

THE INCLUSIVE VALUE OF BASKIN IN SCHOOLS: A QUASI-EXPERIMENTAL STUDY ON ATTITUDES TOWARD DISABILITY

LA VALENZA INCLUSIVA DEL BASKIN A SCUOLA: UNA RICERCA QUASI-SPERIMENTALE SUGLI ATTEGGIAMENTI VERSO LA DISABILITÀ



Double Blind Peer Review

Citation

Cioni, L., Ferraro, A., & Magnanini, A. (2025). The inclusive value of baskin in schools: a quasi-experimental study on attitudes toward disability. *Giornale italiano di educazione alla salute, sport e didattica inclusiva*, 9(2).

Doi:

<https://doi.org/10.32043/gsd.v9i2.1420>

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gsdjournal.it

ISSN: 2532-3296

ISBN: 978-88-6022-510-8

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ABSTRACT

This contribution aims to assess whether a Baskin-based intervention is effective in improving peers' attitudes toward disability. To this end, a quasi-experimental study was conducted on a sample of 417 students, who completed the ATDP (Yuker, Block, & Young, 1970). The results show that students in the experimental group—but not those in the control group—exhibited a significant reduction in negative attitudes toward disability.

Il presente contributo intende verificare se una proposta di Baskin è efficace nel migliorare gli atteggiamenti dei pari verso la disabilità. A tal fine è stata effettuata una ricerca quasi-sperimentale su un campione di 417 alunni, a cui è stato somministrato l'ATDP (Yuker, Block e Young, 1970). I risultati evidenziano che gli alunni del gruppo sperimentale, ma non quelli del gruppo di controllo, mostrano una riduzione significativa degli atteggiamenti negativi verso la disabilità.

KEYWORDS

Attitudes toward disability; Baskin; Universal Design; Intergroup Contact Theory
Atteggiamenti verso la disabilità; Baskin; Progettazione universale; Teoria del contatto

Received 30/04/2025

Accepted 28/05/2025

Published 20/06/2025

Introduction

Within the field of social psychology, the abundance of theories on attitudes makes it difficult to establish a single, universally accepted definition of the concept (Eagly & Chaiken, 1993). For the purposes of this discussion, it is helpful to conceptualize attitudes as an individual's viewpoint or disposition toward a particular object (Gall, Borg, & Gall, 1996, p. 273), or as a psychological tendency expressed by evaluating a specific entity with some degree of favor or disfavor (Eagly & Chaiken, 1998). Attitudes, therefore, involve an evaluative process that may result in more or less positive or negative outcomes, and they can pertain to anything—whether material or immaterial—such as a person, a group, an object, or an idea.

While early theoretical models conceptualized attitudes as unidimensional phenomena, it is now widely accepted that they are complex constructs comprising multiple interrelated dimensions. Specifically, attitudes are typically understood as including: a cognitive component, which encompasses an individual's ideas, thoughts, perceptions, beliefs, and/or opinions about the "object"; an affective component, which relates to feelings, emotions, and affective responses toward the "object"; and a behavioral component, reflecting the individual's tendencies or intentions to act toward the "object" (Eagly & Chaiken, 1993; Olson & Zanna, 1993). Attitudes are thus closely connected to behavior and, to some extent, can be predictive of it. In this regard, the Anti-Defamation League's Pyramid of Hate illustrates how negative attitudes can serve as the foundation for progressively severe manifestations of hate-based behaviors—ranging from avoidance and verbal insults to discriminatory actions, physical violence, and even genocide (2018).

Another key conceptual framework is provided by Social Identity Theory (Tajfel & Turner, 1979), which posits that individuals derive part of their self-concept from their membership in social groups. Consequently, people tend to favor those perceived as members of their own group (in-group) and devalue those perceived as outsiders (out-group). Although these theories are inherently partial and limited in fully capturing the complexity of the attitude construct, they nonetheless offer a useful conceptual framework for examining attitudes toward individuals with disabilities.

A first important consideration is that, like foreigners, immigrants, or others whose biological or sociocultural traits deviate from perceived social norms, people with disabilities are often viewed as different, abnormal, or deviant (Di Nuovo, 1999; Gothard, 2002). This perception contributes to the social stigma and the attribution

of undesirable traits, historically resulting in their exclusion from a life marked by dignity and equal rights (Griffo, 2009). Additionally, the enduring influence of the medical model (Medeghini & Valtellina, 2016) can lead to the reduction of individuals with disabilities to their medical condition. From a psychodynamic standpoint, disability may be emotionally experienced as a threat to the self, triggering avoidant or rejection-based responses (Paicheler, 1990; Ville, 1995).

In line with the Pyramid of Hate, Historians agree that negative attitudes, discriminatory practices, and even violent behaviors against individuals with disabilities have existed since ancient times—from the practice of exposure in antiquity to the Nazi extermination programs, illustrating some of the most extreme manifestations of this phenomenon (Canevaro & Goussot, 2000; Schianchi, 2012). Even today, despite growing international efforts to promote human rights-based cultural models, negative attitudes, stereotypes, and stigma continue to impede full societal participation (Deal, 2007; Scior, 2011; WHO, 2011).

Among the most common stereotypes that still persist today are the tragic stereotype, which equates disability with suffering and sadness, evoking pity and resulting in acts of charity that are not always grounded in authentic empathy or actual need. On the opposite end is the angelic or heroic stereotype, which infantilizes individuals with disabilities and attributes to them exaggerated traits such as inherent goodness, innocence, or courage. This includes the so-called “Supercrip” stereotype, in which individuals are portrayed as “heroes” or “inspirations” merely for engaging in daily life activities or achieving goals perceived as extraordinary. A long-standing cultural fascination with morbid curiosity and ridicule is also evident, from historical “freak shows” to present-day use of derogatory language (e.g., “idiot,” “cripple”) or outright verbal and physical aggression (Bocci & Straniero, 2020; Dell’Anna, 2021). The prevalence of such stereotypes is further confirmed by empirical studies, which show that young people with disabilities are more frequently targeted by bullying than their peers (Corbo, Palladino & Menesini, 2021; UNESCO, 2021a).

However, attitudes are not fixed or innate; they are dynamic cultural constructs and, as such, are subject to change through experience, social interaction, and intentional educational intervention. This makes attitudes a key target for educational practices and a core concern in the field of Special Education. This awareness has grown in parallel with the international movement toward inclusive education, which has gradually opened mainstream schools to students with disabilities (EASNIE, 2015; UNESCO, 1994, 2020, 2021b). To fully implement the

paradigm of inclusion, schools must not only cultivate each student's potential through instructional design inspired by the principles of differentiated instruction (Tomlinson, 2014) and Universal Design for Learning (CAST, 2018), but also promote teaching strategies that foster positive social interactions and a sense of peer belonging (Cottini, 2017), within a broader perspective, in which learning and socialization must go hand in hand (Caldin, 2019). Because negative attitudes can act as significant environmental barriers, disrupting classroom climate and social functioning (WHO, 2007), schools have a responsibility to prevent and counteract such attitudes, which are often linked to rejection and marginalization behaviors (Italian Ministry of Education, 2020).

Despite the clear relevance of this issue for inclusive education, the topic of peer attitudes toward disability has received limited attention in Italian scientific literature (Dell'Anna, 2023), whereas international research has shown greater interest, as reflected in several comprehensive review studies (Armstrong et al., 2017; Chae et al., 2018; De Boer, Pijl & Minnaert, 2012; Freer, 2021; Leal, Eusebio & Da Rosa, 2020; McMillian et al., 2013; Nowicki & Sandieson, 2002). Some studies have yielded conflicting findings regarding the relationship between classroom setting and attitudes toward disability: while some report more positive attitudes among students in inclusive settings, others have found no significant differences—or even more negative outcomes—suggesting that mere physical proximity or shared activities are not sufficient to foster greater acceptance (Babik & Gardner, 2021; Freer, 2021).

More promising is the line of research focused on interventions aimed at improving peer attitudes toward students with disabilities. These include: role-playing activities, where students assume the perspective of a person with a disability to cultivate empathy; awareness-raising activities, which involve reflecting on narratives about disability conveyed through media, books, or educational materials; and contact-based activities, which rest on the assumption that direct interaction with peers with disabilities leads to more positive attitudes. Systematic reviews consistently identify contact-based interventions as the most effective strategy for improving peer attitudes (Armstrong et al., 2017; Chae et al., 2018). In particular, Chae and colleagues (2018) found the highest effect size ($d = 1.780$) for contact-based interventions, followed by materials-based interventions ($d = 1.346$), role-playing ($d = 1.227$), and human rights education ($d = 0.977$). These approaches are grounded in Contact Theory (Allport, 1954), later empirically validated by Pettigrew & Tropp (2006), which posits that intergroup contact—interaction

between members of different social groups—can reduce prejudice and foster positive attitudes through processes such as de-categorization (seeing others as individuals rather than group members), re-categorization (developing a shared superordinate identity), empathy, and mutual understanding. For contact-based interventions to be genuinely effective, however, certain key conditions must be met: equal status among participants, shared goals, cooperative intergroup interactions, and institutional or normative support (e.g., from teachers or school leadership).

1. The Inclusive Value of Baskin

Physical education offers a potentially favorable environment for fostering social interactions and behaviors (Sherrill, 2004). However, when the sports activities included in the curriculum are shaped by an ableist paradigm—which emphasizes the motor limitations of students with disabilities (Bellacicco et al., 2022)—physical education can instead become a setting of social exclusion that reinforces negative attitudes (Winnick & Porretta, 2016).

This is supported by empirical studies on interaction quality, which reveal that students with and without disabilities, even when sharing the same time and space during physical education classes, rarely engage in positive interactions (Block & Obrusnikova, 2007; Place & Hodge, 2001). Additional research on barriers to the social inclusion of students with disabilities in PE highlights the negative attitudes of peers as a major obstacle (Coates & Vickerman, 2008; Goodwin & Watkinson, 2000).

True inclusion requires that all students participate in the game by fully utilizing their own motor skills and abilities, while also being accepted and valued as legitimate participants. Among the various sports models available to people with disabilities, the integrated sport model appears to be the most inclusive. It is defined as “a set of codified ludic and motor activities, both cooperative and competitive in nature, in which individuals with and without various types of disability, men and women alike, can actively and competently participate together, through roles, spaces, and materials adapted to each person’s abilities and potential” (Magnanini, Moliterni, Ferraro & Cioni, 2018, p. 302).

Integrated sport emerged in the early 2000s in Italian schools with the invention of the game Baskin (Bodini et al., 2010). Designed as an innovative pedagogical-

sporting tool, Baskin aims to promote inclusive education by intentionally valuing the skills and abilities of all participants. As illustrated in Table 1, integrated sport is grounded in the principles of Universal Design (Center for Universal Design, 1997) and Universal Design for Instruction (Scott, McGuire & Shaw, 2001).

UD (Center for Universal Design, 1997)	UDI (Scott, McGuire & Shaw, 2001)	Applications in Physical Education
1) Equitable Use: The design is usable and accessible by individuals with diverse abilities, ensuring equal access and use	1) Equitable Use: Instruction is designed to be useful and accessible to individuals with diverse abilities	1) Equitable Use: Physical and sports activities are designed to be performed by individuals with diverse abilities
2) Flexibility in Use: The design accommodates a wide range of individual preferences and abilities	2) Flexibility in Use: Instruction is designed to accommodate a wide range of individual abilities	2) Flexibility in Use: The structure of physical and sports activities, including rules and materials, is designed to be flexible and adaptable to a wide range of individual abilities
3) Simple and Intuitive Use: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level	3) Simple and Intuitive Use: Instruction is designed to be simple and predictable, eliminating unnecessary complexity, regardless of the student's experience, knowledge, language skills, or attention level	3) Simple and Intuitive Use: Physical and sports activities are designed to be easy to understand and perform, regardless of experience, knowledge, abilities, or attention levels
4) Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities	4) Perceptible Information: Instruction is designed to communicate necessary information effectively to the student, regardless of environmental conditions or the student's sensory abilities	4) Perceptible Information: All necessary and functional information should be easily perceivable by everyone, regardless of individual sensory abilities
5) Tolerance for Error: The design minimizes hazards and adverse consequences of accidental or unintended actions	5) Tolerance for Error: Instruction anticipates diversity in learning pace and prerequisite skills among students	5) Tolerance for Error: In conducting physical and sports activities, risks and negative accidental consequences should be minimized by anticipating diversity in initial abilities
6) Low Physical Effort: The design can be used efficiently and comfortably with a minimum of fatigue	6) Low Physical Effort: Instruction is designed to minimize non-essential physical effort to allow maximum focus on learning	6) Low Physical Effort: Physical and sports activities should be performable by all efficiently, comfortably, and without requiring additional physical effort beyond what is planned in the design
7) Size and Space for Approach and Use: Appropriate size and space are provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility	7) Size and Space for Approach and Use: Instruction is designed considering appropriate size and space for access, management, manipulation, and use, regardless of the student's body size, posture, mobility, and communication needs	7) Size and Space for Approach and Use: The size of materials and play space should be suitable for use and access by all students with their varying motor functions
	8) A community of learners: The instructional environment promotes interaction and communication among students and between students and instructors	8) A community of learners: Physical and sports activities promote social interaction and communication among students and between students and instructors
	9) Instructional climate: Instruction is designed to be welcoming and inclusive, setting high expectations for all students	9) Instructional climate: Physical and sports activities are designed to be welcoming and inclusive, establishing goals for educational success for all

Table 1. The application of UD and UDI principles in Baskin

Moreover, integrated sport facilitates interactions between individuals with and without disabilities that meet all four of Allport's (1954) optimal conditions for positive intergroup contact, as outlined in the previous section. As summarized in Table 2, the condition of institutional and social support is embedded within the rules of the game itself, which promote functional diversity and eliminate any hierarchical structure from the outset. This system ensures the active participation—in the same space and time—of individuals with diverse motor and

athletic abilities, whose contributions are both recognized and valued. Additionally, the differentiation of roles based on individual motor and athletic abilities ensures that all players are equally valued, thereby supporting status equality among participants—another of Allport’s key conditions for fostering positive social interactions. As for the remaining two conditions, the rules of integrated sport establish an internal logic whereby all players, without exception, are actively involved from start to finish through complex cooperative socio-motor actions (Parlebas, 1997), all aimed at achieving the common goal of winning. This structure promotes a pedagogical network in which each student-athlete must necessarily cooperate with all teammates, including those in different roles, to sustain enjoyment and strive toward the collective objective defined by the rules.

Optimal conditions for contact (Allport, 1954)	Integrated Sport (Magnanini, Moliterni, Ferraro e Cioni, 2018)
1) Support of Authorities, Law, or Customs	The game rules support the recognition and appreciation of diverse functional abilities within the shared activity, overcoming any form of ability-based hierarchy.
2) Equal status	All roles, differentiated according to individual abilities, hold equal value within the game, thus eliminating any form of hierarchical structure on the field.
3) Intergroup cooperation	All team members, without exception, cooperate with one another from the beginning to the end of the match, overcoming any form of individualism or subgroup separation.
4) Common Goals	All team members participate collaboratively to achieve a common goal.

Table 2. Applications of Contact Theory Principles in Baskin

To better illustrate this, it is helpful to consider two specific rules from the official Baskin rulebook (EISI, 2025). First, the scoring and shooting limits by role: players in role 5—those with the highest motor and athletic abilities—may take a maximum of three shots per period, while players in roles 4, 3, 2, and 1 may each score up to three baskets per period. Second, the rule that each player may only defend opponents of equal or higher role. Though seemingly restrictive, these rules require the entire team to move beyond conventional, ableist patterns of play that typically revolve around the most skilled and physically able athletes. On the contrary, they encourage the development of cooperative strategies aimed at ensuring the inclusion of all players in the game’s dynamics, emphasizing that every participant, without exception, plays an equally important role in pursuing the shared goal: to outscore the opposing team.

Despite the strong theoretical foundation suggesting that integrated sport may promote positive intergroup dynamics and improve attitudes toward disability, empirical research on this topic remains limited. In a review study, McKay (2018)

analyzed various empirical investigations confirming the effectiveness of sports activities based on contact theory principles in reducing negative attitudes toward disability. However, none of these studies specifically examined integrated sport. Magnanini (2018), by contrast, conducted a pioneering study investigating the effects of an inclusive physical education program (including cooperative motor activities and integrated sport) on the social relationships of 228 students aged 15–17, including 14 with disabilities. Analysis of data collected through a sociometric test (Moreno, 1953), administered before and after the intervention, revealed a significant reduction in rejections, including those directed at students with disabilities ($p < 0.01$). Although this experimental study was the first to empirically explore the effects of an integrated sport intervention, it did present some methodological limitations—most notably, the absence of a control group, which would be necessary to isolate the effects of the educational program from other potential confounding variables.

To address this gap, Ferraro, Magnanini, and Cioni (2024) replicated the study with a sample of 417 lower secondary school students (22 with disabilities). Of these, 240 participated in a Baskin-based physical education program, while 177 followed a traditional PE curriculum. Once again, the results showed a significant decrease in rejections of students with special educational needs ($p < 0.01$). However, both studies relied on the sociometric test (Moreno, 1953), which assesses group dynamics by identifying individuals' preferences and rejections toward others. While, within the framework of multidimensional theories of attitude (Eagly & Chaiken, 1993), such preferences and rejections may be interpreted as partial expressions of the behavioral component, the sociometric test is not specifically designed to measure attitudes toward people with disabilities.

2. Objectives

Based on the aforementioned considerations, the present study aims to contribute to a line of empirical research investigating the inclusive value of integrated sport (Magnanini, 2018; Ferraro, Magnanini, Cioni, 2024). Specifically, to fill a gap in the literature, the goal of this work is to assess whether a teaching proposal based on Baskin can improve attitudes toward disability.

3. Sample and Research Design

The sample used in this study is the same as that in the research by Ferraro, Magnanini, and Cioni (2024) and was selected through a non-probabilistic, purposive sampling strategy (Benvenuto, 2015). Specifically, first-year classes from lower secondary schools, recommended by the "Baskin" association, were included. These schools employed physical education teachers trained in the sport of Baskin. A quasi-experimental research design (Thomas, Nelson, & Silverman, 2012) was adopted, with the sample divided into an experimental group and a control group. The experimental group comprised classes with at least one student with a disability, taught by a physical education teacher trained in the rules and techniques of Baskin. The control group consisted of classes with at least one student with a disability, selected from the same schools as the experimental group, but taught by a teacher without the specified training.

The tests required to assess the variables under investigation (outlined in the next section) were administered by the operational manager of the study at the selected schools at the start of the 2019/2020 school year and at the end of the Baskin intervention. The Baskin intervention, summarized in Table 3, consisted of 24 sessions conducted during regular physical education classes over a 12-week period for the students in the experimental group.

Session No.	Activities Conducted
1	Introduction to the Baskin rules
2	Functional tests for role assignment
3-4	Training on basic skills and game tactics
4-24	Matches

Table 3. Baskin Educational Proposal

The collected data were analyzed using both descriptive and inferential statistics. To assess the internal consistency of the instrument used, Cronbach's alpha was calculated. Following Nunnally and Bernstein's (1994) guidelines, values were considered excellent if $\alpha \geq 0.9$, good if $0.8 \leq \alpha < 0.9$, acceptable if $0.6 \leq \alpha < 0.8$, and inadequate if $\alpha < 0.6$. The Kolmogorov-Smirnov test was also applied to determine whether the variables followed a normal distribution. Finally, to test the hypothesis of a statistically significant difference between the groups, the Mann-Whitney U non-parametric test and the Wilcoxon signed-rank test were used. In all cases,

values of $p < 0.05$ were considered significant. All statistical analyses were conducted using SPSS-22 software.

4. Instruments

To assess attitudes toward people with disabilities, the *Attitudes Toward Disabled Persons Scale – Form 0* (ATDP-0) (Yuker, Block, & Young, 1970) was used. The ATDP evaluates explicit attitudes toward disability as a group, focusing particularly on the cognitive dimension. The test consists of 20 items corresponding to statements about the personal characteristics of people with disabilities or how they should be treated by society in general¹. For each item, the respondent is asked to indicate the degree of agreement on a 6-point Likert scale (1 = "Strongly Disagree"; 2 = "Disagree"; 3 = "Slightly Disagree"; 4 = "Slightly Agree"; 5 = "Agree"; 6 = "Strongly Agree")². The ATDP provides a single index that ranges from 0 to 120 and expresses the extent to which people with disabilities are considered similar to people without disabilities. In other words, a high total score indicates that the person perceives individuals with disabilities as relatively similar to those without disabilities, while a low score indicates that people with disabilities are perceived as different. Furthermore, since many of the ATDP statements suggest that when a difference is perceived, it carries negative connotations, a low score suggests that people with disabilities are perceived not only as different but also to some extent as inferior or disadvantaged.

5. Analysis

Overall, the sample consists of 417 students aged between 10 and 11 years ($M = 10.5$; $SD = 0.3$), including 22 with certified disabilities. They are enrolled in 19 first-year classes across 9 secondary schools, with 7 located in the north (Cremona and Vicenza), 1 in central Italy (Rome), and 1 in southern Italy (Avola). The key sociodemographic characteristics of the sample are summarized in Table 4.

¹ Examples of such statements include: "Most disabled people feel sorry for themselves" and "It is almost impossible for a disabled person to lead a normal life."

² For the analysis, the following values are assigned to the scale points: 1 = 3; 2 = 2; 3 = 1; 4 = -1; 5 = -2; 6 = -3. A constant of 60 is then added to the final sum of the new values. In this way, the total score ranges from 0 to 120.

Group	Tot	Males	Females	Age (M)	Disability
Experimental	240	125	115	10,4	13
Control	177	94	83	10,7	9
Total	417	219	198	10,5	22

Table 4. Sociodemographic Characteristics of the Sample

The reliability of the instrument is more than adequate ($\alpha = 0.79$), with values closely aligning with those of the original instrument (0.73) (Yuker, Block, & Young, 1970). Unlike the findings in previous studies by the authors (Ibidem), the data from this research did not indicate that males exhibited more negative attitudes than females ($p > 0.05$). As shown in Table 5, the Kolmogorov-Smirnov test reveals that the distribution of the differences between the Post-Test and Pre-Test means significantly deviates from normality for both the experimental and control groups.

Group	m	Sd	k-s	p	N
Experimental	78,42	17,38	0,080	0,001	240
Control	69,41	16,40	0,071	0,031	177

m = mean of the difference between the mean at T1 and the mean at T0; K-S = Kolmogorov-Smirnov test statistic calculated on the difference between the means; p = probability value

Table 5. Kolmogorov-Smirnov Test

Therefore, to test the hypothesis of a difference between the groups, non-parametric tests were employed. Specifically, the Mann-Whitney U test for independent samples was used to assess differences between the experimental and control groups at Pre-Test, and the Wilcoxon signed-rank test for paired samples was applied to examine differences between Pre-test and Post-test within each group.

Analyzing the differences between the means of the groups (see Tables 6 and 7), the results show: 1) the mean of the experimental group ($M = 70.14$) and the control group ($M = 68.80$) at Pre-test are not statistically different ($p > 0.05$); the mean at Pre-test (70.14) and Post-test (79.50) in the experimental group are statistically different ($p < 0.05$); and the mean at Pre-test (68.80) and Post-test (70.63) in the control group do not differ significantly ($p > 0.05$). Therefore, we can conclude that the experimental and control groups come from the same population, and the

Baskin intervention led to an improvement in attitudes toward disability, while attitudes in the control group remained largely unchanged at the end of the traditional physical education program.

Group	Pre-test (T0)		Post-Test (T1)		N
	m	Sd	m	Sd	
Experimental	70,14	18,75	79,50	18,11	240
Control	68,80	17,40	70,63	17,28	177
Total	69,57	18,18	75,73	18,28	417

Table 6 and Figure 1. Mean scores of the ATDP

Difference between the groups	SV	p	N
$E_{T0}-C_{T0}$	Z = 0,968	0,333	417
$E_{T0}-E_{T1}$	Z = 7,835	0,000	240
$C_{T0}-C_{T1}$	Z = 1,499	0,134	177

$E_{T0}-C_{T0}$ = difference between experimental group and control group at Pre-test; $E_{T0}-E_{T1}$ = difference between pre-test and post-test in the experimental group; $C_{T0}-C_{T1}$ = difference between pre-test and post-test in the control group; SV = Standardized value of the test; p = probability value.

Table 7. Analysis of statistical differences between the groups

Conclusions

The structure of Baskin, inspired by and designed in accordance with the principles of Universal Design (Center for Universal Design, 1997) and Universal Design for Instruction (Scott, McGuire, & Shaw, 2001), offers a tangible example of social inclusion. Inclusion—understood as the opportunity for meaningful participation and interaction with others—is achieved within this integrated sport precisely because it is conceived within an accessible and universal framework. This approach takes into account individuals' characteristics, abilities, and competencies, regardless of their health status or functional condition. In this regard, inclusion is a process that must necessarily begin in schools, which build a culture of educability

and hospitality on a daily basis. Through disciplinary content, relational contexts, and moments of socialization, schools can enhance the potential of each individual. The findings of this study indicate that, unlike traditional physical education programs, this sports model can positively influence students' attitudes toward disability in the school setting. In doing so, it contributes to counteracting the persistent negative attitudes that often hinder the development of a culture that values diversity. Moreover, the results align with the work of Pettigrew and Tropp (2006), providing further evidence of the effectiveness of intergroup contact in reducing negative attitudes toward disability.

In this sense, schools that implement integrated sports can play a key role in dismantling cultural barriers. By promoting universal design, they can foster inclusive learning environments that engage all students, while honoring individual differences and uniqueness.

Integrated sport and the attitudinal changes it can foster give full meaning to the process of inclusion as “a culture of full participation of all and each student in the processes of socialization and learning within a democratic and welcoming school, which regards differences and diversity as historically and existentially positive categories” (Gaspari, 2023, p. 108). It is precisely in the transformation of prejudices and negative attitudes that integrated sport in schools faces one of its most important challenges.

Author contributions

The article is the result of a collaborative effort among the authors. Specifically, Lorenzo Cioni was responsible for the introduction and Sections 3, 4, and 5; Antonio Ferraro contributed Section 2; and Angela Magnanini authored the conclusions.

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