



# LITERATURE REVIEW ON THE CURRENT KNOWLEDGE AND PRACTICES OF TEACHERS IN USING DIGITAL TOOLS AND SOCIAL STORIES FOR TEACHING CHILDREN WITH ASD IN ROMANIA





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**DOI:** https://doi.org/10.5281/zenodo.15534213

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# Literature review on the use of digital tools and social stories in teaching children with ASD by preservice teachers in Romania

#### National context

Autism Spectrum Disorder (ASD) has become an increasingly visible topic in Romania, where efforts to understand and support individuals with autism are gaining momentum. Although significant progress has been made in recent years, challenges persist in diagnosing, supporting, and integrating people with autism into education systems and society. By examining the current situation in Romania, it becomes evident that while progress is underway, much remains to be done to address gaps in awareness, infrastructure, and inclusion.

Autism, a complex neurodevelopmental condition, affects how individuals communicate, interact socially, and process sensory information. In Romania, diagnosing autism has historically been challenging due to a lack of resources, trained professionals, and public awareness. In rural areas especially, access to diagnosis is limited, and early intervention—which is critical for improving outcomes—often comes too late. Even in urban centers, there is a shortage of specialized diagnostic centers and interdisciplinary teams trained to identify ASD. Many families face long wait times or travel significant distances to access the necessary evaluations.

Public awareness of autism in Romania remains a work in progress. Although campaigns by non-governmental organizations (NGOs) and autism advocacy groups have brought more visibility to the condition, societal stigma still lingers. Families of children with autism often encounter judgment or misunderstanding, particularly in small communities where autism is not well understood. Misconceptions about the condition sometimes result in parents being blamed for their child's behaviours, contributing to a culture of silence and denial that prevents many from seeking professional help.





One of the most critical issues for individuals with autism in Romania is the state of the education system. While inclusive education is theoretically supported by Romanian law, the reality is that many schools are ill-equipped to accommodate neurodiverse students. Mainstream schools often lack trained teachers and specialists, such as speech therapists, occupational therapists, or behavioural analysts, who are essential for supporting students with autism. Special education schools exist, but they are few in number and typically located in urban areas, leaving rural families with limited options. As a result, many children with autism are either placed in inappropriate learning environments or excluded from school altogether. According to estimates by the World Health Organization (WHO), about 1 in 160 children have an autism spectrum disorder (ASD). However, some studies suggest higher rates of up to 1 in 59 children in certain regions, such as the United States. Also, in Romania it is estimated that about 1 in 100 children could have an autism spectrum disorder, similar to general estimates at European level. In recent decades, an increase in the number of cases diagnosed with autism has been observed, in part due to better awareness and improved diagnostic methods.

At the national level, in Romania, unfortunately there are no clear statistics in this regard, despite the acute need. The last local research was conducted in 2016 by the specialists of the Help Autism association, which showed a similar and worrying incidence of 1 in 51 children, although the study was limited to a sample of 300 children from nurseries in the capital.

Data collected from the Romanian Institute of Statistics on the "Number of new cases of illness declared by family doctors with the diagnosis of other psychological developmental disorders and without specification (COD ICD 10 - F83-84, F88-F89), in the period 2014-2022" show a 50% increase in the number of new annual diagnoses in recent years: in 2022, 1436 children were diagnosed with ASD, while until 2019 the diagnosis rate was approx. 1000 cases per year. Data on the number of children with pervasive developmental disorders (autistic disorder, Asperger's disorder, atypical autism/pervasive developmental disorder without further specification), childhood disintegrative disorder, infantile autism (registered with the social assistance service on July 1, 2021) show that 13,992 children (0 to 18 years old) nationwide and 1,095 ASD people who left services in the last 2 years at the age of 18. Also, of the 13,992 children, 6,152 children were in the mainstream education system, 3,446 children in the special





education system and 4,394 children were outside any education system (being under educational age or out of school).

Despite these challenges, there are promising developments in autism support within Romania. NGOs and parent-led organizations play a crucial role in bridging gaps left by the public system. Groups such as the Romanian Autism Society (ARCA) and Autism Romania provide services ranging from diagnosis and therapy to advocacy and public awareness campaigns. These organizations often serve as lifelines for families by offering affordable or free therapies such as Applied Behaviour Analysis (ABA), speech therapy, and social skills training.

In recent years, government initiatives and legal reforms have shown a growing commitment to supporting individuals with autism. Romania ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2010, signalling a critical step toward aligning its policies with international standards for the inclusion and protection of people with disabilities, including those with Autism Spectrum Disorder (ASD). The convention underscores Romania's obligation to promote human rights, equality, and non-discrimination for all individuals, regardless of their abilities. It specifically highlights the need to foster inclusion in education, employment, and public life, as well as to provide adequate healthcare and support services. While ratification was a positive milestone, the implementation of the CRPD in practice has been uneven and continues to face structural challenges, particularly for individuals with autism. One of the tangible outcomes of Romania's commitment to the CRPD is the gradual improvement in public funding for early intervention programs and therapeutic services for children with autism. Early intervention is widely recognized as critical in addressing developmental challenges and equipping children with skills that can significantly improve their quality of life. In response, some government-backed programs have begun offering partial subsidies for therapies such as Applied Behaviour Analysis (ABA), speech therapy, and occupational therapy. Additionally, specialized centers funded by municipalities and supported through EU programs have been established in a few major cities, providing access to diagnosis and basic therapeutic support for children and families.

Despite these advancements, the financial barriers families face in accessing necessary interventions remain a significant obstacle. The cost of autism therapies in Romania is substantial and often exceeds what public funding or health insurance will cover. Additionally,





the uneven geographic distribution of autism services exacerbates inequities. Urban centers such as Bucharest, Cluj, and Timișoara tend to have more access to diagnostic facilities, specialized schools, and therapeutic services. In contrast, rural areas are often underserved, leaving children in these regions at a stark disadvantage. Families in rural or small-town areas often have to travel long distances, further increasing costs and logistical challenges associated with accessing care.

An exciting frontier in autism education and therapy in Romania is the adoption of digital tools. These tools include communication apps, visual schedules, and gamified learning platforms, which can enhance education and therapy for children with autism. While challenges remain in ensuring access to these tools, especially in underserved areas, their potential to personalize education and bridge gaps in traditional teaching methods is significant. Some inclusive schools in urban centers have piloted the use of such tools, offering hope for broader implementation in the future.

### State of arts in use of digital tools for education of children with ASD

The review of the "current state of knowledge on the role of digital tools in the education of children with ASD" was carried out through a search in the Google Scholar and Scopus databases since 2010. In the first case, the concepts, in Romanian, "digital resources", "autism spectrum disorder" and "Infantile" were used in common, in any part of the text. In Scopus, the concepts, in English, "autism spectrum disorders" and "information technology", together, were used, located indistinctly, in the title, abstract or keywords, with a search filter in Romania. After a preliminary analysis of the content, and filtering only the articles published after 2010, ten works were selected.

Chistol, Turcu, and Danubianu (2023) developed "Autism Assistant," a Romanian-language therapeutic software platform designed to support home-based interventions for children with Autism Spectrum Disorder (ASD). Created collaboratively by Ştefan cel Mare University and Assist Software Company, the platform addresses the time and financial challenges of traditional Applied Behavior Analysis (ABA) therapy. Developed using the Double Diamond Model with a Human-Centered Design approach, it integrates insights from 60 Romanian





parents, teachers, and therapists to address the specific needs of children with ASD. Comprising a mobile app built with Unity and a web application using React and Ruby on Rails, it was evaluated as suitable educational software under ISO 9126 standards. The platform empowers parents and caregivers to act as co-therapists, promoting self-reliance and faster skill improvement in children, while filling a critical gap in accessible therapeutic tools for non-English speaking users. Costescu et al. (2024) explored the impact of technology use on the quality of life of autistic children aged 5–10, involving 61 parent-reported assessments. The study found that while most children primarily used technology for relaxation, its use for socialization was positively correlated with higher perceived quality of life. This highlights the potential benefits of technology when used for fostering social interaction, even though such usage was less frequent. The authors emphasized the need for further research on technology-based interventions to enhance social skills and well-being among autistic children, recommending careful consideration of both its benefits and potential risks (Costescu et al., 2024).

In Romania, the adoption of digital tools for children with ASD has begun, but it remains in its infancy. Certain researches such as Costescu (2024) and Toma et al. (2024) explore the role of technology in supporting autistic children, but they differ in scope and focus. Costescu (2024) provides a broad overview of technological tools, including software applications, virtual reality, and robotics, emphasizing their tailored application to individual needs and the need for empirical validation. In contrast, Toma et al. (2024) conduct a systematic literature review specifically on extended reality (XR) mobile applications, such as augmented, virtual, and mixed reality, analysing their design, testing methods, and preliminary outcomes. While both works highlight the potential benefits of technology in therapeutic and educational interventions, Costescu's (2024) approach is more conceptual and expansive, addressing various tool categories. Meanwhile, Toma et al. (2024) delve deeply into the technical and practical aspects of XR solutions, stressing the need for rigorous testing and ethical considerations. Both underscore the importance of multidisciplinary collaboration and evidence-based development to optimize outcomes for children with Autism Spectrum Disorder. Although many tools available globally are widely regarded as effective, Romania faces an additional challenge in the form of language accessibility. Many apps and software





programs are available only in English, limiting their use for educators, therapists, and children who lack proficiency in the language. This presents a clear need for localizing and adapting digital tools to the Romanian context.

While the potential of digital tools is undeniable, their implementation in Romania faces several obstacles. One of the most significant barriers is the lack of resources. Alos, many schools lack adequate funding for advanced tools or reliable internet infrastructure, particularly in rural areas where the need for inclusive education support is also greatest. In addition, the effective use of digital tools requires educators to be adequately trained in their application. Yet, many teachers in Romania lack access to professional development programs that focus on how to integrate digital tools into teaching practices for neurodiverse learners (Folostina, et al., 2022). Similar to the above research is Pasco et al. (2014) article that discusses a training and development project in Romania aimed at enhancing services and promoting social inclusion for children and young people with autism. The initiative focused on developing the skills of professionals and parents through evidence-based approaches to improve the quality of care and support for autistic individuals. The project emphasized collaboration between local and international experts to address challenges specific to Romania's autism community and enhance opportunities for integration into broader society.

Moreover, research is focus, at national level on the impact of digital platforms, the use of virtual reality and the extended reality. To start with Costescu et al. (2024) focuses on a systematic review that explores the impact of digital platforms on academic performance. It analyses existing studies on how such tools influence learning outcomes, particularly in environments that include children with diverse learning needs. The review identifies key benefits of digital platforms, such as personalized learning and increased engagement, but also underscores the need for adaptive tools and thorough evaluations to maximize educational outcomes across diverse contexts. On the other hand, Chiţu et al. (2023) examines the potential of virtual reality (VR) in the education of children with disabilities. It highlights VR's ability to create immersive, controlled environments that aid in skill development and learning. The research indicates that VR can improve engagement, understanding, and accessibility for children with disabilities. However, the authors stress the importance of addressing practical barriers, such as cost and accessibility, and further empirical





testing to assess its long-term impact. Not least, Tiliute & Pascu (2024) offers a systematic literature review of extended reality (XR)-based mobile applications for the therapy of children with Autism Spectrum Disorder (ASD). It reviews the development and evaluation of XR solutions, including virtual, augmented, and mixed reality tools. While these technologies demonstrate significant promise in enhancing therapeutic interventions, the study underscores the need for comprehensive testing, ethical considerations, and multidisciplinary collaboration to ensure effective application in real-world contexts.

Looking at these three perspectives, these studies share a common focus on using technology to improve the development, education, or therapy of children with disabilities or Autism Spectrum Disorder (ASD). Each article examines ways in which technology—such as digital platforms, virtual reality (VR), or extended reality (XR)—can enhance learning outcomes, therapeutic interventions, or social inclusion. They also emphasize the importance of empirical evaluation to assess the effectiveness of these technologies and tailor interventions to the individual needs of the children involved. Additionally, all the papers acknowledge the potential benefits of these technologies in improving engagement and therapy outcomes for children with ASD or disabilities.

However, there are significant differences between the studies. Pasco et al. (2014) focuses primarily on training and development for professionals and parents in Romania, aiming to improve autism support services and facilitate social inclusion. The study does not centre on specific technologies but rather on the broader context of service quality improvement. Costescu et al. (2024) investigates the use of digital platforms more generally, focusing on enhancing academic performance for children with diverse learning needs through systematic review. Chițu et al. (2023) explores the potential of VR specifically for the education of children with disabilities, considering the unique benefits it offers in terms of engagement and accessibility, while Tiliute and Pascu (2024) concentrate on XR technologies for therapeutic purposes, reviewing existing literature on their effectiveness for children with ASD.

The geographical context also differs, with Pasco et al. (2014) concentrating on Romania's autism community and its specific challenges in integration, whereas the other studies address broader, often international, populations or specific technological tools. In terms of methodology, Pasco et al. (2014) describes a training initiative and its impact, Costescu et al.





(2024) and Tiliute and Pascu (2024) conduct systematic reviews, while Chiţu et al. (2023) explores VR as an educational tool, possibly using a mixed-method approach to assess its potential.

Each study addresses distinct outcomes, with Pasco et al. (2014) focusing on service quality and social inclusion, Costescu et al. (2024) examining the improvement of academic performance, Chiţu et al. (2023) emphasizing engagement and accessibility in education, and Tiliute and Pascu (2024) reviewing XR tools for therapeutic progress in children with ASD. In summary, while these studies share a unified goal of improving services for children with autism and disabilities, they differ in their technological focus, application, geographical context, and methodological approach.

In conclusion, digital tools offer immense opportunities to enhance the education of children with ASD in Romania by providing personalized, engaging, and sensory-friendly learning experiences. While the potential of these tools is clear, challenges related to resource availability, educator training, language barriers, and cultural stigma must be addressed to maximize their impact. By investing in strategic initiatives and fostering collaboration among educators, families, and policymakers, Romania can unlock the full potential of digital innovation, empowering children with ASD to thrive both academically and socially. The role of digital tools in reshaping the educational landscape for neurodiverse learners is both transformative and necessary, marking a crucial step toward a more inclusive society.

#### State of arts in use of social stories for education of children with ASD

Regarding the second search strategy on "the current state of the use of social stories as a method of supporting socio-emotional development", a systematic analysis was carried out in the Google Scholar and Scopus databases, These databases contain literature published in Romanian and English-speaking countries In the selected databases, the words "Social Stories", "Autism" or "Autism Spectrum Disorder" and "Children" or "Early Education" have been inserted together, anywhere in the text. The selection of the filter "publications from 2010-2024" and which referred, at least partially, to the education stage led to a number of 4 selected articles.





Social stories are an effective, widely used method to support the social-emotional development of children, particularly those with Autism Spectrum Disorder (ASD). This intervention involves creating simple, narrative-based stories that explain various social situations, appropriate social behaviours, and emotional responses in a clear and relatable manner. The primary aim is to help children with ASD understand social cues, improve interpersonal interactions, and regulate their emotions in challenging scenarios. Bălaș-Baconschi and Bărbulescu (2022) explored the use of social stories as an intervention method to reduce inappropriate behaviours and enhance social skills in children with Autism Spectrum Disorder (ASD). Social stories are a common tool in ASD education that helps children understand social situations and appropriate responses through simple, personalized narratives. The authors reviewed various studies and highlighted the effectiveness of this method in improving social behaviours and mitigating behavioural issues, such as aggression and anxiety. The review shows that social stories help children with ASD understand expectations and improve their interaction in social settings. The article presents evidence suggesting that the method contributes significantly to the development of adaptive behaviours and can lead to better emotional regulation and social integration in both school and social environments. The study also discusses potential challenges in applying social stories, including the importance of tailoring stories to the individual needs of each child and the need for consistent use in multiple contexts to reinforce learning. By demonstrating how social stories can be an effective educational tool, the study supports their inclusion in ASD interventions to foster better communication, social understanding, and emotional development in children.

By using social stories, children can learn about expectations in different contexts—whether at school, home, or in the community—and practice appropriate social responses before encountering real-world situations. This proactive approach helps to reduce anxiety and confusion by providing clear guidelines on what behaviours are expected, how others might feel, and how to respond appropriately. The method has been particularly effective in teaching skills like greeting others, sharing, managing conflict, and interpreting emotions. Grigore and Rusu (2014) investigate how therapy dog interaction enhances the effects of the social story method in autistic children. The study highlights the effectiveness of combining traditional educational methods with animal-assisted therapy. The researchers found that interactions with





therapy dogs significantly improved the engagement and social responses of children with ASD. The method used in the study involved both social story interventions and controlled therapy dog interactions, where the children would read or listen to a social story and subsequently interact with the dog. The positive influence of therapy dogs on social behaviours was evident, with children demonstrating better social communication skills, emotional regulation, and increased motivation to participate in therapy. The interaction with the dog was particularly beneficial in reducing anxiety and promoting a sense of security, which helped the children better respond to the social story's content. By integrating therapy animals into interventions, the study demonstrated a practical approach to addressing core issues in ASD, such as social withdrawal and communication difficulties. The authors suggest that the use of therapy dogs, alongside more traditional behavioural strategies like social stories, could significantly enhance therapeutic outcomes for children with ASD.

Social stories also offer a form of emotional preparation for children with ASD. By helping them recognize and articulate their own feelings, these stories foster greater emotional awareness. They support self-regulation, allowing children to better cope with situations that might otherwise cause frustration or distress. Ramona (2016) explores the role of therapeutic stories in the social-emotional development of pupils, with a focus on children with Autism Spectrum Disorder. The author argues that therapeutic stories serve as a powerful tool for fostering empathy, understanding emotions, and improving interpersonal skills in children with ASD. The study provides an overview of how stories, especially those created with therapeutic intent, can address specific social and emotional challenges faced by children with ASD. Ramona presents case examples illustrating how narratives can teach children with autism to identify and express emotions, interpret social cues, and learn appropriate behaviours in social interactions. The therapeutic stories are designed to align with the developmental needs of children, engaging them in emotionally relevant scenarios that they can relate to. The article emphasizes the benefits of using stories not only for academic improvement but also for promoting a more inclusive social experience for children with ASD. Furthermore, Ramona highlights how the method allows educators and therapists to address individual emotional challenges by customizing stories for each child's needs, thereby supporting social-emotional growth. The study underscores the importance of integrating such therapeutic tools within





educational programs to create a holistic developmental approach for children on the autism spectrum.

Another paper developed by Syriopoulou-Delli and Folostina (2021) present a comprehensive collection of interventions designed to improve adaptive behaviours in children with Autism Spectrum Disorders (ASD) in their edited volume \*Interventions for Improving Adaptive Behaviors in Children with Autism Spectrum Disorders\*. The volume includes various contributions that focus on practical, evidence-based interventions aimed at addressing core challenges associated with ASD, such as social communication deficits, repetitive behaviours, and restricted interests. Each chapter in the book highlights specific strategies for improving key adaptive behaviours such as daily living skills, social functioning, and emotional regulation. The interventions presented range from traditional behavioural therapies like Applied Behavior Analysis (ABA) to more innovative approaches incorporating technology, including virtual reality and social robotics. The editors underscore the importance of a personalized, multi-disciplinary approach to ASD interventions, acknowledging the need for ongoing assessment and modification of strategies to meet the individual needs of children. The book stresses the value of involving families in the intervention process, recognizing that consistent practice at home can significantly enhance the outcomes of formal therapies. Syriopoulou-Delli and Folostina conclude that the integration of diverse intervention strategies, coupled with continuous professional development for educators and therapists, is critical for improving the quality of life and functional independence of children with ASD.

Each of these works contributes valuable insights into the challenges and solutions associated with supporting children with Autism Spectrum Disorder, focusing on enhancing their social skills, emotional regulation, and adaptive behaviours through targeted interventions.

All in all, social stories play a pivotal role in the social-emotional development of children, especially those with ASD, by promoting greater understanding of social expectations, emotional recognition, and appropriate behavioural responses. When tailored to the individual needs of each child, they can contribute significantly to improving social skills, enhancing emotional regulation, and fostering a more inclusive environment.





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## Appendix

No	Author, year of publication	Purpose and methodology	Key findings	Relevance to
				the project's
				theme
	Chistol, M., Turcu, C., & Danubianu, M. (2023). Autism	The paper conducted research	The platform underwent evaluation	educational
	Assistant: A Platform for Autism Home-Based	focused on a developed	using the Quantitative Evaluation	software for
	Therapeutic Intervention. IEEE Access, 11, 94188-	educational software for	Framework (QEF) based on ISO 9126,	therapeutic
	94204. <a href="https://doi.org/10.1109/ACCESS.2023.3310397">https://doi.org/10.1109/ACCESS.2023.3310397</a> .	therapeutic interventions for	and it was considered suitable as	interventions
		Romanian children	educational software for special	
		diagnosed with Autism	education. The Autism Assistant	
		Spectrum Disorder (ASD) in	platform was deemed suitable as	
		a home-based setting. We	educational software for special	
		followed the Double	education	
		Diamond Model,		
		emphasizing the core		
		principle of Human-Centered		





I	Design (HCD) methodology,	
t	to design the software with a	
f	focus on the special needs of	
6	end-users. This involved	
	developing proto-personas,	
V	wireframes, and interactive	
1	prototypes, exploring the	
1	latest technologies, and	
i	incorporating feedback from	
6	experienced ABA therapists.	
1	Based on these inputs, we	
	developed the Autism	
1	Assistant platform, which	
i	includes a mobile application	
1	built with Unity and a web	
8	application developed with	
I	React and Ruby on Rails.	





Costescu, C., Tufar, I., Chezan, L., Şogor, M., &	Costescu et al. (2024)	The study found that while most	technology use
Confederat, A. (2024). Assessing technology usage in	explored the impact of	children primarily used technology for	on the quality
relation to the quality of life of autistic children. Digital	technology use on the quality	relaxation, its use for socialization was	of life of
Health, 10, 20552076241304885.	of life of autistic children	positively correlated with higher	autistic
	aged 5–10, involving 61	perceived quality of life. This highlights	children
	parent-reported assessments.	the potential benefits of technology	
		when used for fostering social	
		interaction, even though such usage was	
		less frequent. The authors emphasized	
		the need for further research on	
		technology-based interventions to	
		enhance social skills and well-being	
		among autistic children, recommending	
		careful consideration of both its benefits	
		and potential risks.	
Chistol, M., Danubianu, M., & Bărîlă, A. L. (2023).	Autism Assistant," a	The platform empowers parents and	therapeutic
Technology-Mediated Interventions for Autism	Romanian-language	caregivers to act as co-therapists,	software
	therapeutic software platform	promoting self-reliance and faster skill	platform





Spectrum Disorder. International Journal of Advanced	designed to support home-	improvement in children, while filling a	designed to
Computer Science & Applications, 14(12).	based interventions for	critical gap in accessible therapeutic	support home-
	children with Autism	tools for non-English speaking users.	based
	Spectrum Disorder (ASD).		interventions
	Created collaboratively by		for children
	Ștefan cel Mare University		with Autism
	and Assist Software		Spectrum
	Company, the platform		Disorder
	addresses the time and		
	financial challenges of		
	traditional Applied Behavior		
	Analysis (ABA) therapy.		
	Developed using the Double		
	Diamond Model with a		
	Human-Centered Design		
	approach, it integrates		
	insights from 60 Romanian		
	parents, teachers, and		





	therapists to address the		
	specific needs of children		
	with ASD. Comprising a		
	mobile app built with Unity		
	and a web application using		
	React and Ruby on Rails, it		
	was evaluated as suitable		
	educational software under		
	ISO 9126 standards.		
Toma, M. V., Turcu, C. E., Turcu, C. O., Vlad, S., Tiliute,	A systematic literature	a systematic literature review to	
D. E., & Pascu, P. (2024). Extended Reality-Based	review to evaluate the use of	evaluate the use of extended reality	
Mobile App Solutions for the Therapy of Children With	extended reality (XR) mobile	(XR) mobile applications—	
Autism Spectrum Disorders: Systematic Literature	applications—encompassing	encompassing virtual, augmented, and	
Review. JMIR Serious Games, 12, e49906.	virtual, augmented, and	mixed reality—in the therapy of	
	mixed reality—in the therapy	children with Autism Spectrum	
	of children with Autism	Disorder (ASD). Analyzing 28 studies	
	Spectrum Disorder (ASD).	from 2015 to 2019, they found a	
	Analyzing 28 studies from	predominant focus on augmented	





predominant focus augmented reality (AR) solutions developed Android devices using platforms liks.

2015 to 2019, they found a reality (AR) solutions developed for on Android devices using platforms like Unity 3D and Vuforia. While 68% of these applications were tested with children, the remaining were assessed solely by developers. Evaluation methods primarily involved interviews, yielding generally positive but preliminary outcomes, underscoring the necessity for more comprehensive testing. The review highlights the potential of XR technologies as educational tools for ASD therapy, advocating multidisciplinary collaboration, thorough empirical evaluations, and attention to technology ethics in future research.





Folostina, R., Dumitru, C., Iacob, C. I., & Syriopoulou-	Folostina et al. (2022)	Results revealed significant gaps in	knowledge and
Delli, C. K. (2022). Mapping knowledge and training	conducted a comparative	knowledge, particularly regarding	training needs
needs in teachers working with students with autism	cross-sectional study to	specialized interventions and strategies	of teachers
spectrum disorder: a comparative cross-sectional	investigate the knowledge	for supporting students with ASD in the	working with
investigation. Sustainability, 14(5), 2986.	and training needs of teachers	classroom. Teachers from both	students
	working with students	countries reported a strong desire for	diagnosed with
	diagnosed with Autism	more training in areas such as	Autism
	Spectrum Disorder (ASD).	individualized education programs	Spectrum
	The study surveyed teachers	(IEPs), classroom management, and	Disorder
	from Romania and Greece to	communication techniques. The study	(ASD).
	assess their understanding of	highlighted the need for targeted	
	ASD and the effectiveness of	professional development programs to	
	their training.	better equip educators with the	
		necessary skills and knowledge to	
		effectively teach and support students	
		with ASD.	
Costescu, C. (2024). The Use of Technological Tools for	A comprehensive overview	Costescu emphasizes the importance of	technological
Autistic Children. In Digital Technologies for Learning	of technological tools	tailoring technological interventions to	tools employed in clinical and





and Psychological Interventions (pp. 151-163). Cham:	employed in clinical and	individual needs and highlights the	educational
Springer Nature Switzerland.	educational interventions for	necessity for empirical validation to	interventions for autistic
	autistic children. The chapter	ensure their effectiveness and	children
	categorizes these tools into	appropriateness in therapeutic and	
	software applications, virtual	educational settings.	
	reality environments, and		
	robotic systems, discussing		
	their applications in		
	enhancing communication,		
	social skills, and learning		
	outcomes.		
Pasco, G., Clark, B., Dragan, I., Kalambayi, F., Slonims,	This article discusses a	The initiative focused on developing the	developing the
V., Tarpan, A. K., & Wittemeyer, K. (2014). A training	training and development	skills of professionals and parents	skills of
and development project to improve services and	project in Romania aimed at	through evidence-based approaches to	professionals
opportunities for social inclusion for children and young	enhancing services and	improve the quality of care and support	and parents
people with autism in Romania. Autism, 18(7), 827-831.	promoting social inclusion	for autistic individuals.	through
	for children and young		evidence-based
	people with autism.		approaches





Costescu, C. A., Şogor, M., Pălimariu, S., Katona, J., Tufar, I., & Avram, C. M. (2024, October). Use of digital platforms for enhancing academic performance. Systematic Review. In 2024 IEEE 7th International Conference and Workshop Óbuda on Electrical and Power Engineering (CANDO-EPE) (pp. 39-46). IEEE.

This systematic review explores the impact of digital platforms academic on influence learning tools outcomes, particularly in environments that include children with diverse learning needs. The review identifies key benefits of digital platforms, such as personalized learning and increased engagement, but also underscores the need for adaptive tools and thorough evaluations to maximize

This systematic review The project emphasized collaboration explores the impact of digital between local and international experts platforms on academic to address challenges specific to performance. It analyzes Romania's autism community and existing studies on how such enhance opportunities for integration tools influence learning into broader society.

the impact of digital platforms





	educational outcomes across		
	diverse contexts.		
Chițu, I. B., Tecău, A. S., Constantin, C. P., Tescașiu, B.,	This study examines the	The research indicates that VR can	virtual reality
Brătucu, T. O., Brătucu, G., & Purcaru, I. M. (2023).	potential of virtual reality	improve engagement, understanding,	(VR) in the
Exploring the opportunity to use virtual reality for the	(VR) in the education of	and accessibility for children with	education of
education of children with disabilities. Children, 10(3),	children with disabilities. It	disabilities. However, the authors stress	children with
436.	highlights VR's ability to	the importance of addressing practical	disabilities
	create immersive, controlled	barriers, such as cost and accessibility,	
	environments that aid in skill	and further empirical testing to assess	
	development and learning.	its long-term impact.	
Tiliute, D. E., & Pascu, P. Extended Reality-Based	This article offers a	It reviews the development and	extended
Mobile App Solutions for the Therapy of Children With	systematic literature review	evaluation of XR solutions, including	reality (XR)-
Autism Spectrum Disorders: Systematic Literature.	of extended reality (XR)-	virtual, augmented, and mixed reality	based mobile
	based mobile applications for	tools. While these technologies	applications for
	the therapy of children with	demonstrate significant promise in	the therapy of
	Autism Spectrum Disorder	enhancing therapeutic interventions, the	children with
	(ASD).	study underscores the need for	Autism
		comprehensive testing, ethical	Spectrum





		considerations, and multidisciplinary	Disorder
		collaboration to ensure effective	(ASD).
		application in real-world contexts.	
Bălaș-Baconschi, C., & Bărbulescu, A. (2022).	Bălaș-Baconschi and	The study also discusses potential	use of social
Reducing Inappropriate Behaviors and Enhancing	Bărbulescu (2022) explored	challenges in applying social stories,	stories as an
Social Skills in Children with ASD Through Social	the use of social stories as an	including the importance of tailoring	intervention
Stories. Educatia 21, (23), 93-103.	intervention method to	stories to the individual needs of each	method in
	reduce inappropriate	child and the need for consistent use in	workind with
	behaviors and enhance social	multiple contexts to reinforce learning.	students with
	skills in children with Autism	By demonstrating how social stories can	ASD
	Spectrum Disorder (ASD).	be an effective educational tool, the	
	Social stories are a common	study supports their inclusion in ASD	
	tool in ASD education that	interventions to foster better	
	helps children understand	communication, social understanding,	
	social situations and	and emotional development in children.	
	appropriate responses		
	through simple, personalized		
	narratives. The authors		





reviewed various studies and	
highlighted the effectiveness	
of this method in improving	
social behaviors and	
mitigating behavioral issues,	
such as aggression and	
anxiety. The review shows	
that social stories help	
children with ASD	
understand expectations and	
improve their interaction in	
social settings. The article	
presents evidence suggesting	
that the method contributes	
significantly to the	
development of adaptive	
behaviors and can lead to	
better emotional regulation	





	and social integration in both		
	school and social		
	environments.		
Grigore, A. A., & Rusu, A. S. (2014). Interaction with a	The article investigates how	The positive influence of therapy dogs	therapy dog
therapy dog enhances the effects of social story method	therapy dog interaction	on social behaviors was evident, with	interaction
in autistic children. Society & Animals, 22(3), 241-261.	enhances the effects of the	children demonstrating better social	enhances the
	social story method in autistic	communication skills, emotional	effects of the
	children. The study	regulation, and increased motivation to	social story
	highlights the effectiveness	participate in therapy. The interaction	method in
	of combining traditional	with the dog was particularly beneficial	autistic
	educational methods with	in reducing anxiety and promoting a	children.
	animal-assisted therapy. The	sense of security, which helped the	
	researchers found that	children better respond to the social	
	interactions with therapy	story's content. By integrating therapy	
	dogs significantly improved	animals into interventions, the study	
	the engagement and social	demonstrated a practical approach to	
	responses of children with	addressing core issues in ASD, such as	
	ASD. The method used in the	social withdrawal and communication	





	study involved both social	difficulties. The authors suggest that the	
	story interventions and	use of therapy dogs, alongside more	
	controlled therapy dog	traditional behavioral strategies like	
	interactions, where the	social stories, could significantly	
	children would read or listen	enhance therapeutic outcomes for	
	to a social story and	children with ASD.	
	subsequently interact with the		
	dog.		
Ramona, H. I. (2016). The Contribution of Therapeutic	The article explores the role	It highlights how the method allows	the role of
Stories to the Social-Emotional Development of	of therapeutic stories in the	educators and therapists to address	therapeutic
Pupils. European Proceedings of Social and	social-emotional	individual emotional challenges by	stories in the
Behavioural Sciences.	development of pupils, with a	customizing stories for each child's	social-
	focus on children with	needs, thereby supporting social-	emotional
	Autism Spectrum Disorder.	emotional growth. The study	development of
	The author argues that	underscores the importance of	pupils, with a
	therapeutic stories serve as a	integrating such therapeutic tools within	focus on
	powerful tool for fostering	educational programs to create a holistic	children with
	empathy, understanding		Autism





	emotions, and	impro	ving	developmental approach for children on	Spectrum
	interpersonal	skills	in	the autism spectrum.	Disorder
	children with AS	D. The s	tudy		
	provides an over	view of	how		
	stories, especi	ally t	hose		
	created with	therap	eutic		
	intent, can addı	ress spe	cific		
	social and	emot	ional		
	challenges faced	by chil	dren		
	with ASD. Ram	ona pre	sents		
	case examples	illustra	ating		
	how narratives	can t	each		
	children with	autism	to		
	identify and	exp	oress		
	emotions, inter	pret s	ocial		
	cues, and learn	approp	riate		
	behaviors in	n s	ocial		
	interactions. The	therap	eutic		





	stories are designed to align		
	with the developmental needs		
	of children, engaging them in		
	emotionally relevant		
	scenarios that they can relate		
	to. The article emphasizes the		
	benefits of using stories not		
	only for academic		
	improvement but also for		
	promoting a more inclusive		
	social experience for children		
	with ASD.		
Syriopoulou-Delli, C. K., & Folostina, R. (Eds.).	The volume includes various	The editors underscore the importance	
(2021). Interventions for Improving Adaptive Behaviors	contributions that focus on	of a personalized, multi-disciplinary	
in Children with Autism Spectrum Disorders. IGI	practical, evidence-based	approach to ASD interventions,	
Global.	interventions aimed at	acknowledging the need for ongoing	
	addressing core challenges	assessment and modification of	
	associated with ASD, such as	strategies to meet the individual needs	





social communication deficits, repetitive behaviors, chapter in the book highlights specific strategies for improving key adaptive behaviors such as daily living skills, social functioning, and emotional regulation. The interventions presented range from traditional behavioral therapies like Applied Behavior Analysis (ABA) to more innovative approaches incorporating technology, including virtual reality and social robotics.

of children. The book stresses the value of involving families in the intervention and restricted interests. Each process, recognizing that consistent practice at home can significantly enhance the outcomes of formal therapies. It concludes that the integration of diverse intervention strategies, coupled with continuous professional development for educators and therapists, is critical for improving the quality of life and functional independence of children with ASD