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Inclusive education in Montenegro: From special schools to inclusive practices

Case study

Montenegro's inclusive education reform is distinguished by a bold social awareness campaign and firm policy commitments. In the early 2010s, the country's "It's About Ability" campaign helped transform public attitudes: within three years, support for children with disabilities learning alongside peers rose dramatically to 80%. This shift in mindset paved the way for strong government action. Through successive national strategies and legal reforms, Montenegro equipped schools and teachers to welcome diverse learners, setting up resource centres and training programmes to support students with special needs. The country is also expanding early support services – from day-care centres to improved early disability detection – to reach families who need help. By coupling community engagement with robust policy, Montenegro has created an education system where inclusion is the norm – showing how a small nation can achieve big changes in attitudes and opportunities.

By pioneering digital accessible textbooks, created an important lever for change. The DAISY initiative is a shining example of innovation: it harnessed technology to remove barriers, and it did so by uniting people from many fields around a common goal. The success was so profound that when the COVID-19 pandemic struck years later, Montenegro's investment in digital learning tools paid off widely – those audio textbooks became invaluable for remote education, benefiting all students during school closures.

Changing policies and changing minds

Montenegro's journey toward inclusive education exemplifies the broader shift seen across Eastern Europe and Central Asia in the past two decades. Like many countries in the region, Montenegro historically educated children with disabilities in segregated "special" schools or institutions. In the early 2000s, only a handful of children with special needs were included in regular schools. Two policy shifts altered that landscape decisively. First, ratification of the UN Convention on the Rights of Persons with Disabilities (CRPD) and the pressures of EU accession talks demanded legislation that guaranteed every child the right to learn alongside peers - prompting amendments to the General Law on Education and adoption of the Law on Education of Children with Special Educational Needs. Second, a sequence of Inclusive Education Strategies (2008-2013, 2014-2018, 2019-2025) set measurable targets for accessibility, quality and teacher capacity, anchoring inclusion in national planning rather than short-term projects. Third, companion strategies on digitalisation of the education system (2022-2027) and early-childhood development (2021-2025), which included assistive technology and family-centred early care into mainstream planning.

Public attitudes evolved in tandem. UNICEF's *It's About Ability* campaign (2010-2013) used children's stories, TV spots and community debates to challenge stigma; by 2015 the share of citizens who considered it *acceptable* for a child with disabilities to sit in the same class as their own rose from 35 per cent to 78 per cent, while acceptance of close friendships climbed from 22 per cent to 60 per cent. With social support growing, policymakers could move from rhetoric to structural change.

During 2012–2013, Montenegro's special schools underwent significant transformation and reform. The Ministry of Education redesignated three special schools as Resource Centres – transforming into national hubs mandated to *support* inclusion instead of *substituting* for it. This paradigm shift – moving from a "special school" mentality to a resource-and-support model – required overcoming initial resistance from educators who feared for their jobs or doubted inclusion's feasibility. Through pilot projects and outreach, mindsets gradually changed. Resource Centre staff began to see their role not as segregated caregivers but as partners in each child's education, working together with families and regular teachers. As one educator noted, inclusion demanded *"seeing the child first, rather than their impairment"* – a fundamental shift in philosophy

that Montenegro embraced. The inclusive education reform thus reflects a broader change in societal values, affirming that diversity enriches the educational experience and all children have the right to learn together.

The three Centres each assumed an explicit thematic mandate while sharing a common outreach mission. Resource Centre "Dr Peruta Ivanović", Kotor became the hub for hearing and speech, offering sign-language tuition, audiology services and communication technology; Resource Centre "1. Jun", Podgorica took the lead on intellectual disability and autism, delivering functional-academics and behaviour-support programmes; and Resource Centre "Podgorica" focused on physical and visual impairments, hosting the national tactile/Braille and DAISY-textbook studios. Since 2018, all three operate assistive-technology classrooms, run mobile multidisciplinary teams and coach mainstream teachers - turning former "special" staff into partners who travel to children rather than transferring children to segregated sites .

This resource-centre architecture has proved central for Montenegro. It secures specialist services without reviving segregation, aligns with EU standards on inclusive schooling, and offers a scalable template for neighbouring states that face similar demographic and fiscal constraints. The pages that follow trace how this model underpins three core pillars -accessible learning materials, assistive-technology networks and early-childhood intervention - and where further consolidation is needed to complete Montenegro's inclusive-education journey. They offer itinerant outreach, teacher coaching, production of accessible materials (e.g., Braille and DAISY books) and, where necessary, short-term intensive programmes for children. Their staff reinforced their expertise through regional peer learning, most notably a study visit to Serbia's inclusive flagship "Milan Petrović" school, which inspired Montenegro's own Assistive-Technology Labs and training packages for mainstream teachers.

Montenegro's Resource Centres work in tandem with the social-protection sector, having signed agreements with every municipal social-work centre to house families during early-intervention visits and to formalise referral and payment pathways, positioning inclusion as a joint welfare–education mandate. Building on that platform, the Ministry of Education–supported by UNICEF–has embedded day-care expertise into kindergartens and primary schools in 11 municipalities, so therapeutic services and classroom learning reinforce one another instead of running in parallel . This creates a multi-tier network in which Resource Centres, day-care services, schools, social-welfare units and health professionals co-design Individualised Plans, ensuring every child receives seamlessly coordinated specialist support in their natural settings. Specialists flag developmental risks; municipal referral commissions coordinate assessment; and Centres deploy *mobile teams* to homes, preschools and primary classrooms. These arrangements have begun to erase the old boundary between "special" and "regular" provision, embedding specialist know-how inside the general system rather than at its margins.

The resource-centre architecture delivers three strategic pay-offs. First, it secures specialist support nationwide without recreating segregation. Second, it fulfils EU and CRPD obligations by ensuring that expertise follows the child. Third, it offers a scalable template for neighbours facing similar demographic and fiscal constraints. The sections that follow trace how this systemic pivot underpins Montenegro's flagship pillars–accessible learning materials, assistive-technology networks and family-centred early intervention–and where consolidation is still needed to complete the country's inclusive-education journey.

Resource Centres' roles - starting in early intervention

Inclusive education in Montenegro does not begin when a child enters primary school – it starts much earlier, through proactive early childhood intervention (ECI) services that reach children in their first years of life. Early intervention is a critical part of the inclusive education ecosystem, ensuring that developmental delays or disabilities are addressed as early as possible so that children can transition smoothly into preschool and school alongside their peers. Montenegro's approach to ECI has been to extend the inclusive philosophy into the domain of early childhood, transforming

what used to be "special" early education services into inclusive, family-centered support. In essence, the journey has moved *"from the traditional concept of the special school to the homes of the youngest children,"* showing how the once isolated "special" professionals are now becoming partners to parents in the child's natural environment. This shift illustrates the systemic approach Montenegro has adopted: building an inclusive continuum that spans from infancy through the entire education system.

Before the reforms, services for young children with disabilities in Montenegro were limited and mostly institution-based. If a child was born with a disability or developmental difficulty, the main options were sporadic therapies (often in medical settings) or enrollment in a special preschool or daycare, separate from mainstream children. Special schools traditionally focused on school-age children and had little outreach to kids below school age. This began to change with the inclusive education reforms. The Law on Education of Children with Special Needs and the Law on Social and Child Protection were updated to establish early intervention programs as a right and a mandated service. Importantly, the redefinition of special schools into Resource Centres included the expectation that they would provide early childhood services in addition to school-age education. In practice, each Resource Centre developed early intervention programs targeting the age group and disabilities of children they specialize in.

Resource Centre "Podgorica" (formerly the Institute for Education and Rehabilitation of Disabled Children and Youth) was a pioneer in this effort. It underwent a profound paradigm shift in the early 2010s, even changing its name to signal a new orientation toward inclusion. As staff opened up to new ways of working, the Centre started an early intervention program in the 2013/2014 school year, focusing on infants and toddlers with physical, motor, or visual impairments. The program provides individualized therapy and stimulation for children, delivered by a multidisciplinary team that includes somatopedists (physical development specialists), tiflologists (visual impairment specialists), speech therapists, psychologists, and physiotherapists. Sessions are tailored to each child's needs and often involve parents directly in the interventions (parents might be guided on exercises to do with their child, for example). The Resource Centre Podgorica's early intervention services might take place at the Centre and – increasingly – through home visits, where specialists coach families on helping their child's development in everyday routines.

At the Resource Centre "1. Jun" in Podgorica, which serves children with intellectual disabilities and autism, early intervention efforts have included training and outreach to local preschools. Specialists from "1. Jun" work with very young children on the autism spectrum, using play-based therapy and behavioral techniques to improve social and communication skills. They also invite kindergarten teachers to their Centre for workshops on strategies for including children with autism in regular preschool classes. This collaboration has two benefits: the children receive early specialized support, and the preschool staff become more confident and skilled in working with those children in an inclusive setting. Similarly, the Resource Centre for Hearing and Speech "Dr. Peruta Ivanović" in Kotor opened its doors to infants and toddlers with hearing impairments. In Kotor's program, a notable practice is that parents participate alongside their children in early intervention sessions. By having parents present, the therapists ensure that families learn how to communicate effectively with their deaf or hard-of-hearing child (for example, by using sign language or visual communication methods). This Centre also helps prepare children for inclusive preschool or school by organizing visits to mainstream institutions – essentially easing the transition by familiarizing the child (and the school) with each other. Such visits help reduce anxiety and build bridges between special and mainstream settings, making inclusion a more natural next step.

A cornerstone of Montenegro's early intervention model is the adoption of the Family-Oriented Early Intervention (FOEI) approach. FOEI emphasizes empowering families to support their child's development, rather than having the "experts" do everything in a clinic. In 2013, Montenegro invested in building capacity for FOEI by training Resource Centre staff extensively. Teams from RC Podgorica underwent a series of four training modules (conducted in April, May, and June 2017) that covered setting functional developmental

goals, conducting home visits, coaching parents, developing Individual Family Support Plans, and using standardized tools like the "International Guide for Monitoring Child Development".
The training was very hands-on, involving self-assessment and reflection to help professionals shift their mindset from a therapy-Centred model to a family-Centred model. Following this, in 2021 RC Podgorica launched a pilot FOEI service. Although the RC was not included in the piloting process they adopted this approach and as of the latest report, six families and their children are actively involved in FOEI services at RC Podgorica. In FOEI, a specialist (or a small team) visits the family regularly at home, works with the child in their natural environment (like during playtime or daily routines), and guides the parents on techniques to stimulate development through everyday activities. This approach has been shown internationally to improve developmental outcomes and family well-being, and Montenegrin families have similarly responded very positively. One preschool teacher who participated in joint workshops with Resource Centre specialists remarked: *"It was a great success because we learned about the specifics of the children who come to them for treatment, but we also learned how to design and implement some activities ourselves. More importantly, we got to know each other and made contacts, and now we can go directly to them for advice and instructions. I think it would be good to continue working together... combining their expertise and our creative skills... so that together we can design materials that further support these children's development."* This testimonial underscores the power of collaboration between special educators and mainstream preschool teachers – the Resource Centres are no longer isolated but rather are working in tandem with regular early childhood services.

Assistive technology and communication support

For many children with disabilities, simply having a textbook is not enough – they may also require specialized tools or technologies to participate fully in learning and communication. Recognizing this, Montenegro has made assistive technology (AT) and augmentative and alternative communication (AAC) tools a central pillar of its inclusive education strategy. The right to communicate and participate in the classroom is seen as fundamental; no child should be unable to engage in learning due to the lack of a needed device or support. As stated in Montenegro's current Inclusive Education Strategy, beyond ensuring physical accessibility of schools, it is *"necessary to ensure that every child's developmental and educational needs are met with the help of accessible equipment and adapted teaching material and methods,"* including assistive technology. This policy commitment has translated into concrete initiatives to develop, procure, and utilize a range of assistive devices and communication aids in schools. Moreover, the transformation of special schools into Resource Centres enabled a system where expertise in assistive technology is shared across the whole school system – the Resource Centres act as assistive technology hubs supporting regular schools nationwide.

One of the first major steps was establishing Assistive Technology Labs at each Resource Centre. As mentioned earlier, by 2018 all three Resource Centres had dedicated AT classrooms, each tailored to the primary needs of the student population it serves. For example, the Resource Centre for Hearing and Speech in Kotor set up a Communications AT Lab focusing on speech-generating devices and hearing-assistive technology for children with hearing or communication impairments. The Resource Centre "1. Jun" in Podgorica, which serves children with intellectual disabilities and autism, created a Developmental–Didactic AT Lab, emphasizing cognitive and learning aids, sensory toys, and software for children on the autism spectrum. Meanwhile, the Resource Centre for Children and Youth in Podgorica (which specializes in visual and physical disabilities) established a Sensory-Motor AT Lab, equipped with devices like screen readers, magnifiers, tactile and Braille devices, as well as mobility and physiotherapy tools. These labs were not intended just for the students enrolled at the Resource Centres; critically, they function as demonstration and training sites for educators from mainstream schools. Resource Centre experts use the labs to train classroom teachers, learning support assistants, and parents on how to use assistive devices and adapt teaching materials for children with disabilities. In this way, the benefits of the specialized equipment extend to many schools and students across the country.

Montenegro's push to develop AT capacity was bolstered by learning from international and regional best practices. In 2017, representatives from all three Resource Centres and the Bureau for Education went on a study visit to Novi Sad, Serbia, organized by the Ministry of Education and UNICEF. They visited the Primary and Secondary School "Milan Petrović," which is well-known in the region for its advanced assistive technology programs and production of low-cost didactic aids. The visit exposed Montenegrin educators to a working model of how a former special school can operate as a resource hub for AT. Inspired by this, the Montenegrin team returned with new skills to create customized didactic and teaching materials and to train staff in regular schools on using these resources effectively. Shortly after, the Resource Centres began producing their own assistive teaching aids – including some *home-grown innovations* using affordable materials and even 3D printing technology. For example, teams designed tactile and 3D-printed models to teach Braille or geometry, and simple communication boards with symbols for non-verbal children. These locally made didactic materials were combined into "assistive packages" and distributed to regular primary schools. In 2022, sets of 3D-printed teaching aids and other adaptive materials were delivered to primary schools with inclusive classrooms, to ensure all children (not just those at resource Centres) could benefit from them. The idea is that assistive technology should be available at the child's school, as much as possible, rather than requiring the child to always come to a special Centre. By decentralizing the tools, Montenegro increased the reach of assistive supports across the whole education system.

Another key component has been extensive capacity building for teachers and professionals on assistive technology and AAC. The Ministry of Education, with UNICEF's support, organized a series of training programs and workshops for educators at all levels. These trainings introduced participants to various types of AT–covering supports for intellectual disabilities, physical impairments, visual and hearing impairments, and autism–and how to implement them in classrooms. In total, several hundred educators have been trained. Notably, one large general training on assistive technology had 240 participants, reflecting the strong interest among Montenegrin teachers to learn about new tools. Specialized sessions were also held, for instance on using assistive communication for children with autism (with 53 participants) and on integrating AT into Individualized Educational Plans (IEPs) and transition plans in secondary schools (130 participants). The largest training session, with 240 attendees, focused on the characteristics of children with developmental disabilities and how to adapt/develop assistive technology materials to support their learning. This emphasis on tailoring materials to each child underscores Montenegro's commitment to truly individualized support.
One example of the new AAC tools is Cboard, a symbol- and text-to-speech app adopted in 2019. After nationwide training sessions, it is now used in a growing number of preschools and primary schools, illustrating how educators integrate digital aids to support non-verbal communication. The focus remains on thoughtful selection and classroom integration of such tools so they translate into real learning gains rather than stand-alone gadgets.

The impact of these assistive technology initiatives is increasingly visible. Through the program "Towards Practical Student and Teacher Competencies of Inclusive Education" (supported by UNICEF), a needs analysis was done to guide AT investments in schools. Forty schools were selected for intensive training and coaching on inclusive tech use, involving not just teachers but also principals, IT coordinators, and support staff. These schools received basic assistive equipment packages and ongoing mentorship. As a result, by the end of the program, AAC materials had been developed for approximately 520 students with communication or learning difficulties across those schools. These materials helped students to better master academic subjects, improve literacy and numeracy skills, and even manage their emotions and behaviour through visual supports. Such outcomes illustrate a significant step forward in creating inclusive classrooms. Instead of a few specialized institutions concentrating all supports, many regular schools in Montenegro now have the knowledge and tools to accommodate students with a range of disabilities.

Overall, Montenegro's experience shows that investing in assistive technology and teacher

training goes hand-in-hand. The country built an infrastructure (Resource Centre labs, devices in schools) *and* human capacity (trained teachers, support teams) simultaneously. This systemic approach is depicted conceptually in Montenegro's *"Inclusive-Assistive Response Scheme"* (Figure 1), which links resources horizontally (across different types of support and settings) and vertically (from policy level to classroom practice). By ensuring policy, practice, and technology are aligned, Montenegro has laid a strong foundation for assistive technology to continuously evolve. As new tools emerge (for example, future innovations with 3D printing or software driven by artificial intelligence), the education system is prepared to evaluate and integrate them in the service of inclusion. The collaborative networks established – between Resource Centres, mainstream schools, ministries, and international partners – will be critical in sustaining momentum. Montenegro's progress in this area also contributes to the regional knowledge base; other countries in the Western Balkans have observed Montenegro's AT programs and expressed interest in adopting similar models of resource hub networking and teacher capacity development. In short, assistive technology and AAC in Montenegro are not treated as add-on extras, but as integral components of quality education for all. This reflects a deep understanding that accessibility and inclusion are two sides of the same coin in education.

Accessible textbooks: introducing DAISY audio books

One of Montenegro's most notable innovations in inclusive education is the development of DAISY textbooks – audio-visual digital textbooks designed for students who have difficulty using standard print. DAISY (Digital Accessible Information System) format books provide synchronized audio narration with highlighted text, offering a richer, multi-sensory learning experience for readers with visual impairments, dyslexia, or other learning difficulties. The introduction of DAISY textbooks has greatly improved accessibility in education by respecting the rights and needs of students with print disabilities. Montenegro is the first country in the world to systematically integrate DAISY audio textbooks into its national inclusive education system, making them a standard part of teaching materials across all primary schools. While similar assistive materials exist elsewhere, Montenegro's approach stands out for its comprehensiveness and scale, achieved through a strong partnership between policymakers, education authorities, and practitioners. This collaborative effort ensured that audio textbooks moved from a novelty to a mainstream resource available free of charge to any student who needs them.

Work on DAISY textbooks began in May 2013, spearheaded by the Resource Centre for Children and Youth in Podgorica. An initial working group meeting convened stakeholders from the Ministry of Education, UNICEF Montenegro, the Institute for Textbooks and Teaching Aids, the Institute of Education, and the Faculty of Dramatic Arts in Cetinje. By pooling their expertise, this group planned how to adapt Montenegro's printed primary school textbooks into the DAISY format. They decided to start with literary readers (language arts textbooks) for grades 4 through 9, based on expert recommendations. The reasoning was that younger visually impaired students should first master Braille literacy, after which audio textbooks would provide significant educational benefits. In line with this plan, the team set out to record the readings for these textbooks. Professors and students from the Faculty of Dramatic Arts volunteered their time and talent to narrate the texts in a clear and engaging manner, lending professional-quality voice acting to the books. The recording, editing, and production processes were carried out on a completely voluntary basis, showcasing a remarkable collaboration between educators and artists in support of children with disabilities. By June 2015, the final audio reader (for 9th grade) was completed, marking the successful recording of six grade-level readers in total. An event was held at the Montenegrin National Theatre to promote the first recorded DAISY textbook, celebrating this milestone in front of educators, students, and the broader public.

The DAISY materials were then piloted in real classrooms. Starting in 2015, a pilot program introduced DAISY audio readers in 20 primary schools to test their usage and impact. The feedback was overwhelmingly positive. Teachers reported that the audio-visual format helped *all* students improve their reading engagement

and comprehension, not only those with visual impairments or dyslexia. By 2019, DAISY textbooks had been rolled out to half of all primary schools in Montenegro, and usage continued to grow. A total of 10 textbooks (six literature readers and four history textbooks) for various grades have been produced in DAISY format to date. Hundreds of teachers were trained in how to use these resources: by 2019, 356 teachers of language and history subjects had received training on incorporating DAISY audio textbooks into their teaching. These trainings included guidance from dyslexia experts and methodology workshops on teaching with audio-visual content, ensuring that teachers could effectively integrate the new format into lesson plans.

Importantly, DAISY textbooks were made freely available for download to maximize their reach. The Resource Centre "Podgorica" established a studio and online repository where all recorded textbooks can be accessed at no cost, and the national Institute for Textbooks and Teaching Aids also hosts the DAISY files on its website. This open access strategy meant that any student, parent, or teacher could obtain the audio textbooks, democratizing access to educational content. Over time, DAISY books have become a vital component of Montenegro's broader digital education efforts. Their value was especially evident during the COVID-19 pandemic, when schools closed and learning moved online – students used DAISY audio textbooks at home, benefiting from their multi-sensory format to continue learning remotely. The existence of these accessible digital materials significantly supported continuity of learning for children with disabilities during lockdowns.

To ensure the long-term sustainability of the DAISY initiative, an evaluation was carried out and a strategic plan was developed. In 2015, UNICEF Montenegro commissioned an evaluation titled *"Use of Textbooks in DAISY Format – Training of Primary School Teachers for the Use of Audio Textbooks."* Based on this evaluation's recommendations, an Action Plan was created to institutionalize DAISY production and training.

One key step, taken in early 2016, was handing over the coordination of new DAISY recordings to the Institute for Textbooks and Teaching Aids in Podgorica. This move integrated DAISY into the mandate of the official textbook publisher, thereby embedding accessible textbook production into the regular education system. Throughout 2016 and 2017, the Institute, with UNICEF's support, oversaw the recording of the remaining history textbooks for grades 6–9. These history texts posed unique challenges (e.g. describing complex historical maps and timelines in audio form), which were solved by consulting subject experts to prepare clear verbal descriptions. The high level of dedication to quality ensured the audio textbooks were truly educationally equivalent to printed books. The Action Plan also outlined responsibilities for each partner and secured commitments for ongoing activities and funding. A persistent challenge identified was the need for continuous teacher training, since some teachers were initially reluctant or unsure how to integrate technology into their teaching. To address this, the plan called for expanding training to more teachers and sharing success stories to encourage uptake.

After nearly a decade, the DAISY textbook initiative in Montenegro can be deemed a resounding success. It has shown how digital innovation can foster inclusion, benefiting not only the originally targeted group (e.g. students with visual impairment) but a broader range of learners. Montenegro's systematic approach – supported by policy, driven by multi-sector partnerships, and sustained by embedding in the education system – provides a model that other countries are now interested in. Indeed, Montenegrin representatives have presented their experience with DAISY at international conferences (such as the "New Technologies in Education" conference in Belgrade in 2016) to share lessons learned. By making curriculum content accessible in multiple formats, Montenegro is upholding the principle of education for all in a very tangible way. The DAISY experience also paved the way for further digitization of education materials in the country's ongoing education reform.

Challenges that remain

Montenegro's reform trajectory now stretches over fifteen years, yet a cluster of systemic obstacles still complicates the day-to-day reality of inclusive practice. The first revolves around governance and policy continuity. Even though inclusion is embedded in three successive national strategies and in amended framework laws, political changes can affect implementation, divert earmarked funds or revive debates. Advocates therefore find themselves revisiting the "why" of inclusion whenever a change in government happens. A proposed solution is to fuse the freshly adopted Early-Childhood Development Strategy (2023–2027) with the Inclusive Education Strategy (2019–2025) into a single cross-sector programme accompanied by a multi-year financing decree; doing so would make the cradle-to-career pathway legally indivisible and less vulnerable to political churn.

Even with explicit laws, inter-sector co-ordination remains uneven. Health centres routinely identify developmental risks and issue medical certificates, but if referral paperwork is delayed or terminology differs from education forms, children can enter preschool without the Individual Developmental–Educational Plan that unlocks classroom adaptations. The Ministry of Education, Science and Innovation has brokered memoranda tying social-work centres, day-care services, kindergartens and the three national Resource Centres into a referral loop that includes temporary accommodation for rural families. Yet these agreements still rely on ad-hoc goodwill and project funds; without a standing body that convenes budget holders from all three sectors each quarter, service gaps and overlap persist–particularly at moments of crisis such as the COVID-19 shutdown, when remote therapies had to be improvised without clear inter-agency protocols.

A third constraint is the workforce gap. Nationally there are fewer than forty registered speech–language pathologists and an even smaller cadre of augmentative-communication or assistive-technology coaches. Most are clustered in Podgorica, leaving northern municipalities dependent on itinerant teams who can visit perhaps once a month. Universities are revising curricula to include inclusive-education modules and the Resource Centres have begun micro-credential courses for classroom teachers, but graduates still emerge without sufficient practicum in AT, family-oriented early intervention or multisensory literacy methods. Compounding the shortfall are civil-service staffing norms that allocate positions by enrolment ratios rather than by needs indices, making it hard to hire an itinerant psychologist or part-time Braille instructor even when municipal budgets can cover the salary.

The fourth challenge concerns infrastructure, materials and digitalisation. Montenegro's DAISY textbook initiative is lauded internationally, yet fewer than a quarter of primary-level titles have been converted, and the existing mp3 files sit on two separate portals that do not track usage or push automatic updates. AT cabinets installed during the 2018–2020 roll-out are showing wear: switches need replacement, tablets require new operating-system licences and low-tech symbol boards have missing pieces. Meanwhile, the 2022–2027 Digitalisation Strategy mandates virtual-learning platforms and AI-driven diagnostics, but classroom teachers and parents say guidance on safe, purposeful use is still sparse; many feel compelled to "figure it out on the fly", which heightens the risk of devices becoming showcase items rather than embedded learning tools.

Geography and money form the fifth knot: Resource-Centre mobile teams now cover eleven municipalities, but outreach services remain thin in several northern and coastal municipalities, and families from remote villages still shoulder travel and lodging costs when a child needs intensive physiotherapy or Braille training in Podgorica. Donor projects have bridged gaps, but core state budgets do not yet carry a dedicated line for updating DAISY titles, replenishing AT kits or scaling coaching teams. Unless those expenses shift from project to programme financing, hard-won innovations could stagnate when external funding cycles close.

Finally, quality-assurance mechanisms are in place, but they operate largely in silos. Evidence still comes from project-specific studies, revealing uneven standards between schools, and data are stored in incompatible health, education and social-work files that cannot be merged to track each child's progress. The priority now is to agree on a small set of shared indicators, align reporting calendars and embed joint multi-sector reviews in everyday practice–so that outcomes are monitored consistently and improvements can be steered with real-time feedback. Without harmonised indicators and a feedback loop, policymakers cannot easily see which supports generate the strongest gains, nor can they redirect resources swiftly when gaps emerge.

Overcoming these intertwined challenges will require steady political stewardship that transcends election cycles, enforceable inter-agency protocols with pooled budgets, a strategic plan to grow and fairly deploy the specialist workforce, designated funds for renewing inclusive technologies, and a robust data backbone that follows each child from the first home visit through graduation. Taking those steps would convert Montenegro's inclusive vision–already sketched in laws and strategies–into an every-day reality for children and families in every classroom and community.

References

Government of Montenegro. (2010). *Law on the Education of Children with Special Educational Needs* (Official Gazette of Montenegro, No. 45/10). Podgorica: Government of Montenegro. Available at: Government of Montenegro – Official Documents (in Montenegrin)

Institute for Textbooks and Teaching Aids, & UNICEF Montenegro. (2017). *Handbook for using DAISY textbooks in teaching*.

Ministry of Education of Montenegro. (2019). *Inclusive Education Strategy 2019–2025*. Podgorica: Ministry of Education. Available at: UNICEF Montenegro – Inclusive Education Strategy 2019–2025 (PDF)

Ministry of Education, Science & Innovation. (2022). *Strategy for the digitalisation of the education system 2022–2027*.

Ministry of Health. (2023). *Early childhood development strategy 2023–2027*.

UNICEF Montenegro, & Government of Montenegro. (2013). *It's about ability: National awareness campaign on the inclusion of children with disabilities (2010–2013) – Final synthesis report*.

UNICEF Montenegro. (2014, January 22). "It's about ability" campaign results in 80 per cent of citizens supporting inclusive education. *UNICEF Montenegro News*. Available at: UNICEF Montenegro – News story

UNICEF Montenegro. (2015). *Use of textbooks in DAISY format–Training of primary-school teachers for the use of audio textbooks: Final evaluation report*.

UNICEF Montenegro. (2017, November 12). DAISY textbooks – more self-contained learning for children with reading difficulties. *UNICEF Montenegro Stories*. Available at: UNICEF Montenegro – Story

UNICEF Montenegro. (2019). *Analysis of the cross-sectoral system support for children with disabilities in Montenegro*. Podgorica: UNICEF. Available at: UNICEF Montenegro – Research Publication (PDF)

UNICEF Montenegro. (2020, February 25). DAISY textbooks in Montenegro among the best innovative practices of inclusive education in the world. *UNICEF Montenegro Stories*. Available at: UNICEF Montenegro – Story

Zero Project. (2020). Inclusive Education. 75 Innovative practices and 11 Innovative Policies from 54 countries. Textbooks in electronic, audio, and video formats for mainstream primary schools." Montenegro / UNICEF Montenegro – Daisy Textbooks." p. 101.

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