

DISABILITY AND EARLY CHILDHOOD EDUCATIONAL SERVICES: A STUDY ON FUTURE EDUCATORS' PERCEPTIONS OF INCLUSIVE DESIGN

Umberto Veneruso, & Diana Carmela Di Gennaro
University of Salerno (Italy)

Abstract

National, European, and international regulations increasingly articulate the principle of inclusion within early childhood educational services by emphasizing the importance of ensuring effective accessibility, enhancing children's learning processes, and improving the quality of relationships developed within these contexts. The overarching goal is to enable all children to actively participate in culturally meaningful and high-quality experiences from the earliest years of life. Within this framework, adopting an inclusive approach to the design and implementation of educational processes is essential in order to promote autonomy, self-determination, and the development of competencies for every child. From an inclusive perspective, educational design in early childhood services plays a crucial role, as it allows practitioners to anticipate the intended effects of pedagogical actions while taking into account children's characteristics and the ways in which environmental and relational arrangements may generate such effects. Educational design must therefore be multidimensional, considering children in their entirety, within their system of relationships and living contexts. The person, understood as a network of relationships, is embedded within an ecosystem of affective, social, and cultural bonds, which calls for an ecological perspective on development and a global, integrated, and multimedia view of pedagogical action. Starting from these premises, the study aims to analyze future educators' perceptions, representations, and expectations related to the design of inclusive pedagogical interventions, with particular reference to children with disabilities. The sample consists of students enrolled in the Bachelor's Degree in Education (Early Childhood Education curriculum) at the University of Salerno. A quali-quantitative questionnaire was administered within the course *Inclusive Design within Early Childhood Educational Services*, in order to explore levels of awareness, self-perceived competencies, and emerging training needs related to inclusion. The findings reveal a heterogeneous landscape of educational practices observed during internships. The most frequently reported approach concerns individualized or adapted activities indicating a general sensitivity toward differentiation. A significant proportion of responses highlights the absence of structured inclusive design, while only a limited number of cases described good inclusive practices characterized by intentional design, accessible materials and coherent organizational strategies. These results suggest that, despite the formal endorsement of inclusive principles, inclusive educational design in early childhood educational services remains unevenly implemented and largely dependent on individual initiative. The study underscores the need to strengthen both initial and in-service educators' training, promoting inclusive design as a reflective, shared, and documented pedagogical process capable of supporting the full participation of all children, particularly those with disabilities.

Keywords: *Early childhood educational services, educational design, disability, inclusion.*

1. Educational design in early childhood educational services

Pedagogical planning within early childhood educational services constitutes the backbone of educational intervention, guiding, through critical awareness and epistemological rigor, the various didactic, organizational, and relational dimensions. It should not be reduced to a merely linear and mechanical form of planning; rather, it must be understood as a circular, reflective, and intentional process, constantly nourished by multiple factors such as active family participation, ongoing professional development, cooperation among educators, and systematic observation of children (Schön, 1983; Bondioli & Savio, 2018; MIUR, 2020). All of these elements underpin the daily co-construction of the educational project, which is both shared and dynamic (Bianquin & Bulgarelli, 2022). In the contemporary educational landscape, planning in early childhood services represents a pedagogical act of extraordinary theoretical and operational meaning, through which a specific image of the child is delineated: a child recognized as an active, competent subject and protagonist of their own developmental trajectory, capable of attributing

meaning to the world through experience, play, interactions with others, and engagement with the environment (Zecca & Negri, 2023). This vision is deeply rooted in the pedagogical thought of Loris Malaguzzi and in the educational practices developed within the so-called Reggio Emilia approach, which have promoted an educational paradigm based on the plurality of languages and on a participatory and democratic conception of children's knowledge. Such an approach is attentive to the "hundred languages" through which each child can express themselves and relate to the world (Malaguzzi, 1995). From this perspective, educational inclusion does not represent an additional or specialized intervention aimed at specific categories; rather, it constitutes a foundational and transversal principle of the entire planning process. As stated in the Italian *Pedagogical Guidelines for the Integrated 0–6 System* (MIUR, 2021), inclusion should be understood as the structural capacity of educational contexts to welcome the diversity of individuals, enhance differences, and ensure equal opportunities in terms of both participation and learning. Designing inclusively therefore means preparing environments, time structures, relationships, and activities that are flexible, accessible, and meaningful for all children, while respecting their uniqueness (Chiappetta Cajola & Rizzo, 2014; Aiello, 2023). Within this framework, the quality of educational environments emerges as an element of primary importance. Educational spaces should not be conceived as neutral containers, but rather as genuine "pedagogical organisms" capable of interacting with children and stimulating their cognitive, affective, motor, and relational potential. The *National Guidelines for Early Childhood Educational Services* (2021) emphasize the centrality of space as a symbolic and experiential place in which children are allowed to experiment, express themselves, create, and interact autonomously and meaningfully with others. The design of educational spaces, both indoor and outdoor, must therefore respond to multiple criteria—such as safety, transparency, modularity, and accessibility—while also addressing aesthetic and sensory dimensions, privileging natural, recyclable, and transformable materials capable of stimulating imagination (Amadoro, Di Gennaro, Veneruso, 2024). The use of unstructured materials such as wood, metal, fabrics, natural elements, and recycled objects, as described by Goldschmied and Jackson (1997), enables children to act freely, explore, narrate, and attribute new meanings to reality, overcoming the adult-centered logic of pre-structured activities. In this way, the environment becomes a truly inclusive space where each child can remain faithful to themselves and learn according to their own modes (Weyland & Galletti, 2018). Time is equally relevant within early childhood services and can no longer be conceived as a mere chronological sequence of predefined activities. Instead, it should be understood as lived time, rich in meaning—a flexible time open to unpredictability and surprise, yet capable of supporting routines. The *Pedagogical Guidelines 0–6* explicitly invite educators to overcome forms of temporal standardization by promoting practices such as desynchronization—allowing children to engage in different activities at different times—and the extension of time frames to avoid interruptions and dead time that may generate frustration and demotivation. These practices are particularly effective in creating an educational climate of well-being and participation, in which every child can feel welcomed, recognized, and valued (Bondioli & Savio, 2018; Aiello, 2023). Based on these theoretical premises, the present contribution aims to present the results of an exploratory study conducted within the Bachelor's Degree in Education (curriculum Early Childhood Education) at the University of Salerno. The study, carried out during the first semester of the 2024/2025 academic year, involved a sample of students ($n = 43$) who were attending the course *Inclusive Design within Early Childhood Educational Services*. Through the administration of a structured questionnaire, the study aimed to explore students' perceptions of educational planning in the presence of children with disabilities, with the aim of identifying critical issues and available resources.

2. Research methodology

2.1. Aim

The present study aims to explore future early childhood educators' perceptions and representations of inclusive pedagogical design within early childhood educational services, with particular reference to children with disabilities. Furthermore, it seeks to analyze pre-service educators' levels of awareness and self-perceived competencies related to inclusive educational planning, with specific attention to processes of accessibility, participation, and learning for all children.

2.2. Sample

The sample consists of 43 university students currently enrolled in the third year of the Bachelor's Degree in Education, with a professional specialization in *Early Childhood Education*, at the University of Salerno (Italy). The group was intentionally selected, as participants were engaged in a training pathway aimed at developing educational and planning competencies in the 0–6 age range, with particular attention to inclusion.

2.3. Research instrument and procedure

The data collection instrument consisted of a qualitative-quantitative questionnaire, allowing for the collection of both objective numerical data and descriptive elements useful for analyzing participants' subjective representations and perceptions. The questionnaire comprised a total of eighteen questions and was divided into three thematic sections, each designed to explore specific areas of interest related to educational planning in inclusive contexts. The first section (questions 1–7), aimed at collecting socio-demographic data (age, gender, place of origin, educational background), in order to outline the general profile of the sample and to capture the heterogeneity of participants' backgrounds and prior training experiences. The second section (questions 8–16), focused on participants' curricular internship experiences, an integral part of their university training, investigated the type of early childhood educational setting in which the internship took place (question 9), the presence or absence of children with disabilities within the observed context (question 12), and the type of disability identified (question 13). Participants were also asked to assess the perceived effectiveness of the activities designed to promote the inclusion of children with disabilities (question 15). This section enabled a comparison between direct field experience and levels of awareness and critical reflection. The third and final section (questions 17–18) explored future educators' perceptions and planning ideas regarding the construction of educational activities in the presence of children with disabilities. In particular, question 17 asked participants to imagine an inclusive educational context and to describe the activities they would design to respond to the specific educational needs of children with disabilities and to promote their inclusion within the group. Question 18 focused specifically on the presence of children with visual impairments, prompting a more targeted reflection on inclusive strategies for this condition. The questionnaire was administered during the first lesson of the course *Inclusive Design of Early Childhood Educational Services*, at the very beginning of the academic program. This methodological choice was made in order to collect responses not yet influenced by the theoretical content and operational tools that would later be introduced, thus valuing participants' spontaneous impressions, prior knowledge, and personal sensitivity developed through internship experiences. Particular attention was devoted to the qualitative analysis of responses to question 17, considered central for exploring future educators' conceptions of inclusive planning. The study adopted a qualitative research design aimed at exploring participants' representations of inclusive educational planning, using open-ended responses to a questionnaire item to allow the free expression of pedagogical conceptions. Data were analysed through a thematic approach grounded in qualitative research paradigm (Braun & Clarke, 2006; Creswell & Poth, 2018). The analytical process involved three phases: the identification of recurring lexical units, the analysis of their frequency to highlight salient concepts, and the organization of the data into interpretative macro-categories, following established procedures for qualitative data analysis (Miles et al., 2014). This process enabled the identification of dominant conceptual patterns, as well as areas of convergence and divergence among participants' representations, providing a concise yet articulated overview of pedagogical conceptions in formation.

2.4. Data analysis and discussion

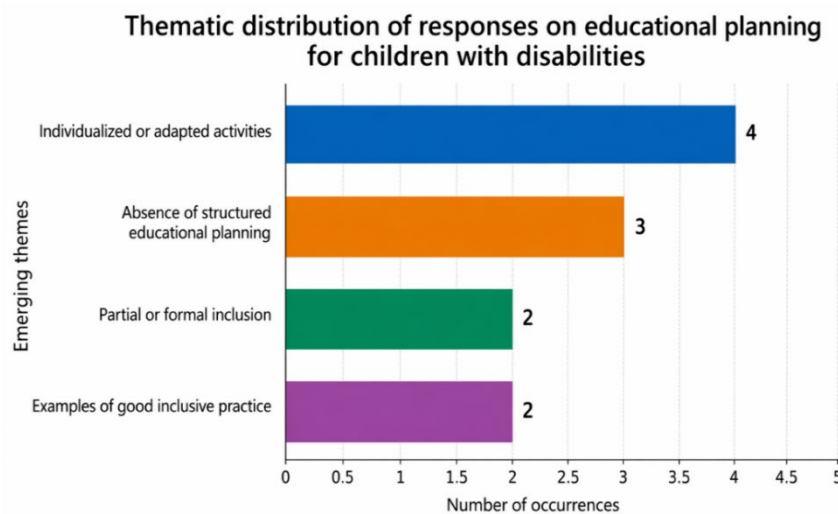
With regard to the first section of the questionnaire, the analysis of socio-demographic data reveals that the entire sample comes from the Campania region, where the university is located. Specifically, 72% of participants come from the city of Salerno and its province, 16% from Naples and its province, while the remaining 12% come from other provinces within the region (5% from Avellino and Benevento and surrounding areas, and 2% from Caserta and its province). The sample is predominantly female (98%), with only 2% identifying as male. Most participants (92%) are between 21 and 25 years of age, while 6% report being under 20 and 2% over 25 years old. Regarding the second section of the questionnaire, which focused on internship experiences, the majority of participants (91%) reported completing their internships in nursery schools, 7% in preschools, and 2% in other types of educational settings. When asked about the presence of children with disabilities in the internship context (question 12), only 16% of respondents answered affirmatively. Responses to the subsequent question (question 13) indicate that this presence was exclusively within nursery school settings. Concerning the third section, aimed at investigating how future educators envision planning activities in early childhood contexts where children with disabilities are present, responses were subjected to thematic analysis, leading to the identification of four recurring macro-categories:

- › **Individualized or adapted activities (n = 4).** This category includes responses describing personalized educational interventions designed to meet the specific needs of children with disabilities. In these cases, educators propose simplified activities, the use of visual and auditory materials, or individualized support, with the aim of enhancing residual abilities and supporting development.
- › **Absence of structured educational planning (n = 3).** Some responses highlight a lack of educational interventions specifically designed for inclusion. In certain cases, children with

disabilities participate in common activities without mediation; in others, they are excluded altogether, relegated to the role of observers.

- › **Partial or formal inclusion (n = 2).** This category includes responses describing participation of children with disabilities in common activities without genuine personalization. The educational approach appears more permissive than intentional, characterized by limited planning.
- › **Examples of good inclusive practice (n = 2).** Some responses document experiences of genuine inclusion, involving the creation of small groups, the selection of accessible materials, and the adoption of cooperative strategies that promote the participation of children with disabilities in group life. The following graph illustrates the frequency of the main categories identified. The most represented category is that of individualized or adapted activities, indicating a certain level of attention among educators toward personalizing interventions. However, it is noteworthy that nearly half of the responses indicate weak or entirely absent planning, highlighting a systemic weakness in the observed contexts.

Figure 1.



3. Conclusions

The most frequently represented theme is that of individualized or adapted activities, accounting for 36.4% of responses. This finding suggests that in a significant portion of the observed contexts, educators attempt to address the needs of children with disabilities through targeted interventions, although these are often neither systematic nor formalized within an explicit planning framework. This is followed by the category of absence of structured educational planning, which represents 27.3% of responses. In these cases, educational practice does not appear to be grounded in intentional inclusion criteria, but rather in ordinary activity management, sometimes accompanied by generic and poorly targeted interventions. The categories of partial or formal inclusion and examples of good inclusive practice each account for 18.2% of responses. The former highlights situations in which the participation of children with disabilities is merely apparent or entrusted to the individual initiative of the educator, without genuine educational support. In such cases, inclusion is often reduced to formal adherence to inclusive principles without corresponding practical implementation. Conversely, the latter category gathers virtuous examples of conscious planning, in which inclusive strategies and accessible materials are embedded within a coherent educational framework aimed at promoting the full participation of all children. The analysis of responses to question 17 reveals fundamental issues related to educational planning in early childhood contexts where children with disabilities are present. The diversity of internship experiences reported by students reflects a still heterogeneous reality, in which attempts at individualized educational intervention coexist with situations where inclusive planning is weak or entirely absent. A particularly significant finding is that fewer than 20% of responses describe experiences of genuine good inclusive practice, characterized by intentional planning, the use of accessible materials, and the organization of activities in small groups. This suggests that while signs of an emerging culture of inclusion are present, such a culture is not yet uniformly consolidated across early childhood educational services. The *Pedagogical Guidelines for the Integrated 0–6 System* (MIUR, 2021) requires not only individual sensitivity, but also operational tools and adequate training elements that appear to be lacking in many of

the observed contexts. The most frequent category (36.4%), that of individualized or adapted activities, reflects a positive orientation in terms of educational intent, as educators appear to recognize the need to differentiate interventions according to the characteristics of children with disabilities. However, the responses also reveal the risk of non-systematic personalization, based more on intuition or common sense than on shared, documented planning grounded in solid theoretical and methodological frameworks. Particularly concerning is the fact that nearly one third of responses (27.3%) indicate an absence of structured educational planning, and an additional 18.2% describe forms of inclusion that are merely formal or tolerant, in which children with disabilities participate in activities without receiving effective educational support. In these situations, the presence of children with disabilities appears more as an organizational fact than as a pedagogical project. Inclusion, in such cases, risks being reduced to passive integration, where children are physically present but not valued in terms of their specific needs and potential. These findings raise a central question: to what extent is a culture of inclusive planning truly rooted in early childhood educational services? The evidence suggests that although inclusive principles are formally shared, there is still a lack of full internalization of inclusive planning practices among educators. Educational planning often appears too closely tied to individual initiative and insufficiently supported by a shared methodological framework. In light of these considerations, it is necessary to strengthen both initial and in-service training for educators, promoting a conception of planning as a reflective, participatory, and documented process. As emphasized in relevant scientific literature, designing for inclusion requires the adoption of a systemic perspective capable of modulating environments, time, relationships, and tools in response to the needs of all children, with particular attention to those with disabilities (Goussot, 2015). Moreover, internships emerge not only as moments of practical learning, but also as privileged spaces for critical reflection on observed educational practices (Larrivee, 2000; Marschall, 2021). Students' narratives, though brief, reveal growing awareness and analytical capacity that should be supported through more robust training tools. Inclusion thus remains an open challenge, involving not only individual educators but the entire system of early childhood educational services, which must increasingly orient itself toward an authentically person-centered and rights-based educational design, ensuring every child's full participation in educational life.

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