Alma Mater Studiorum University of Bologna, Italy

Inclusive design of school contexts and a curriculum according to the Universal Design for Learning approach

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Theoretical Framework

Children's rights serve primarily the protection and development of children with respect to their physical, mental, emotional, social, moral, and economic care (Akyüz, 2000). Inclusive Education (Cottini, 2017; Malaguti, 2017;Bonaiuti, Calvani, Ranieri, 2016; Morganti, Bocci, 2017; Ianes, Demo 2016) is the key to the reshaping of children's rights. In this context, it has been observed in recent years that there is a great deal of interest in the education of children about their rights and responsibilities in school programs (Howe & Covell, 2010; Covell, Howe, & Polegate, 2011). The school, in particular the classroom environment, appears to be the preferred context in which to intervene to encourage the process of physical and psychological growth of the child, the development of transversal skills for life, and the inclusion of all students. In this, the practices implemented by the teachers play a crucial role in the quality of children's rights education.In this new perspective, the international approach of Universal Design for Learning (CAST 2011; 2018; Savia 2016) allows to underline individual variability.
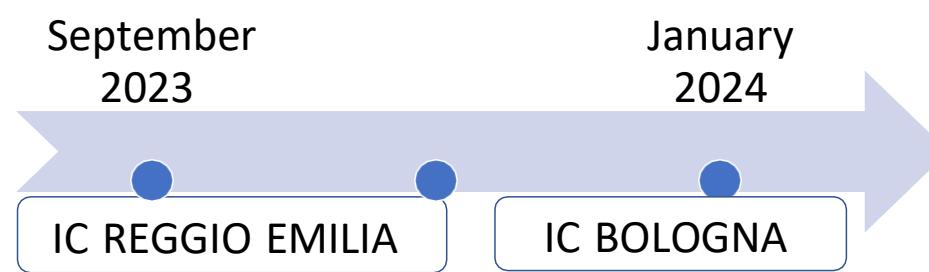
UDL is based on a set of Principles, Guidelines and Verification Points (CAST, 2018), for design and development a flexible, proactively, intentionally and systematically school curriculum (Meyer, Rose, Gordon, 2014) which take into account the differences of all pupils, including pupils with disabilities. National literature review (Savia, 2018; Aquario, Pais and Ghedin, 2017; Montesano, Carchidi and Valenti, 2019) and international (Abell, Jung and Taylor, 2011; Davies, Schelly and Spooner, 2013; Capp, 2017; Rao, Ok et al, 2014; Marino 2009, 2014; Katz, 2013) underline how the application of UDL principles promotes an Inclusive Teaching and produces improvements in four dimensions, in relation to student's perception: well-being, participation, motivation, learning levels.

Research Goals

The aim of this doctoral research is to design an inclusive school curriculum (objectives, methodologies, materials, spaces, evaluation) according to the Universal Design for Learning approach, which takes into account the differences of all pupils, including pupils with disabilities. Through the application of this framework we will investigate the four dimensions in relation to students. A particular focus will be on the inclusion of pupils with disabilities.

Methodology

Action Research (Losito, 2005; Canevaro, 1999, 2004) according to a **Mixed Methods** approach (Trinchero & Robasto, 2019; Cottini, 2020).

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| FOCUS GROUP WITH TEACHERS	• Investigate the reasons for partecipation in research • Investigate attitudes and beliefs related to the concept of inclusion • Reflection on the teaching methods and on the organization of the school curriculum
TRAINING ABOUT UNIVERSAL DESIGN FOR LEARNING	• Training on the principles of Universal Design for Learning • Creation of a UDL curriculum • Design of Learning Units
RESEARCHER OBSERVATION	• Analysis of different class contexts and specific difficulties (children with disabilities and learning disorder)
SURVEYING OF PUPIL'S OPINIONS (initial)	• Questionnaire of well-being QBS 8-13 (Tobia & Marzocchi, 2015) • Semi-structured interviews to detect motivation and participation
ACTION	• Testing of UDL Learning Units • Process control through researcher observation • Video analysis sessions with teachers
DATA COLLECTION (in the end)	• Questionnaire of well-being QBS 8-13 (Tobia & Marzocchi, 2015) • Semi-structured interviews to detect motivation and participation • Surveying of increased levels of learning • Focus about the inclusion of children with disabilities

Research

The following action-research is developed in the different phases, in two school contexts in Reggio Emilia and Bologna, Italy. Through a training on the Principles of Universal Design for Learning carried out in September 2023, UDL Learning Units and an inclusive curriculum will be designed, working on the different parts that make it up. To measure students' perceptions, a welfare questionnaire was administered at the beginning of the school year, and semi-structured interviews were carried out, which investigated the motivation for study and participation in the classroom. The experimentation of the ongoing training intervention is monitored by observations of the researcher in the field and by the photo-video documentation of the teachers (Santagata, 2011; 2012; Santagata & Angelici, 2010; Santagata & Guarino, 2011). The collection of quantitative qualitative data will take place through the tools described in the table, which will investigate the four dimensions considered in pupils after the application of the UDL model.

A particular Focus will be on the inclusion of students with disabilities in the different classes.

Conclusion

The following research, in the Italian context, is a experimentation of educational interventions based on the application of the UDL in the school curriculum and the results will concern students, about the effectiveness of this educational-teaching model. The challenge of inclusive education, as the key to a quality education, is needed to adopt and test new approaches, such as this, that will act as an inspiration for the teaching process-learning, but also provide resources to put it into practice (Malaguti, Augenti, Alba Pastor, 2023).
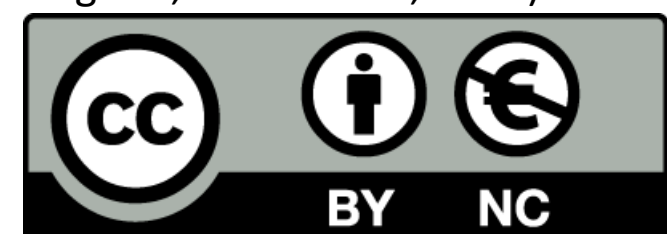
References

Key Words

Universal design for learning, inclusive curriculum , inclusive teaching, inclusion, disability.