontaneous interaction with peers, maintaining eye contact, initiating and sustaining conversations, and sharing attention. These skills are closely tied to the child's ability to integrate into group settings and build relationships. The use of group games, social stories, and visual examples (e.g., videos of peers playing) are mentioned as strategies to facilitate these goals.

Several responses also highlight **flexibility in thinking and behavior** as a developmental priority. Cognitive rigidity can make it difficult for children with ASD to adapt to changes or unexpected events. Developing flexibility helps reduce stress, encourages adaptability in different social settings, and supports smoother transitions between activities.

Other important areas mentioned include **social rule acquisition, problem-solving skills, tolerance to frustration and waiting**, and **basic independence** through daily routines like hygiene. These support autonomy and the ability to function confidently in structured environments like schools.

Overall, the highest-priority skills identified are emotional regulation, functional



communication, social interaction competencies, behavioral flexibility, and the ability to follow social norms. These areas collectively promote integration, reduce anxiety, and foster positive peer relationships. The emphasis on both emotional understanding and practical social functioning reflects a balanced approach to supporting the holistic development of children with ASD.

PARTICIPANTS PREPAREDNESS

In-service teachers

Notably, 36.36% of **in-service teachers** rated their preparation as *very poor*, indicating that over a third of respondents feel entirely unprepared for engaging with this population. This significant proportion highlights an urgent need for foundational training and support.

Equally, 36.36% of the respondents consider themselves *well-prepared*, although they acknowledge that there is still room for improvement. This suggests that while some individuals have received relevant training or have gained practical experience, even those with a solid foundation recognize the complexities involved in working effectively with children with ASD.

A smaller group, 18.18%, feel *somewhat prepared* but note the need for further guidance. These individuals may have had limited exposure to strategies or frameworks for supporting children with ASD but lack the confidence to apply them independently.

Only 9.09% rated their preparation as *poor*, suggesting minimal training that falls short of being functional. Strikingly, no respondents rated their preparation at the highest level, indicating that *none* of the participants feel fully confident or expertly trained in this area.

Overall, the data suggests that while there is a subgroup with a reasonable level of competence, the majority of respondents are either underprepared or moderately prepared. The absence of respondents who feel highly confident points to a broader issue of insufficient specialized training. This highlights the need for targeted professional development, hands-on experience, and continuous support to elevate both the confidence and competence of educators and practitioners working with children with ASD.

Table 1.



In-service teachers	Description	Frequency	Percentage
	Very poor: I feel completely unprepared to work with children with ASD	8	36.36%
	Poor: I have limited preparation and need significant support/training	2	9.09%
	Fair: I feel somewhat prepared but need more guidance	4	18.18%
	Good: I feel well-prepared but could still improve in some areas	8	36.36%
	Excellent: I feel fully confident and capable in working with children ASD	0	0.00%

Pre-service teachers

When asked “How would you assess your preparedness for working with children with ASD?”, pre-service teachers provided a clear picture of the current confidence levels and training gaps among participants.

The majority of respondents, 47.46% (28 out of 59), rated themselves at a moderate level of preparedness. This suggests that while they possess some foundational knowledge and feel somewhat equipped to work with children with Autism Spectrum Disorder (ASD), they recognize the need for further development, particularly in specialized strategies and hands-on experience.

A significant portion, 32.20% (19 respondents), rated their preparedness as low, indicating they have basic awareness but lack deeper understanding and practical skills. This highlights a pressing need for more comprehensive training programs that go beyond theoretical knowledge.

Only 1 respondent (1.69%) feels completely unprepared, which, although minimal, still underscores the necessity of ensuring that all practitioners have at least a foundational level



of competence before working with children with ASD.

On the more positive end of the spectrum, 15.25% (9 respondents) consider themselves well-prepared, though they acknowledge there is room for improvement. This reflects a small but meaningful group that may benefit from more advanced or specialized training.

Finally, just 5.08% (2 respondents) rated their preparedness as excellent, feeling confident and fully equipped to work effectively with children on the spectrum. This minority shows that while high competence is attainable, it is not yet widespread.

In conclusion, the data suggest that most respondents are either moderately or insufficiently prepared to work with children with ASD. There is a strong indication of the need for targeted, practice-oriented training and continued professional support to build competence and confidence in this vital area of educational and therapeutic work.

Table 2.

Pre-service teachers Preparedness Level	Number of Responses	Percentage (%)
1. Very Poor: I feel completely unprepared	1	1.69%
2. Poor: I have basic information but need more knowledge/practice	19	32.20%
3. Moderate: I feel somewhat prepared, but need further development	28	47.46%
4. Good: I feel well-prepared, though there's room for improvement	9	15.25%
5. Excellent: I feel confident and well-prepared	2	5.08%
Total	58	100%

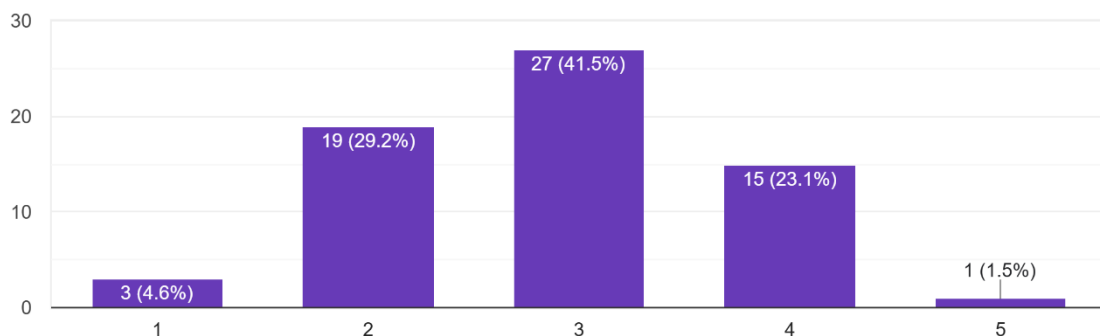
ASSISTIVE TECHNOLOGIES - EXPERIENCE, PRACTICE AND TRAINING

Pre-service teachers

Graph 8

31. How would you evaluate the availability of assistive technologies for children with ASD in the institutions where you have completed internships or worked?

65 responses



Based on the survey results, it appears that pre-service perceive the availability of assistive technologies for children with ASD to be generally moderate or somewhat low. The majority of responses cluster around the mid-range of the scale, indicating that while assistive technologies are present, their availability is inconsistent and not fully integrated into educational settings.

A small percentage of respondents express very low availability, suggesting that in some cases, assistive technologies are either nonexistent or rarely used. Conversely, only one respondent perceives very high availability, highlighting a significant gap between the ideal and the reality in most teaching environments.

This distribution suggests that while efforts to introduce assistive technologies are underway, challenges such as access, training, and resource allocation may be limiting their widespread adoption. Teachers likely experience varying degrees of support and infrastructure, affecting how frequently and effectively they can incorporate these tools into their work with children.

In-service teachers



A significant gap exists in the use and availability of assistive technologies for children with ASD in early childhood education.

The survey results suggest that pre-service and in-service teachers perceive these technologies as largely unavailable, with moderate integration at best. This aligns with the pie chart, where 73% of respondents reported never having used assistive technologies in early childhood education. While some technologies are present, they appear to be inconsistently accessible and infrequently integrated into teaching practices. The minority of educators who do utilize them likely have access to specialized resources, training, or institutional support that others lack.

These findings highlight a broader issue of access, awareness, and implementation barriers. Many educators may not be sufficiently trained in using assistive technologies, or the resources may not be readily provided in their teaching environments. This disparity suggests a need for targeted interventions to improve availability, training programs, and institutional support.

To address the challenges surrounding the availability and use of assistive technologies for children with ASD in early childhood education, several key strategies can be considered.

Increasing accessibility is essential. Schools and educational institutions should invest in a wider range of assistive technologies tailored for children with ASD. Partnerships with technology developers could facilitate cost-effective solutions and improved access.

Enhancing teacher training would help educators gain confidence in using assistive tools. Pre-service and in-service teachers need targeted programs that familiarize them with available technologies and their applications. Workshops and continuous professional development opportunities can improve competency and comfort in integrating these tools into their teaching methods.

Institutional support and policy development play a crucial role. Clear policies should be established to ensure systematic integration of assistive technologies into everyday teaching practices. Schools could implement funding strategies to support the purchase and maintenance of these tools, ensuring consistent availability.

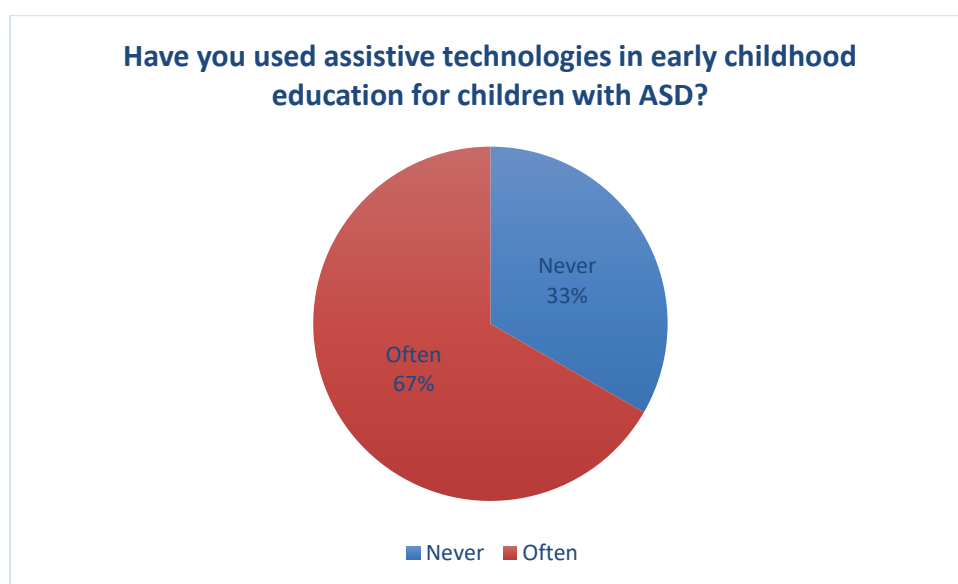
Raising awareness among educators, parents, and policymakers would be beneficial. Informing them about the advantages of assistive technologies in improving learning outcomes for children with ASD can encourage broader adoption. Sharing success stories



and case studies from teachers who have effectively integrated these technologies into their classrooms can offer inspiration and practical guidance.

Encouraging collaboration can foster a sense of community among educators. Platforms where teachers exchange best practices and experiences with assistive technology could be valuable. Working with specialists in ASD education and technology experts would further support the effective implementation of these tools.

Graph 9.



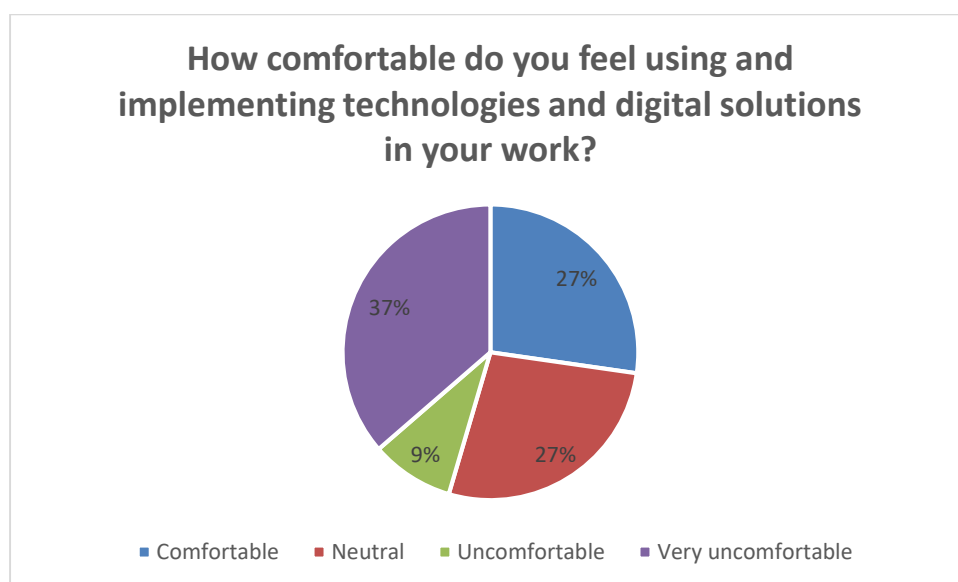
There is a clear indication that educators have varied **levels of comfort** when it comes to using and implementing technologies and digital solutions in their work. The pie chart reveals that a significant percentage of respondents feel either neutral or comfortable with integrating technology into their teaching methods. However, a substantial proportion—46% in total—express discomfort or strong resistance, indicating a need for further support, training, and accessibility.

This aligns with the findings in your document regarding the availability of assistive technologies for children with ASD. While some pre-service and in-service teachers recognize the presence of technology, the overall impression is that it is either minimally



available or inconsistently used. In-service teachers, having direct experience in the field, may have slightly more exposure to assistive technologies, but accessibility issues persist. These results suggest that without targeted interventions, technology adoption will remain uneven. Improving accessibility to assistive technologies, offering structured training, and fostering collaboration among educators could encourage more confident and effective use. Institutional support and clear policies could also bridge the gap between the potential benefits of assistive technologies and their practical implementation.

Graph 10.



The responses indicate in-service teachers perceive **assistive technology availability for children with ASD as limited**. Ratings range from very low to moderate availability, with only a small percentage viewing these technologies as widely accessible and systematically integrated into their work.

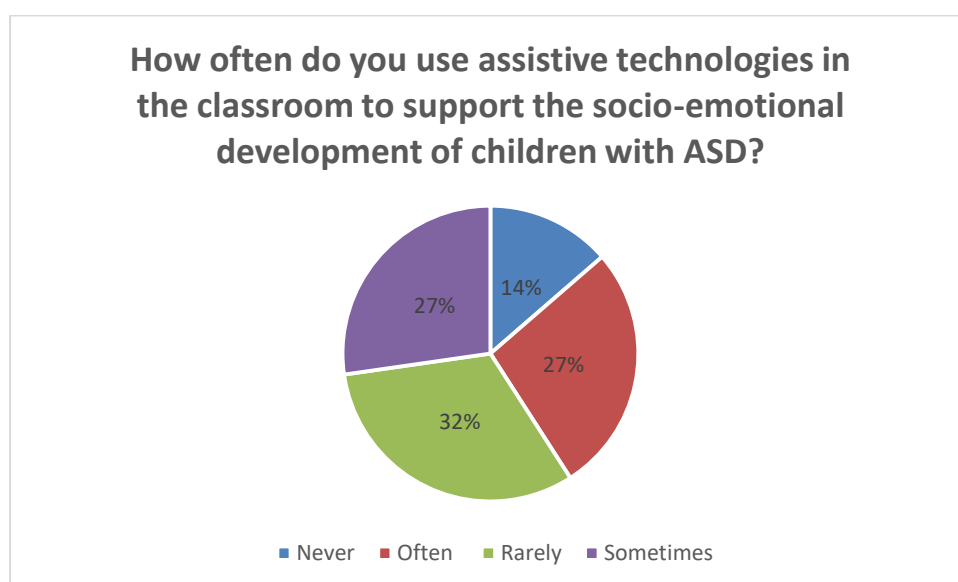
In-service teachers tend to report minimal exposure to assistive technologies, often indicating that such tools are either absent or used only sporadically. This suggests that teacher training programs may need to place a stronger emphasis on familiarizing educators with available resources. In contrast, in-service teachers, who are actively working in



classrooms, show slightly more awareness of assistive technologies, but still reflect inconsistencies in access and implementation.

These findings highlight a gap between the potential benefits of assistive technologies and their practical integration into educational settings. Limited availability may stem from factors such as insufficient funding, lack of institutional support, or inadequate training opportunities for educators. To bridge this gap, educational systems could focus on improving accessibility, offering specialized training, and fostering collaboration between teachers and technology providers.

Graph 11.



NEEDS

Pre-service teachers

The survey responses indicate a wide range of perspectives on the availability of assistive technologies for children with ASD in educational institutions. The majority of respondents rated availability as moderate (rating 3), which suggests that while assistive technologies exist, they are not consistently integrated into teaching practices.

Approximately 29.2% of participants rated availability as low (rating 2), reflecting limited access and inconsistent use across different educational settings. This implies that many



institutions may have assistive technologies available but lack the necessary infrastructure or training to implement them effectively.

On the other end of the scale, very low availability (rating 1) was reported by a small percentage (4.6% of respondents), suggesting that in some environments, assistive technologies are either completely absent or rarely used. Similarly, only 1.5% rated availability as very high (rating 5), indicating that systematic integration of these technologies is rare across institutions.

The presence of 23.1% of responses in category 4 implies that certain institutions are actively incorporating assistive technologies, though this does not seem to be a widespread trend. These findings highlight disparities in access and suggest that availability is highly dependent on institutional support, funding, and training opportunities. Teacher training programs should emphasize hands-on experience with assistive tools. Pre-service teachers need exposure to these technologies during their studies, while in-service teachers would benefit from continuous professional development. Workshops, practical applications, and online courses can help educators become proficient in utilizing assistive technologies effectively.

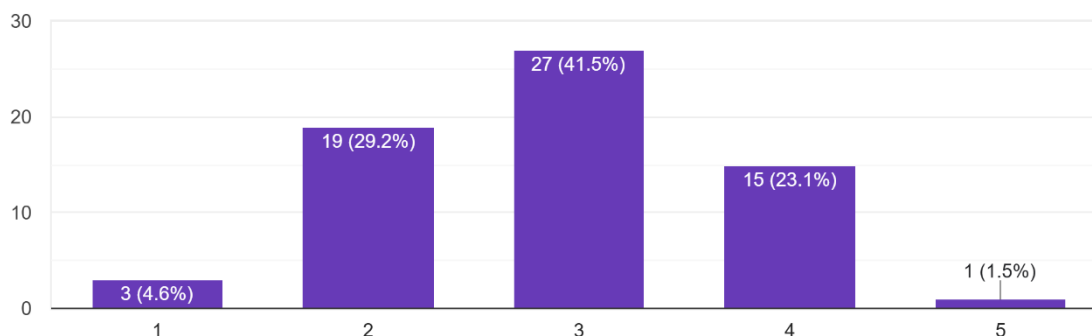
Institutional support plays a crucial role in ensuring successful implementation. Schools should develop clear policies that promote the use of assistive technologies, allocate resources for purchasing and maintaining devices, and provide structured guidance on integrating these tools into teaching practices.

Graph 12.



31. How would you evaluate the availability of assistive technologies for children with ASD in the institutions where you have completed internships or worked?

65 responses



In-service teachers

In-service teachers' perceptions of the importance of various resources and support for their work with children with Autism Spectrum Disorder widely varies. It's crucial to acknowledge that while there's a general recognition of the value of each resource, the intensity of this perceived value varies considerably. When we examine **detailed training on the characteristics of ASD**, it's clear that while a significant portion of teachers consider it important, very important, or even extremely important, there's a noticeable minority who express that it is less important or even not important. This suggests that some teachers might feel they already possess sufficient knowledge in this area, perhaps through prior experience or training, or that they prioritize other forms of support more highly. A similar pattern emerges with **training on teaching strategies specific to ASD**. Here, the emphasis on importance strengthens somewhat, but the presence of "less important" ratings persists, possibly indicating variations in teachers' confidence in their existing pedagogical skills or differences in the specific needs of their students.

The responses regarding **pre-made paper-based materials** offer an interesting insight into the evolving nature of teaching practices. While a substantial number of teachers still find these materials valuable, the increased presence of "less important" ratings could reflect a growing preference for more dynamic, adaptable, or technology-driven resources. Teachers might be seeking materials that can be easily modified to suit

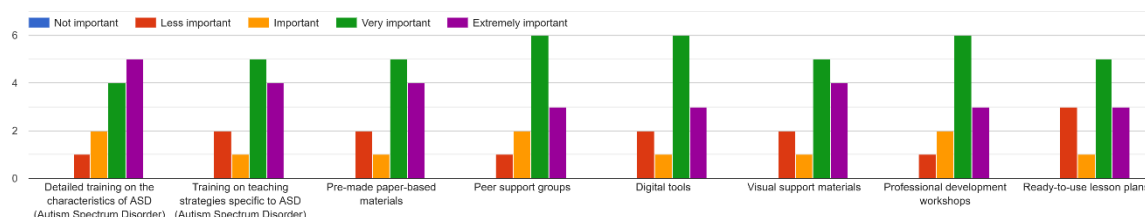


individual student needs or that integrate seamlessly with digital learning environments. Conversely, the overwhelming importance placed on **peer support groups** speaks volumes about the collaborative nature of effective teaching. The strong consensus that these groups are "very important" or "extremely important" underscores the critical role of shared experiences, mutual support, and collaborative problem-solving in navigating the complexities of working with students with ASD. This highlights that teachers don't just need *things*, they need each other.

The prominence of **digital tools** echoes this emphasis on contemporary and effective support. The high ratings in the "very important" and "extremely important" categories reflect the increasing integration of technology into education and the recognition of its potential to personalize learning, enhance engagement, and provide accessible resources for students with ASD. Teachers likely appreciate the flexibility, versatility, and potential for differentiation that digital tools offer. Likewise, the strong endorsement of **professional development workshops** reflects teachers' commitment to continuous learning and improvement. The emphasis on "very important" and "extremely important" highlights the need for ongoing training that equips teachers with the latest evidence-based practices and strategies for supporting students with ASD. Finally, the responses concerning **ready-to-use lesson plans** reveal a similar distribution to paper-based materials. While many teachers appreciate the convenience and time-saving aspect of these plans, the presence of "less important" ratings suggests that some teachers prefer to develop their own lessons to better align with their specific teaching styles and student needs.

Graph 13.

How important do you think it is to have access to the following resources or support for your work with children with autism spectrum disorder (ASD)? (Please rate on a scale from 1 – not important to 5 – extremely important)

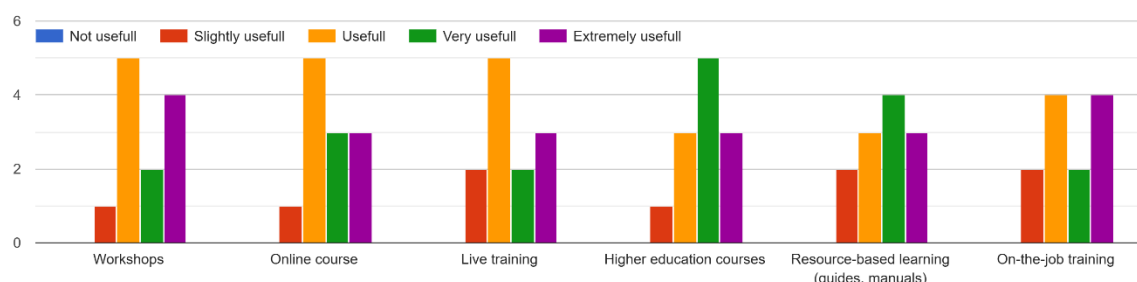




In-service teachers opinion regarding the usefulness of technology-assisted training, can spot a general acceptance of technology's role in professional development, but with clear preferences for certain formats. Online courses and live training are consistently rated as highly useful, likely due to their flexibility and interactive nature. Online courses offer the advantage of self-paced learning and accessibility, while live training provides opportunities for real-time interaction, Q&A sessions, and collaborative learning. These formats seem to cater to the diverse learning styles and time constraints of in-service teachers. In contrast, workshops, while still considered useful, exhibit a wider range of responses. This could stem from variations in the quality, relevance, or format of workshops, with some being highly engaging and informative while others might be perceived as less effective. Higher education courses present an interesting case. While they offer in-depth knowledge and theoretical foundations, the data suggests that in-service teachers may find them less immediately applicable to their daily classroom practice compared to more focused training formats. The more moderate ratings could also reflect time constraints or the perceived commitment required for such courses. Similarly, resource-based learning (guides, manuals), though valuable for providing information, might be seen as less engaging or less effective for skill development compared to interactive training. Finally, on-the-job training, while practical, shows a mixed response, potentially due to variations in the quality and consistency of mentorship and support provided within schools.

Graph 14.

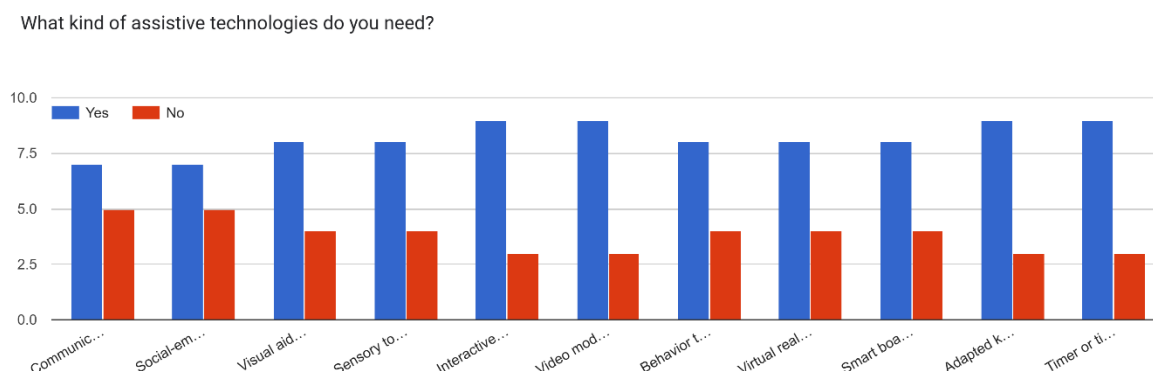
31. What type of technology-assisted training would be useful for teachers like you to best support children with ASD? (Please rate on a scale from 1 – not useful at all to 5 – extremely useful)





Not least, the need for assistive technologies, paints a compelling picture of the crucial role technology plays in supporting students' diverse needs. Across all categories, the overwhelming majority of teachers indicate a "Yes" response, highlighting a strong recognition of the need for these tools. This underscores the importance of providing teachers with adequate resources and support to access and effectively utilize assistive technologies. Specifically, the particularly high demand for categories like Interactive learning applications, video modeling technologies, adapted keyboards or input devices, and time management tools points to the need for technologies that promote engagement, enhance communication, and support organization and self-regulation. This data strongly advocates for investment in assistive technology and professional development to ensure that teachers are equipped to meet the diverse learning needs of all students.

Graph 15.



CONCLUSION

The survey conducted within the Erasmus+ EARLY-ASD Project offers a crucial lens into the preparedness, training experiences, and perceived needs of Romanian educators, both in-service and pre-service, who are either working with or preparing to work with children diagnosed with Autism Spectrum Disorder (ASD). The findings paint a complex picture, revealing both areas of strength and significant challenges that need to be addressed to foster truly inclusive educational environments.

One of the most striking conclusions is the pronounced deficiency in assistive technology



training among in-service teachers. A mere 14% of these educators reported receiving any form of training in this area, highlighting a systemic failure to equip them with the tools necessary to support children with ASD effectively. This lack of training directly contradicts Romania's stated commitment to inclusive education and underscores an urgent need to integrate assistive technology training into both pre-service and ongoing professional development programs.

Furthermore, while a larger proportion (64%) of in-service teachers have received some form of training related to ASD, a substantial 36% still lack this foundational knowledge. This inconsistency points to potential disparities in training access and content across different institutions and regions, raising concerns about equitable support for students with ASD. Alarming, even fewer in-service teachers (41%) have received training specifically focused on the social and emotional development of children with ASD, a critical area often significantly impacted in these children. This deficiency suggests a potential overemphasis on academic instruction at the expense of holistic development.

The data on pre-service teachers presents a somewhat more encouraging picture, with the majority (69%) receiving a combination of theoretical courses and practical training on ASD. This aligns with research emphasizing the effectiveness of integrated training approaches. However, a significant minority received only theoretical (16%) or only practical (12%) training, which may leave them ill-equipped for the complexities of real-world ASD education.

While pre-service teachers reported completing an average of 100 hours of practical training, the survey lacks detail on the distribution and content of these hours. This raises concerns about whether the training adequately covers all essential areas, such as behavior management, communication strategies, and sensory support.

Both in-service and pre-service teachers express significant concerns about their preparedness to work with children with ASD. A substantial proportion of in-service teachers (36.36%) feel "very poor" prepared, with an equal percentage feeling "well-prepared" but still acknowledging room for improvement. Notably, no in-service teacher



feels "excellent" prepared. Pre-service teachers exhibit a similar trend, with the majority (47.46%) rating themselves as moderately prepared and a significant portion (32.20%) feeling poorly prepared. These findings strongly indicate a need for more comprehensive and practical training to boost teacher confidence and competence.

A consistent theme across both groups is the limited availability and integration of assistive technologies in educational settings. Pre-service teachers perceive assistive technologies as moderately available at best, with a significant number reporting low availability. In-service teachers echo this concern, with a large percentage reporting never having used assistive technologies. This lack of access and utilization represents a major barrier to effective inclusive education.

The survey also sheds light on the resources and training formats that teachers find most valuable. In-service teachers strongly emphasize the importance of peer support groups, digital tools, and professional development workshops. They also express a preference for technology-assisted training, particularly online courses and live training, which offer flexibility and interactivity. Furthermore, there is a clear recognition of the need for various assistive technologies, especially those that support communication, social-emotional skills, and self-regulation.

In conclusion, the survey data provides compelling evidence for the need for significant improvements in the training and support of Romanian educators working with children with ASD. The survey's findings necessitate several key recommendations aimed at enhancing the support system for children with ASD in Romanian educational settings. Firstly, there is a clear imperative to overhaul teacher education programs, ensuring they provide comprehensive and balanced training in Autism Spectrum Disorder, encompassing both the necessary theoretical knowledge and substantial practical experience. Secondly, it is crucial to prioritize assistive technology training for both educators in training and those currently practicing, alongside a concerted effort to increase the accessibility and availability of these vital technologies within schools. Furthermore, ongoing professional development opportunities must be relevant, practical, and directly aligned with the needs of teachers, with a strong emphasis on evidence-based



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strategies and the effective integration of technology. To foster a supportive environment, it is also essential to cultivate collaboration and support networks among teachers, recognizing the significant value of peer learning and the sharing of expertise. Finally, the development of clear policies and the allocation of adequate resources are paramount to underpin the effective implementation of inclusive practices and the appropriate utilization of assistive technologies.

By addressing these critical areas, Romania can move closer to realizing its goal of providing truly inclusive and equitable education for all learners, including those with ASD.

In conclusion, the survey calls for restructuring teacher education and professional development in Romania to better prepare educators to support students with ASD, focusing on practical training, technology proficiency, and equitable access to resources.