



Co-funded by
the European Union



INCLUSION AND DISABILITIES IN AND THROUGH SPORT

Creation of qualitative and quantitative
indicators

No. 101089892 – IDI4Sport – ERASMUS-SPORT-2022-SCP



Work Package 4 – Evaluation

D4.2 Creation of qualitative and quantitative indicators

Deliverable Title	Creation of qualitative and quantitative indicators
Work package Title	WP4 - Evaluation
Work package Number	4
Work package Lead	ISCA – International Sports and Culture Association
Author(s)	ISCA
Contributor(s)	All partners
Reviewer(s)	All partners
Dissemination level	PU
Project Number	101089892
Instrument	Erasmus+ Sport
Start date of Project	01/01/2023
Duration	36 months
Project coordinator	France Education international

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

Table of Content

1. SUMMARY	3
2. QUANTITATIVE INDICATORS	3
NUMBER OF PARTICIPANTS IN IMPLEMENTATION	3
VALUATION OF TRAINING PATHWAY	3
VALUATION OF GOOD PRACTICES	3
LEARNING EXPERIENCE	4
ACCESS AND USE OF DELIVERABLES (TRAINING PATHWAY AND GOOD PRACTICES)	4
3. QUALITATIVE INDICATORS	4
EVALUATION BY LOCAL COACHES AND TEACHERS	4
ASSESSMENT OF IMPLEMENTATION DELIVERABLES	5
ENGAGEMENT AND ENJOYMENT OF PUPILS	5
AWARENESS OF BARRIERS TO INCLUSION	5
SUSTAINABILITY OF INCLUSIVE ACTIVITIES	6
CHANGES IN PERCEPTION, ATTITUDES, AND BEHAVIOR	6
4. BIBLIOGRAPHY	8

1. Summary

This document outlines the key quantitative (5) and qualitative (6) indicators we have used to evaluate the implementation and impact of the project. These eleven indicators provide an initial framework for assessing participation levels, the relevance and quality of training resources, the target groups feedback, and the sustainability of the inclusive practices. Through a mixed methods approach, we aimed to combine numerical data with reflective and narrative insights. Together, they support ongoing learning, accountability, and continuous improvement toward inclusive environments in and through sport. The creation of these indicators aligns with the Conclusions (2019/C 192/06) reached by of the Council of the European Union and the representatives of the Member States within the Council on Access to sport for persons with disabilities and the Article 6 of the International Charter of Physical Education, Physical Activity and Sports (Council of European Union, 2019; UNESCO, 2015)

2. Quantitative indicators

Number of participants in implementation

We chose this indicator to assess how broadly the project’s implementation activities engaged its target audiences—namely teachers, coaches, and pupils (children and young people who participated in the project) in schools and sports clubs. Although participation volume alone doesn’t determine implementation quality, it offers valuable insight into the scale and outreach achieved during this phase of the project. However, considering both the diversity of the target audiences and the dynamics of the interactions reinforces these qualities and intended information.

Valuation of training pathway

This indicator explores how teachers and coaches evaluate the quality of the training pathway designed for the project. Their quantitative feedback offers a valuable perspective on whether the content supports inclusive practices and responds to the practical challenges they encounter when working with young people with disabilities in sports settings. Strong positive ratings indicate that the training materials are not only accessible and relevant but also applicable in day-to-day practice—contributing meaningfully to the professional development of teachers, trainers and other stakeholders (health, municipalities, etc.) working in the fields of sport and physical activity and social inclusion.

Valuation of good practices

This indicator was elected to assess how useful and adaptable teachers and coaches find the documented good practices in relation to their specific teaching or coaching environment and in the wider community. When participants respond positively, it suggests that the examples provided are not only informative but also grounded in practical reality—offering realistic and motivating models for fostering inclusive sports settings. Evaluating this aspect helps ensure that the project’s materials align with the

everyday needs of practitioners and support meaningful inclusion of individuals with disabilities.

Learning experience

With this indicator, we looked to examine how teachers and coaches perceive changes in their knowledge, confidence, and preparedness to implement inclusive sports practices after completing the project's training. It reflects their self-assessed learning and provides insight into how the training has contributed to their growth (personal, professional, social, and cultural) within educational and sports contexts. By focusing on individual perceptions of readiness, this indicator helps highlight strengths while identifying areas where further support may be valuable. Importantly, existing research emphasizes that educators' confidence and sense of self-efficacy are among the strongest predictors of sustained use of inclusive practices, underscoring the relevance of this measure for the project's evaluation (Kiel et al., 2020; Sharma et al., 2021; Gentile et al., 2023).

Access and use of deliverables (training pathway and good practices)

This indicator tracks how many teachers and coaches reported using—or planning to use—the resources developed during the project. It offers insight into the practical uptake of key deliverables, such as the training pathway and the collection of good practices. By monitoring this usage, the evaluation can better understand the relevance of these materials to the needs of educators and assess how well the project succeeded in encouraging their application in real-world settings.

3. Qualitative indicators

We used qualitative indicators to explore the deeper, more context-specific aspects of the project's implementation and impact. Drawing primarily from focus group discussions and open-ended survey responses, these indicators shed light on how teachers, coaches, and pupils (and, in some cases, their families) experienced and made sense of the project's activities. They provide valuable insights into shifts in attitudes, behaviours, and institutional practices—helping us understand not just what changed, but how and why those changes occurred in different settings. These personal narratives enrich the evaluation by revealing the social and emotional dimensions of the project, while also pointing to areas where further work may be needed. This approach positions the project and evaluation process in line with the article 7.3. of the Convention of the Rights of Persons with Disabilities and their right to express their views in matters affecting them (United Nations General Assembly, 2007)

Evaluation by local coaches and teachers

This indicator examines whether the project's implementation and overall approach met the needs and expectations of local coaches and teachers. As central figures in delivering inclusive sports activities, these practitioners bring valuable, experience-based perspectives on how the project unfolded in real-world settings. Including their voices in the evaluation not only validates their role but also helps shape a more

grounded understanding of what success looks like in practice. Their insights contribute to a more relevant, credible, and actionable set of findings by capturing the diversity of experiences across contexts (Patton, 2008). Recognizing that each participant’s viewpoint is shaped by their unique environment and challenges (Patton, 2015), the evaluation uses this feedback to inform a more nuanced assessment of impact, support continuous learning, and reinforce accountability

Assessment of implementation deliverables

We have selected this indicator to explore how coaches and trainers perceive the quality and practical value of the project’s core resources. When participants respond positively, it suggests that tools like the training pathway and good practices are not only clearly presented and relevant but also applicable in everyday educational and coaching settings. Well-designed, context-sensitive materials that educators can readily use are key to boosting their sense of competence—an important factor in sustaining inclusive practices over time (Kiel et al., 2020; Sharma et al., 2021; Gentile et al., 2023). This indicator complements the quantitative measure on learning experience and capacity building by offering a richer, narrative-based view of how the project’s resources supported real-world implementation.

Engagement and enjoyment of pupils

This indicator focuses on how pupils responded to the new sports activities introduced through the project. Expressions of surprise, excitement, and enjoyment suggest that the activities were not only engaging but also emotionally meaningful, i.e. positive and memorable experiences. “Early positive experiences of play, games and physical activities should be prioritized for all so as to lay a foundation of the knowledge, skills, attitudes and motivation necessary for the maintenance of lifelong participation in physical activity and sport.” (UNESCO, 2015). Moreover, such engagement is a promising early sign of successful inclusion—it supports sustained participation, reduces dropout risk (Roult et al., 2015), will contribute to greater motivation and academic success, and encourages social connection between youth with and without disabilities (Rimmer et al., 2007). In addition, when pupils describe the activities as fun and eye-opening, especially in terms of understanding peers with disabilities, it points to a deeper impact aligned with the project’s broader goals.

The importance of this indicator is well-established in the literature. Enjoyment is widely recognized as a key psychological driver of youth’s motivation to participate in physical activity. As Fairclough et al. (2018) highlight, enjoyment is not a secondary benefit but a core element that fosters long-term engagement. Similarly, Zhang et al. (2024) show that game-based physical education significantly boosts enjoyment, while Bajamal et al. (2024) underscore its role as a basic psychological need—one that should be central when designing programs aimed at improving youth’s health behaviours.

Awareness of barriers to inclusion

This indicator examines how pupils, teachers and coaches perceive the barriers that people (and especially young people) with disabilities face in accessing sports. Their reflections—and their ideas for overcoming these challenges—demonstrate a growing

awareness of inclusion issues and signal that the project is fostering more than just participation; it is encouraging deeper understanding and shifts in attitudes. Such critical thinking is key to building empathy and promoting long-term social change, aligning with the project’s broader objectives (Abellan et al., 2018; Rocha et al., 2023) and the EU and UN goals (United Nations Assembly, 2007; Council of European Union, 2019).

The inclusion of people with disabilities in sport is still hindered by a wide range of obstacles, which can be categorized as physical, attitudinal, informational, organisational, social, and psychological—both internal and external (Jaarsma & Smith, 2018; Barbosa-Granados et al., 2024). Addressing these barriers is essential to creating equitable and inclusive sporting environments. Through focus groups, pupils highlighted several of these challenges, offering direct insight into the everyday realities that limit participation.

Physical barriers emerged as a major concern, especially regarding accessible facilities and appropriate equipment (Sahlin & Lexell, 2015). French adolescents, for example, noted that access is often constrained not by disability itself, but by environmental factors such as transportation, schedules, and infrastructure: “It is the environment, not the person.” In Portugal, students pointed out the lack of specialized equipment in schools and emphasized how young people in rural areas face geographic isolation, requiring long travel to access inclusive programs.

Attitudinal barriers also stood out as particularly damaging. Stereotypes, social stigma, and a lack of awareness—whether from peers or adults—can create unwelcoming environments and discourage participation. As noted in prior research, such attitudes undermine self-esteem and can cause young people with disabilities to withdraw or avoid sports altogether (Ives et al., 2021; Olasagasti-Ibargoiien et al., 2023). The fact that participants recognized these dynamics suggests a meaningful shift in perspective and an important step toward fostering more inclusive peer environments.

Sustainability of inclusive activities

With this indicator, we want to focus on whether schools and clubs plan to continue offering inclusive sports activities after the project ends. Signs of long-term commitment—such as incorporating these practices into regular programming, aligning them with institutional planning, or showing strong intent from staff to maintain the activities—suggest that inclusive approaches are becoming part of everyday routines. This continuity reflects the project’s deeper impact, moving beyond short-term interventions toward sustainable, systemic change (Scheirer & Dearing, 2011; UNESCO, 2015, 4th article). Sustained implementation is essential to ensuring that young people with disabilities continue to have meaningful access to inclusive sports opportunities over time.

Changes in perception, attitudes, and behavior

This indicator evaluates how the project has contributed to shifts in attitudes, beliefs, and everyday practices among key participants—particularly teachers, coaches, and pupils—toward inclusion in sports. As noted by Avramidis and Norwich (2002), a positive attitude is a foundational condition for implementing inclusive practices in educational

settings. Observable changes might include increased empathy, reduced stigma, more proactive inclusive behaviour, and a greater willingness to engage with individuals with disabilities (Ling et al., 2025). Tracking these developments helps reveal the project's broader social impact and its effectiveness in fostering inclusive mindsets and environments beyond the immediate intervention.

4. Bibliography

- Abellán, J., Sáez-Gallego, N. M., & Olivares, S. C. (2018). La boccia como deporte adaptado y sensibilizador en Educación Física en Educación Secundaria. *SPORT TK-Revista Euroamericana de Ciencias del Deporte*, 109-114. <https://doi.org/10.6018/sportk.343011>
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: a review of the literature. *European journal of special needs education*, 17(2), 129-147. <https://doi.org/10.1080/08856250210129056>
- Bajamal, E., Abou Hashish, E. A., & Robbins, L. B. (2024). Enjoyment of physical activity among children and adolescents: A concept analysis. *Journal of School Nursing*, 40(1), 5–14. <https://doi.org/10.1177/10598405221137718>
- Barbosa-Granados, S., Aguirre-Loaiza, H., Arenas-Granada, J., Urrea-Cuéllar, Á., Roldán, R. H., Quiñonez, J., Guevara, D., Bolaños, L., & Nanez, J. (2024). *Psychological characteristics related to sport: Differences between disabled and able-bodied athletes*. *Apunts. Educació Física i Esports*, (156), 19–29. [https://doi.org/10.5672/apunts.2014-0983.es.\(2024/2\).156.03](https://doi.org/10.5672/apunts.2014-0983.es.(2024/2).156.03)
- Conclusions of the Council of the European Union and the Representatives of the Member States meeting within the Council on Access to Sport for Persons with Disabilities (2019/C 192/06) Council of the European Union. (2019). *Conclusions of the Council of the European Union and the Representatives of the Member States meeting within the Council on Access to sport for persons with disabilities (2019/C 192/06)*. *Official Journal of the European Union*, C 192, 6–8. [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XG0607\(03\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XG0607(03))
- Fairclough, S. J., Stratton, G., & Ridgers, N. D. (2018). Process evaluation of a pilot multi-component physical activity intervention – active schools: Skelmersdale. *BMC Public Health*, 18, 6272. <https://doi.org/10.1186/s12889-018-6272-1> BioMed Central
- Gentile, A., Giustino, V., Rodriguez-Ferrán, A., La Marca, E., Compagno, L., Bianco, A., Battaglia, G., & Alesi, M. (2023). Inclusive physical activity games at school: The role of teachers' attitude toward inclusion. *Frontiers in Psychology*, 14, 1158082. <https://doi.org/10.3389/fpsyg.2023.1158082>
- Ives, B., Clayton, B., Brittain, I., & Mackintosh, C. (2021). 'I'll always find a perfectly justified reason for not doing it': challenges for disability sport and physical activity in the United Kingdom. *Sport in Society*, 24(4), 588-606. <https://doi.org/10.1080/17430437.2019.1703683>
- Jaarsma, E. A., & Smith, B. (2018). *Promoting physical activity for disabled people: Lessons from a critical review of behavior change theories and models*. *Disability and Rehabilitation*, 40(24), 2874–2884. <https://doi.org/10.1080/09638288.2017.1357638>

- Kiel, E., Braun, A., Muckenthaler, M., Heimlich, U., & Weiss, S. (2020). Self-efficacy of teachers in inclusive classes. How do teachers with different self-efficacy beliefs differ in implementing inclusion?. *European Journal of Special Needs Education*, 35(3), 333-349. <https://doi.org/10.1080/08856257.2019.1683685>
- Ling, W., Wang, D., Xu, X., Zhu, D., Wu, X., & Zhang, L. (2025). The association between empathy ability and attitudes toward children with disabilities in inclusive physical education classes among primary students: the mediating role of friendship quality. *Frontiers in Psychology*, 16, 1531002. <https://doi.org/10.3389/fpsyg.2025.1531002>
- Olasagasti-Ibargoiien, J., Castañeda-Babarro, A., León-Guereño, P., & Uria-Olaizola, N. (2023). Barriers to physical activity for women with physical disabilities: A systematic review. *Journal of Functional Morphology and Kinesiology*, 8(2), 82. <https://doi.org/10.3390/jfmk8020082>
- Rimmer, J. H., Rowland, J. L., & Yamaki, K. (2007). Promoting the participation of children with disabilities in sports, recreation, and physical activities. *Pediatrics*, 119(6), 1298–1303. <https://doi.org/10.1542/peds.2008-0566>
- Patton, M. Q. (2008). *Utilization-Focused Evaluation* (4th ed.)
- Patton, M. Q. (2015). The sociological roots of utilization-focused evaluation. *The American Sociologist*, 46(4), 457-462. <https://doi.org/10.1007/s12108-015-9275-8>
- Rocha, C. L., Casanova, L. L., Gajardo, V. N., Ramírez, Y. V. P., Aravena, R. S., de Campos, L. F. C. C., & Campos, K. C. (2023). Awareness programs towards people with disabilities in the school context, physical education and health: A systematic review of the last 10 years. *Retos: nuevas tendencias en educación física, deporte y recreación*, (50), 1281-1288.
- Roult, R., Brunet, I., Belley-Ranger, É., Carbonneau, H., & Fortier, J. (2015). Inclusive sporting events in schools for youth with disabilities in Quebec: Social, educational, and experiential roles of these activities according to the interviewed practitioners. *SAGE Open*, 5(3), 2158244015604696. <https://doi.org/10.1177/2158244015604696>
- Sahlin, K. B., & Lexell, J. (2015). Impact of organized sports on activity, participation, and quality of life in people with neurologic disabilities. *Pm&r*, 7(10), 1081-1088. <https://doi.org/10.1016/j.pmrj.2015.03.019>
- Scheirer, M. A., & Dearing, J. W. (2011). An agenda for research on the sustainability of public health programs. *American journal of public health*, 101(11), 2059-2067. <https://doi.org/10.2105/AJPH.2011.300193>
- Sharma, U., Sokal, L., Wang, M., & Loreman, T. (2021). Measuring the use of inclusive practices among pre-service educators: A multi-national study. *Teaching and Teacher Education*, 107, 103506. <https://doi.org/10.1016/j.tate.2021.103506>

-UNESCO. (2015). *International Charter of Physical Education, Physical Activity and Sport*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000247025>

-United Nations General Assembly. (2007). *Convention on the Rights of Persons with Disabilities (A/RES/61/106)*. Adopted 13 December 2006; entered into force 3 May 2008. United Nations Treaty Series, 2515, 3. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-persons-disabilities>

-Zhang, Y., Li, X., & Wang, J. (2024). Effects of game-based physical education program on enjoyment in children and adolescents: A systematic review and meta-analysis. *BMC Public Health*, 24, 18043. <https://doi.org/10.1186/s12889-024-18043-6>