

An investigation of the deployment and practice of teaching assistants (TA) in Italian, mainstream primary classrooms: TA class role and support for children with special educational needs and/or disabilities

Lorenzo Ciletti

IOE's Faculty of Education and Society

PhD thesis in Education

I, Lorenzo Ciletti confirm that the work presented in my thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

ABSTRACT

Internationally, Teaching Assistants (TA) play a crucial role in the mainstream education of children with Special Educational Needs and/or Disabilities (SEND). They support children with SEND, whereas teachers deal with whole-class instruction. Despite TAs' help, children with SEND were found to progress less than their peers. Researchers blamed the inadequate, if any, training of TAs, negatively impacting their instruction and children's learning. Also, they argued that children with SEND might overly rely on the nearby TAs to complete their classwork, thereby compromising their thinking and learning.

The current research was carried out in a country that provides TAs with wealthy training and whole-class responsibilities, notably Italy, in order to provide a nuanced understanding of TA deployment and practice. The research relied on a series of thematic analyses of the classroom observations of a single TA (Study 1); and interviews with 31 other TAs (Study 2). The thematic analyses converted the continuity of the observational and interview data into discontinuous, thematic codes. The findings were displayed a) quantitatively by counting the frequencies of the thematic codes in the data stream (i.e., systematic observations); b) qualitatively by describing the codes. Socio-cultural theories were used to interpret qualitative and quantitative results.

Despite their whole-class responsibilities, the participating TAs were found instructing children with SEND and less frequently collaborating with teachers for whole-class education. Also, the research findings suggested that the TAs did not effectively scaffold the thinking of children with SEND, regardless of being well-trained. Among the many teaching patterns, the research found that the TAs were correcting children's mistakes or supplying them with the answers to

academic tasks, thus closing down children's thinking and learning. The findings and their relation to TA conditions of employment and training are further discussed in the thesis.

IMPACT STATEMENT

The current research has potential operational impacts on practitioners and politicians. Alongside illustrating to Teaching Assistants (TA) and their colleagues (teachers and headteachers) effective teaching support strategies to children with Special Educational Needs and/or Disabilities (SEND), the research identifies viable policy changes for policymakers. Among those, it is worth noting the design of a new role for TAs (i.e., *de facto* whole-class teacher role) and changing the TA training programs by including more theoretical courses (e.g., child developmental theories).

Whilst these practical impacts of the project are germane to the research context (Italy), there are reasons to believe that they could have broader effects internationally. Countries having similar educational contexts, such as the UK, can equally benefit from the policy discussions raised in this thesis.

Furthermore, the research could promote more theoretical impacts. The nuanced research's conceptualisations, including the inclusion of socio-emotional support alongside academic instruction in the understanding of teaching effectiveness (see Chapter 2 for more detail), seemingly revisit the debates in the field. As such, the research could shift the way we talk about TAs and their effectiveness and promote new literature and political debates.

ACKNOWLEDGEMENTS

I wish to thank my research supervisors, Dr Matt Somerville, Dr Ed Baines, and Dr Julie Radford. Their critical comments shape the content of this work while promoting added thinking, exploration, and learning. It goes without saying that without their help, my understanding of the field and the current thesis would not be the same.

I am also indebted to the Department of Psychology and Human Development for its continuous support throughout the past years. Among the many, I am grateful for the assistance from Dr Paula Bosanquet, Dr Maria Kambouri and Dr Rob Webster, who provided feedback on the work at various stages and helped improve its content.

Insightful comments and support were also received from my (PhD student) peers. Among them, it is worth mentioning Francisco Duran Del Fierro. His philosophical background improved my understanding of epistemological matters and affected the nature of this research, giving it a more theoretical shape.

Finally, I am more than grateful for my friends and family's support, including my little niece, Giulietta. Despite having little understanding of academia, they have also shown immense confidence in me and my work. *Grazie mille, vi voglio tanto bene*. Last but not least, I give special thanks to my partner, Kristin, who was always there to assist me psychologically in addition to proofreading, proofreading, and again proofreading the work.

CHAPTER 1. INTRODUCTION	19
1.1. RESEARCH PROBLEM: TA DEPLOYMENT AND PRACTICE.....	20
1.1.1. <i>International context: the typical conditions of employment and training of TAs.....</i>	<i>20</i>
1.1.2. <i>Italian context: unique conditions of employment and training of TAs.....</i>	<i>24</i>
1.2. MY POSITION IN THIS STUDY	28
1.3. THE WAY FORWARD: THE STRUCTURE OF THIS THESIS.....	29
CHAPTER 2. SITUATING THE RESEARCH PROBLEM.....	31
2.1. INTRODUCTION	31
2.2. OVERVIEW OF THE EXISTING RESEARCH ON AND INVOLVING TAs	31
2.3. THE WIDER PEDAGOGICAL ROLE (WPR) MODEL OF TAs	36
2.4. THE SOCIO-CULTURAL PROBLEMATISATION OF THE MAIN CONCEPTS OF THE WPR MODEL	39
2.4.1. <i>TA preparedness: Socio-cultural theoretical principles of pedagogical and subject matters.....</i>	<i>41</i>
2.4.2. <i>TA deployment: TA class role and co-teaching practice.....</i>	<i>44</i>
2.4.3. <i>TA practice</i>	<i>45</i>
2.4.3.1. TA multi-dimensional practice	45
2.4.3.2. Effective teaching practices: scaffolding approaches.....	48
2.5. THE RE-DESCRIPTION OF THE WPR MODEL: A GUIDING FRAMEWORK FOR ACTION	54
CHAPTER 3. ITALIAN PRIMARY EDUCATION LANDSCAPE	57
3.1. INTRODUCTION	57
3.2. PRIMARY EDUCATION LANDSCAPE: PRIMARY PUBLIC AND PRIVATE SCHOOLING	57
3.3. TYPES OF CHILDREN WITH SEND ACROSS THE ITALIAN CLASSROOMS	61
3.4. TA CHARACTERISTICS	63
3.4.1. <i>TA demographics.....</i>	<i>63</i>
3.4.2. <i>TA (and teacher) conditions of employment and training.....</i>	<i>64</i>
3.5. CONCLUSION.....	70

CHAPTER 4. REVIEWING THE LITERATURE IN THE FIELD OF TA DEPLOYMENT, PREPAREDNESS AND PRACTICE	71
4.1. INTRODUCTION	71
4.2. TA DEPLOYMENT.....	71
4.2.1. <i>Literature review for studies in Italy</i>	71
4.2.2. <i>Literature review of international studies</i>	74
4.2.3. <i>Analysis of the reviews and research gaps</i>	78
4.2.3.1. Research question No. 1.	79
4.3. TA PRACTICE AND PREPAREDNESS	80
4.3.1. <i>TA multi-dimensional support</i>	80
4.3.1.1. Literature review for studies in Italy.....	80
4.3.1.2. Literature review of international studies	81
4.3.1.3. Analysis of the reviews and research gaps	86
4.3.1.3.1. Research question No. 2.	87
4.3.2. <i>TA pedagogical support (and preparedness)</i>	88
4.3.2.1. Literature review for studies in Italy.....	88
4.3.2.2. Literature review of international studies	89
4.3.2.3. Analysis of the reviews and research gaps	92
4.3.2.3.1. Research question No. 3	94
4.4. SUMMARY	94
CHAPTER 5. METHODOLOGY: THE LOGIC AND PROCESS OF INQUIRY.....	95
5.1. INTRODUCTION	95
5.2. SITUATING THE RESEARCH PHILOSOPHY: SOCIO-CULTURAL EPISTEMOLOGY	95
5.3. RESEARCH DESIGN: SEQUENTIAL MULTI-METHOD DESIGN	99
5.3.1. <i>Study 1: observation-based study</i>	102
5.3.1.1. Recruiting participants	103
5.3.1.2. Procedures	107
5.3.1.3. Data Analysis	109
5.3.1.3.1. Video data: (i) systematic observations.....	109
5.3.1.3.2. Video data: (ii) socio-cultural analysis of speech events	114
5.3.1.3.3. Field notes: thematic coding.....	118

5.3.2. <i>Study 2: Interview-based study</i>	119
5.3.2.1. Sampling logics.....	120
5.3.2.2. Participants: recruiting process and participants' characteristics.....	122
5.3.2.3. Procedure.....	124
5.3.2.3.1. TA questionnaire.....	125
5.3.2.3.2. Interviews.....	126
5.3.2.4. Data analysis.....	129
5.3.2.4.1. Questionnaire data: thematic coding and frequency analysis.....	129
5.3.2.4.2. Thematic analysis of interview data.....	129
5.3. ETHICS.....	133
5.3.1. <i>Data management policy</i>	134
5.4. SUMMARY.....	136
CHAPTER 6. STUDY 1 FINDINGS.....	137
6.1. INTRODUCTION.....	137
6.1.1. <i>Classroom characteristics: student numbers and characteristics</i> ...	137
6.1.2. <i>Participating TA: training and conditions of employment</i>	138
6.2. RESEARCH QUESTION 1.....	139
6.2.1. <i>Research Question 1.1</i>	139
6.2.2. <i>Research Question 1.2</i>	141
6.2.3. <i>Research Question 1.3</i>	142
6.3. RESEARCH QUESTION 2.....	147
6.3.1. <i>Research Question 2.1</i>	147
6.3.2. <i>Research Question 2.2</i>	150
6.4. RESEARCH QUESTION 3.....	157
6.4.1. <i>Research Question 3.1</i>	158
6.4.2. <i>Research Question 3.2</i>	158
6.5. SUMMARY.....	169

CHAPTER 7. STUDY 1 DISCUSSION.....	171
7.1. INTRODUCTION	171
7.2. MAIN FINDINGS: RESEARCH QUESTION 1	171
7.2.1. <i>Explanations for TAs' deployment</i>	172
7.3. MAIN FINDINGS: RESEARCH QUESTION 2	175
7.3.1. <i>Explanations for TAs' typical support pattern</i>	177
7.4. MAIN FINDINGS: RESEARCH QUESTION 3	179
7.4.1. <i>Explanations for the TA's pedagogical practice</i>	180
7.5. SUMMARY OF THE FINDINGS AND INTERPRETATIONS.....	183
7.6. STUDY LIMITATIONS AND FUTURE RESEARCH	184
CHAPTER 8. STUDY 2 FINDINGS	187
8.1. INTRODUCTION	187
8.1.1. <i>Participating TAs: demographics, training, and conditions of employment</i>	187
8.1.2. <i>Classroom characteristics: year groups and types of children</i>	188
8.2. RESEARCH QUESTION 1.....	190
8.2.1. <i>Research Question 1.1</i>	190
8.2.2. <i>Research Question 1.2</i>	193
8.2.3. <i>Research Question 1.3</i>	194
8.2.4. <i>Research Question 1.3</i>	195
8.2.4.1. <i>Co-teaching style</i>	195
8.2.4.2. <i>TAs' special role</i>	198
8.3. RESEARCH QUESTION 2.....	200
8.3.1. <i>Research Question 2.1</i>	201
8.3.2. <i>Research Question 2.2</i>	202
8.3.3. <i>Research Question 2.3</i>	204
8.4. RESEARCH QUESTION 3.....	205
8.4.1. <i>Research Questions 3.1. and 3.2</i>	206
8.4.2. <i>Research Question 3.3</i>	209
8.4.3. <i>Research Question 3.4</i>	213
8.5. SUMMARY	215

CHAPTER 9. STUDY 2 DISCUSSION.....	217
9.1. INTRODUCTION	217
9.2. MAIN FINDINGS: RESEARCH QUESTION 1	217
9.2.1. <i>Explanations for TAs' deployment</i>	218
9.3. MAIN FINDINGS: RESEARCH QUESTION 2	221
9.3.1. <i>Explanations for TAs' typical support pattern</i>	222
9.4. MAIN FINDINGS: RESEARCH QUESTION 3	225
9.4.1. <i>Explanations for the TAs' pedagogical practice</i>	225
9.5. STUDY LIMITATIONS AND FUTURE RESEARCH	226
9.5.1. <i>Questionnaire limitations</i>	228
9.5.2. <i>Interview limitations</i>	228
9.6. CONCLUSION	229
CHAPTER 10. CONCLUDING REMARKS	231
10.1. INTRODUCTION	231
10.2. THE NEW WPR FRAMEWORK OF TAs	231
10.3. IMPLICATIONS FOR POLICY AND PRACTICE	234
10.3.1. <i>TA class role: a quest for policy clarification</i>	234
10.3.2. <i>TA support strategies: multi-dimensional training and national curriculum</i>	237
10.3.3. <i>TA pedagogical support: the importance of theoretical training</i>	239
10.3.4. <i>Maximise the societal impact of the research results and policy implications: my plan for dissemination and future research</i>	240
10.4. SUMMARY AND FINAL THOUGHTS.....	243
REFERENCES.....	247
APPENDIX A. FILED NOTES EXAMPLE.....	265
APPENDIX B. QUESTIONNAIRE (TRANSLATED VERSION) SECTION 1 AND 2.....	266
APPENDIX C. HEADTEACHER CONSENT FORM/QUESTIONNAIRE	283
APPENDIX D. SYSTEMATIC OBSERVATION: CODING PROCESS	293
APPENDIX E. INTER-CODER-AGREEMENT (ICA)/EVENT SAMPLING	299
APPENDIX F. TRANSCRIPTION RULES FOR CLASSROOM INTERACTIONS.....	301

APPENDIX G. CODEBOOK SOCIO-CULTURAL SPEECH ANALYSIS.....	302
APPENDIX H. INTERVIEW SCHEDULE	304
APPENDIX I. CODEBOOK THEMATIC ANALYSIS OF INTERVIEWS	311
APPENDIX J. INTERVIEW EXTRACTS	315
APPENDIX K. TRANSLATION INTERVIEW EXTRACTS.....	316
APPENDIX L. CONSENT FORMS	324

LIST OF TABLES

<i>Table 1 2019 National statistics: public and private schools</i>	58
<i>Table 2 2019 National statistics: children with SEND in Italian primary schools</i>	62
<i>Table 3 Teaching personnel age distribution</i>	63
<i>Table 4 Master’s degree in primary education (MPE): curriculum</i>	66
<i>Table 5 Master’s degree in special education (MSE)</i>	68
<i>Table 6 Research questions, tools, and data analysis</i>	101
<i>Table 7 The characteristics and pseudonyms of the participants</i>	105
<i>Table 8 Categorisation of SEND - Code of Practice 2014</i>	106
<i>Table 9 Observational schedule of the systematic observations</i>	112
<i>Table 10 Cohen Kappa scores for ICA / Socio-cultural analysis of speech</i> <i>events</i>	117
<i>Table 11 Saturation table</i>	121
<i>Table 12 The characteristics and pseudonyms of the participants</i>	123
<i>Table 13 Cohen Kappa scores ICA / Thematic analysis of interviews</i>	132
<i>Table 14 Classroom characteristics</i>	137
<i>Table 15 Systematic observation of the classroom’s working context</i>	141
<i>Table 16 Gloria’s types of support for Josh</i>	148
<i>Table 17 Gloria’s type of interactions during pedagogical support and task</i> <i>engagement support to Josh</i>	149
<i>Table 18 Types of interaction between Gloria and Josh</i>	158
<i>Table 19 Age distribution/Latest education achievement</i>	188
<i>Table 20 Special needs of the participating children with SEND</i>	189
<i>Table 21 Co-teaching styles</i>	192
<i>Table 22 Time-logs: the deployment of TAs inside the classroom</i>	193
<i>Table 23 Private interactions</i>	194
<i>Table 24 Teacher training traps</i>	198
<i>Table 25 Factors shaping TA roles</i>	200
<i>Table 26 TA support in different settings</i>	201
<i>Table 27 TA support strategies</i>	203
<i>Table 28 Availability of tools for children with SEND</i>	207
<i>Table 29 Frequencies of TAs’ pedagogical practice’s codes – TA interviews</i>	209
<i>Table 30 Supplying the answer/repairer: “A good strategy.”</i>	210

<i>Table 31 The TAs' judgement of Gloria's practice</i>	<i>213</i>
<i>Table 32 Factors shaping TA practice: focus on TA training – TA interviews .</i>	<i>215</i>
<i>Table 33 Research contributions and confirmations</i>	<i>227</i>
<i>Table 34 Key research contributions and implications</i>	<i>241</i>
<i>Table 35 Observational schedule (i): TA deployment</i>	<i>293</i>
<i>Table 36 Observational schedule (ii): TA types of support.....</i>	<i>294</i>
<i>Table 37 Observational schedule (iii): TA types of interactions</i>	<i>295</i>
<i>Table 38 Observational schedule (iii): location and working context.....</i>	<i>296</i>
<i>Table 39 Observational schedule (iv): TA (pedagogical) interactions</i>	<i>298</i>
<i>Table 40 Inter-rater agreement: measuring Kappa with a time-window analysis</i>	<i>300</i>
<i>Table 41 Thematic codes classroom interactions: TA deployment</i>	<i>302</i>
<i>Table 42 Thematic codes classroom interactions: TA support strategies</i>	<i>303</i>
<i>Table 43 Thematic codes classroom interactions: TA pedagogical support ...</i>	<i>303</i>
<i>Table 44 Thematic codes (interviews): co-teaching styles.....</i>	<i>311</i>
<i>Table 45 Thematic codes (interviews): TA class role.....</i>	<i>312</i>
<i>Table 46 Thematic codes (interviews): TA support strategies</i>	<i>313</i>
<i>Table 47 Thematic codes (interviews): TA pedagogical preparedness.....</i>	<i>314</i>

LIST OF FIGURES

<i>Figure 1 The WPR role model of TAs</i>	38
<i>Figure 2 The learning cycles</i>	47
<i>Figure 3 Scaffolding Framework</i>	53
<i>Figure 4 Socio-cultural re-description of the WPR model</i>	55
<i>Figure 5 Co-Teaching Styles</i>	77
<i>Figure 6 TA multi-dimensional practice</i>	85
<i>Figure 7 Sequential multi-method design</i>	100
<i>Figure 8 Camera and observer locations during the recording</i>	108
<i>Figure 9 Gloria's training – self-reported data</i>	138
<i>Figure 10 Classroom layout</i>	140
<i>Figure 11 The findings of TA deployment in the Wider Pedagogical Role model</i>	175
<i>Figure 12 The findings of TA deployment and support strategies in the Wider Pedagogical Role model</i>	178
<i>Figure 13 The findings of TA deployment and practice in the Wider Pedagogical Role model</i>	184
<i>Figure 14 Sample geographical distribution</i>	187
<i>Figure 15 Factors shaping co-teaching practices</i>	197
<i>Figure 16 The new WPR role framework of TAs</i>	234

LIST OF EXTRACT

<i>Extract 1 TAs and Josh's public interaction: TA's proactive intervention in the whole-class talk</i>	143
<i>Extract 2 TA stereo teaching practice</i>	151
<i>Extract 3 Searching word: Multiple Other-Initiated Other-Repair interactions</i> .	159
<i>Extract 4 Grammar exercise: multiple repair sequences</i>	164

LIST OF ABBREVIATIONS

ASD	Autism spectrum disorder
C&I	Communication and Interaction
C&L	Cognition and Learning
CA	Conversation Analysis
F	Feedback (Follow-up)
HDE	High School Diploma in Education
I	Initiation
IEP	Individual Educational Plan
INSET	In Service Training
MIUR	The Italian Ministry of Education
MLD	Mild Learning Difficulties
MPE	Master of Science in primary education
MPSS	Main Pupil Support Study
MSE	Master of Science in Special Education
OTOA	One Teaches and The Other Assists style
OTOB	One Teaches, and the Other Observes style
P&SN	Physical and/or Sensory Needs
PDP	Personal Didactical Plan
PMLD	Profound & Multiple Learning disabilities
R	Response
SEMH	Social, Emotional and Mental Health difficulties
SEN	Special Educational Needs
SEND	Special Educational Needs and/or Disability
TA	Teaching Assistant
TQ	Teacher Questionnaire
WPR	Wider Pedagogical Role
ZPD	Zone of Proximal Development

Chapter 1. Introduction

The present research is part of a significant strand of literature exploring the mainstream education of primary-school children with Special Educational Needs and/or Disabilities (SEND). The research's first aim is to better understand the role and assistance of the practitioners, known as Teaching Assistants (TA), directly intervening in the instruction of children with SEND. The second and conclusive aim is to introduce novel theories of what educational factors, including TA conditions of employment and training, inhibit or enhance the teaching performance of TAs.

In anticipation of future discussions, it is worth clarifying the meaning of TAs and children with SEND from the many different ones of the literature. In this research,

- The term “TAs” is used to refer to all support staff who directly intervene in the education of school children with SEND, also known as “classroom assistants,” “learning support assistants,” “teacher aides,” “paraprofessionals,” “support teachers,” and “specialist teachers.”
- The term “children with SEND” incorporates vast categories of children with learning, social and emotional difficulties that need extra healthcare and/or educational support. Extra healthcare and/or educational support consists of a wide array of assistance specific to the children with SEND in addition to the general healthcare and school provisions (e.g., in-classroom individual assistance from TAs or teachers, physiotherapy, and hearing help).

In a historical fashion, the following section provides added information on the education of children with SEND and the role of TAs internationally. Next, the section moves to a more detailed discussion of the educational context in which this research was carried out, notably the Italian education system. The section concludes by suggesting how Italy, more than any other international context, could help achieve the above research objectives. Finally, Section 1.2. discusses my personal motivation in developing this work, and Section 1.3. closes the chapter by describing the following chapters' content.

1.1. Research problem: TA deployment and practice

1.1.1. International context: the typical conditions of employment and training of TAs

Over the last decades, there has been a global commitment to guarantee formal education to all children regardless of their health, ethnicity, social and learning status. The Convention on the Rights of the Child was among the first international agreements setting out the international legal right for every child to benefit from primary and secondary education (Global Monitoring Report team, 2010). A few years later, the Dakar Framework for Action went even further by calling upon nations to define clear international “inclusive” goals and address the exclusions from regular education of marginalised groups, such as nomads, ethnic minorities, and the disabled (Ainscow & Booth, 1998).

Within this international “inclusive” agenda, the international community started taking the education of children with SEND in hand. In 1994, the Salamanca Statement and Framework for Action on Special Education (SSFASE) inaugurated a new season of international accords asking for more equitable educational conditions for children with SEND (Mazurek & Winzer, 2000). In the

SSFASE, national ministers agreed to remove any barrier to formal schooling for children with SEND (e.g., infrastructural and financial barriers). They also decided to dismantle separate educational settings, including but not limited to schools catering to the education of just children with SEND (e.g., special schools and racially segregated schools). Where possible, the education of children with SEND was to be moved to mainstream schools and classrooms.

In the aftermath of the SSFASE, more and more children with SEND benefited from mainstream education (EFA Global Monitoring Report team, 2015). An illustration of this was a 5% increase in regular schools' enrolments of children with SEND across European countries between 2014 and 2018 (European Agency for Special Needs and Inclusive Education, 2017, 2020). Similar patterns were also seen in the USA and Australia (Unesco, 2021; World Health Organization, 2011). Hence, mainstream schools across the world found themselves in the situation of dealing with progressively more children with SEND.

To face this ever more relevant challenge, schools implemented new pedagogical solutions. Among the many, they introduced special educational programs for children with SEND, also referred to as Individual Educational Plans (IEPs) (Armstrong, 2010). IEPs laid out unique academic and socio-emotional goals for the children with SEND. Also, IEPs listed the type of extra educational support suitable for each of them, for instance, individual classroom instruction from TAs or speech therapists, and personal and physical care (e.g., being around school safely, going to the toilet, and eating).

Moreover, school heads started employing additional teaching resources, known as TAs. TAs were primarily used across classrooms that include children with

SEND (i.e., inclusive classrooms). They received the critical duty of delivering individual extra help for children with SEND. Rarely were they used in support of classroom teachers to deal with broader classroom management issues, such as preparing the classroom materials, managing the behaviours of disruptive children, and substituting them when absent (Navarro, 2015). In the meantime, class teachers kept the educational responsibilities of whole classes. Classroom teachers also had the additional duties of: a) planning the IEPs of children with SEND in collaboration with the children's parents and other school professionals (e.g., educational psychologists and SEN coordinators); and b) designing and overseeing the specific classwork of TAs, such as the types of assistance and they supply to children with SEND (Giangreco et al., 2014; Skipp, 2019).

In the late 1990s, Giangreco and colleagues pioneered studies into the role of this "new" teaching resource (TAs) and how it could shape whole class teaching dynamics (e.g., Giangreco & Broer, 2005; Giangreco & Doyle, 2007; Giangreco et al., 1997). Many of their research studies across the USA found that TAs play a crucial role in the education of children with SEND, somewhat echoing their more typical contractual duties (Navarro, 2015). Meanwhile, the teachers rarely, if ever, assist children with SEND individually, preferring the management of the whole class (Giangreco et al., 2014).

Giangreco and colleagues' work did not go beyond that (Blatchford et al., 2009). He and his colleagues did not produce compelling evidence on TA instructional practices (e.g., tactics to support children's task completion). Nor did they investigate how the TA role could impact the learning of children with and without SEND (Navarro, 2015). Similar considerations were also made regarding other international studies around the same era (Webster, 2022). Hence, little

information existed regarding the TA practice worldwide as of the early 2000s (Giangreco et al., 2014).

To address this knowledge gap, Blatchford, Russell, and Webster (2011) designed the Deployment and Impact of Support Staff in Schools (DISS) project. Drawing from classroom observations and TAs' and teachers' surveys, the project examined TAs' conditions of employment, their classroom activities, and their impact on pupils' learning on a larger, previously unseen scale (Navarro, 2015). Similarly to what seemingly happened in the USA, the DISS project showed that TAs' key contractual responsibility of directly intervening in the education of children with SEND was replicated in their practice. TAs commonly assisted children with SEND in groups or individual settings, inside or outside classrooms (Pinto et al., 2019). In the meantime, classroom teachers dealt with the whole-class instruction and, where possible, supervised TAs' work.

The DISS project also produced a second and quite surprising result. Blatchford and colleagues (2011) found that children with SEND progress less than their peers in mainstream and special classes. Alarmingly, they performed worse academically when receiving increasingly individual assistance from TAs (Blatchford, 2009; Giangreco et al., 2014). Hence, the researchers concluded that the deployment of TAs could harm rather than help the education of children with SEND, especially those who spend the most time in a one-to-one support mode with them (Baines et al., 2015; Giangreco & Broer, 2005).

To explain this unexpected result, Blatchford and colleagues (2011) came up with two theories. The first suggested that the TA one-to-one support model for children with SEND might cause the children to be hesitant to complete classroom tasks alone (Baines et al., 2015; Efthymiou & Kington, 2017). At worst,

this could make them utterly passive in dealing with the classwork completed then by the TAs themselves. As a result, children minimise their (cognitive) involvement in solving the task and consequently constrain their learning potential.

Secondly, the researchers believed that the TAs' insufficient, if any, teacher training may be contributing to their inadequate performance and children's minor learning (Giangreco et al., 2014). An illustration of this was the adverse impact of insufficient training on the appropriateness of the information the TAs deliver to children with SEND, such as algebra and grammar (Blatchford et al., 2011). Hence, Blatchford and colleagues (2011) concluded that the TAs' inadequate training could further harm the education of children with SEND (see also Giangreco et al., 2014).

1.1.2. Italian context: unique conditions of employment and training of TAs

Whilst the discussions presented earlier for the UK and USA have broad applicability globally, they do not represent the entire picture of TA deployment and practice internationally (Giangreco et al., 2014). Alongside a few others (e.g., Norway and Spain), Italian primary education displays "different" characteristics of TA employment and training, potentially echoing TA nuanced pedagogical practices (Ianes, 2015). In this subsection, the detailed description of unique Italian educational conditions for TAs (and the education of children with SEND) provides a rationale for carrying out the current research in Italian primary schools.

The mainstream education of children with SEND has a long history in Italy. Already in 1971, law No. 118 guaranteed the legal right for all children with SEND

to be enrolled in mainstream schools (Canevaro et al., 2009). In 1977, the legislators took a few steps forward. The first was to abolish the then-existing segregated settings for the education and care of children with SEND (e.g., special schools and asylums) (Dal Passo, 2015). The second and consequent legislation consisted of establishing mainstream education for all children with SEND regardless of the severity of their needs (Ianes & Macchia, 2008).

Subsequently, children with SEND were largely included in mainstream settings (D'Alessio, 2011; 2013). In 2001, the Ministry of Education reported a stable increase in enrolments of children with SEND in mainstream settings from 1989 to 1999 (Ministero della Pubblica Istruzione [MPI] & EDS, 2001). Contemporary, special schools drastically diminished their role in the education of children with SEND (Borgonovi & Ciletti, 2018).

During the 1970s, the TAs, known nationally as “support teachers”, were also emerging (see Giangreco [2012] for the rationale of the TA abbreviation). In 1977, law No. 517 was the first legislation mandating the TAs’ employment across schools enrolling children with SEND. Furthermore, the law identified the TAs’ role as that to “*cater individual assistance [...] to the whole class and, in particular, to children with learning difficulties*” (Gazzetta Ufficiale, 1975, art. 9). Despite this, no other and more specific dispositions were given, for instance, whether TAs had to take part in the design of the class curriculum; or if they had to deliver the instruction “just” to children with SEND. Nor did the law provide any information as to TA deployment, notably, whether schools had to assign TAs to classrooms by themselves or in addition to other teachers. Thus, schools started employing TAs without having any clear idea of how to use them (Canevaro et al., 2009).

Soon after, the legislators provided more clarity. They designed unequivocal legislative fundamentals of TA work, which are valid until this day. First, schools were instructed to deploy TAs in addition to and not alternatively to classroom teachers (Amatori, 2019). Second, TAs should have been preferably deployed across classrooms that include children with SEND (D'Alessio, 2012). Third, TAs received whole-class duties in partnership with classroom teachers (lanes, 2015). Thus, TAs and classroom teachers were (and are) advised to collaboratively design the classroom curriculum. Also, they altogether plan the IEPs for children with SEND, with the help of their parents and, where appropriate, school educational psychologists (Canevaro et al., 2009). Inside their classroom, TAs and teachers are invited to jointly collaborate in the instruction of the whole class and promote variable teaching styles according to the children's needs, for example, sharing whole class instruction, dividing the classroom into two big groups in order to teach them two different topics, or more (Merlo, 2016). Rarely do the legislators advise schools to assign TAs (or teachers) to support the classwork of children with SEND individually. This happens in the circumstance that children with SEND have a separate curriculum from the rest of the class and thus require continuous individual assistance to deal with it (lanes, 2014). As a result, TAs might address the extra educational needs of children with SEND equally to most international colleagues (e.g., learning support assistants in the UK), whereas teachers manage the education of the whole class. That being said, Italian teachers and TAs have the pedagogical freedom to do otherwise and when this is justified by pedagogical reasons (Merlo, 2016). For instance, they might decide to equally share their time in individually supporting children with SEND. This way, they avoid the teachers' excessive emotional attachment to a single child and the associated risk of including not solely educational evaluation

in their teaching, for example, designing unchallenging tasks, increasing their recess time and limiting working hours (Borgonovi & Ciletti, 2018).

In the 1970s, the legislators also set high-level qualifications and training standards for TAs (lanes, 2014; lanes et al., 2013). Since then, primary-school TAs' job requirements included a master's degree in special education in addition to general teaching qualifications. Whereas secondary-school TAs have been required to achieve a master's degree in special education as an alternative to the teachers' compulsory initial qualifications specific to the subject they teach (e.g., mathematics, biology, and literacy). It follows that "Italian" primary-school TAs have been extensively trained, even more so than their teaching colleagues (lanes, 2014).

Despite the unique conditions of training (and employment), a significant gap in the research remains concerning how these conditions impact TA deployment and practice across Italian schools, particularly primary schools (Kanter et al., 2014). Much of the existing international research on TA deployment and practice has been carried out in countries where TAs receive limited training, and a role focused on assisting only children with SEND. The similarity of such countries led researchers to similar findings and explanations of TA deployment and practice (e.g., Blatchford, 2009; Giangreco et al., 2014). Hence, the current PhD study aims to explore TA deployment and practice in an extraordinary and relatively unexplored Italian primary school context to produce a nuanced understanding of the field.

1.2. My position in this study

I, the author, am an Italian researcher with a background in the field of education, social and health care of children with SEND. In the past, I have explored the role that healthcare providers and schools play in assessing the education and social and health care needs of children with SEND (see Borgonovi & Ciletti [2018] for details). Also, I investigated the educational experience of a small group of children with SEND via classroom observations and interviews with teaching practitioners. This more educational work made me aware of the indispensable yet relatively unexplored role that TAs (and teachers) play in the education of these children: thus, it informed the design of this study.

Furthermore, I feel that my University College of London research community, particularly the learning exchange with my PhD supervisors (Dr Julie Radford, Dr Matt Somerville, and Dr Ed Baines), shaped the way I went about researching the topic and developing the research methodology. Of note is that two of my supervisors took part in the most influential research project on TAs (the DISS project). They embraced the DISS project's concepts and theorisations and a focus of analysis on the pedagogical role of TAs. Thus, they significantly contributed to informing my PhD research scope and aims. While this potentially results in overlooking other less researched aspects of TA work (e.g., TA support to children with SEND during recess time), the use of the DISS project's well-known concepts and methodologies (or their redefinition) might enhance the understanding of this text and help the reader navigating the unique and insufficiently explored research context (Italian primary education). This way, the research might generate knowledge of easy access and thus of possible use in academia and the wider society (e.g., policymakers).

1.3. The way forward: the structure of this thesis

In this introductory chapter (Chapter 1), I provided an international overview of the role of TAs in the education of children with SEND. Also, I laid out the research aims and the rationale for carrying out the study across Italian primary schools.

The following chapters are designed as follows:

- Chapter 2 situates the key research interests and concepts in the field of study as well as the research philosophy.
- Chapters 3 and 4 examine the Italian education system. Chapter 3 describes the conditions of employment and training of TAs in Italy. Chapter 4 explores the existing literature on the deployment and practice of TAs from which the research questions arise.
- Chapter 5 further discusses the theoretical underpinnings of current research and how they relate to the research methodology. Key justifications for the research design, procedures, and data analysis are also laid out. Finally, the chapter ends by discussing the research's ethical concerns.
- Chapters 6 and 7 explore and discuss the results from the classroom observations of a single primary-school TA (Study 1). Chapter 7 concludes by listing the limitations of the study.
- Chapters 8 and 9 describe and discuss the second study's findings, drawing from self-report surveys and interviews with 31 primary-school TAs (Study 2). At the end of Chapter 8, a discussion of the limitations of Study 2 is provided.

- Chapter 10 gathers the research findings and theorisations in a novel conceptual framework, from which the implications for policy and practice arise.

Chapter 2. Situating the research problem

2.1. Introduction

This chapter initially describes the main themes and perspectives of analysis of TA classwork (Section 2.2.). It also presents the key research themes and concepts from the broader research field of TA literature. For this purpose, I use the Wider Pedagogical Role model of TAs (henceforth the WPR model): a theoretical framework explaining TA deployment and practice introduced in the field's most significant research study, the Deployment and Impact of Support Staff in Schools (DISS) project. The empirical background, alongside its relevance for many international contexts (Giangreco et al., 2014; Navarro, 2015), gives the WPR model a substantial degree of credibility. More detailed information on the model's terms and relationships - along with the DISS project - is provided in the following section. Next, Section 2.4. elaborates on and potentially challenges some of the core concepts of the WPR model (e.g., TA preparedness and deployment). As a result, a nuanced re-description of the WPR model is achieved (Section 2.5.), upon which the hypotheses for the deployment and practice of TAs in the research context (Italian primary education) arise.

2.2. Overview of the existing research on and involving TAs

The wide array of tasks carried out by TAs inside and outside the classrooms (such as supporting teachers, the whole class, and supporting children with SEND) and their unique conditions of employment and training compared to teachers and other school professionals, has generated a large body of literature focused on and involving TAs. One focus been exploring the diverse roles that TAs play in support of the "inclusion" of children with SEND in the mainstream classroom context, namely: assisting the children in taking part in classroom activities and physical education, for instance, by moving wheelchairs for children

with physical disabilities around the schools and classrooms (Canevaro et al., 2009; Navarro, 2015); and ensuring that children without SEND are aware of their peers' difficulties in order to build a culture of understanding and help towards their peers with SEND. This might create the conditions for improving their social interactions and relationships (lanes, 2014).

That being said, research has also highlighted issues in this field. In two large-scale research in UK primary- and secondary-schools, Webster and Blatchford (2013; 2017) suggested that TAs' proximity to children with SEND and their continuous one-to-one support might separate them from peers and teachers and thus the entire classroom dynamics. Ultimately, this might result in difficulties in structuring positive social interactions and relationships with anyone but the TAs (Giargreco et al., 2014). Similar results were also found in research in the USA. For instance, Giargreco (2010) found that TAs and students with SEND are often seated at the back or side of the room, physically separated from the class. There, TAs instruct and support the classwork of children with SEND in a one-to-one mode and rarely, if ever, in group settings with peers. Thus, TA deployment and teaching support seemingly create conditions for children with SEND to be isolated from classroom dynamics and peer interactions. To make things worse, Giargreco (2010) suggested that the classroom presence of TAs and the fact that children with SEND are the sole pupils working with them might make these children stand out negatively in the perceptions of their peers (e.g., being privileged or different children). This might further damage their ability to engage in interactions with peers and build positive social relationships.

Perhaps, the conflicting evidence as to TA support for children's classroom inclusion might be explained on the basis of the type of children with SEND the

TAs work with (Borgonovi & Ciletti, 2018). Whilst children with severe educational and physical needs might have significant difficulties in independently taking part in classroom activities and thus benefit from the TA's physical and social liaising with peers, children with milder needs are largely able to participate unassisted in the classroom activities; hence they might feel the excessive control of TAs over their activities a barrier to their social relationships and interactions. More research is nonetheless needed to confirm this tentative argument.

A second strand of literature on TAs explored their "non-teaching" activities (McAnuff et al., 2022). In many international countries, these include assistance to classroom teachers with clerical and administrative tasks, such as processing exam results, collating pupil reports, administering exams, managing pupil data, and minuting school meetings (Navarro, 2015). In a large-scale research study in the UK, this wide array of non-teaching tasks reduced teachers' workload (Blatchford et al., 2011). It also allowed teachers to focus on teaching activities, such as lesson planning and instruction (Blatchford et al., 2011).

In other educational contexts wherein TAs have a teaching status (Italy), TAs are nevertheless expected to share these organisational and clerical commitments with classroom teachers (lanes, 2014). Whilst this collaboration has rarely been explored in research, it might nonetheless improve the work schedules and reduce the stress of both professionals (Canevaro et al., 2009).

Other TA "non-teaching" activities also included assistance with children's emotional status and health (Navarro, 2015). In particular, literature found that TAs (and teachers) play an important part in promoting children's self-talk and positive emotions, for instance, after receiving poor marks (lanes, 2014). This

reassurance helps children to deal with negative emotions (such as sadness) and be ready to learn new content. In other instances, TAs reported supervising children's behaviours during break- and lunch-times and protecting their safety (and health) from bullying and harassment (Baines & Blatchford, 2019). A few studies have also shown that TAs might supervise personal care (e.g., washing hands) or supply medicines to children with and without SEND (McAnuff et al., 2022). Albeit this area of research has potentially significant implications for the children's welfare and well-being, there is limited evidence to compute the extension of these TA practices and their impact on children (McAnuff et al., 2022).

A third strand of literature regarding TAs has examined their "unique" conditions of employment and how these might impact their well-being (and preparedness). In the UK, the USA and Australia, TAs typically work for long hours and have low pay (Navarro, 2015). What is more, they might be requested to carry out additional tasks outside their working schedule (Giangreco et al., 2014). For instance, research in the UK found that teachers commonly supplied induction or instruction to TAs regarding their classroom role and types of support to provide to children in training sessions after their work hours (Blatchford et al., 2011). Among other things, these "unfair" conditions of employment might be expected to affect their well-being and stress negatively (Blatchford et al., 2011).

In other educational contexts (such as in Italy), TAs have competitive salaries and contractual conditions similar to teachers (see Section 3.4. for more details). Nonetheless, research pertaining to Italy indicates that the name of the TA (i.e., support teachers), and the slightly different employment conditions than classroom teachers, might negatively impact their well-being via their deployment

styles (Ianes, 2014). In particular, a) employing TAs only across classrooms with children with SEND and b) their potential classroom use in dealing with the extra individual needs of these children seemingly creates the perceptions amongst laypeople (and school professionals) that TAs have fewer instructional responsibility compared to classroom teachers (Ianes, 2014). Thus, this perception of lower teaching status might adversely impact TAs' job satisfaction and well-being (Merlo, 2016). Also, it could reduce the professional attraction for the role as well as cause the frequently observed phenomenon across Italian schools of TAs switching their job to classroom teachers (Borgonovi & Ciletti, 2018). Of note, TA job conversion to a teacher role is relatively straightforward due to the similar training and contractual conditions of TAs and teachers (see Section 3.4. for more details). More research is nonetheless needed to confirm the role of socio-cultural perceptions of laypeople on TA well-being and its impact on TA role conversion.

The final strand of research involving TAs explored their pedagogical role. In this field, international research found that TAs supported the education of children with (and more rarely without) SEND inside and outside their classroom (Webster, 2022). Whilst significant research highlighted issues with the ways in which TAs assisted the education of these children, there are also examples of TAs a) adequately promoting children's learning of academic concepts (Radford et al., 2015), or b) empowering them with relevant cognitive means to reach the solutions of tasks and learn by themselves, for example, what questions should they ask themselves to deal with classroom tasks correctly (Radford et al., 2013).

This PhD aims to contribute to this latter strand of literature due to its important and direct implications on the education of children with SEND. Other themes of

analysis explored in this overview (such as TA support to the classroom inclusion of children) will be helpful for the reader to frame the complexity of TA work. Where possible, these issues will be further discussed in the following sections and chapters to explain TA deployment and teaching performance (e.g., TA conditions of employment). In the following section, an in-depth exploration of one of the most significant studies exploring the pedagogical role of TAs, the DISS project, will be used to highlight critical thematic domains of analysis (such as TA deployment and practice). These variables will inform the scope and the interest of this research.

2.3. The Wider Pedagogical Role (WPR) model of TAs

The DISS project was designed on a large scale to obtain reliable data on job descriptions, training, and activities of school support staff in the UK, such as TAs, secretaries, and assistant headteachers. Its objective also included an in-depth exploration of the deployment and practice of the support staff working in classrooms, the TAs, and their impact on children's academic progress. The research comprised two strands covering primary and secondary schools, and special schools across England and Wales. Strand 1 relied on large-scale questionnaires completed by headteachers (about 6,000), support staff (about 7,500), and teachers ([TQ] about 3,000). Strand 2 involved classroom observations, interviews with schoolteachers and TAs across 65 schools, and the Main Pupil Support Study (MPSS). The MPSS collected evidence from demographics of the school children (the national School Census) and from an updated version of the teacher questionnaire (TQ), where information regarding the academic progress of nearly 7,500 children and a quantification of the support they receive from TAs (frequency of support) were collected.

As a result of strand 1, Blatchford, Russell, and Webster (2011) found that UK school support staff have many responsibilities (e.g., administrative and cooking). The most frequent job (TA) was the individual pedagogical support for children with SEND. TA classwork was supervised by teachers, who contemporarily dealt with the whole-class instruction. TAs were also found to have rarely earned any entry-level teaching qualification. Nor did their contracts seem to provide them with paid time for in-service training (INSET).

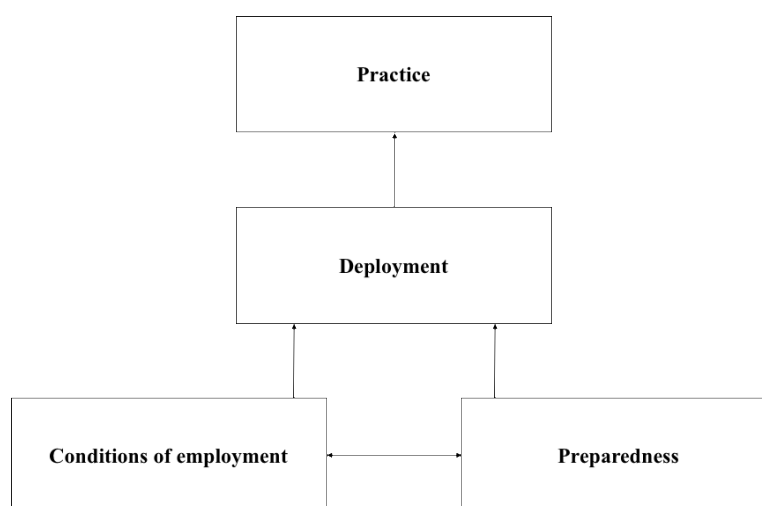
Strand 2 complemented the research by depicting an alarming picture of TA practice. First, the MPSS showed that the more time the participating TAs spent individually supporting the children, the less they progressed. Second, the classroom observations reported that the TAs commonly provided incorrect explanations to children with SEND concerning subject matters (e.g., grammar and mathematics) or; that they supplied ineffective pedagogical assistance, for instance, immediately supplying children with solutions to classroom tasks, thus minimising their effort and learning.

To explain TA (ineffective) practices and relate them to wider educational conditions, Blatchford and colleagues (2011) developed the WPR model. A fundamental aspect of the model (Figure 1) linked TAs' employment duties to their classroom deployment and, ultimately, to practice. In the UK, this meant that the one-to-one support model devised in the TA conditions of employment might not stimulate children to learn. Instead, it made children passive in completing tasks and over-relying on TA assistance; thus, TAs minimised their effort and learning (for similar theorisation, see Giangreco, 2010). Hence, Blatchford and colleagues (2011) recommended that schools design TA conditions of

employment, promoting a wider class deployment of TAs (along with discouraging their individual assistance to children with SEND).

The second and conclusive key pattern of the WPR model was more straightforward. It indicated that the TA practice could be shaped by how contexts promote TA preparedness. As illustrated in the DISS project's findings, the school policies, including but not limited to the conditions of employment limiting INSET, do not seem to encourage TA teaching preparedness, compromising further TA teaching performance and children's learning. For these reasons, Blatchford and colleagues (2011) urged schools to improve the training for TAs immediately.

Figure 1 The WPR role model of TAs



Note. Adapted from Blatchford et al. (2011, p. 45).

In short, the WPR model identified the wider educational policies as potentially enhancing the TA teaching performance (in addition to describing and explaining the TA practice in the UK). With this in mind, the current research was designed to examine the relevance of the model in the Italian educational context, where TAs' performance supposedly thrives due to their wealth of training and whole-class responsibilities. Potentially, this exploration might promote significant

implications for policy and practice, alongside a nuanced interpretation of the field of study.

2.4. The socio-cultural problematisation of the main concepts of the WPR model

While the earlier discussion focused on the critical relationships among the WPR model's components, this section discusses in-depth each of its "*three main components: first, the preparedness of TAs and teachers, in terms of their training for the role (which will influence pedagogical and subject understanding) [...]; second, the deployment of TAs [...]; and third, the practice of TAs, in terms of the nature and quality of their interactions with pupils*" (Blatchford et al., 2011, p. 46).

In addition, the section relies on socio-cultural theories to elaborate on, develop, and potentially challenge their original understanding (see Section 5.2., for the rationale of selecting socio-cultural approach in the current study). This way, a nuanced understanding of the WPR model arises. In anticipation of this discussion, a succinct overview of socio-cultural theories and theorists is provided.

Many research papers and books predominantly associate socio-cultural theories with the work on language and cognitive development of a Russian educator named Lev Vygotsky [1896 – 1934] (Derry, 2013). Some researchers go even further by considering Vygotsky as the father of socio-cultural theories (Derry, 2013).

Despite this, socio-cultural theories are arguably not an invention of Vygotsky (Glassman, 2001). Nor are socio-cultural theories exclusive to philosophers of the 20th century. Many other philosophers, perhaps not directly connected with

socio-cultural theories' terms, have worked in the same theoretical strand. John Dewey [1859 – 1952] and Donald Alan Schön [1920 – 1997], and the German Georg Wilhelm Friedrich Hegel [1770 – 1831] are among those (Dykhuizen, 1973; Hegel, 2018; Helferich, 1979; Newman, 1999).

The work of John Dewey has a considerable influence on the current research – and perhaps on Vygotsky's as well (Glassman, 2001). Dewey was an American educational psychologist, philosopher, and political activist (Dykhuizen, 1973). His works coherently gathered wide-ranging socio-cultural principles, going from the epistemological nature of knowledge to child development (Dykhuizen, 1973).

Broadly, his theoretical discussions can be summarised as follows:

- *Knowledge is a conglomerate of cultural concepts and beliefs informing human behaviours.* For example, the (western) cultural principle of equality guides teaching and parenting, thereby encouraging parents and teachers to share equal time and attention among their pupils. As being culturally specific, cultural values (and behaviours) differ from community to community.
- *Interaction with the cultural community shapes the individual self and knowledge.* In Dewey (1958), humans have a derivative (cultural) nature from the multiple interactions with people's socio-cultural values; and the learning that these interactions involve (see also Vygotsky, 1962).
- *Cognition is crucial for learning.* Individuals learn when they reflect on logical underpinning socio-cultural behaviours and academic operations (e.g., anyone learns that speaking loudly in public spaces is not polite by thinking about the logical - and harmful - consequence of such an action

for the wider public). As they do so, they make logical cultural principles the guidelines for their actions.

- *The cognitive learning cycle is inter-mediated by socio-emotional processes.* In Dewey (1910; 1951), the learning cycle is complex. Individuals think and learn by interacting with peers or listening to the teachers' explanations (social process). The learning cycle can also be inhibited by destructive emotions (e.g., anger and disinterest) or boosted by positive ones, such as amusement and curiosity.

2.4.1. TA preparedness: Socio-cultural theoretical principles of pedagogical and subject matters

Blatchford and colleagues (2011) indicated that a) TA professional training (i.e., Initial training), and b) the day-to-day instruction that TAs receive from classroom teachers as to classroom activities as well as teachers' feedback after their daily lessons (i.e., In Service training) influence their pedagogical and subject matter preparedness. Nevertheless, the researchers did not mention what "preparedness" specifically entails: is preparedness about teaching methods and tactics, theoretical concepts (e.g., pedagogical and child developmental tenets), or all of the above? No less, Blatchford et al. (2011) did not explain to the reader the process TAs and teachers undergo to apply such preparedness into practice, thus the link between preparedness and practice.

The present subsection addresses these gaps by describing the socio-cultural understanding of teaching preparedness. Before doing so, an overview of Dewey's seminal work on the socio-cultural learning process and its application to daily life is provided.

In a series of theoretical treatises, Dewey (1922; 1951; 1958) put cognition at the centre of the learning process. He notably suggested that individuals learn when they reflect upon the socio-cultural principles and rationales underpinning human tasks and behaviours. Case in point, children learn algebra when they think about algebraic logic - and not when dealing with classroom tasks or listening to the teacher's drilling.

As they learn, individuals can finally and independently deal with social life. Children, for instance, with a good understanding of algebra rules can successfully deal with mathematical tasks. Equally, expert teachers, engineers, mathematicians, and the like have the essential means to deal with socio-cultural life, academic problems, and more.

That is not to say, however, that individuals work out their daily problems by simply applying knowledge as it stands. Indeed, knowledge is more of a series of abstract, logical principles that should be contextualised here and now to solve practical problems. This happens, for example, when children solve algebra tasks. They do not solve classroom tasks by applying algebraical knowledge the way it is. Instead, they use algebraical logic in the context of the practical exercise.

In the late 20th century, Schön (1987; 1991) finally applied Deweyan theories into the context of teaching practice (as well as in other job professions, such as urban design, architecture, and management). In *The Reflective Practitioner*, he philosophised on the meaning of pedagogical knowledge, among other things (Schön, 1987). He suggested that pedagogical knowledge is not an end as such; it is not a composition of teaching solutions and methods ready for use in practice (i.e., applied teaching knowledge). On the contrary, it is more theoretical; it

concerns educational principles, including socio-cultural pedagogical tenets (e.g., maximising children's thinking; see Section 2.3.3. for more details).

Similarly, Schön (1987, 1991) conceptualised subject knowledge (see also Dewey, 1956; 1998). Subject knowledge was notably defined as the substantive rationales of academic matters (e.g., literacy and mathematics). Understanding these matters, alongside pedagogical knowledge, was thought to substantiate expert teachers' preparedness.

In the book, Schön (1991) also coined the famous theory (and expression) on how practitioners put their theoretical preparedness into practice. He suggested that when they deal with instructional activities, teachers often “stop and think” upon a) theoretical, pedagogical principles of children's development and b) the substantive rationales of the academic matters they instruct. As a result, they make sense of the teaching events and accordingly (and consciously) design their teaching strategies to promote children's learning.

Besides studies involving teachers, research on TAs and their training has not explored the content of TA training and knowledge in depth, despite its relevance in informing their practice (Navarro, 2015). Much of the existing TA research has only investigated practical elements of training supposedly enhancing TA preparedness, for example, the timing and the quality of collaboration between TAs and teachers (Noble, 2020; Webster et al.; 2020). To address this knowledge gap, this PhD study uses Schön's definition of preparedness and contextualises it in the context of TA research: hence, prepared TAs are considered those trained on the principles underpinning subject matters (mathematical logic and grammar principles) and pedagogy. In Section 2.4.3., I detail the key (socio-cultural) pedagogical principles for effective teaching practice.

2.4.2. TA deployment: TA class role and co-teaching practice

In the WPR model, Blatchford and colleagues (2011) put forward a pretty intuitive definition of TA deployment. They used the term “deployment” to describe the pedagogical role of TAs (and teachers) in isolation from the classroom dynamics, that is, whether TAs work with a group of children, a child with SEND, or the whole class.

That said, the reality of the TA role is more complex than that. TA classroom duties are not designed in a vacuum. Rather, they are constantly negotiated with teachers and designed according to their work, among the many others (e.g., students and headteachers).

It follows that studying TAs and teachers’ teaching relationships provides a better understanding of TA deployment. Case in point, there is a somewhat difference in saying that TAs have whole-class responsibilities in the absence of the classroom teachers from the occasions in which they equally collaborate with teachers in the whole-class instruction. In the first scenario, TAs could momentarily substitute the teacher’s work. Hence, TAs can no longer have whole class responsibilities when the teacher is back in the classroom. On the contrary, TAs dealing with whole class duties in the presence of a teacher might indicate that TAs and teachers have equal instructional roles in their classrooms.

Aside from the DISS project, research involving TAs has looked at TA-to-teacher teaching collaborations in detail, especially across countries wherein TAs have a teaching status (e.g., specialist teachers or support teacher status; Giangreco et al., 2014). Among the many others, Scruggs, Matropieri, and McDuffie (2007) found that the most typical teaching collaboration (between classroom teachers

and specialist teachers) has seen the teachers instructing the whole class while TAs assist a child or a group of children with SEND. Rare were other types of partnerships, such as station teaching and teaming. More of this discussion and the diverse model of TA-to-teacher teaching styles will be presented in Chapter 4.

Due to the objective of providing a detailed description of TA classwork and collaboration with teachers and how they impact the education of children with and without SEND, this study adopts two interrelated concepts to define TA deployment. The first is the operational definition of the DISS project for its merit of effectively describing the specific classroom activities of TAs (i.e., who TAs predominantly assist and what responsibilities they have in the classroom). The second operational concept, co-teaching practice, looks at the TA role and how it relates to the role of class teachers.

2.4.3. TA practice

2.4.3.1. TA multi-dimensional practice

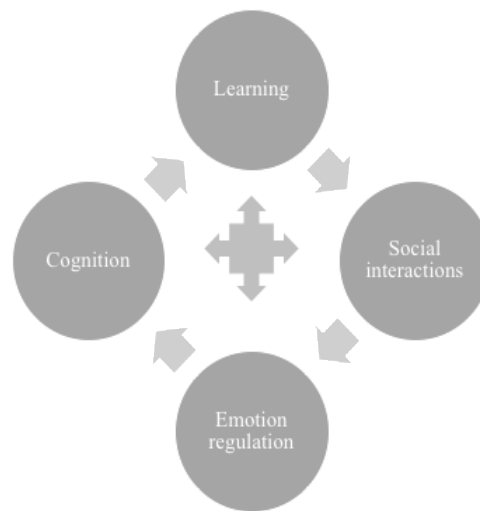
Blatchford and colleagues (2011) conceptualised TA pedagogical practice in a multi-dimensional fashion. Their definition of “TA practice” entailed assisting task engagement, academic learning, and socio-emotional development of children with and without SEND. That said, Blatchford and colleagues (2011) did not provide an explicit theoretical framework to examine the effectiveness of TA multi-dimensional practice. As a result, they could not judge whether the practice explored was optimal for children’s development.

This section addresses this gap by discussing an original multi-dimensional conceptualisation of TA practice. Like before, Dewey's seminal work on learning/knowledge generation will help me in this effort.

In *Experience and Nature*, Dewey (1958) comprehensively reconstrued the complexity of the learning process. He indicated that the "learning cycle" is not composed only of cognition but also includes multiple and contemporarily socio-emotional processes (See Figure 2). For the sake of simplicity, the following paragraphs separate the continuity of the learning cycle into three consecutive steps, such as:

- *Social processes.* A fundamental step to learning is the interaction between the learner and the socio-cultural community out there (e.g., teacher, peers, and family members). This way, the learner enters into contact with new socio-cultural information that they consequently learn (Baines et al., 2017).
- *Emotion regulation.* In the act of learning, the learner may go through emotional distress, for instance, when dealing with tests or public speaking performances. If not competently regulated or reversed into positive emotions, these (negative) emotions can get in the way of their thinking and learning (Deplancke et al., 2022).
- *Cognitive processes.* Individuals finally learn by reflecting on logic underpinning social duties, academic tasks, and (culturally appropriate) socio-emotional behaviours (Dewey, 1998; O'Brien & Roberts, 2019).

Figure 2 The learning cycles



Note. This figure was created by the author of this work.

In *Experience and Education*, Dewey (1998) built on the multi-dimensional learning cycle to inform teaching practice (see also Dewey, 1951). He notably argued that the teaching cycle should be oriented according to the children's learning cycle and their individual needs. That is to say that teachers should spend more time interacting with children or when they notice some children having minor social competencies (e.g., children with autism). Before or during a distressful academic task, and when dealing with children's significant emotional difficulties, they should encourage positive emotions and the regulation of negative ones (Dewey, 1956). Finally, cognitive support should be provided when children have difficulties with completing academic tasks or have cognitive deficits.

Recent research on TAs has provided an account of the TA multi-dimensional support of children with and without SEND building on the work of the DISS project (Webster, 2022). For instance, Bowles (2015) and Borgonovi and Ciletti (2018) provided a detailed description of the socio-emotional and pedagogical

assistance that TAs supply to children with and without SEND (e.g., promoting self-talk and regulation of negative emotions). This will be further discussed in Chapter 4. Nonetheless, there is still an insufficient evaluation of these supports in conjunction with the children's socioemotional and cognitive difficulties and how this support-to-need relationship might impact the pupils' content learning and socio-emotional development (Webster & Blatchford, 2013). To address this lack of exploration, I apply the Deweyan teaching and learning framework to examine the effectiveness of TA multi-dimensional support. Thus, I consider TA multi-dimensional support adequate when designed contingent on children's socio-emotional and cognitive learning needs (Morcom, 2014).

2.4.3.2. Effective teaching practices: scaffolding approaches

While the discussion presented earlier gives a sense of the need for multi-dimensional teaching strategies, it nonetheless provides information on the appropriate way to deliver them. In this subsection, I address this gap by describing (effective) socio-cultural teaching strategies to support children's learning of academic concepts and socio-emotional skills. Before doing so, I indicate the fundamentals of child development from which the conceptualisation of effective teaching strategies arises.

In Dewey (1951; 1956), learning cultural logical principles and beliefs is not always straightforward or possible (see also Garrison, 1996). Seemingly, individuals can only learn matters that have a logical connection with their prior knowledge and experience (i.e., learning continuum). Case in point, children understand multiplication after having mastered the concepts underlying the sum.

In *Mind and Society*, Vygotsky (1978) further discussed the individual learning process, particularly concerning children. He notably suggested that children learn when dealing with tasks within the Zone of Proximal Development (ZPD), namely the distance between what children may achieve on their own compared to what children may accomplish with the added help of more capable others. Tasks in the ZPD are proximal to children's current capabilities allowing them to participate in their resolutions and accomplish new learning as they do so (Blatchford et al., 2016).

Conversely, demanding and undemanding tasks are unhelpful for children's learning (Vygotsky, 1978). In the case of difficult tasks, children might not have the prior competencies to solve them and, ultimately, learn from doing so. Further, demanding tasks could cause emotional distress in children as they cannot find a way to solve them regardless of the effort they put in. Similarly, simple tasks may not produce learning as children may quickly solve them with little thinking (and learning). On many occasions, children may also show disinterest and boredom in completing simple tasks, perhaps, avoiding dealing with them entirely. Hence, tasks outside the ZPD are, at best, ineffective for learning and, at worst, could cause disinterest or emotional distress.

In a study on early language development, Wood, Bruner, and Ross (1976) employed socio-cultural theories in the context of one-to-one instruction to children. Building primarily on the work of Vygotsky, they devised effective temporary teaching support, also called scaffolding (Wood et al., 1976). Scaffolding incorporated Vygotsky's theory of constructing tasks proximally to the children's current capabilities and simultaneously promoted a complex type of

instructional assistance while completing their tasks according to their momentaneous needs (Van De Pol et al., 2011).

At the end of the 20th century, scaffolding tenets were finally applied to formal education (Van De Pol et al., 2011). Cazden (2001) and Mercer and Littleton (2007) were among the first contextualising scaffolding principles in classroom education. Later, many more papers on scaffolding were carried out to study effective teaching practices supporting children's learning in classroom contexts (Van De Pol et al., 2011).

In a recent review of published papers (mainly) in the field of academic learning, Van De Pol, Volman, and Beishuizen (2011) detailed the common principles of the scaffolding approaches, such as:

- *The contingency of the task/lesson topic.* Scaffolding requires teachers to design lessons and classroom tasks within the ZPD of their students, that is, contingently to their cognitive capacities. To do this, teachers should first elucidate the children's current level of competence by, for instance, asking (open) questions and structuring written exams/tasks. Once they have collected this information, teachers can adapt the lesson topic and design classroom tasks contingently to the children's capacities.
- *Transfer most cognitive responsibility for task completion.* Scaffolding theories suggest maximising children's cognitive responsibility when dealing with classroom tasks. To achieve this goal, instructors should provide the least support to children (i.e., low pedagogical support). This could mean observing the children completing the task. If children have trouble or make mistakes, they may then offer additional support. As a first

strategy, instructors should give little support, such as prolonged silence, verbal prompt (e.g., repeating the task), or gestures (e.g., pointing at a sheet); this seemingly provides extra time to rethink their turn and work out their trouble. When more help is needed, instructors should gradually increase their level of support by first clueing information or hinting at the initial parts of the answer and then providing a model of the possible answers. This way, they can promote the highest possible cognitive endeavour for the children in completing the tasks (see Figure 3 for more strategies). When these types of support do not work, instructors can supply the solutions to the task/correct the child's mistakes (i.e., high pedagogical support). However, correcting and giving the child the answer is not scaffolding or helpful for learning (Bosanquet et al., 2016).

More recently, scaffolding principles have also been adopted concerning the instruction of social skills (Van De Pol et al., 2011). One way of thinking about social scaffolding is to provide direct instruction to children on social skills or to design individual tasks on, for instance, the "correct" meaning to give to facial expressions or how to act when dealing with peer interactions (see Baines & Howe [2010], for different types of social written tasks). In the case of individual tasks, instructors should transfer the highest responsibility for task completion to children, thereby maximising their learning potential (Pinto et al., 2019). Another practical example of scaffolding social skills is that of assisting children in natural interactions (e.g., when dealing with group activities). On those occasions, instructors are invited to inspect the types and content of the interactions among the children they support (Highton, 2017; O'Brien & Roberts, 2019). Next, according to the group interactions and the social needs of the children involved, instructors should variably support the students' speeches. For example,

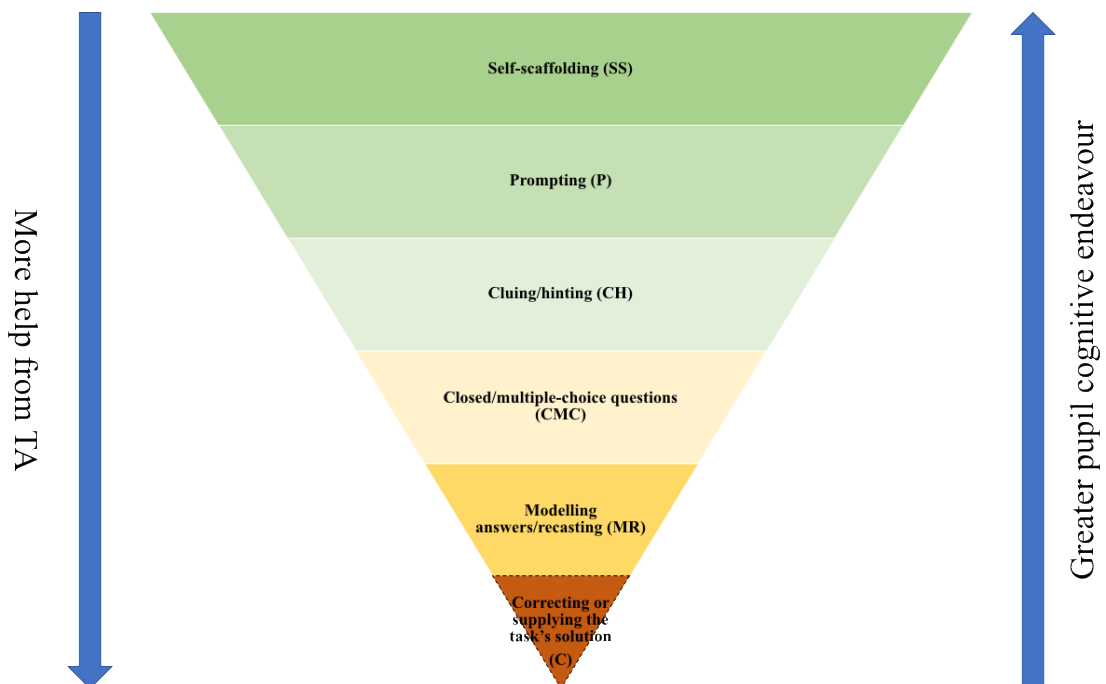
instructors should guide the interactions of groups when a single child could be excluded from talking and learning. Alternatively, little support may be given when the children seem capable of independently managing their interactions, thus maximising their learning potential.

Finally, scaffolding theories have been applied in the context of emotional regulation strategies (Fried, 2011). The literature in the field encourages the instruction of emotional regulation strategies to prevent emotional anxiety, distress, and misbehaviours, alongside promoting positive emotions (e.g., making routines to keep the mind busy and reduce stress due to uncertain, positive self-talk). Also, it invites educators to design their emotional support in response to children's ongoing emotional needs. Furthermore, they might address children's bad emotions and flare-ups, asking them to breathe and relax (Somerville & Whitebread, 2019). If needed, their emotional support should progressively increase (e.g., give a pause, think about something positive), nonetheless maintaining the maximum emotional responsibility to deal with deviant emotions in the children (Deplancke et al., 2022; Somerville & Whitebread, 2019). This way, instructors might end children's emotional turmoil and, as they do so, promote their learning/consolidation of emotional regulation strategies (Koole, 2009).

In the DISS project, Blatchford and colleagues (2011) used the scaffolding principles in Van De Pol et al. (2011) to define and explore the impact of TA practice on children's academic learning. To evaluate TA practice and its impact on children's academic learning more effectively, Bosanquet, Radford, and Webster (2016) more recently published a scaffolding framework focused on TA work (Figure 3). The framework comprises different levels of support (e.g.,

prompting, cluing, and correcting). On moving down each layer of the framework, the level of TA help increases, whereas children’s cognitive endeavour in completing tasks diminishes. The core principle of the framework is that TAs must provide the least amount of support to children when interacting during tasks. This way, they transfer most cognitive responsibility for task completion to the children.

Figure 3 Scaffolding Framework



Note. Adapted from Bosanquet et al. (2016, p. 59).

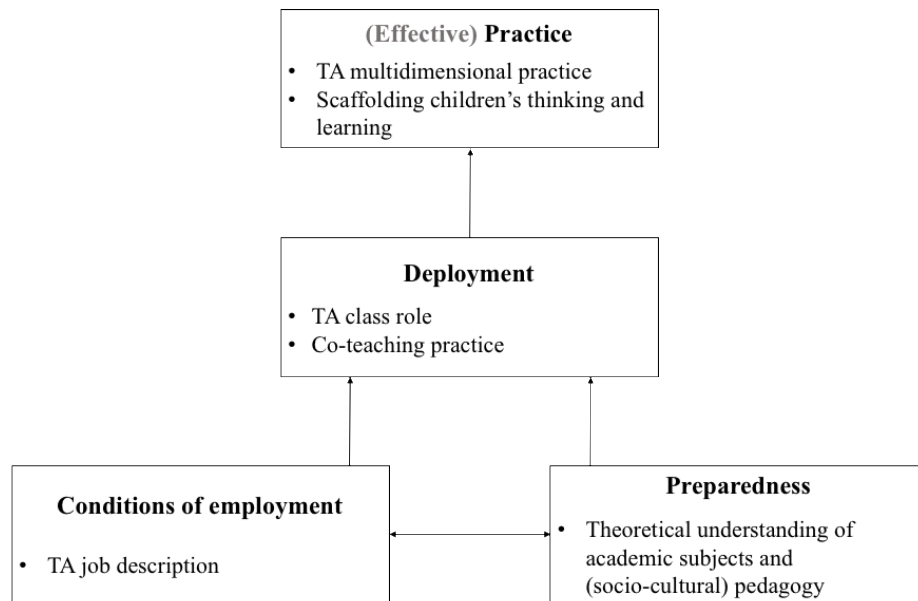
Nevertheless, the DISS project and associated literature on TAs did not use similar theories to study TA support for children’s socio-emotional development. Due to the relevance of the socio-emotional process in any type of learning, the current thesis expands the scaffolding principles to the socio-emotional domains. Accordingly, I define effective teaching strategies as the pedagogical practice of TAs (and teachers) that scaffold children’s learning in all educational aspects.

2.5. The re-description of the WPR model: a guiding framework for action

Figure 3 re-describes the WPR model in line with the earlier socio-cultural problematisation of its key concepts. “Preparedness” is re-conceptualised as the TAs’ understanding of subject matters and socio-cultural theoretical principles (scaffolding principles + Deweyan teaching and learning framework). Second, “TA deployment” is conceptualised in terms of the TA role (i.e., whom TAs predominantly assist) and the types of teaching collaborations between teachers and TAs (i.e., co-teaching practice). Finally, “TA practice” is devised in its multi-dimensional nature.

In re-describing the model, I somewhat reformulate its two key relationships. Notably, the updated model indicates that: a) TA conditions of employment influence TA class roles (like in the past), but also the working relationship they establish with class teachers (i.e., co-teaching practice) and; b) the TA theoretical preparedness on socio-cultural pedagogy and subject matters – rather than any knowledge as in Blatchford et al. (2011) - has seemingly a direct positive impact on the practice of TAs and, ultimately, children’s learning (see Figure 3).

Figure 4 Socio-cultural re-description of the WPR model



Note. Adapted from Blatchford et al. (2011, p. 45).

This re-description of the WPR model plays a crucial role in this research. First, it provides a list of key concepts and terms to be considered in exploring TA deployment and practice. Second, it supplies an initial series of hypotheses regarding the deployment and practice of TAs across the context of this research (Italian primary classrooms), such as:

- Whole-class duties of Italian TAs and teachers should promote equal teaching collaborations among them in addition to avoiding the proximity of TAs to children with SEND and the adverse effect on children's learning associated with it.
- High teaching standards that "Italian" TAs undergo should promote their theoretical knowledge regarding subject matters and pedagogy, including scaffolding theories, thus positively impacting their teaching effectiveness (lanes, 2014).

Simply put, the education context supposedly bodes well for the effectiveness of “Italian” TAs. This research is constructed to empirically test the hypotheses and perhaps revisit them in a new version of the WPR model.

Chapter 3. Italian primary education landscape

3.1. Introduction

The chapter presents the reader with Italian primary education and how it influences TA conditions of employment and preparedness. It includes three sections: the first provides an overview of the Italian primary education system regarding its management and funding; the second delves into the extra help children with SEND receive across Italian primary schools; the final investigates demographic conditions, conditions of employment, and training of “Italian” primary-school TAs.

3.2. Primary education landscape: primary public and private schooling

Table 1 reports that Italian primary education largely relies on public schools. About 94 % of primary schools are publicly managed and funded. The remaining 6% are private schools.

By law, private schools either follow the national curriculum and the wider educational guidelines (i.e., private dependent schools), including teaching standards and the national contractual conditions for the employment of TAs and teachers, or they are independent of such public regulations and the national curriculum (independent schools). Independent schools are a minority among Italian private schools, as they account for “just” about 50 schools in total (MI – Ufficio Regionale Scolastico (USR) per la Regione Lombardia, 2022; USR Abruzzo, 2022; USR Calabria, 2022; USR Campania, 2022; USR Emilia-Romagna, 2022; USR Friuli Venezia Giulia, 2022; USR Lazio, 2022; USR Marche, 2022; USR Molise, 2022; USR Piemonte, 2022; USR Puglia, 2022; USR Sardegna, 2022, 2022; USR Sicilia, 2022; USR Toscana, 2022; USR Umbria, 2022).

Table 1 2019 National statistics: public and private schools

Category of primary schools	Public Schools		Private Schools
	State-funded and managed	Local Authority funded and managed	
Number of schools	14,822	607	1,411
As % of total national schools	88%	4%	8%
Classrooms	131,156	3,680	8,951
As % of total national classrooms	91%	3%	6%
Number of enrolments	2,485,139	58,847	169,387
As % of total national enrolments	92%	2%	6%

Note. Data adapted from ISTAT (2019). Scuole – Dati ISTAT. Istituto Nazionale di Statistica. https://dati.istat.it/Index.aspx?DataSetCode=DCIS_SCUOLE

In public schools, the Italian Ministry of Education (henceforth MIUR) predominantly hires school personnel (and rarely makes them redundant) (Borgonovi & Ciletti, 2018). To do so, the MIUR publishes calls for applications open to the wider public, which require applicants to achieve minimum professional standards beforehand (Gazzetta Ufficiale [GU], 2020). An illustration of this is the most recent call asking applicant teachers to earn a master's qualification in primary education, while TAs had to secure both a master's degree in primary education and a (second) master's degree in special education (GU, 2020).

When hired, TAs and teachers sign their respective national contracts (Agenzia per la Rappresentanza Negoziale delle Pubbliche Amministrazioni [ARNPA], 2007; 2018). The TA's and teacher's national contracts provide the practitioners

with equal and competitive conditions of employment with their international counterparts in terms of salary, working hours, and more (ANRPA, 2018).

In addition to hiring teaching personnel, the MIUR contributes to shaping public and dependent schools' teaching resource management. Among other norms, law No. 169 of 2008 mandates schools to deploy single classroom teachers per school classroom. Other national guidelines recommend adding TAs to class teachers in classrooms hosting children with SEND (Ministero dell'Istruzione [MI] & Ministero delle Finanze [MF]; 2020). It follows that schools find themselves in the conditions to deploy TAs in partnerships with teachers in inclusive classrooms and not in other settings (e.g., TAs by themselves in regular classrooms) (Ianes, 2014).

Although providing a clear framework for TA deployment, some argue that such comprehensive and "strict" regulations may compromise the effective use of teaching resources (Borgonovi & Ciletti, 2018). Case in point, the norms could hypothetically lead schools to deploy TAs and class teachers in classrooms with low complexity due to their small size and the presence of a single child with mild SEND (e.g., mild learning difficulties). By contrast, they could create the unfortunate conditions for which single-class teachers (and not TAs and teachers) may be dealing with "needy" classrooms because of bigger class sizes and, perhaps, the enrolment of multiple children with educational difficulties without SEND. Therefore, the existing national regulations could lead to unequal instructional support among school students.

The MIUR's role in regulating the public (and dependent) school system does not stop there. Indeed, it also influences children's education by encouraging public (and dependent) schools to follow the national curriculum for mathematics,

literacy, history, and more (GU, 2013). The curriculum standards should not be nevertheless applied to children with SEND. Nor do any other curricular guidelines exist for the educational curriculum of children with SEND (MI & MF, 2020). Instead, schools, teachers, and TAs are invited to respond “just” to the children’s learning needs and potential in order to structure their individual educational curricula (lanes, 2014).

For their part, public school boards (and private dependent schools) have a few managerial responsibilities. First, public school boards (largely) design the content of the In-Service training (INSET) (Dipartimento per il sistema educativo di istruzione e di formazione - Direzione generale per il personale scolastico, 2020). Second, schools independently purchase and manage educational materials and tools (e.g., laptops and paper) (Borgonovi & Ciletti, 2018). Third, in rare circumstances, schools can open calls for applications to employ teaching staff (MIUR, 2017).

While the discussion presented here covers the entire educational system, the rest of the chapter and the thesis explores TA conditions of employment, training, and deployment across public schools – even when not directly mentioned. This purposeful choice benefited the research (and writing) by reducing the challenge of analysing different school contexts (e.g., different classroom settings, conditions of employment and preparedness of TAs). Simultaneously, it does not seem to affect the representativeness of the Italian primary educational context, as public schools are the overwhelming majority of it (see Table 1 for details).

3.3. Types of children with SEND across the Italian classrooms

To date, the vast majority of children with SEND are instructed in Italian mainstream primary (and secondary) schools. National statistics show that more than 99% of primary (and secondary) school children receive education in mainstream schools (Ministero dell'Istruzione, dell'Università e della Ricerca [MIUR], 2020; European Agency Statistics on Inclusive Education [EASIE], 2020). The rest, mainly blind and deaf children, are instructed in special schools (D'Alonzo, 2012).

In mainstream Italian schools, children with SEND benefit from individual pedagogical assistance in addition to the average educational provision (e.g., individual educational plans and speech therapy). The type of extra assistance varies according to the children's SEND status (D'Alessio, 2008). For instance, children with disability status, such as the ones with progressive and/or severe neurological and developmental disorders, are entitled to Individual Educational Plans (IEPs). IEPs design curriculum adjustments, such as reducing educational objectives and changing curricular goals, and might allow the use of compensative tools, such as laptops and Augmentative & Alternative Communication (ACC) devices, to support children's classwork. IEPs also report the time children with disabilities may benefit from the individual assistance of teachers or TAs (Ianes, 2014). Children could receive up to 22 hours per week of individual assistance, representing 60% to 90% of their total school time. Although national laws are unspecific as to whom should provide such individual assistance, recent MIUR guidelines have invited schools to assign TAs to the individual assistance of children with a disability status (MI & MF, 2020).

The second (and final) legal status of children with SEND is that of Special Educational Needs. Children with a status of Special Educational Needs, for instance, children with Specific Language Disorders (SLD), Children with Italian as their second language (ISP) and underachievers, are entitled to Personal Didactical Plans (PDPs) (D'Alessio, 2011). Similar to IEPs, PDPs may support children's learning by implementing of curricular adjustments, providing compensative tools, and more (Borgonovi & Ciletti, 2018). Nevertheless, they do not provide children with extra individual assistance from TAs or teachers (Ianes & Macchia, 2008). As a result, some argue that children with a status of Special Educational Needs, the majority of children with SEND (see Table 2 for details), could suffer from unequal educational provision compared to those few others with disabilities (Ianes et al., 2013).

Table 2 2019 National statistics: children with SEND in Italian primary schools

Category of send	Pupils with a status of Special Educational Needs		Pupils with a disability status
	Pupils with Specific Learning Difficulties (SpLD)	Other categories	
National enrolments	52,105	176,369	101,416
As % of the total student population	2%	7%	4%
Class ratio	1:0.4	1:1.2	1:0.7

Note. Data adapted from Istituto Nazionale di Statistica (2019). Scuole – Dati ISTAT. Istituto Nazionale di Statistica. https://dati.istat.it/Index.aspx?DataSetCode=DCIS_SCUOLEData regarding children with SpLD were adapted from Gestione Patrimonio Informativo e Statistica (GPID) (2020). I principali dati relativi agli alunni con DSA anno scolastico 2018/2019. Ministero delle Istruzione, dell'Università e della Ricerca.

The following part of this thesis generally refers to children with SEND, and no distinctions are made among those children (in writing). This is because the current research focuses on the TA instructional role and how it might relate to the instruction of children with SEND regardless of their legal status.

3.4. TA characteristics

3.4.1. TA demographics

Table 3 shows that Italy has the oldest population of primary-teaching staff (TAs + teachers) among the developed countries. 21% of whom are TAs, and 79% are primary teachers (GPID, 2020) - similar data are reported across Italian secondary schools (GPID, 2020).

Table 3 Teaching personnel age distribution

Age	< 30	30-39	40-49	50-59	60 ≤
Italy	1%	10%	30%	41%	17%
UK	28%	33%	23%	13%	2%
USA	16%	27%	29%	21%	8%
OECD Average	13%	26%	29%	25%	8%
EU 22 Average	11%	24%	30%	28%	8%

Note. Data adapted from Organization for Economic Co-operation and Development (OECD, 2019). Educational personnel. https://stats.oecd.org/Index.aspx?DataSetCode=EDU_PERS_AGE#

About 95% of the Italian primary teaching personnel in line with the average of the countries of 86%.

The reason behind this older teaching population might be: a) the comparatively high job protection for Italian teachers and TAs and the exceptional cases for schools to justify their redundancy (e.g., severe and extended low teaching performance and serious disciplinary offences such as fraud and physical violence; ANRPA, 2018); and b) the fact that Italian teachers and TAs rarely leave their job due to their profession's competitive salary and conditions of employment (Ianes, 2014). Thus, teaching is typically a life profession in Italy, with teachers and TAs leaving their professions largely when they retire.

This set of circumstances might nonetheless generate difficulties for young teachers to enter the job market and thus rejuvenate the teaching profession. At the same time, it creates the conditions to retain experienced teaching staff, which may bode well for teachers' and TAs' teaching skills and the education of children with and without SEND (Borgonovi & Ciletti, 2018). Whilst these interpretations may be felt acceptable, more research evidence is nonetheless needed to confirm them.

3.4.2. TA (and teacher) conditions of employment and training

In Italy, both primary-school TAs and teachers have equal whole-class pedagogical duties. They could instruct whole classes individually or together (lanes, 2014). The latter option (TA + teacher) is recommended by national policies and is more widely adopted in practice (lanes & Macchia, 2008).

To deal with joint (or individual) whole-class responsibilities, the teachers' and TAs' national contracts provide 40 hours for lesson planning (and school meetings) yearly (ANRPA, 2018). Also, TAs and teachers benefit from two paid non-teaching hours weekly (ANRPA, 2007).

Apart from these similarities, a few differences exist between teachers and TAs, such as:

- *Hiring and deployment.* While schools employ teachers in relation to the number of school classrooms and, preferentially, deploy them per classroom, TAs are employed every two children with a disability status and used in classrooms hosting just children with a disability status (D'Alessio, 2012). Some argue that the TA deployment logic reflects the concerns for dual teaching roles in inclusive classrooms; namely, one is to

provide extra individual assistance to children with disabilities, and the other is to deal with whole-class instruction (Borgonovi & Ciletti, 2018).

- *Teaching standards.* The MIUR decree No. 249 of 2010 indicates that the required teaching standard for teachers is a Master of science in primary education (MPE) (GU, 1997; 2011). Differently, the TA teaching standard has been, since the 1970s, a master's degree in special education (MSE) in addition to the general teaching qualification (GU, 2011). Hence, TAs have been seemingly better qualified than teachers since the origin of the TA profession.

In the history of the initial teaching training provision, the MPE is relatively recent (GU, 2020). It was institutionalised in the early 2000s to promote better pedagogical education for primary-school teachers, which relied in the past “just” on High school Diplomas in Education (GU, 1997; 2011). The most recent version of the MPE programme (Table 3) predominantly provides teachers with courses on subject knowledge (e.g., literacy and mathematics) and applied teaching methods (e.g., praise and punishment tactics). Meanwhile, more theoretical themes, such as child developmental theories, are less relevant.

Table 4 Master's degree in primary education (MPE): curriculum

Relevant Disciplines	Type of Knowledge	Courses	University credits (CFU)	%
Subject Knowledge	Subject Knowledge	Mathematics, literacy, physics, biology, and so on	150	50%
Special education	Applied teaching methods for special education	Special teaching methods	34	11%
General Pedagogy	Theoretical, pedagogical knowledge	General pedagogy	17	6%
Human development	Theoretical, pedagogical knowledge	Human development and learning	17	6%
Experimental pedagogical methods	Applied teaching methods for general education	Experimental teaching methods	13	4%
Elective courses	Applied teaching methods for general and special education	Teaching methods and special teaching tactics	8	3%
Anthropology	Other	Sociology and Anthropology of Education	8	3%
History	Other	The history of general pedagogy	8	3%
Medical science	Other	Neuropsychiatry and clinical psychology	8	3%
Law (and medical science)	Other	General Hygiene, Administrative laws, and the like	4	1%
Total in-classroom learning			267	89%
Internship	//	Teaching, marking, observing classrooms, feedback on class activities	24	8%
Total experiential learning			24	8%
Final exam and related training			9	3%

Note. Data adapted from GU (2011).

Unlike the MPE, the MSE has a longstanding tradition in the Italian context (Amatori, 2019). The MPE was constituted in the early 20th century for the initial training of teachers in special schools and later became the fundamental training for TAs (Amatori, 2019). Recently, the MSE has changed in duration (e.g., 1-year

or two-year program), but its structure and course contents have been consistent with its past (Amatori, 2019).

Table 4 shows the current MSE programme. It relies on applied knowledge, such as classroom management and teaching strategy (i.e., 42% of the total courses). Meanwhile, courses on theoretical knowledge are minorly provided (See Table 4).

Table 5 Master's degree in special education (MSE)

Disciplines	Type of Knowledge	Courses	University credits (CFU)	%
Special Education and pedagogy	Applied teaching methods for special education	Special teaching tactics and classroom management	20	33%
	Applied teaching methods for special education	SEND diagnosis and Individual Educational Plan: planning and assessment		
	Applied teaching methods for special education	Special teaching methods for children with sensory impairments		
	Applied teaching methods for special education	Special education and pedagogy for children with learning disabilities and Pervasive Developmental Disorders		
	Applied teaching methods for special education	Special pedagogy: teaching metacognition and working in groups		
Elective courses	Other	Neuropsychiatry, school administration, and the like	9	15%
Educational psychology and human development	Applied teaching methods for special education	Observation, assessment, and design of academic activities for children with learning disabilities and Pervasive Developmental Disorders	4	7%
	Theoretical, pedagogical knowledge	Child learning and development: learning styles	4	7%
Child Neuropsychiatry	Other	Child Neuropsychiatry	4	7%
Public Law	Other	School laws in support of the education of children with SEND	3	5%
General pedagogy	Applied teaching methods for special education	Pedagogy focused on the relational and social support for children	1	2%
Total Classroom learning			45	75%
Teaching, marking, observing classroom			6	10%
Teaching methods using ITCs			3	5%
Reviewing the classroom experience			3	5%
Total Experiential learning			12	20%
Final examination			3	5%

Note. Data adapted from GU (2021).

To promote continuing professional development, the national contract of primary-school TAs and teachers also provides practitioners with a non-compulsory five paid days of In-Service training (INSET) (Fondazione Giovanni Agnelli's [FGA], 2009; Tatto & Menter, 2019). TAs and teachers freely select INSET courses among the certified training providers, such as public schools (including theirs) and ministerial training agencies throughout the country (Borgonovi & Ciletti, 2018). Although paid, some argue that TAs and teachers might rarely attend INSET because of its non-compulsory nature (FGA, 2009; Tatto & Menter, 2019). However, more research is needed to confirm this, as few pieces of research have been produced on the INSET of TAs and teachers (Borgonovi & Ciletti, 2018).

More clear data are out there for TAs' and teachers' initial qualifications. First, FGA's (2009) recent large-scale survey of teaching qualifications of 6000 newly employed teachers (and TAs) showed that the vast majority of practitioners have a high school diploma in education (67%), while fewer have a university degree or MPE (33%). Perhaps, this is because most TAs and teachers (due to the high proportion of older staff) might have started their professions before the MPE establishment, thus achieving the prior required teaching standard: a high school diploma in education (see Section 3.4.1. for more details). Second, the institute of national statistics shows that a significant proportion of TAs has MSE title (i.e., 66%). Meanwhile, the rest have “just” the required teaching qualifications for teachers (ISTAT, 2022).

3.5. Conclusion

According to the research's theoretical framework (see the re-description of the WPR model; Chapter 2), the conditions of employment and training of TAs found across Italian (public) schools should improve their teaching effectiveness. First, the whole-class responsibilities of teachers and TAs might encourage effective collaborative practice between teachers and TAs. As doing so, they might discourage TAs from working constantly with children with SEND and overly support their classroom tasks, which minimise their thinking and learning (Giangreco et al., 2014). Furthermore, Italian public schools provide TAs with a wealth of training, which could positively impact their practice (Begeny & Mertens, 2007). The following chapter explores the trustworthiness of these hypotheses by synthesising the "Italian" literature on TA deployment and practice. Next, the research findings (Chapters 6-7-8-9) will further test (and potentially revisit) the research hypotheses.

Chapter 4. Reviewing the literature in the field of TA deployment, preparedness and practice

4.1. Introduction

Having in mind the main themes of the re-description of the Wider Pedagogical Role (WPR) model of TAs (Section 2.4.), the chapter reviews recent research exploring TAs' deployment, preparedness and practice in Italian primary (and secondary) schools. The "Italian" literature review is also complemented by studies and research from other parts of the world. International studies enrich the discussion of TA deployment and practice with added methodological approaches and themes of analysis.

In the early stages of the chapter, the TA deployment section provides information on TAs' positions, their activities, and their teaching collaborations with classroom teachers (co-teaching styles) within Italian schools. The chapter then concludes by investigating TAs' multi-dimensional support and pedagogical preparedness. At the end of each main section (and key subsections of this chapter), I clarify the influences of the existing literature on the current research and mention the research questions.

4.2. TA deployment

4.2.1. Literature review for studies in Italy

Among the studies read and reviewed, D'Alessio (2008) was one of the few promoting an in-depth investigation of the educational experience of children with SEND and how it relates to TA class role. Over six months of school visits, the Italian researcher took field notes about school activities and meetings across two Italian schools. She also collected field data through interviews with teachers,

TAs, school managers, and others. The data were ultimately analysed in light of the broader Italian policy context through an interpretative thematic analysis known as (Critical) Discourse analysis.

Two (more descriptive) results were drawn from D'Alessio's (2008) study. The first indicated that the TAs often supported children with SEND on a one-to-one basis, both inside and away from their classrooms (e.g., in school corridors and special units). The second suggested that the children with SEND experienced frequent school time (perhaps most of it) outside their classrooms.

D'Alessio (2008) explained the findings and, particularly, the exclusion of children with SEND from mainstream education as the result of the deficient, inclusive education model of Italian schools. She argued that the Italian inclusive education policy has relentlessly and pervasively relied on custodial care, backing the segregation of children with SEND from mainstream education (D'Alessio, 2011). In the past, children's exclusion was possible in asylums and special schools (D'Alessio, 2011). Nowadays, schools' units and corridors, alongside the personal support of TAs, give schools the same chance to separate children with SEND from mainstream settings.

D'Alessio's findings (2011; 2013) about the classroom withdrawal of children with SEND (2009) seem, however, to conflict with the evidence in Giangreco, Doyle, and Suter (2012). Relying on orally structured interviews (i.e., oral questionnaires) with head teachers across 16 Italian primary and secondary schools, Giangreco et al. (2012) quantified the extension of the classroom withdrawal of primary school children with SEND into roughly 20% of school time (and slightly more for secondary school children). Whereas children spent 80%

of their time in regular classes dealing with curricular activities. Therefore, Giangreco and colleagues (2012) argued that “Italian” primary children with SEND may experience more time in the mainstream than in segregated settings, as D’Alessio (2011) alluded to.

Focusing more on the TA class role (and less on the phenomenon of the classroom withdrawal of children with SEND), Nes, Heidrun, and Ianes (2018) designed a multiple-case study of 13 Italian primary classrooms. Drawing from field notes of classroom observations and focus group interviews with school professionals, Nes and colleagues (2018) showed that the participating TAs were mainly in charge of educating children with SEND, despite their whole-class responsibilities. Inside the classrooms, the TAs frequently assisted children with SEND; meanwhile, the teachers managed the whole-class instruction (Ianes, 2014). When pulled out from their classroom, children with SEND were instructed in groups or individually by a single TA.

Nes and colleagues (2018) interpreted the significant role of TAs in the education of children with SEND according to some of the TA conditions of employment (see also Ianes, 2014). They argued that the national employment of TAs in relation to the number of school children with SEND, among other national regulations, might create a set of circumstances for these children to benefit from the extra support of TAs and less from teachers. More (large-scale) research is nevertheless needed to confirm the transferability of these findings and interpretations across Italian schools.

4.2.2. Literature review of international studies

Above all, two international strands of literature influenced the present investigation on TA deployment. The first consisted of multiple studies of the Deployment and Impact of Support Staff in Schools (DISS) project (Blatchford, Russell, & Webster, 2011). The latter hinged on the work of Scruggs, Matropieri, and McDuffie (2007) and, in particular, their exploration of the instructional role of TAs and their collaboration with class teachers (i.e., co-teaching practice). The following paragraphs discuss both literature and provide further information on the research methodologies and findings.

In the DISS project, Blatchford, Webster, and Russell (2011) produced a seemingly exhaustive description of TAs' school activities, the location of their work (i.e., inside or away from their classrooms), and their working context (e.g., group work and whole-class instruction) in England and Wales. Among the multiple methods of data collection, Blatchford et al. (2011) used time logs (see Support Staff Questionnaire [SSQ], first wave for details). The time logs converted a single school day (from 7 a.m. to 7 p.m.) into intervals of 20 min. Participating TAs were invited to fill every timed interval with single activities among 22 options (e.g., helping pupils understand the instruction, rewarding their achievements, and Individual Educational Plan development/implementation). They could also have reported other activities in writing, whether unsatisfied with the alternatives. To analyse the results, Blatchford and colleagues (2011) thematically grouped the responses into several categories, such as a) support for teachers on academic duties, b) learning support for pupils, and c) pastoral support for pupils. Data were ultimately displayed in frequency tables.

The results indicated that the 310 participating primary and secondary school TAs largely supported children's learning (61% of their school day). Less time was spent on assisting the class teachers (24%), delivering pastoral support for children (4%), and other types of activities (Blatchford et al., 2008). Therefore, Blatchford and colleagues (2011) concluded that the participating TAs had a primary pedagogical role and fewer assistantship duties in support of teachers and children.

These results found their confirmation in the classroom observations of TAs. The classroom observations explored the role of 27 primary- and secondary-school TAs in over 125 hours of classroom practice. The classroom data were collected/analysed with a systematic coding technique, transforming TAs' live practices into multiple discontinuous intervals of 10-sec. In every interval, Blatchford et al. (2011) coded a single event among a list of predetermined categories, such as 1) TA working with pupils (e.g., working with one pupil and group); and 2) TA is not directly working with pupils (e.g., listening teachers and roving). By summing the codes across intervals, Blatchford et al. (2011) could calculate the time spent by TAs in various educational modes and their frequency. The results showed that the TAs had a pedagogical duty towards pupils (64%) and fewer teacher assistantship responsibilities (roving [16%] and listening to teachers [20%]).

To better describe the pedagogical role of TAs, Blatchford and colleagues (2011) further analysed a subsample of the classroom observations. They converted about 36 hours of classroom live events into discontinuous categories of TA working context (e.g., working with an individual child with or without SEND, in group settings, or leading the whole class), TA location (in class or out of class),

and more. Among the other results, this second systematic analysis showed that the TAs tended to target their pedagogical support towards children with SEND, both inside and outside their classrooms (Blatchford, 2009). Therefore, they argued that the TAs were more instructors of children with SEND than of the whole class.

The second strand of studies examined here is that of Scruggs and colleagues (Cornoldi et al., 1998; Palladino et al., 1999; Scruggs et al., 2007). The American authors focused less on TAs' class activities but more on their teaching collaboration with teachers (i.e., co-teaching practices) (Mastropieri & Scruggs, 2007).

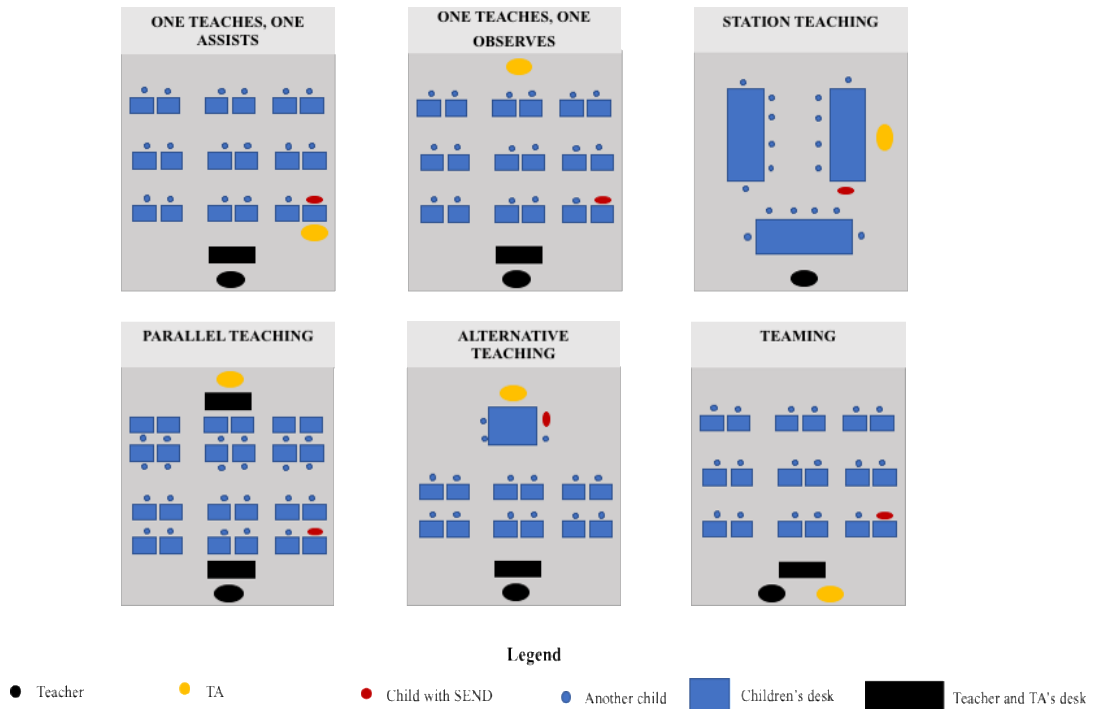
In 2007, Scruggs et al. exhaustively summarised the literature exploring co-teaching practices between classroom teachers and specialist teachers (henceforth TAs) across 32 primary and secondary schools in the USA, Canada, and Australia (Scruggs et al., 2007). A thematic synthesis of the findings, referred to as meta-synthesis, identified the following variety of co-teaching strategies, such as:

- *One teaches, and one assists* the learning of a single child or a group of children.
- *One teaches, and one observes* the students' activities.
- *Station teaching* in which TAs and teachers rotate the instruction to separate groups of pupils.
- *Parallel teaching*, where teachers and TAs teach two different classroom groupings on two different matters.
- *Alternative teaching*, which involves one dealing with the whole class's education; meanwhile, the other instructs a small group of students.

- *Team teaching (or interactive teaching)*, where TAs and teachers equally share the responsibilities of the whole class.

Figure 4 graphically groups the multiple co-teaching styles found in the review.

Figure 5 Co-Teaching Styles



Note. Figure adapted from Friend and Bursuck (2009; p. 92).

Internationally, the “One Teaches and the Other Assists” (OTOA) style was more commonly selected by co-teachers (Scruggs et al., 2007). By and large, OTOA configurations showed class teachers dealing with the whole-class instruction; meanwhile, TAs individually assisted the classwork of a child or a group of children, mainly with SEND.

Scruggs et al. (2007) interpreted this result in light of the type of TA preparedness. Notably, they argued that special teachers’ training requirements across the USA, Canada, and Australia mainly concern special education matters. Rarely are TAs

required to attend mainstream pedagogical education (e.g., knowledge of subjects and general pedagogy). Hence, their “special” preparedness might lead them to take a leadership role in the education of children with SEND (Seleznyov et al., 2020).

The work of Scruggs et al. (2007) concludes this review of the literature on TA deployment. The following section discusses the literature reviewed so far and puts forward the research objectives.

4.2.3. Analysis of the reviews and research gaps

Much research about the Italian context has promoted a qualitative analysis of the TA class role (e.g., D’Alessio, 2008). Nevertheless, minor information exists on the classroom co-teaching styles, and the kinds of support TAs deliver to children with or without SEND (e.g., whether TAs assist children in group interactions or privately; and if they work on curriculum matters or substantially different subjects).

Building on the existing literature, I planned to deal with these gaps and provide information on what tasks TAs are responsible for throughout the school day. Moreover, a nuanced in-depth thematic investigation was designed concerning the working relationship between teachers and TAs (i.e., co-teaching styles).

Furthermore, the “Italian” research did not seem to make any quantitative representation of the TA role, classroom working context (e.g., one-to-one assistance, whole-class settings), and types of co-teaching practice (e.g., OTOA and teaming). The quantitative display of TA deployment would potentially add information on the extension of TA activities and locations. With this in mind, the current research aimed to introduce a numerical investigation of TA deployment

into the Italian literature. Blatchford and colleagues' work (2011) was used as a key model for this endeavour.

Finally, the present research was designed to enrich the existing understanding of the educational factors potentially constraining TA deployment (e.g., TA conditions of employment). To achieve this goal, TAs' perceptions were to be used, as TAs are seemingly in the best position to know what shapes their practice despite being rarely interrogated on the matter (Bowels, 2015).

With this, the research objectives of TA deployment came to an end. Section 4.2.3.1. states them in the form of research questions (RQ). The broader overarching goal is expressed in RQ1, accompanied by more specific objectives in the research sub-questions, such as a mixed-method representation of TA deployment (e.g., RQ 1.2. and RQ 1.3.). A similar format for RQs is used in the following subsections.

4.2.3.1. Research question No. 1.

Overarching Research Question: TA deployment

RQ 1. In Italy, how are TAs deployed in mainstream primary schools?

Research sub-questions:

RQ 1.1. What types of co-teaching styles are evident in lessons?

RQ 1.2. Who do TAs predominantly work with? Where do they predominantly work (e.g., inside or outside the classrooms)?

RQ 1.3. How (e.g., private conversations and group interactions) and what types of support do TAs provide to the children with SEND (e.g., curricular or differentiated activities), whole class (e.g., curriculum), and teachers (e.g., administrative)?

RQ 1.4. What factors, including conditions of employment and training of TAs, do TAs perceive could be associated with their deployment?

4.3. TA practice and preparedness

In this section, I review the “Italian” and international literature concerning the several types of TA support to children with and without SEND (i.e., TA multi-dimensional practice), including socio-emotional support and behavioural management. Subsection 4.3.2. complements the work with an in-depth exploration of the TA pedagogical practice and preparedness.

4.3.1. TA multi-dimensional support

4.3.1.1. Literature review for studies in Italy

Few research studies were found in the Italian literature investigating the multi-dimensional practice of TAs. One of these was my previous work with Borgonovi ([Borgonovi & Ciletti], 2018). As part of our broader interest in the institutional relationship between schools, health care, and local social services, we explored the classroom experience of three primary-school TAs (Borgonovi & Ciletti, 2018). Drawing from field notes of classroom observations and teaching staff focus groups, we indicated that the participating TAs delivered two types of assistance to children - in addition to pedagogical support, discussed later in the chapter (Borgonovi & Ciletti, 2018). The first type of support involved the management of the inattentiveness of children with (and rarely without) SEND via its disapproval, telling the children off, and more. This way, the TAs brought the children back to their tasks, such as listening to the teachers’ explanations or dealing with individual tasks. Nevertheless, the children lost their attention again, especially when they did not understand the teacher’s explanations or could not solve the classroom tasks alone. To deal with this, the TAs had to ultimately simplify the children’s task/topic so that they could be cognitively engaged with the work and deal with it effectively.

The second type of support concerns TAs instructing children's social skills (Borgonovi & Ciletti, 2018). Our evidence indicated that teachers and TAs supported the children's interactions and social development by structuring practical activities outside their classroom (e.g., drawing tasks, physical activities, and speech therapy). However, we provided (and collected) little information regarding how these activities were designed. Nor did we discuss what strategies TAs and teachers employed to promote children's social development.

The second (and last) study found in my literature search was that of D'Alessio (2008). Similarly to the study above, D'Alessio (2008) indicated that TAs support peer relations and correct the destructive behaviours of children with SEND. However, as in our research (Borgonovi & Ciletti, 2018), she did not provide much information and evidence of how this assistance was delivered and how it could impact the children's development.

4.3.1.2. Literature review of international studies

Overall, two strands of literature shaped the present investigations of TA multi-dimensional practice. The first consisted of the works of a group of researchers interested in an in-depth thematic analysis of the TA multi-dimensional instruction (e.g., Bowles, 2015). The latter was a numerical account of TA instructional strategies developed in the DISS project.

Within the thematic strand of literature, Bowles (2015) seemingly provided an exhaustive analysis of the varieties of TA support activities in the UK. He thematically analysed classroom observations and interviews with 11 TAs. As a result, he showed that the TAs assisted children, mainly with SEND, in many distinct aspects of learning. First, the TAs were reported supporting children with

their curricular learning objectives, for instance, phonics, mathematics, and grammar rules. This type of assistance went under the name of TA pedagogical support in this thesis and will be discussed in the following subsection.

Second, Bowles (2015) suggested that the TAs managed the children's misbehaviour. Misbehaviour was intended either in terms of a) low level of classroom disruptions, such as inattentiveness and distraction, or b) elevated levels of disturbance, such as bullying peers, fidgeting, and throwing class materials. In Bowles (2015), most of the evidence concerned TA management of low-level disruptions, which I will call TA task engagement support in the rest of this thesis, while minor, if any, related to the second (henceforth TA behavioural management); thus, it will be minimally reported in the rest of the section.

TA assistance to task engagement mainly echoed the behaviourists' tactics of rewards and punishments (Bowles, 2015). Particularly, Bowles (2015) indicated that the TAs punished the distractions and, alternatively, they rewarded children's attention (i.e., reactive behaviourist strategies). In other circumstances, the TAs used the prospect of either punishments or rewards to prevent bad behaviour and encourage attentiveness, respectively (i.e., preventative behaviourist strategies). In Bowles (2015) and elsewhere (Rubie-Davies et al., 2010), TA behaviourist strategies seemingly increased children's propensity for on-task behaviours.

Regardless, behaviorist tactics do not seem to produce learning of "good" behaviours. As Dewey (1986) put it, learning is more the result of a complex cognitive endeavour and the grasping of the logical value of, for instance, acceptable classroom behaviours – rather than the response to external punishments or rewards. Hence, TAs and teachers may be better off when scaffolding children's cognition and understanding of the benefit of on-task

behaviours (e.g., improving their learning and respecting others), thereby promoting learning and children's independent behavioural adjustments.

Bowles's findings (2015) certainly did not stop there. He also found that the 11 participating TAs promoted children's socio-emotional development. Socio-emotional assistance was categorised as a) emotion regulation support (henceforth TA emotional support) and b) TA social support.

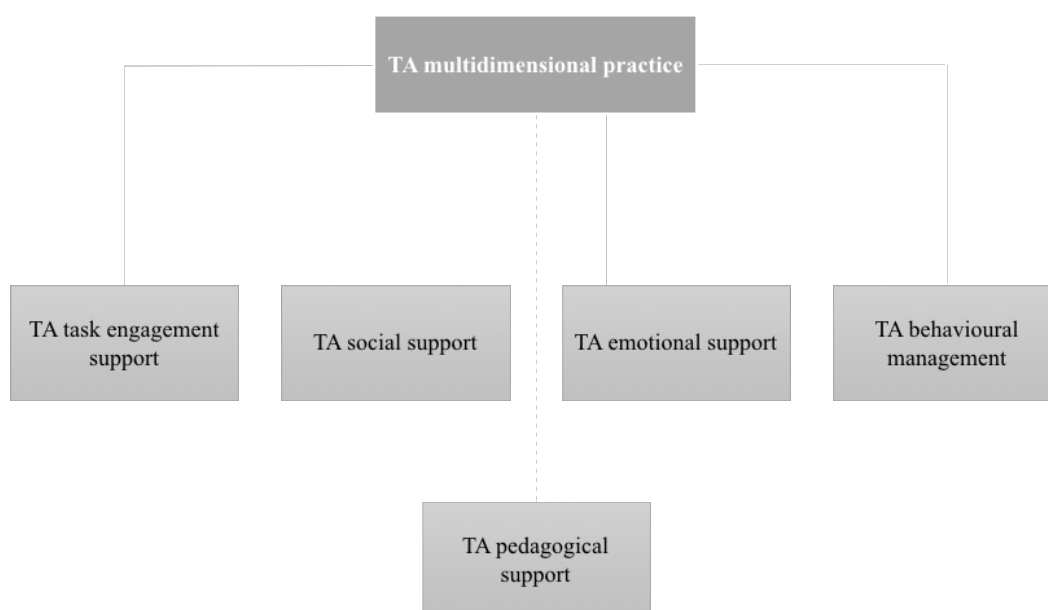
Emotional support was provided in two forms. The first showed the TAs reassuring the children about their competencies after, for instance, failing classroom tasks and feeling disappointed or angry. The strategy put the children's destructive emotions under control and simultaneously instructed the children on a new solution to regulate destructive emotions in the future, namely having positive talk and thinking. The second and final emotional support showed the TAs patiently waiting for the children's completion of classroom tasks. This prevented children's anxiety in completing the task and, doing so, enhanced children's cognitive focus on the task (and less on bad motions) (Romney et al., 2022).

Two different tactics were also reported for TA support to social skills. Either the TAs were shown directly instructing social concepts to children (e.g., respect for each other and cooperative learning). They did so by inviting the pupils to listen to each other or share their opinions during the completion of classroom tasks. Alternatively, the TAs encouraged the children's learning of social skills when interacting with peers. However, Bowles (2015) gave a little account of this type of social support.

Highton (2017) addressed this knowledge gap by producing a more detailed investigation of TA social support strategies in more “natural” circumstances. Drawing from multiple interviews with 6 primary-school TAs, Highton (2017) indicated that TAs might adopt two alternative strategies to assist the interactions of children with SEND with peers (Highton, 2017). The first is to restrain children’s independent agency by controlling and directing the content of their interactions (Highton, 2017). As a result, pupils can increase their peer interactions but might not be stimulated to deal independently with peer interactions. The second, the coaching strategy, described TAs employing more contingent assistance to children’s social needs. In order to do this, TAs initially explore group interactions and how they relate to each child’s individual needs. Accordingly, they guide group interactions when children with social difficulties may be excluded from talking. Next, when the children achieve better control over the interactions and participate more in the group activity, the TAs may reduce their assistance by, for instance, diminishing their interventions. Ultimately, little support is given when all children independently manage their social interactions. As a result, children may gradually learn to deal with social interactions and improve their social skills (Kington et al., 2013; Romney et al., 2022).

With this, the thematic investigations of TA multi-dimensional support in the literature end. Figure 5 synthetically groups the various support found in Bowels (2015) and others.

Figure 6 TA multi-dimensional practice



Note. Figure inspired by Bowles (2015, p. 71).

The second strand of literature that influenced this work is more quantitative-driven. It gave less attention to the description of TA practice but focused more on providing a frequency account of TA support strategies. The quantitative analysis of TA support is arguably relevant in providing information on the extension of, for instance, good or bad TA support strategies and, subsequently, their influence on children's learning.

Among the quantitative analyses of TA multi-dimensional support, Rubie-Davies, Blatchford, Webster, Koutsoubou, and Basset (2010) gave a comprehensive description of the time that TAs spend on multiple support activities across 15 schools in the UK (8 primary- and 7 secondary-schools). To generate frequencies of the TAs' support strategies, sixteen lessons were transcribed. Next, appropriate codes were applied to the TAs' utterances, namely TAs' classroom procedures (i.e., organisation of pupils, organisation of materials), their task

engagement strategies (i.e., preventive/reactive behavioural strategies), and more. As a result of the study, Rubie-Davies and colleagues (2010) showed that the participating TAs frequently managed children's inattentiveness (reactive strategies) but spent little time in activities with a cognitive focus.

Little interest in the study concerned the investigation of the multi-dimensional support of the TAs according to the children's individual (special) needs, for instance, whether the TAs' support patterns echo children's socio-emotional and cognitive needs. An analysis of this kind could have shown if the practice was constructed contingently to children's (multi-dimensional) needs and, accordingly, potentially showed its effect on their development (Dewey, 1958).

4.3.1.3. Analysis of the reviews and research gaps

As of now, Italian research mentioned TA multi-dimensional assistance. However, little thematic description of their tactics and solutions was given. Nor was any information on the frequencies of the different types of support practices provided.

The present research aimed to fill these knowledge gaps by providing a qualitative and quantitative representation of TA support activities (see Section 4.3.1.3.1., RQ 2.1 and 2.2 for details). In line with what was seen internationally, I aimed to produce a detailed description of TA socio-emotional and behavioural strategies and complement it with a moment-by-moment representation of TA support activities (Baines et al., 2008). Finally, the practice found must be interpreted based on its contingency on children's special needs and to what extent it fosters children's socio-emotional and cognitive learning (see scaffolding theories & Deweyan learning cycle; Chapter 2 for details).

Another critical gap in the Italian (and international) literature was the insufficient analysis of the factors, including TA training, that could potentially impact the numbers and “quality” of TA socio-emotional and behavioural practices. The current research hoped to fill the literature gap by exploring the TAs’ perceptions on the matter (see Section 4.3.1.3.1., RQ 2.3 for details). TAs’ voice was expected to enrich my existing theoretical framework (i.e., the re-description of the WPR model).

4.3.1.3.1. Research question No. 2.

Overarching Research Question: TA multidimensional practice

RQ 2. In Italy, what types of support activities do TAs employ to support the classroom experience of primary-school children with SEND?

Research sub-questions:

RQ 2.1. What types of TA support strategies, such as behavioural management support and enhancement of on-task behaviours, are used in the lessons?

RQ 2.2. What are the tactics that TAs use to: a) manage disruptive behaviours, b) support task engagement, and c) support the learning of social skills of children with SEND?

RQ 2.3. What factors, including the conditions of employment and training, do TAs perceive could be associated with their types of support for children with SEND?

4.3.2. TA pedagogical support (and preparedness)

This subsection describes the literature concerning TA (pedagogical) practice and preparedness. Evidence from TA preparedness was placed in the same section of TA practice because the two themes are highly interwoven and were treated as such in the literature reviewed.

4.3.2.1. Literature review for studies in Italy

While many studies were found mentioning that TAs provide pedagogical support or were highly pedagogically prepared, just a single one (Franciolini, 2011) nonetheless explored TAs' pedagogical support and preparedness in detail. Franciolini (2011) studied the interactional exchanges among children, teachers, and TAs across 8 Italian primary classrooms. Twenty hours of video recording were transcribed and analysed mainly in line with Conversation Analysis (CA) procedures, thus a detailed description of the structure of interactions and their intonations (Have, 2007).

Franciolini's (2011) data analysis was also motivated. She looked specifically at repair episodes. In a similar fashion to CA literature, the Italian author defined repair episodes as those interactions starting with a repairable utterance from a single speaker, for instance, a mistake and (mis)hearing or misunderstanding of a prior speech (Schegloff, 2000). Next, the repairable source, also known as trouble, could be perceived and ultimately corrected by the speaker (i.e., self-initiated self-repair). Alternatively, the hearer could step in and take the initiative to repair the speaker's troubles (i.e., other-initiated other-repair).

Franciolini's (2011) investigations on repair episodes indicated that the participating teachers and the TAs mostly withheld quick corrections to children's troubles to promote their self-repair. Then, if self-repairs were not produced, they provided low pedagogical support, such as added information, to stimulate children's thinking and later corrections (i.e., other-initiated self-repair). Therefore, Franciolini (2011) concluded that the TAs and teachers were pedagogically prepared and promoted children's thinking and learning.

That said, such conclusions seemed "generous" towards TAs as they represented a small sample share. Hence, any attempt to transfer the results exclusively concerning TA interactions appeared to be somewhat speculative. More research is therefore needed in the field of TA practice.

4.3.2.2. Literature review of international studies

In many ways, Radford and colleagues' work influences TA pedagogical practice and preparedness analysis in the current research (see Radford, 2010; Radford et al., 2006; 2014; 2015). Initially, the subsection describes Radford's research regarding TA pedagogical practice to conclude with a work focused on TA preparedness.

As a part of the DISS project, Radford, Blatchford, and Webster (2011) audio-recorded and transcribed 4 lessons in 2 primary and 2 secondary classrooms. Data were then interrogated about TAs' and teachers' turn-taking. In line with CA literature, Radford and colleagues defined a) turn-taking as the act of negotiation between speakers and hearers in a local interaction (Baines & Howe, 2010; see also Sacks et al., 1974) and b) turn in terms of single or multiple grammatical

units, expressions, or statements composing the whole turn of a speaker (Sacks et al., 1974).

In the literature on CA, researchers found that turn-taking often follows a three-part ruleset, such as: (a) a speaker initiates talking and then selects the next speaker, (b) the next speaker chooses another speaker or (c) continues talking (Sacks & Schegloff, 2006). In classroom environments, Sinclair (1975) indicated that this triadic rule commonly translates into teachers initiating the interactions (I) by asking a question to a child, the child responding (R), and the teacher ending the exchange with positive/negative feedback or following up with added questions (F), thus possibly starting another triadic exchange.

In their study of turn-taking, Radford et al. (2011) found that teachers stimulated children's thoughts and speeches by, for instance, asking open questions or encouraging children to explain their ideas. On the contrary, the TAs predominantly closed down the students' talk by quickly correcting their mistakes (other-initiated other-repair) and providing the answer to the teacher's questions. This way, they constrained children from vocally working out the solution to the classroom tasks and, ultimately, learning from doing so (Van De Pol et al., 2011).

The work of Radford and colleagues on TA practice certainly did not stop there. They also explored how teachers, TAs, and children negotiate the construction of new conversational topics. In the literature on CA, researchers found that turn-taking in topic-generation episodes involves speakers either introducing a topic without any negotiation with the hearer (other-initiated topic generation) (Radford et al., 2006). Alternatively, speakers and hearers may negotiate the topic of discussion as equal partners (Joint-topic construction) (Radford et al., 2006).

From their analysis of topic-generation episodes, Radford et al. (2011) showed that teachers often openly negotiated the topic of conversations with children. In so doing, they elicited children's preparedness and cognitive capacities. Next, they designed conversational topics within their zone of proximal development (ZPD), thereby stimulating children's interest and learning. Contrarily, TAs appeared to design tasks without any prior negotiation with children. This way, TAs ended up designing demanding activities that did not stimulate children's task engagement and learning. Therefore, Radford et al. (2011) concluded that TAs (unlike teachers) have little knowledge of the scaffolding principles (e.g., maximising children's thinking).

To explore whether these problems in TA practice persisted throughout the years, Radford and (other) colleagues (Bowles, [Radford], and Bokopoulou, 2018) recently designed an interviewed-based study with 11 TAs from two primary schools in London. The thematic analysis of the data showed conflicting results. On the one hand, the TAs did not mention many effective scaffolding practices to support children's education (Bowles et al., 2018). On the other hand, the TAs effectively handled conversations on scaffolding principles throughout the interviews (e.g., contingency of assistance).

To explain this conflict, Bowles and colleagues (2018) ended up blaming the research methods they used. Notably, they argued that conventional interviews could not have effectively measured TA practice (and perhaps have done better with TA preparedness) as covering areas of discussion, such as the pedagogical tactics and solutions, which are complex to talk through. Therefore, the participants could have had more technical skills than they could explain (as their theoretical preparedness showed). Simply put, they argued that TA practice, and,

by extension, any teaching practice, could not be effectively studied in an interview study (Bowles et al., 2018).

In the past, to deal with these interview limitations, many researchers used video-elicitation questions where participants were asked to comment on pre-existent video material (Henry & Fetters, 2012). The video material provides contextual situations in which the interviewees could elaborate on their answers and opinions (Henry & Fetters, 2012). Also, observing a practical teaching example in a video encourages interviewees to reflect upon the pros and cons of given solutions, explain their theoretical considerations, and put forward their alternative/similar solutions in the context. Therefore, video elicitation might be excellent for measuring contemporarily theoretical preparedness and the participants' teaching practice.

With this, the review of the literature concludes. It has shown a wide array of investigations of TA practice, such as the analysis of turn-taking among TAs and children during repair episodes, topic generation episodes, and more. No empirical investigations of factors impacting TA preparedness and practice were reviewed (e.g., training). More research is therefore needed in this regard.

4.3.2.3. Analysis of the reviews and research gaps

To my knowledge, recent exploration has yet to exclusively target TA practice or preparedness in the Italian context.

To address this gap, the research aimed to develop multiple studies, such as:

- An in-depth thematic investigation of the TA pedagogical practice (e.g., repair and topic-generating episodes) (RQ 3.2.). Similar work to Radford

et al. (2011) could be designed to explore TA teaching tactics and how they impact children's thinking and learning.

- A quantitative representation of TA practice (e.g., frequencies of TA repairs, topic generation episodes, and the like). The quantitative analysis could provide additional information on the extension and frequencies of effective or ineffective pedagogical interactions (see Section 2.4.3. for more details on the definition of TA effective practice).
- A (qual-quant) investigation of the theoretical principles that guide and substantiate TA practice. This way, I could promote the triangulation of information between TA practice and TA preparedness, thereby raising the credibility of the results as a whole (see Bowles et al., 2018), other than investigating an essential variable in our theoretical framework (TA preparedness) – The investigations of TA theoretical preparedness (RQ 3.3.) have been placed in this subsection just for the sake of simplicity. However, there was no doubt that the investigation of TA theoretical preparedness might transcend pedagogical themes and involve the multi-dimensional aspects of teaching and learning, which will be considered in the analysis.

Another core objective of this research was to enrich the theoretical foundations of my re-description of the WPR model (see Section 2.5. for more details). In Chapter 2, I indicated that TA training could positively impact TA practice; nevertheless, there is no evidence confirming so. Hence, the current research aimed to invite TAs to address this gap and to potentially promote a nuanced interpretation of the relationship between TA preparedness/practice and the broader educational policies (RQ 3.4.).

4.3.2.3.1. Research question No. 3

Overarching Research Question: TA pedagogical support (and preparedness)

RQ 3. In Italy, how do TAs support the content learning of children with SEND?

Research sub-questions:

RQ 3.1. What types of pedagogical interactions, including repair and topic generation episodes, are available in the lessons?

RQ 3.2. How do TAs design pedagogical interactions, including repair episodes and topic generation episodes?

RQ 3.3. How do TAs reflect on teaching practice? What are the theoretical principles upon which their approaches rely on?

RQ 3.4. What factors, including the conditions of employment and training, do TAs perceive could be associated with their pedagogical practice?

4.4. Summary

Whilst suggesting that TAs often work with children with SEND on pedagogical and socio-emotional matters, much of the Italian research did not provide enough information on the types of interactions that TAs have with children and how they impact their learning. Furthermore, insufficient research explored the TAs' interpretations of what factors, including TA training, could inhibit or enhance their effectiveness. The current study aimed to fill these gaps by producing a nuanced mixed-method representation of TA deployment and practice, along with investigating TAs' interpretations of the policy barriers/enhancers for their classwork. The next chapter will provide more information on the methods and the types of analysis to accomplish these ambitious goals.

Chapter 5. Methodology: the logic and process of inquiry

5.1. Introduction

The chapter describes my socio-cultural understanding of knowledge and its production, also referred to in the literature as epistemology. In the following section, my epistemology arises from discussing and critiquing two alternative, classical philosophies: namely, rationalism and empiricism. Later in the chapter, my theoretical perspective is used to inform the research's design, procedures, and data analysis. The chapter concludes with a detailed description of the ethical concerns of this work.

5.2. Situating the research philosophy: socio-cultural epistemology

The epistemological premise of rationalism and empiricism is to relegate knowledge to a secondary position compared to the social and natural worlds (Renault, 2016). For those philosophies, knowledge does not interact with social and natural phenomena (i.e., social and natural ontologies) but is external to them.

Based on these assumptions, rationalists hypothesise that individuals might be gifted with some sort of innate mental capacity to deduce coherent, universal truths independently from prior perceptual experiences (Piaget, 1970; Stern, 1993). Hence, they can reflect and produce general knowledge that is valid anywhere and at all times.

However, following such a rationalistic logic might generate questionable, if not absurd, consequences (Dewey, 1958; Eisner & Eisner, 1985). For instance, rationalism might consider that any inference of extra-terrestrial life is an act of human reasoning, not the more natural consequence of the empirical discovery

of extra-terrestrial planets and beings. Likewise, rationalist thinking might suggest that researchers figure out their philosophies by themselves, as if interactions with colleagues, reading manuscripts, and other similar activities, do not contribute to shaping their thinking and theories. Therefore, it is hard to believe that the natural and social worlds do not have any role in influencing the researcher and his or her knowledge generation.

In complete rejection of such a rationalist hypothesis, the empiricist tradition offers a more anti-cognitivist stance on knowledge generation (Lewisohn, 1972; Mill, 1846). Empiricists believe that individuals can objectively perceive and describe the world around them in a sort of conceptual vacuum. Thereby, researchers (and non-academic individuals) of any nation at any moment have similar perceptual experiences and can equally describe the natural and social ontologies around them.

Similarly to rationalism's case, empiricist principles can nevertheless be disconfirmed by factual considerations (Eisner, 1982). For example, empiricism may lead to the belief that pilots and passengers equally perceive and describe flying experiences; as if their different prior knowledge of departure safety protocols, for instance, do not shape such descriptions. It is more likely, therefore, that individuals gather unequal sociohistorical information, such as safety protocols, that ultimately shapes their analysis of the social and natural world (Dewey, 1958; Renault, 2016).

To overcome the problematic implications of empiricism and rationalism, socio-cultural theorists argue that researchers (and, by extension, any individuals) have a derivative nature (Dewey, 1958). Rather than being or thinking aprioristically in

terms of natural ontology and existing knowledge, individuals construct themselves in interactions with them (Dewey, 1958). It follows that their continuous interactions with epistemology and ontology explain why individuals infer phenomena based on prior empirical discoveries, such as the case of extra-terrestrial life, and also why humans' prior knowledge shapes their analysis (see the example of passengers and pilots).

The researcher's interaction with the social and cultural world also plays a large part in knowledge generation (Dewey, 1910, 1951). For the sake of simplicity, three processes (and interactions) can be distinguished in the construction of knowledge of phenomena in social science research, although they are probably interrelated and simultaneous. The first process is conceptual: it results from an interaction between the researcher, his/her prior knowledge, and the existing knowledge of phenomena in his/her community. As a result, an initial socio-cultural definition of the field of study and its central relationships is produced. The second is more naturalistic and is the consequence of an empirical interaction between the researcher and the phenomena under investigation. This empirical investigation enriches the researcher's learning and, perhaps, stimulates nuanced reflection on and analysis of the matters (Dewey, 1910, 1951). The researcher's reflection, the last process in knowledge generation, abstracts the empirical phenomena per se to conceptually reformulate them on common socio-cultural principles. In this way, the researcher renders the empirical evidence general knowledge: widely applicable knowledge across contexts that share homogenous sociohistorical characteristics with the researcher (Lincoln & Guba, 1984). An illustrative example of this was applying the DISS project's conceptualisations of deployment and practice, rather than

empirical findings, to the Italian context (Chapter 2). This was possible due to the sociohistorical similarities between the UK and Italy (e.g., similar mainstream provisions for children with SEND and TA training), which perhaps might not be found in other countries where, for instance, the TA profession does not exist.

However, the general value of knowledge does not mean a permanent validity of knowledge. Indeed, knowledge continually evolves as researchers collect additional information about phenomena (Dewey, 1910, 1951). As a case in point, perhaps like many other PhD students, I have continuously modified the words and content of this epistemological section during the continuum of learning experiences throughout the four-year PhD research programme (e.g., reading, discussing with colleagues and supervisors). The “settlement” of this draft is not expected to be permanently settled as such. In the future, I am likely to reshape such theoretical arguments and, by extension, the findings and writing of this thesis due to added learning and experiences. Hence, knowledge is perhaps widely applicable in a given time, but is never permanent.

In many ways, such philosophical tenets permeate the design and methodology of this study. A central task of the following subsections is to make this explicit by showing how the research design and tools are imbued with the socio-cultural epistemology hereby stated.

5.3. Research design: sequential multi-method design

A sequential multi-method research design was chosen to address the research questions according to the research's socio-cultural epistemological underpinning. Before delving into the more methodological aspects (e.g., research goals and questions), I will explain how my socio-cultural epistemology permeates and shapes the research design.

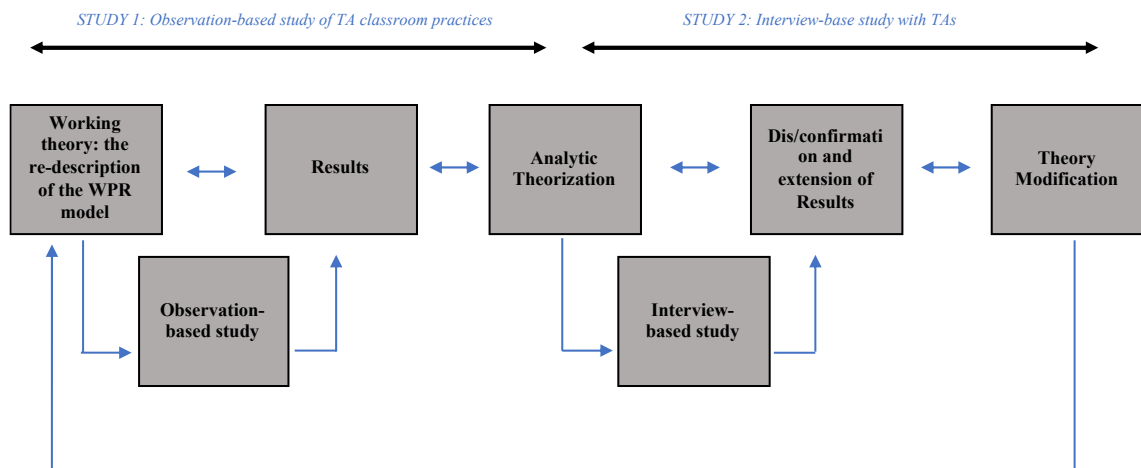
The sequential multi-method design (Figure 6) embraces the three sequential steps of socio-cultural knowledge generation: (1) definition of a conceptual background, (2) empirical interactions with the phenomena, and (3) analytic theorisations. In Figure 6, the first square on the left shows that the conceptual framework of this study is the re-description of the Wider Pedagogical Role (WPR) model, predicting that:

- Whole-class responsibilities of TAs and teachers across Italian primary schools promote effective collaboration for the education of the whole class, avoiding TAs' deployment close to children with SEND and the adverse effect on children's education associated with it.
- The demanding teaching training requirements for Italian TAs favour a theoretical preparedness in pedagogical and subject matters, which positively impacts their teaching practice.

Furthermore, the sequential research design espouses the socio-cultural knowledge evolution principle (more efficiently than single-study research). As illustrated in Figure 6, knowledge seemingly evolves; this motivates the two independent studies of this research, namely the classroom practices of a single

TA (henceforth also labelled as Study 1) and small-sample interviews with primary-school TAs (henceforth also labelled as Study 2).

Figure 7 Sequential multi-method design



The two studies aimed to provide a comparable quantitative and qualitative description of TA practices, class roles, and deployment. The convergence of similar numerical and thematic representations of the TA deployment and practice favoured the triangulation of information within and among studies, thus potentially increasing the reader's trust in the research findings (Creswell, 2007; Morse, 2009).

Table 6 synthetically presents the research questions, the corresponding study, the tool employed to collect the data, and a description of the data analysis. The Table also shows that Study 2 reached all the research objectives, even those not addressed in Study 1, due to its technical limitations (e.g., research question 1.4.). More information on the design of the two studies and their rationale is laid out in the following sections.

Table 6 Research questions, tools, and data analysis

Research question	Study	Procedure	Analysis	Data display
1 In Italy, how are TAs deployed in mainstream primary schools?				
1.1. What types of co-teaching styles are evident in lessons?	1	Field notes of classroom events	Thematic analysis	Vignette
	2	Questionnaire	Systematic Observations	Table of frequencies
		Interview	Thematic data	Interview extract
1.2. Who do TAs predominantly work with? Where do they predominantly work (i.e., inside or outside the classrooms)?	1	Video of classroom observations	Systematic Observations	Table of frequencies
	2	Questionnaire/ Time logs	Systematic Observations	Table of frequencies
1.3. How (e.g., private conversations and group interactions) and what types of support do TAs provide to the children with SEND (e.g., curricular or differentiated activities), whole class (e.g., curriculum), and teachers (e.g., administrative)?	1	Video of classroom observations	Socio-cultural analysis of speech events	Extracts of interactions
	2	Interviews	Thematic analysis	Interview extract
1.4. What factors, including conditions of employment and preparedness of TAs, do TAs perceive could be associated with their deployment?	2	Interviews	Thematic analysis	Table of frequencies
				Interview extract
2 In Italy, what types of support activities do TAs employ to support the classroom experience of primary-school children with SEND?				
2.1. What types of TA support strategies, such as behavioural management support and enhancement of on-task behaviours, are used in the lessons?	1	Video of classroom observations	Systematic Observations	Table of frequencies
	2	Questionnaire/ Time logs	Systematic Observations	Table of frequencies
2.2. What are the tactics that TAs use to: a) manage disruptive behaviours, b) support task engagement, and c) support the learning of social skills of children with SEND?	1	Video of classroom observations	Socio-cultural analysis of speech events	Extracts of interaction
	2	Interviews	Thematic analysis	Interview extract
2.3. What factors, including the conditions of employment and preparedness, do TAs perceive could be associated with their types of support for children with SEND?	2	Interviews	Thematic analysis	Table of frequencies
				Interview extract
3 In Italy, how do TAs support the content learning of children with SEND?				
3.1. What types of pedagogical interactions, including repair and topic generation episodes, are available in the lessons?	1	Video of classroom observations	Systematic Observations	Table of frequencies
	2	Interviews	Thematic analysis	Table of frequencies
3.2. How do TAs design pedagogical interactions, including repair and topic generation episodes?	1	Video of classroom observations	Socio-cultural analysis of speech events	Extracts of interactions
	2	Interviews	Thematic analysis	Interview extract
3.3. How do TAs reflect on teaching practice? What are the theoretical principles upon which their approaches rely on?	2	Interviews	Thematic analysis	Table of frequencies
				Interview extract
3.4. What factors, including the conditions of employment and training, do TAs perceive could be associated with their pedagogical practice?	2	Interviews	Thematic analysis	Table of frequencies
				Interview extract

5.3.1. Study 1: observation-based study

Study 1 was based on classroom observations of the TA teaching experience. The observations were limited to literacy lessons so as to reduce the analytical and practical challenges of planning them and processing data across multiple subjects and related contexts (e.g., different participants, classrooms, and topics). Among the many subjects, literacy was chosen as representing the most relevant and timely extensive instruction activity within the Italian primary curriculum (Ministero dell'Istruzione [MI], 2020).

The exploration of TA teaching experience through classroom observations has a wide array of benefits. First, classroom observations provide first-hand information on TA classroom activities. The absence of filters promotes a more naturalistic exploration of the phenomena. Second, classroom observations produce rich information on the TA teaching experience and its potential impact on children's learning (Sackett, 1978). Other research tools, such as interviews/questionnaires, render those analyses more complicated, as they seemingly constrain the participants to self-report data in short sentences or in a limited time; this potentially impoverishes the data per se and their (educational) interpretations.

Nevertheless, the advantages of classroom observations are counterbalanced by costs. To begin with, there are many steps that the researcher must take before the observations (e.g., identification and overseeing of the site), which makes this method less efficient in terms of time and energy than other research designs. Furthermore, the experience of analysing classroom data might be

overwhelming, unwieldy, and time-consuming, especially for research designed to respond to many research questions, such as the current study.

To address those drawbacks, I decided to sample a small group of participants, between one and five cases. This way, I reduced the challenges of planning and analysing a large-scale classroom observation research, making it achievable in the planned period (Yin, 2014). Furthermore, the small sample was not considered a limitation to achieving the research goals (in addition to being consistent with socio-cultural epistemologies). The richness of the classroom data allowed me to (seamlessly) populate the existent/novel thematic conceptualisation of TA deployment and practice and revise my re-description of the WPR role model.

Unfortunately, the planned study of one to five cases occurred during the COVID-19 pandemic and the consequent social distance regulations. When these regulations were implemented, only a single case study of literacy classroom observations had been completed, and no other studies were possible within the programmed schedule of the research.

5.3.1.1. Recruiting participants

Multiple stages were followed to source Study 1's participating school and TA(s). Initially, an unspecified number of mainstream schools were identified, from which the participating TA(s) were to be drawn. The TA(s) must have had high preparation and whole-class responsibility in order to represent the typical Italian case study. TA(s) were considered prepared when they possessed a master's degree in special education (MSE), in addition to the regular teaching

requirements (i.e., Master in Primary Education [MPE] or high school diploma in education [HDE]). Furthermore, TA(s) were sampled if they had signed permanent or yearly national contracts. National contracts legally bind TAs to instruct the whole class of students (ARNPA, 2007; 2018); they also provide TAs with a) up to five paid days a year for In-Service Training (INSET) and b) paid hours for co-planning lessons throughout a school week (ARNPA, 2007, 2018). Excluded from the sampling were TA(s): a) without an MSE, b) and with short-term contracts (e.g., substitute teachers) or private teaching contracts (e.g., TAs in private schools). Similar conditions for sampling were also applied when sourcing Study 2's participating TAs.

The second sampling stage involved engaging in conversations with the headteachers to search for a subgroup of TAs that had the characteristics required and wanted to participate in the project (i.e., using opportunistic sampling). Next, talks were held with the identified subgroup of TAs and their teaching colleagues: the classroom teachers. During the informal conversations, I explained in detail the research design and the ethical concerns of conducting such research (e.g., storage, processing, and use of the data). Approximately one month after the conversations, a single dyad (a TA and classroom teacher) informally agreed to participate in the project.

The third stage started with a request to the TA to identify a single child with whom the TA worked predominantly, within the classroom. Once identified, I asked the headmaster and teachers to organise a meeting with the child's parents and the child himself to speak informally about the research design and ethical concerns. Approximately three months after this meeting, I received an informal acceptance from all the identified participants. Next, I sought their written

consent (see Appendix L for details). Finally, an information sheet on the project was sent to all the students and teachers of the classroom where the identified participants worked to make them formally aware of the project. Students and teachers were told they could opt out of the project by requiring that any data gathered concerning themselves be destroyed. The process ultimately led to recruiting the participants, as shown in Table 7.

Table 7 The characteristics and pseudonyms of the participants

Participant pseudonym (TA)	Age	Years of experience	Qual.	INSET training	Year group in Italy/Equivalent year group in the UK	The child the TA predominantly works with	Participant pseudonym (child with C&I + SN&P)
Gloria	30-39	5 - 10	MPE + MSE	No	4th class/Year 5	The child with Communication and Interaction (C&I) + Physical and/or Sensory Needs (P&SN)	Josh

Note. TA demographics, qualifications, and training data were gathered through the TA questionnaire/Section 1 (Appendix B). The demographics and needs of the participating child with SEND, classroom composition, etc., were collected through a questionnaire forwarded to and answered by the school's headteacher (Appendix C).

Gloria is a white female Italian with Italian as her first language. Josh is a white male Italian with Italian as his first language. In Service Training (INSET) was calculated across only the last three school years.

In Table 7, the data are organised in broader thematic categories and numerical intervals. First, I labelled the questionnaire responses regarding the specific child's types of needs according to the classification of the UK's SEND Code of Practice 2014, such as Communication and Interaction (C&I) + Physical and/or Sensory Needs (P&SN) (DfE, 2014). Second, age, qualifications, and other details were grouped into broader thematic categories (e.g., age range and qualification level). Third, the names of the participants were pseudonymised. As a result of all these processes, I prevented clear identification of the participants and protected their confidentiality.

To code the children’s special needs, I employed the classification of the Code of Practice 2014 – rather than, for instance, the international classification of functioning, disability, and health (ICF-CY) – due to its merit in focusing on educational matters (and less so on clinical disorders). The coding was straightforward, as the Code of Practice 2014 details how to group the areas of needs in SEND, defined according to the International Classification of Diseases (ICD), which was used to collect the data in the first place (see Table 8 for details).

Table 8 Categorisation of SEND - Code of Practice 2014

Area of SEND	Definition (Extract)
Communication and Interaction (C&I)	“Children and young people with speech, language, and communication needs (SLCN) have difficulty in communicating with others. This may be because they have difficulty saying what they want to, understanding what is being said to them or they do not understand or use social rules of communication. [...] Children and young people with ASD, including Asperger’s Syndrome and Autism, are likely to have particular difficulties with social interaction. They may also experience difficulties with language, communication, and imagination, which can impact on how they relate to others” (DfE, 2014, pg. 97).
Cognition and Learning (C&L)	“Support for learning difficulties may be required when children and young people learn at a slower pace than their peers, even with appropriate differentiation. Learning difficulties cover a wide range of needs, including moderate learning difficulties (MLD), severe learning difficulties (SLD), where children are likely to need support in all areas of the curriculum and associated difficulties with mobility and communication, through to profound and multiple learning difficulties (PMLD), children are likely to have severe and complex learning difficulties as well as a physical disability or sensory impairment. Specific learning difficulties (SpLD), affect one or more specific aspects of learning. This encompasses a range of conditions such as dyslexia, dyscalculia, and dyspraxia (DfE, 2014, pg. 97-98).
Social, Emotional and Mental Health difficulties (SEMHD)	“These may include becoming withdrawn or isolated, as well as displaying challenging, disruptive, or disturbing behaviour. These behaviours may reflect underlying mental health difficulties such as anxiety or depression, self-harming, substance misuse, eating disorders or physical symptoms that are medically unexplained. Other children and young people may have disorders such as attention deficit disorder, attention deficit hyperactive disorder or attachment disorder” (DfE, 2014, pg. 98).
Physical and/or Sensory Needs (P&SN)	“These difficulties can be age related and may fluctuate over time. Many children and young people with vision impairment (VI), hearing impairment (HI) or a multi-sensory impairment (MSI) will require specialist support and/or equipment to access their learning, or habilitation support. Children and young people with an MSI have a combination of vision and hearing difficulties” (DfE, 2014, pg. 98).

5.3.1.2. Procedures

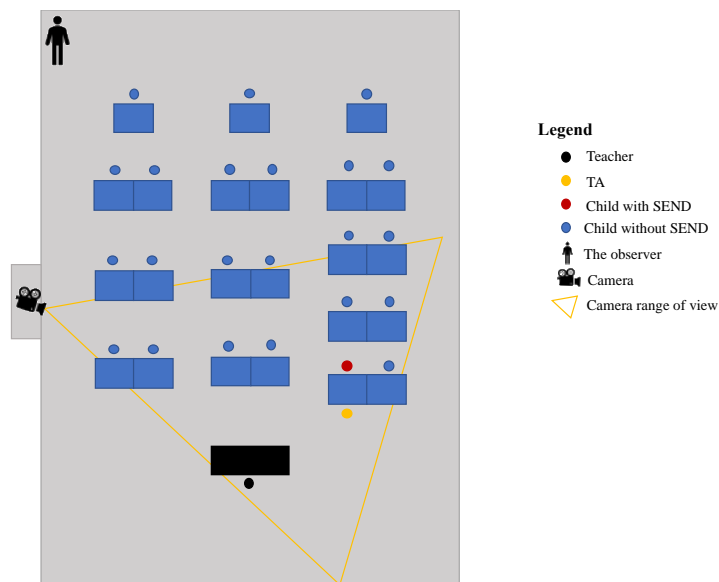
Observational data were principally gathered through video recording. Videos were instrumental in developing multiple and detailed analyses of TA classroom activities (e.g., multiple systematic observations and detailed analyses of classroom interactions), which might have been unwieldy in a live observation format. Furthermore, video data and, notably, the replay option made multiple observations (and checks) possible, and hence enabled a more robust analysis.

In the days before the study, I oversaw the participating classroom settings and talked with the teachers and headteachers. This way, I could have an idea of the participants' classroom positions, where to place the camera and my position during the study. Nonetheless, I did not run a preliminary (pilot) video observation of classroom activities to test the feasibility of the entire study (e.g., checking whether the camera gathers the TAs also when moving around the classroom). The decision was taken as this pilot observation would be of one or two hours maximum considering the small size of Study 1; thus, its small length could seemingly not have brought to light any important information about the classroom dynamics or the workability of the research plan (Kim, 2010). Also, I felt that my extensive experience with classroom observations would help run the process effectively, reducing the need for pilot work (Malmqvist et al., 2019).

During the study phase, video recordings were made via a camera on a tripod. The camera was placed in the recess of a classroom window to avoid interfering with the classroom's activities or facing participants. This way, it seemingly minimised the TA's, the teacher's, and the classroom students' perceptions of being observed (Croll, 1986). The camera was set to have a wide-range target

so that the TA could usually be observed, also if moving across the classroom (see Figure 7 for details). In the analysis phase, the video could be zoomed when, for instance, particular features of the participant's body language needed to be captured. An unobtrusive wireless microphone was attached to the clothing of the participating TA. Another microphone was left on the desk of the other participant, namely the child with whom the TA reported interacting the most (i.e., the child with SEND). By having two audio reception points, I was more confident in capturing the voices of both the TA and the child with SEND. Also, the small size of the microphones seemed to prevent them from significantly influencing the participants' natural behaviour.

Figure 8 Camera and observer locations during the recording



I, the observer, was also present in the classroom. I sat in the classroom corner at a distance from the camera and the participants. My position allowed me to

observe the participants' actions while minimising their discomfort at being observed.

During the observations, I took substantial handwritten notes in English about classroom dynamics, classroom settings, and other details. As a result, I added more contextual information to the (video) observations of the TA classwork. The notes were chronological commentaries and rarely reported ongoing classroom dialogues (see Appendix A). By loosely recording the content of classroom activities, these types of notes allowed me to stay attentive to the ongoing classroom activities and to report them in their broader aspects (alongside monitoring the camera) (DeWalt, 2011; Emerson et al., 2011).

5.3.1.3. Data Analysis

5.3.1.3.1. Video data: (i) systematic observations

The video recording of classroom observations was processed with a continuum of numeric and thematic analyses. In this subsection, I focus on the more numerical type. The following section targets the thematic analysis.

In Study 1 and across the entire research, quantitative analysis displayed frequencies and duration of TA behaviour and interactions. No other (parametric) statistics were developed (e.g., analysis of variance and linear regression).

Parametric statistics were not used, as they conflict with the socio-cultural understanding of knowledge endorsed here. Parametric statistics assume that empirical findings of, for instance, a sample of TA practices could represent the broader population of TAs (empiricism). The socio-cultural position indicates instead that the sampled empirical practices are shaped by uneven sets of circumstances, including the types of children that TAs interact with, and their

cultural background; and therefore, these practices are unique (see also the example of pilots and passengers and the related argument; Section 5.2). It follows that knowledge cannot be generalised when it relies on empirical practices, whereas empirical data can be a vehicle for general knowledge when they prompt the researcher's theorisations upon more widely applicable socio-cultural beliefs and logic (see the WPR model's application in the Italian context and the related argument; Section 5.2).

Now moving to more pragmatic aspects, the quantitative research elaboration of classroom data relied on systematic observations. Systematic classroom observations were chosen as the optimal solution to produce a frequency analysis of TA deployment and practice, and address to the quantitative research questions (Sackett, 1978). Moreover, they are an efficient method of analysis. They do not require any preparatory work, such as the transcriptions of interactions, but the analysis is conducted on the video directly. Finally, systematic observations incorporate verbal and non-verbal data, such as pointing and gazing, thereby producing a more exhaustive and richer interpretation of the phenomena compared to mainly linguistic analysis of classroom data, as was explored in the literature review (e.g., Rubie-Davies et al. [2010]).

Three broad stages of analyses were followed to process the video data numerically. Initially, I constructed thematically organised observational schedules in the four key domains of this research: a) the classroom working context, b) TA deployment, c) TA support strategies, and d) TA pedagogical practice. Each observational schedule was composed of semantic subthemes and codes, such as superficial categories of TA behaviours and support styles (see Table 9 for more details).

In line with the socio-cultural principles, the themes and codes were produced in a deductive and inductive continuum. That is to say that many categories were theoretical/deductive, as they recycled existent ones used in observational schedules or concepts of the literature. In this regard, I mostly used Blatchford, Webster, and Russell's schedules (2011), as they were effectively constructed to answer similar research questions (i.e., exploring TA deployment and practice). Additional categories were nonetheless built inductively by observing the video data, such as questioning and focusing, to provide a more fine-grained representation of TA support than was present in Blatchford et al. (2011).

In the second phase of the analysis, I designed the sampling technique to calculate the frequency of appearance of the schedules' codes in the continuity of the video data. I applied time sampling techniques to measure the frequencies of TA behaviours, TA support strategies, and classroom working context (see Appendix D for details). Specifically, I first converted the videos into multiple timed intervals. Then, in each of the intervals, I coded the longest-lasting category among the codes of each observation schedule (i.e., predominant coding). Conversely, I measured the frequencies and duration of (only) the TA pedagogical interaction categories as they appeared in the data (i.e., event-sampling techniques). Table 9 gives full details of the sampling methods in the various domains.

Table 9 Observational schedule of the systematic observations

Observation schedule	Sub-themes	Sampling strategy	Inter-Coder-Agreement (ICA)
TA class role	Working with/not working with (e.g., the child with SEND, a child without SEND, and whole class)	Time sampling (interval of 10 sec)	.80
TA support strategies	TA types of support (e.g., pedagogical support, behaviour management)	Time sampling (interval of 10 sec)	.81
	TA types of interaction (e.g., questioning or making a statement)	Time sampling (interval of 10 sec)	.77
Pedagogical support (e.g., repair episodes and topic generation episodes)		Event sampling	.71
Classroom context	The location of the TA (e.g., in or outside the classroom)	Time sampling (interval of 1 min)	1.00
	Working context (e.g., group work, whole-class teacher-led)	Time sampling (interval of 1 min)	.91
	Task content (e.g., reading and writing)	Time sampling (interval of 1 min)	.89

Generally, the literature on classroom observations indicated that event sampling and, by extension, any continuous coding techniques are preferred, as they fairly represent the events of interest in terms of duration and frequency (Sackett, 1978). By contrast, any discontinued coding practices, including time sampling techniques, distort the natural frequency and duration of events; for instance, events may be naturally shorter or longer than the prescribed interval in which they are coded (Sackett, 1978). However, there are some circumstances where time sampling is the best option (Mitchell, 1979). As a case in point, the current study's TA behaviours and support style schedules comprise more than 40 highly recurrent events, making the event sampling of each of the 40 categories unwieldy. Also, the codes, seemingly of naturally brief duration (e.g., focusing, giving orders, and interrogating), were somewhat accurately circumscribed in short intervals. Hence, TA behaviours and support style categories were believed to be more effectively coded in time intervals than by event sampling, and the distortion in the coding process, if existent, appeared to be acceptable.

In the final phase of the analysis, I studied the sensitivity of the analysis to that of my research community and practitioners (Italian context). To do this, I measured the extent to which another Italian researcher and I had assigned the same codes to the same data set. The inter-coder agreement results (ICA) tested the codes and the coding and, if needed, suggested changes to increase the communicability of the work to the broader Italian audience to whom this study is primarily directed.

The ICA took place on a series of moments. First, I trained the additional observer to use multiple coding systems. Over a Zoom video call, I showed the coding procedures of a session and discussed the coding with the additional observer. That particular session would then not be included when calculating ICA. After the training, I shared a single day of observation of about two hours (i.e., 20% of the total video observations), the list of codes and definitions, and the observation schedules, in a Microsoft Excel (XLS) file. The trained observer could see the videos but, for ethical reasons, could not download them. Next, the trained observer and I independently coded the session on the shared XLS file. Finally, I measured ICA on an event-by-event basis, rather than comparing the total categorical frequencies. Cohen's Kappa was calculated to safeguard the agreement measure from the possibility that the two observers had coded similarly by chance (see Appendix E for this process). Cohen's Kappa was preferred to other measures, such as correlation, because it is more effective in measuring the agreement of two coders (and not more) in scoring independent rather than continuous categories. The high level of agreement (Table 9) reassured me of the high communicability of the analysis in the Italian context. Thus, there was no need to adapt the coding system further.

As originally conceived, ICA was certainly not intended to measure the communicability of analysis to the research socio-cultural world, as in this case (Braun et al., 2019). On the contrary, it was designed to ensure the objective accuracy and stability of the analysis, regardless of different observers (i.e., reliability analysis). Undoubtedly, this latter conception cannot be applied in socio-cultural epistemological contexts, where the researcher and his or her unique derivative nature have a central role in the analysis. That said, there are no reasons to believe that ICA cannot be adapted to socio-cultural studies (O'Connor & Joffe, 2020). As many have proposed before me, socio-cultural ICA should be designed to ensure that the researcher's analysis transcends their subjective views and is consistent with the audience's broader socio-cultural principles; thus, it can be understood and shared in the community (O'Connor & Joffe, 2020).

5.3.1.3.2. Video data: (ii) socio-cultural analysis of speech events

The video recording and, notably, the interactions between the participating TA and the child with SEND were also analysed more qualitatively. This analysis was designed to promote an in-depth description of TA practice and address the multiple qualitative research questions (e.g., RQs. 1.3. and 2.2.). It was also designed to overcome the limitations of systematic classroom observations and, by extension, any frequency analysis, as this method tends to ignore the historical, educational (and cultural) context within which the single code of TA behaviour or support strategy is located (Hardman & Hardman, 2017; Kington et al., 2011).

The qualitative analysis focused on the interactions between the TA and Josh, as the TA rarely interacted with other children. The analysis was informed by the

work of various researchers who have studied classroom interactions (Gumperz, 2008; Snell et al., 2015) and, notably, Mercer (2004). Constructivist and scaffolding theories were used to interpret the impact of talk strategies on children's learning in a complementary manner to Mercer's Socio-cultural Discourse Analysis (2004). Also, the organisation of the interactions according to goal-oriented events or codes was promoted; these are also known as "speech events" in the sociolinguistic literature (Gumperz, 2008). Such speech events were grouped in coherent thematic codes, whilst episodic ones were removed from the analysis. In so doing, I rejected the practice found in some literature of cherry-picking "insightful" extracts to substantiate the researcher's theoretical arguments, and thereby promoted a fairer representation of TA interactions and more democratic theorisation (Amabile & Stubbs, 1982).

The interactions between Gloria and Josh were broadly processed in multiple phases. First, they were transcribed into Word documents in the first stage, using conventional orthography. Silence and pauses were also noted. Second, the transcription was segmented into temporally organised sequences of goal-oriented event instances. Third, the transcription of a single day was interrogated in terms of the scaffolding themes by asking the following questions: "How does the TA enhance the child's on-task behaviour?", "How does the TA support the child's learning?", "How does the TA repair the child's troubles?" The discrete thematic, semantic categories were then generated from the analysis. Categories were originally generated from the analysis of the data (inductive categories) or echoing and further developing pre-existing codes found in the literature (e.g., stereo teaching, curricular support, and indirect support). Fourth, the rest of the data corpus was sought to verify the provisional categories. Where possible, the emergent themes of Phase Two were reworked according to the new data.

Fifth, I calculated the ICA to ensure that the codes were widely communicable in the Italian context. I trained an additional Italian researcher on the coding procedures and observational schedules over a few Zoom video calls (see Appendix E). I showed them some video extracts and discussed the coding procedures. Those particular extracts were then not included when calculating ICA. After the training period, I shared multiple files of a single day of observation, corresponding to the codes of the session. I also shared the entire video of the session so that the observer could locate the interaction in the broader classroom activities. The trained observer was then invited to independently label each extract with a single category of each observation schedule. Cohen's Kappa was calculated to safeguard the agreement measure from the possibility that the two observers had coded similarly by chance (see Appendix E for more details).

Table 10 shows the level of agreement in each of the three thematic domains of the analysis (i.e., themes). The results reassured me of the high communicability of the analysis in the Italian context, despite being inferior to what was seen for systematic observations. The difference between the two results could be explained by the nature of the two coding systems: more superficial codes in the systematic observation schedules and more interpretative ones here; this makes the current qualitative analysis less straightforward and susceptible to a higher, yet acceptable, disagreement (O'Connor & Joffe, 2020).

Table 10 Cohen Kappa scores for ICA / Socio-cultural analysis of speech events

Domain	ICA
TA class role	.64
TA multi-dimensional support (excluding pedagogical assistance)	.61
TA pedagogical practice	.62

After the measurement of the ICA, data were translated from Italian to English. The translation was literal except for cultural and dialectal expressions where an equivalent in English was used. Also, grammar and syntactic rules with no equivalent in English were reported in the findings, along with specifying the rationale of the Italian rules. The findings are presented as extracts in the translated and original versions.

In this work, the translation was merely designed to convey the findings to the English audience and had no impact on the analytic process, which was conducted in Italian throughout. It follows that any added procedure to evaluate/improve the quality of the translation was not considered (e.g., back-translation), as the Italian-based analysis would have been unaffected and not bettered, even after a supposed “improvement” of the English translation.

After the translation, a line-by-line analysis of linguistic (e.g., change in tone and lexical shift) and non-verbal features (e.g., nodding and pointing) was produced. Essentially, the analysis was reported in the section “observer comments” next to the speech. Transcriptions incorporated only a few linguistic features of the interactions (see Appendix F for details). The linguistic approach of including many more, if not all, para/linguistic features was perceived as a technical exercise in a multilingual study and did not add much information to answer the research questions.

Finally, the thematically organised interactions were interpreted in line with socio-cultural pedagogies. In particular, I made an inference regarding to what extent the TA fostered the children's thinking and maximised their responsibility to deal with emotional, social, and pedagogical tasks.

5.3.1.3.3. Field notes: thematic coding

Field notes provided a narrative account of the classroom activities, the classroom teacher's role, and how it related to the TA classwork (i.e., semi-structured field notes). They effectively answered the research question regarding the class co-teaching style (RQ1.1.), which could not be achieved through the video data largely involving the TA (see Figure 8 for more details).

The field notes were processed in multiple phases. Initially, the handwritten field notes were transcribed into digital Word documents. The transcription accurately preserved the handwritten notes. Rarely did I define the abbreviations or correct typos/mistakes. Next, the transcription was interrogated regarding co-teaching matters. An initial framework of thematic categories was used to code co-teaching: for instance, one teaches and the other observes and teaming. Finally, a single day of observations was presented as a vignette in the main text: the storytelling of the classroom events. The vignette transparently shows the readers how I reached my analytic conclusions so that they can be the ultimate analysts to confirm or refute them.

5.3.2. Study 2: Interview-based study

Study 2 was structured around two subsequent interviews with a small sample of TAs. Initially, each TA answered a written questionnaire, which amounted to a structured (written) interview. It provided a systematic account of TAs' deployment, types of support activities, and pedagogical practices. The second interview was a more conventional oral interrogation, which probed and extended the information gathered in the questionnaire in a less structured fashion.

The rationale for designing such a study was fourfold:

- *Democratising the broader research findings.* The combination of Study 1 findings, my observation of phenomena, and Study 2 (practitioners' perceptions) promotes inclusive research findings. As a result, the work could be more widely communicable across multiple types of audiences (e.g., practitioners and researchers).
- *Replicating, testing, and potentially revising the findings of Study 1.* Study 2 selectively limited the analysis of TA deployment and practice to literacy lessons, similar to Study 1. Hence, I could cross-check the studies' findings, remove the anomalous results, and keep the more trustworthy ones.
- *Expanding the research results.* Study 2 gathered additional information and responded to research questions that could not be answered in Study 1, thus stimulating further thinking and theorisations.
- *Increasing confidence in the broader transferability of the results.* Where possible, Study 2 provided the reader with evidence that the Study 1's findings could be applied to other classrooms. In so doing, it potentially

supported the results' wider applicability in the context of Italian primary schools.

5.3.2.1. Sampling logics

The Study 2 sample size was more significant (than Study 1's). That was possible because Study 2 hinged on easier-to-collect and handle textual information (i.e., transcripts of interviews and questionnaire data). The larger sample was also intended to compensate for the lower richness of textual information than the Study 1 video data (e.g., body language and contextual information). This gave Study 2 an equal ability to populate existing categories in my theoretical framework or produce new ones. Furthermore, a larger sample was felt adequate to (better) reach the objective of increasing readers' confidence in the applicability of the research findings to a larger population of TAs.

However, there was no clear idea of what a large(r) sample size meant before the study took place. The literature did not appear to provide a gold standard for an interview-based study such as this (i.e., questionnaire + interview) or even single-interview research (Beitin, 2012). Whilst many researchers propose sizes of 20 or 40 (Francis et al., 2010), other researchers, grounded theorists, take a more radical stance. They argue that sampling cannot be chosen beforehand, as it varies across studies and data (Braun & Clarke, 2021). For them, sampling should stop when the data, gathered inductively and comprehensively, instantiate themes and their relationships in order to construct a novel theory (i.e., theoretical sampling).

Despite the credibility of the latter position, I was conscious of the planning, resource management, and time benefits of designing a provisional sample

beforehand. Hence, an approximate target of 30 TAs was chosen, echoing studies with similar theoretical goals (Bowles, 2015; see also Bowles et al., 2018; D’Alessio & Cowan, 2013). The provisional target was nevertheless flexible and could be extended. Sampling only stopped when data saturation was reached (Saunders et al., 2017); that is, there was evidence that the data collected became redundant in substantiating theoretical or new codes/themes from which the theorisations of this work arose (Low, 2019). At the end of the fieldwork, 31 TAs were interviewed, rather than the planned 30, due to more practical contingencies (i.e., more identified participants decided to participate in the research than expected). Nevertheless, data saturation was reached long before the 31st unit. No relevant new themes/subthemes/categories were coded after the 15th interview. For illustration, Table 11 shows how no added codes were recorded after the fourth interview in the thematic domain of TA deployment’s theorisations (for similar analysis, see Lowe et al., 2018).

Table 11 Saturation table

Themes	Interview No.																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Factors explaining TA class role	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Condition of employment (generic theme)	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
School community misbelief				X	X				X	X				X		X		X					X	X		X	X		X		X	X
De facto conditions				X	X									X		X		X						X			X	X				X
Preparedness differential (generic theme)		X		X					X				X				X			X			X	X								
TA SEND preparedness		X	X	X		X	X	X		X	X	X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Teacher SEND unpreparedness		X	X		X				X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Other (Good will, etc.)	X			X					X				X		X		X			X			X	X			X					X
No new relevant themes/Codes	2	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

5.3.2.2. Participants: recruiting process and participants' characteristics

The process of sourcing the participants was streamlined in Study 2:

1. A convenient sample of schools was contacted to identify plausible participating TAs with a yearly/permanent national contract and an MSE title.
2. The contacted TAs were then asked to identify further possible participants with similar characteristics (i.e., snowball sampling).
3. Conversations with the TAs were conducted to seek their consent.
4. Information sheets and consent forms were sent. Written consents were a precondition for the start of the project.

Table 12 shows the characteristics of the 31 female white Italian participants. As in Study 1, data were grouped into broader thematic categories and numerical intervals, and names were pseudonymised to protect the participants' confidentiality.

Table 12 The characteristics and pseudonyms of the participants

No.	Pseud.	Age	Expe.	Qualifications	Year group	Participant Child
1	Alba	40-49	< 5	Other Educational degrees + SP	5 th class/Year 6	Child with Cognitive and Learning difficulties (C&L) + Social Emotional Mental Health difficulties (SMEH)
2	Paola	< 30	< 5	Master's degree in Primary Education (MPE) + Master's degree in Special Education (MSE)	2 nd class/Year 3	Child with Physical and/or Sensory Needs (P&SN) + SEMH
3	Giovanna	50-59	> 20	High school Diploma in Education (HDE) + MSE	2 nd class/Year 3	Child with C&L + SEMH
4	Antonella	40-49	11 - 15	MPE + MSE	1 st class/Year 2	Child with C&L
5	Stefania	50-59	> 20	MPE + MSE	5 th class/Year 6	Child with Communication and Interaction needs (C&I)
6	Angela	40-49	5 – 10	Non-educational university degree + MSE	3 rd class/Year 4	Child with C&L + SEMH
7	Margherita	50-59	> 20	MPE + MSE	3 rd class/Year 4	Child with C&L + SEMH
8	Stefania	40-49	5 – 10	MPE + MSE	2 nd class/Year 3	Child with C&L
9	Lorenza	40-49	< 5	MPE + MSE	4 th class/Year 5	Child with C&L
10	Carla	40-49	11 - 15	MPE + MSE	4 th class/Year 5	Child with SN&P (Single need)
11	Polly	30-39	11 - 15	Other Educational degrees + MSE	5 th class/Year 6	Child with C&L + C&I
12	Megan	40-49	11 - 15	MPE + MSE	1 st class/Year 2	Child with C&L + C&I + SN&P
13	Lynn	40 – 49	< 5	Non-educational university degrees + MSE	2 nd class/Year 3	Child with C&L
14	Francesca	30 – 39	5 – 10	MPE + MSE	3 rd class/Year 4	Child with C&L
15	Paula	30 – 39	5 – 10	Other Educational degrees + MSE	4 th class/Year 5	Child with SEMH
16	Manuela	30 – 39	5 – 10	MPE + MSE	4 th class/Year 5	Child with C&L + C&I
17	Jemma	40 – 49	< 5	Non-educational university degree + SP	2 nd class/Year 3	Child with SEMH
18	Julia	50 – 59	> 20	Other Educational degrees + MSE	1 st class/Year 2	Child with C&L + SN&P
19	Giulia	< 30	< 5	MPE + MSE	2 nd class/Year 3	Child with C&L
20	Sarah	50 – 59	11 – 15	MPE + MSE	2 nd class/Year 3	Child with C&L + C&I
21	Ida	40 – 49	5 – 10	Non-educational university degree + MSE	2 nd class/Year 3	Child with C&L + SN&P
22	Imma	30 – 39	11 - 15	MPE + MSE	5 th class/Year 6	Child with SN&P (3 types)
23	Lina	30 – 39	5 – 10	MPE + MSE	1 st class/Year 2	Child with SN&P (Single need)
24	Linda	40 – 49	5 - 10	MPE + MSE	3 rd class/Year 4	Child with C&I
25	Leonida	40 – 49	15 – 20	HDE + MSE	2 nd class/Year 3	Child with SN&P (2 types)
26	Gina	30 – 39	5 – 10	Non-educational university degree + MSE	5 th class/Year 6	Child with C&I
27	Geppa	30 - 39	5 – 10	MPE + MSE	2 nd class/Year 3	Child with C&I + SN&P
28	Kim	40 – 49	15 – 20	Non-educational university degree + MSE	5 th class/Year 6	Child with SN&P (single need)
29	Barbara	30 – 39	< 5	Non-educational university degree + MSE	3 rd class/Year 4	Child with C&I
30	Domenica	40 - 49	5 – 10	Other Educational degrees + MSE	5 th class/Year 6	Child with C&L + C&I
31	Donna	40 – 49	11 - 15	MPE + MSE	1 st class/Year 2	Child with C&L + C&I + SN&P

Note. TA Pseudonym and TA teaching experience are abbreviated as Pseud. and expe., respectively.

Children's Year groups are expressed with the Italian classification (e.g., 5th class) and their equivalent in the UK school system (e.g., Year 6).

5.3.2.3. Procedure

Interviews and questionnaires are among the most efficient tools for collecting data (Alwin, 2007). They promote the quick and compelling collection of a large quantity of data. Also, they could effectively be adapted to deal with the COVID-19 social distancing restrictions that this study encountered (e.g., remote interviews and questionnaire completion). Finally, they were flexible enough to allow the replication (and extension) of Study 1's findings.

Both tools were piloted before the study took place, and, where appropriate, necessary amendments were made (e.g., appropriateness of the wording of the questions and their length). To test their "quality", two Italian non-participating retired teachers completed the questionnaire and were interviewed as if they were part of the study. Data collected is not displayed in the findings and was destroyed to protect the non-participants' privacy. Next, I asked them to give me feedback on the process, and modifications were made, namely improving the wording of some questions. The average length of completing the questionnaire (15 min) and of the interviews (1 h and 15 min) was nonetheless considered appropriate by the non-participants (and the literature [Alwin, 2016]). It seemingly avoided the danger of tiring them and negatively impacting the quality and precision of their responses.

The following subsections provide additional information on the questionnaire, its limitations, and its strengths. Next, the nature of the interview and its questions are described.

5.3.2.3.1. TA questionnaire

Study 2's questionnaire was designed to gather a systematic account of a wide array of items, such as TAs' classwork and their co-teaching relation with classroom teachers. This allowed me to effectively answer the many (quantitative) research questions involving TA deployment and practice (e.g., RQs 1.2. and 2.2.). Also, it replicated similar data as in Study 1. This made triangulation of results across studies possible, thereby enhancing the trustworthiness of the research findings as a whole.

To deal with the COVID-19 social distancing restrictions, the questionnaire was digitally shared and filled in a Word document format. Alternative digital survey methods, such as Qualtrics, were also considered, but did not seem to be the best option for the participants (e.g., complex to use).

The questionnaire invited the TAs to provide a wide range of information in 24 areas (e.g., TA demographics, deployment, and practice). The 24 items were mainly multiple-choice questions. An exception to these was the time-log task, which consisted of three time-log spreadsheets, dividing three classroom hours across three different school days into four intervals of 20 min. Participants were asked to fill each interval with the child/ren they work predominantly with, along with the support type they predominantly provided, among a predetermined list of strategies similar to Study 1's observational schedule (e.g., support on tasks, pedagogical support). This would enable a comparison of the two studies' findings. Furthermore, the participants were invited to complete each time log after the daily lesson (and not all at once) so that they could more easily remember their classroom activities, thereby increasing the chances of accurate reporting (Alwin, 2007).

One of the strongest critiques of the questionnaire and, by extension, any survey research is that participants might respond unfairly (Alwin, 2007). For instance, they could select answer options considered morally desirable and not consistent with the reality of their experiences (Alwin, 2016). To minimise this potential (negative) impact on the research findings, the questionnaire's answers were cross-checked with information from the subsequent interviews. In so doing, inconsistencies among answers could emerge and be treated with caution in the analysis. Simply put, data triangulation raised the trustworthiness of the research data and its theorisations.

A second potential problem of the research questionnaire concerned its length (Thiessen & Blasius, 2016). The extensiveness and complexity of some individual items might have tired participants, inducing inaccurate (or missing) responses (Alwin, 2016). To reduce this risk, I divided the questionnaire into two parts of about 12 items each, which respondents were asked to complete at different times. Also, I structured the questionnaire around "interesting questions"; for instance, using images and tables could keep the interviewees engaged in the task, and thus perhaps compensate for their potential tiredness (Alwin, 2016).

5.3.2.3.2. Interviews

➤ The procedure

The interviews were remotely conducted through the Zoom video call platform. The platform offered considerable flexibility in facilitating my encounters with the interviewees, among other benefits (Olliffe et al., 2021). One of the most serious problems with conducting Zoom interviews is the potential occurrence of unstable internet connections. Poor connections could interrupt the participants' and

interviewer's voices, generating misunderstandings and mishearing. To prevent this, I assessed the connection quality during an initial friendly interaction with the participants; next, I proceeded with the interview if the connection was acceptable. The initial talk was also used to promote familiarisation between myself and the participants to minimise our anxieties and stresses with the interview process. During the talk, I also provided clear information about the nature of the study. I repeatedly mentioned that the interview could be stopped at any moment if they did not feel comfortable with the process. This last step reassured the participants of the ethical soundness of the project and perhaps increased their confidence in the research and the quality of their answers.

➤ The structure

A semi-structured interview model was considered appropriate for the research. Semi-structured interviews allowed a predefined discussion on the themes emerging from the questionnaire and the broader interests of this research. Likewise, the flexible nature of semi-structured interviews helped the participants to elaborate on themes of their interest, which may be outside the researcher's theoretical framework. This way, they potentially favoured (added and) more "democratic" reflections on the phenomena.

The semi-structured nature of the interviews was also reflected in the way the multiple topics of interest were discussed. General main questions opened the talk, ensuring that the participants "freely" generated a thematic focus on the matters. Next, I had the opportunity to clarify some aspects of their answers (i.e., probing questions) or to explore further key ideas, words, and themes (i.e., follow-up questions). Occasionally I concluded the (topical) exchange with questions

asking the participants to comment on and, perhaps, refute my points of view on the interview topics (i.e., more confrontational questions). Although (empiricist) manuals discourage their use (Ritchie & Lewis, 2003; Rubin & Rubin, 2012), the latter questions espouse the socio-cultural aim of generating knowledge in interaction with the participants (Dewey, 1958).

➤ Interview schedule

Twelve topics were mainly discussed. The opening topic, TA general activities, allowed easy discussion for the practitioners, and thus gently eased them into the interview process. The subsequent nine topics directly related to the interview questions: TA deployment, support practices, and pedagogical interactions and preparedness (see Appendix H for more details). Among the other more conventional questions, TA practice was also discussed through video elicitation tasks, where participants commented on two videos of TA practice obtained from Study 1. Before starting the video and questioning, I provided contextual information about the video content, such as the classroom age group and the topic of conversation. The video elicitation questions proceeded by displaying the videos to the participants so that they could focus their attention on the given features of the videos (e.g., the teacher's or TA's talk), and thus start thinking about their answers. Where appropriate, videos were shown multiple times to promote a correct reception of the content of the audio/video. The video elicitation practice was expected to facilitate communication between myself and the participants, harmonising our understanding of words, arguments, and more. Also, it aimed to encourage the participants to analyse the teaching practice in the video, voice their theoretical reflections (i.e., preparedness), and propose

their alternative teaching solution more effectively than in conventional interviews (e.g., Bowles et al., 2018).

5.3.2.4. Data analysis

5.3.2.4.1. Questionnaire data: thematic coding and frequency analysis

The data from the questionnaire were collated in frequency tables to effectively address the more quantitative research questions regarding TAs' behaviours and support strategies (e.g., RQs 1.2. and 2.1). Where appropriate, raw responses were also gathered in broader thematic categories or intervals (e.g., children with dyslexia were grouped in the Cognition and Learning category). This coding was largely guided by theoretical categorisations of the literature (e.g., using the UK's SEND Code of Practice [DfE, 2014]). The analysis produced a similar elaboration to Study 1 so that the quantitative findings could be triangulated across studies.

5.3.2.4.2. Thematic analysis of interview data

Interview data were analysed using thematic analysis (Braun & Clarke, 2006), which was chosen for its theoretical flexibility to address various epistemological traditions, including socio-cultural ones. Other methods, including grounded theory, are more dogmatic and often support theoretical backgrounds conflicting with mine (e.g., inductive/empiricist in grounded theory). Hence, they could not be employed in this research.

A multiple-phase approach was used to work out the codes and the overarching themes and codes in the data. First, the audio recording of the interviews was transcribed verbatim in Word documents. Next, the data were interrogated in relation to multiple research questions to proceed with the thematic coding of the

data (see Table 6 for more details regarding the research questions). Initially, the coding was produced using a small proportion of the dataset (i.e., six interview extracts). Next, the rest of the data corpus was sought to verify the provisional categories. Where possible, the emergent codes were reworked according to the new data.

The COVID-19 university closure prohibited access to university computers, and thus the use of qualitative software for the analysis (e.g., NVivo and ATLAS.ti). Hence, the thematic study was ultimately carried out manually in a Word document; in particular, I used the Word comment function in the review panel to segment the coding area and label the codes. As a result, the analysis became undoubtedly time-consuming. Nevertheless, the time spent in the analysis enhanced my familiarisation with the data and increased the theoretical robustness of the coding process (John & Johnson, 2000).

The codes generated from the analysis included participants' and interviewer's speeches. This way, I echoed the democratic socio-cultural conception of knowledge generation produced by the interaction between the researcher and the participants (see Appendix J for details).

Seemingly, the codes were more latent than in prior analyses. This added interpretative nature was the result of the interplay between:

- *Much larger size and more redundancy in the data set.* The repetitiveness of the data promoted continuous redefinition and reflection upon the same codes. As a result, codes become, in one way or another, more interpretative (Braun et al., 2019).

- *Increased familiarisation with the field of study.* Many codes in the data replicated similar pre-existent codes in the literature (and Study 1 codes), thereby promoting additional reflection, and thus evolving their meaning and interpretation further.
- *Types of data.* The interview written extracts involved a body-language communication gap (e.g., pointing and referring to video data), resulting in a seemingly more interpretive nature of the code.

After the coding phase, I grouped different categories into overarching identifiable distinctive themes. Themes alongside their codes were either theoretical or more inductive (e.g., TA deployment, support strategies, and types of pedagogical practice) (see Appendix I for more details). When the analysis was concluded, I calculated the ICA to ensure that the codes were widely communicable and thus did not need any further adjustments (e.g., splitting the codes into two or adding new categories). To do so, I trained an additional Italian researcher on the coding procedures over a Zoom video call by showing them some extracts and discussing them. Next, I shared four (other) extracts of the transcriptions and the multiple observation schedules. For ethical reasons, the trained researcher could read and comment on the extracts but not download them. The extracts were segmented in a way that included a) sections that I had coded (labels were removed) and b) sections with a coherent theme that had not been coded (codes not relevant to the analysis). Each segment within the extracts had to be coded by the observer with a single category of the appropriate observation schedule. Cohen's Kappa was calculated to safeguard the agreement measure from the possibility that the two observers had coded similarly by chance.

Table 13 shows a high level of agreement across the themes of analysis, reassuring of the communicability of the analysis (see below). The lower agreement concerning TA preparedness reflected the seemingly more latent nature of the codes derived from the video elicitation practice (less so for myself, as the referral to the video in the interviews disambiguated the meaning of the talk). It follows that the higher level of interpretation for TA preparedness could have resulted in higher disagreement; nevertheless, the ICA is still considered acceptable for qualitative studies (O'Connor & Joffe, 2020).

Table 13 Cohen Kappa scores ICA / Thematic analysis of interviews

Domain	Agreement research and trained observer
Co-teaching style	0.70
TA class role	0.68
TA support strategies	0.74
TA pedagogical preparedness	0.62

In the findings, the thematic analysis is displayed in two forms. The first is through the quotation of extracts corresponding to key codes of the analysis. The extracts were literarily translated into English, apart from Italian cultural expressions, which were translated with an equivalent cultural expression in English (see Appendix K for the original extracts in Italian). Also, the analysis is displayed quantitatively by presenting the frequency of categories in the data set (i.e., event coding) (see Guest et al., 2012, for similar data presentation). This potentially enabled me to increase the coding process's transparency and confidence in the findings (especially when contentious).

5.3. Ethics

In this section, I will first discuss the key ethical concerns that I faced in conducting this study. Next, I will deal with data management policy (e.g., data storage and disposal) of the data collected (See Section 5.3.1.)

The Institute of Education Ethical Committee (IEEC) supervisory panel evaluated the ethical soundness of the projects and granted independent permissions for each of the two studies of this research. One of the most critical ethical concerns of the two studies was making the participants aware of the nature of the research and ensuring an informed decision about their participation. Two slightly different procedures were followed in the studies to do that, as follows:

- In Study 1, I had talks about the study's nature and ethics with the participating school and participants months before the start of the project. Next, I sent a research proposal to the school board representing the school personnel, teachers, TAs, and parents. The board formally discussed and then approved the research proposal. Subsequently, individual information sheets and consent forms were sent to the participating TA, the single child with whom the TA worked predominantly within the classroom (Josh), and his parents. A simplified version of a consent form was designed for Josh so that he could independently understand the research and decide whether to participate in it (see Appendix L). I also encouraged the classroom teachers, TAs, and parents to explain the project to the child. Participant consents were a precondition to the start of the study (as well as Study 2).
- In Study 2, I had multiple phone calls with the identified participants to explain the research content and ethics. After receiving informal

permission to participate in the research, I shared information sheets and consent forms with the participants (see Appendix L).

In both studies, participants' withdrawal policies were also put in place (see Appendix L). Participants could withdraw from the project at any time during the data collection phase or up to 15 days after it. Their withdrawal would have required the disposal of the data.

In addition, Study 1 faced two more specific ethical concerns. The first was to inform the TA and the child with SEND (and his parents) of the eventuality of sharing video data involving themselves for research purposes (e.g., video-elicitation interviews and ICA). This was done through informal interactions with the participants and information sheets. The consent forms also listed a clear affirmative/negative option regarding this specific eventuality.

A second concerning aspect of the observation study was the possible recording of non-participating individuals, including children without SEND, and classroom teachers. Those people were to be informed of this, as well as of the nature of the project, beforehand. To do so, I required the school board to send information sheets to non-participant teachers and parents of the classroom children, giving them the opportunity to opt out of the project (see Appendix L for more details).

5.3.1. Data management policy

For safety concerns (e.g., protection from hacking), data was stored using encryption and anonymisation (for transcriptions of the audio recordings) or pseudonymisation (for videos) in my laptop cloud space (i.e., iCloud) as well as my research organisation's processor (i.e., University College London's

processor). The processors' safety was analysed beforehand, and appropriate adjustments were made (e.g., designing a multi-password system).

Different copies of each digital file collected or generated were saved in the processors using different non-proprietary formats (such as WAV and MP3 for audio data and Word document and PDF readers for the transcript and TAs' demographics). This way, I ensured cross-checking of information across files (i.e., version control).

In line with the standard advice in research, data will be retained in my processors for a minimum of ten years (see <https://ukdataservice.ac.uk/learning-hub/research-data-management/plan-to-share/esrc-data-management-plan-and-policy/>, for more details). Where appropriate, data will be then destroyed. Participants were informed of this eventuality in conversation prior to the project. Moreover, the participants' information sheet attached to their consent form will clearly state this (see Appendix L).

The findings chapters (and this methodology) grouped the research raw data in broader thematic categories or numerical intervals (such as qualification level and age range). The participants' names were pseudonymised to protect their confidentiality. A similar process will be followed when the study is published in academic journals or conference presentations.

5.4. Summary

The research's socio-cultural epistemology indicates that knowledge is constructed in the interaction between my initial theoretical framework (the WPR model) and the additional empirical information collected during the inquiry. Here, the fieldwork was designed around the classroom observations of a single TA (Study 1) and interviews with 31 other TAs (Study 2). Thematic analysis was used to process the observational and interview data into discrete, thematic codes. In the following chapters, the findings will be presented a) quantitatively by counting the frequencies of the thematic codes (systematic observations); and b) qualitatively by describing the codes.

Chapter 6. Study 1 Findings

6.1. Introduction

The current chapter describes the results of the observation-based study involving a single classroom context, a single TA, and a single classroom teacher (Study 1). The overarching and research sub-questions are used to lead the descriptions. Questions will be phrased in plural terms (e.g., “How are TAs deployed?”) to allow their consistent use across the thesis, despite being answered here using data from a single TA (and classroom teacher). Background information about the participants and classroom characteristics are also provided.

6.1.1. Classroom characteristics: student numbers and characteristics

Table 14 shows that the participating Year 5 classroom aligned with the characteristics of a typical Italian primary classroom. In particular, the 23 Year 5 pupils are comparable to the national primary classroom average (no.: 19). Three of the Year 5 children had SEND (i.e., two with Special Educational Needs and one with a disability status) versus a national average per classroom of two.

Table 14 Classroom characteristics

Type of children	Participating Class (Year 5)	Typical primary classroom (Public and private schools)
Class size	23	19
Black, Asian, and minority ethnic (BAME) pupils	3	2
Pupils with a disability status	1	≅ 1
Pupils with a Special Educational Needs status	2	1

Note. Participating class data are obtained from the headteacher questionnaire (see Appendix C for details). Typical primary classroom data are an elaboration on data coming from Istituto Nazionale di Statistica (2019). Scuole – Dati ISTAT. Istituto Nazionale di Statistica.

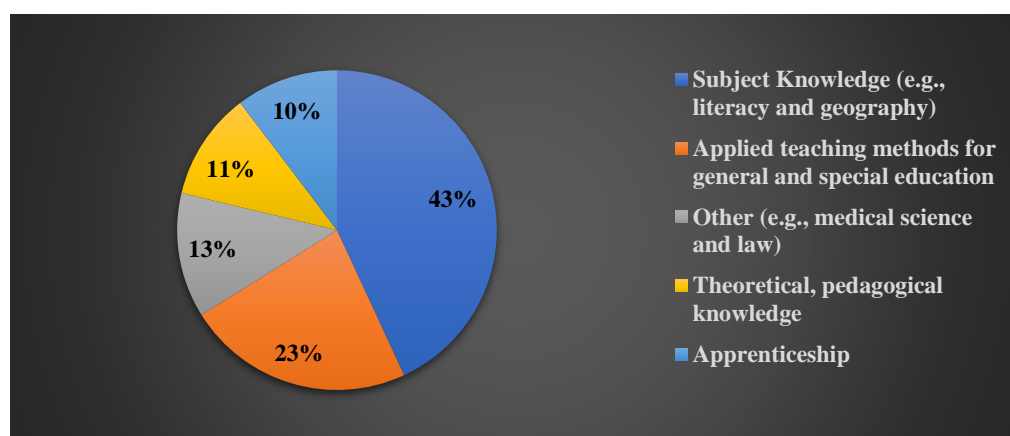
In the participating classroom, the child with a disability status was the participating child (Josh). He was a male pupil with Communication and Interaction (C&I) and Physical and/or Sensory Needs (P&SN).

To deal with his special needs, the participating TA (Gloria) and the teacher planned to support Josh with about 80% of the classroom activities on an individual basis (data retrieved from the headteacher questionnaire). Although the Ministry of Education’s guidelines invite TAs to take care of the education of children with SEND, there are no legal constraints preventing Gloria and the teacher from sharing the responsibility for Josh’s (individual) classroom instruction (MI & MF, 2020).

6.1.2. Participating TA: training and conditions of employment

In the TA questionnaire, Gloria reported being a female Italian with nearly ten years of teaching experience. Having completed a master’s degree in primary education (MPE) and a (second) master’s degree in special education (MSE), Gloria’s training focused on subject knowledge and teaching models and less on theoretical and epistemological themes (see Figure 8 for more information).

Figure 9 Gloria’s training – self-reported data



Note. Data adapted from the TA questionnaire. Percentages are calculated based on the total CFU of MPE and MSE (GU, 2011; 2021). The university credits/time in exams (13 CFU/time total) were excluded.

Gloria also self-reported that she had benefitted from a permanent national TA contract (ARNPA, 2018). The contract legally bound Gloria to share the instructional responsibilities of the class with the classroom teacher. Gloria and the teacher had to collaborate on planning and delivering the lessons, likewise for designing the educational plans for children with SEND.

6.2. Research Question 1

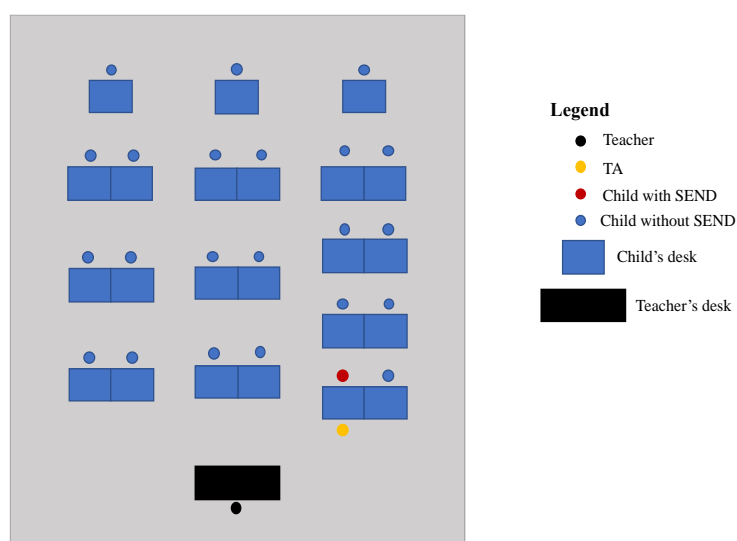
The first overarching research question (RQ1: *In Italy, how are TAs deployed in mainstream primary classrooms?*) was addressed through a wide array of different analyses, such as systematic classroom observations, thematic coding of field notes, and qualitative speech analysis. In the following subsections, the RQ1 answer is provided, along with each of its three sub-questions: the first focuses on the class co-teaching practices; the latter two describe the TA's classroom role.

6.2.1. Research Question 1.1.

What types of co-teaching styles are evident in lessons?

The field notes indicate that the classroom layout was stable throughout the lessons. The classroom had a typical table-rows layout. Positioned at the front and centre of the classroom, the teacher had an uninterrupted view of the whole classroom. She could talk with and monitor children at all times. Gloria typically sat on the right side of the first row, facing Josh while keeping her back to the teacher. This way, she could easily monitor and assist with Josh's classwork. However, she did not have a perfect view of the whole class due to the obstruction of Josh's body and the children of the first row (see Figure 9 for more details).

Figure 10 Classroom layout



The field notes also report that the teacher commonly handled the whole-class activities; meanwhile, Gloria assisted with Josh's classroom tasks. For instance, the field notes collected on the first day of observation reported that the teacher initially generated the lesson's topic by herself, extensively talking about the content and meaning of the poetry: "*Un foglio di carta*". In the meantime, the children and Gloria were described as listening to the teacher. In a second lesson phase, the teacher was reported asking the children to individually read the poetry aloud. Frequently, the teacher interrupted the reader to either give additional information about the poetry, or to ask her questions regarding, for example, the allegorical features of the poetry. During this last lesson block, Gloria monitored Josh's attention and classwork. At times, she assisted Josh in dealing with the teacher's questioning.

Similar teaching contexts were also replicated in the other five lessons observed. The systematic observations of all six lessons (Table 15) show that the teacher

primarily led the whole-classroom activities. Rarely did Gloria do so. Gloria was more concerned with monitoring and assisting Josh, as the field notes indicate. Therefore, it can be concluded that Gloria and the teacher stably employed a “One Teaches and The Other Assists” style (OTOA) during the lessons.

Table 15 Systematic observation of the classroom’s working context

Working context	Frequency counts (FC)	%
Whole-class – Teacher-led	610	93%
Pupil plenary	28	4%
Whole-class – TA-led	10	2%
Individual work	0	0%
Group work	0	0%
Other	5	1%

Note. Data were systematically coded within intervals of 1 min (see appendix D).

The categories coloured in grey represent working contexts of rare occurrence (1% or less) or coded intervals with the Other’s code.

6.2.2. Research Question 1.2.

Who do TAs predominantly work with? Where do they predominantly work?

The first conclusion drawn from the systematic observations of TA deployment is that Gloria (and Josh) always worked inside the classroom. The second is that Gloria spent most of the lessons working with Josh on a one-to-one basis (39% of the total observations) and rarely with other classroom children in any working setting (9%). When not assisting children, Gloria interacted with the teacher (34%) or assessed Josh’s written work/was distracted (non-interaction, 18%).

The systematic observations also made clear that Gloria and the teacher’s interactions entailed Gloria primarily listening to the teacher’s talk directed toward the whole class (i.e., whole-class interactions). Rare were the instances in which

Gloria and the classroom teachers directed the focus of the conversation to each other. The episodic nature of the TA-teacher interactions, and the TA to classroom children other than Josh, prevented any further investigations of these events. The qualitative and quantitative analysis and findings in the following sections target the more common interactions between Gloria and Josh.

6.2.3. *Research Question 1.3.*

How and what types of support do TAs provide to the children with SEND [whole class and teachers]?

Gloria was observed assisting Josh in dealing with classroom curricular tasks throughout the classroom observations. Often, she did so in private one-to-one conversations (Extract 2), not involving other class members. In rare circumstances, exchanges between Josh and Gloria were part of the whole-classroom conversation, and the rest of the class silently listened to them. These “public interactions” widely began when Gloria interrupted the teacher’s public interrogation of Josh to ask him additional public questions. Alternatively, Gloria (Extract 1) proactively started a public interaction with Josh by asking the teacher for permission to ask him questions and then publicly interrogating him.

Turn	Speaker	Speech	Observer Comments
1	Initiation (I): A	Teacher	
		<p><i>Allora bambini, adesso andiamo a fare la comprensione della poesia...</i></p> <p>So, children, now we are going to do poetry comprehension...</p> <p><i>Prima la facciamo da un punto di vista ortografico, di sintassi, di linguaggio...</i></p> <p>We will first study it from an orthographic, syntactical and language standpoint...</p> <p><i>Abbiamo sempre questo linguaggio forbito, arricchimento del lessico...</i></p> <p>You always have this refined language, rich wording...</p> <p><i>E poi dopo andiamo a fare una comprensione diversa sempre della poesia...</i></p> <p>And then, we will make a different comprehension type regarding the poetry...</p> <p><i>Allora...</i></p> <p>So...</p>	<p>In this turn, the teacher explains in detail the current task. At the end of the turn, the teacher vaguely mentions what will be done next (“<i>then we will make a different type of comprehension</i>”).</p>

2	I: B	Gloria	<p style="text-align: center;"><i>Iniziamo un po' noi!</i></p> <p>We will start and finish shortly!</p> <p style="text-align: center;"><i>Mm?</i></p> <p style="text-align: center;">Mm?</p>	<p>Gloria gazes at and assertively tells the teacher she is ready to begin questioning Josh. In the statement, Gloria suggests that the activity will be short. Next, she counterbalances the initial assertive talk by requesting to start the activity using a raising vocal “<i>mm</i>” sound. Finally, she gazes at Josh and repeatedly touches his hands to bring his attention to herself.</p> <p>Interestingly, Gloria uses the personal pronoun “<i>we</i>” to refer to herself and Josh. Although using this generic pronoun, the teacher understands the referral to Josh, and the talk moves smoothly from the teacher to Gloria and Josh. The use of “<i>we</i>” may result from frequent interactions between the TA and Josh.</p>
3	Response (R): B	Teacher	<p style="text-align: center;"><i>Va bene!</i></p> <p style="text-align: center;">All right!</p>	<p>The teacher gazes at Gloria. She also nods to show her acceptance of Gloria's request.</p>

4	I: C	Gloria	<p><i>Dimmi un po' allora come è il suolo e come è la strada?</i></p> <p>Tell me a bit about the ground and how the street is?</p> <p><i>Come è descritto?</i></p> <p>How is it described?</p>	<p>Gloria gazes at Josh and starts asking him questions. She initially makes two vague questions, <i>how are the ground and the street?</i> Then, she clarifies the request by suggesting that she is looking for the adjective used in the poetry to describe the <i>ground</i> and the <i>street</i>.</p>
5	R: C	Josh	<p><i>Il suolo è un umido</i></p> <p>The ground is wet...</p>	<p>Josh looks at his notebook in which the poetry is written. Then, he reads the possible answer aloud. Conceptually, he gives the correct answer. However, in phrasing the answer, he produces a grammar mistake. He adds the indefinite article before the adjective <i>wet</i>.</p>
6	Follow-up (F): C	Gloria	<p><i>È umido...</i></p> <p>It is wet...</p> <p>Si!</p> <p>Yes!</p>	<p>Gloria nods and accepts the answer as the right one. Then, she loudly corrects Josh's grammar mistakes so that Josh and his peers can retrieve the correct phrase from the poetry (i.e., embedded correction).</p>

7	R: C	Josh	<p><i>La strada...</i> The street...</p> <p><i>Deserta!</i> Empty!</p>	<p>In this turn, Josh looks again at his notebook and rightly responds to the second question.</p>
8	I: D	Gloria	<p><i>E che cosa sono umido e deserta?</i> And what is wet and empty?</p>	<p>Gloria produces a closed question. The question is, however, vague: <i>what is wet and empty?</i> No specification is made regarding whether the words <i>wet</i> and <i>empty</i> should be grammatically or logically analysed.</p>
9	R: D	Josh	<p><i>Aggettivo qualificativo!</i> Describing adjectives!</p>	<p>Without any hesitation, Josh gives the correct answer.</p>
10	F: D	Gloria	<p><i>Bravo, bravo!</i> Good boy, good boy!</p>	<p>Gloria congratulates Josh on the correct answer. Although not reported in this extract, she publicly keeps questioning Josh.</p>

6.3. Research Question 2

The second overarching research question (RQ2: *In Italy, what types of support activities do TAs employ to support the classroom experience of primary-school children with SEND?*) was addressed through systematic classroom observations and qualitative speech analysis. In the next subsections, a frequency analysis of TA practice is followed by a detailed qualitative analysis of TA support strategies.

6.3.1. Research Question 2.1.

What types of TA support strategies, such as behavioural management support and enhancement of on-task behaviours, are used in the lessons?

The systematic observations (Table 16) indicate that Gloria mainly supported Josh in being attentive to and participating in classroom activities (i.e., TA task engagement support). Also, she frequently assisted the child's completion of academic tasks (i.e., TA pedagogical support). Rarely did she deal with Josh's disruptive behaviours (i.e., TA behavioural management), procedural assistance, or emotional support. Absent was any form of support for the child's social interactions and learning. The rare occurrence of procedural, socio-emotional, and behavioural management support prevented any further investigations here and in the following subsection.

Table 16 Gloria's types of support for Josh

TA support strategies for Josh	FC	%
Task engagement support	1066	69%
Pedagogical support	365	24%
Procedure/Routine	34	2%
Emotional Support	19	1%
Behavioural Management	5	<1%
Social Support	0	0%
Other	50	3%

Note. Data were systematically coded within intervals of 10 sec.

The categories coloured in grey represent support strategies of rare occurrence (1% or less) or coded intervals with the Other's code.

Table 17 describes in detail Gloria's types of support for the child's completion of academic tasks and engagement in classroom activities. Task engagement support was mainly delivered by proactively drilling facts aloud (see "Total statement"). Also, Gloria punished off-task behaviours to bring him back on task (see "Giving orders & Critiquing Behaviours and work"). Hence, Gloria mainly used to "Rule and Drill" Josh to keep him focused on the classroom's tasks.

Gloria's pedagogical support was typically provided by explaining classroom tasks or promoting their solution (see Table 17, "Total statement"). Body language was also used to assist the child in comprehending and completing tasks (i.e., "Silent Interactions"). In other instances, she questioned Josh with closed questions on literacy concepts, thus potentially limiting him to saying a few words to conclude the tasks.

Table 17 Gloria's type of interactions during pedagogical support and task engagement support to Josh

Type of interaction	TA task engagement support		TA pedagogical support		
	Frequency Count (FC)	%	FC	%	
Questioning	Recalling facts	29	3%	3	1%
	Closed questions	46	4%	87	24%
	Open questions	5	0%	6	2%
	Praising behaviour or work (Rhetorical question)	1	0%	0	0%
	Critiquing behaviours or works (Rhetorical question)	2	0%	2	1%
	Giving orders (Rhetorical question)	4	0%	1	0%
	Other	1	0%	0	0%
Total questioning	88	8%	99	27%	
Statement	Statement of facts, ideas, problems	75	7%	99	27%
	Feedback (praise behaviour or work)	6	1%	5	1%
	Critiquing behaviours or works	30	3%	10	3%
	Reading/Dictating	643	60%	57	16%
	Giving orders	67	6%	9	2%
	Other	5	0%	8	2%
	Total statement	826	78%	188	52%
Silent interaction	Gesturing	14	1%	26	7%
	Focusing	76	7%	6	2%
	Other	17	2%	18	5%
	Total silent interaction	107	10%	50	14%
Listening	Listening reading	10	1%	1	0%
	Listening talk	34	3%	27	7%
	Other	0	0%	0	0%
	Total listening	44	4%	28	8%

Note. Data were systematically coded within intervals of 10 sec.

6.3.2. *Research Question 2.2.*

What are the tactics that TAs use to: a) manage disruptive behaviours, b) support task engagement, and c) support the learning of social skills of children with SEND?

Here, I explore the (qualitative) findings derived from the in-depth analysis of Gloria and Josh's task engagement interactions. Later (Section 6.4.), TA pedagogical assistance is discussed.

Two broader interactional patterns emerged from the investigation of TA task engagement support. The first, stereo-teaching, showed Gloria repeating the teacher's whole-class dictations, questions, and explanations. While it improved the child's engagement in the teacher's talk and potentially his understanding of the talk in some circumstances (e.g., teacher's short questions and dictations), Gloria's stereo-teaching assistance was not enough in others. For instance, Extract 2 shows Josh writing under the teacher's dictation. The child immediately has problems hearing the teacher's talk (e.g., Line 4). Gloria therefore privately repeats the teacher's talk to Josh (Lines 5-8). Despite the help, Josh keeps having more troubles (e.g., Lines 7-9), including understanding the TA's private talk. As a result, his writing starts running significantly behind the teacher's dictation. To deal with this, Gloria interrupts the stereo-teaching assistance and completes the writing herself in Josh's notebook (Lines 25-28). In the meantime, the child is left without a task and completely disengages from the classroom activity (Line 27).

Extract 2 TA stereo teaching practice

Turn		Speaker	Speech	Observer Comments
1	Initiation (I): A	Teacher	<i>Adesso, scrivete a pagina pulita!</i> Now, please write it down on the next page!	In this turn, the teacher introduces a new task: the dictation of a text.
2	I: B	Gloria	<i>Prendi la penna!</i> Take the pen!	Gloria gazes at Josh and orders him to take the pen to get ready to write down what the teacher says.
3	I: A	Teacher	<i>Dopo aver...</i> After having... ... <i>Lavoro!</i> Task! ... <i>Dopo aver...</i> After having... ... <i>Analizzato!</i> Analysed!	The teacher slowly dictates the text. She takes a small pause for every one or two words. In the extract, the teacher is not using pre-printed material or a digital tool from which to read the text but is inventing it at the moment.
4	I: C	Josh	<i>Huh...</i> Huh...	Josh gazes at Gloria and produces the exclamation <i>huh</i> , showing that



he did not appropriately hear what the teacher just said.


5	R: C	Gloria	<i>Dopo...</i> <i>After...</i>	Gloria gazes at and starts repeating what the teacher said to Josh.
6	I: A	Teacher	<i>Aver analizzato...</i> Having analysed...	The teacher keeps dictating the text to the whole class.
7	I: D	Josh	<i>Dopo?</i> <i>After?</i>	Josh gazes at and repeats Gloria's word <i>after</i> , with a rising intonation making it sound like a question.
<p>Interestingly, in Italian, questions have broadly raised intonations or raised pitch. The pitch differs from the English language, in which rising intonation is used just for yes/no questions, whereas wh-questions ask for a rising intonation (e.g., Why have you done so? what are you doing?).</p>				
8	R: D	Gloria	<i>Aver analizzato...</i> Having analysed...	Gloria whispers to Josh the text to be written down.
9	I: E	Josh	<i>Aver?</i> Having?	Josh gazes at and repeats, <i>having</i> to Gloria with a rising intonation.

10	R: E	Gloria	<i>Analizzato!=</i> Analysed!=	Gloria repeats the word <i>analysed</i> and raises the tone so that Josh can hear better.
11	I: A	Teacher	= <i>e commentato...</i> =And commented...	The teacher overlaps Gloria's turn and continues dictating the text to the whole class.
12	I: F	Josh	<i>Anizzato?</i> Anised?	Josh repeats the word he just heard from Gloria without writing it down. The word Josh says is the misspelling of Gloria's word, namely <i>analysed</i> .
13	R: F	Gloria	<i>Analizzato!</i> Analysed!	Gloria repeats the word to Josh and raises her voice again.
14	I: G	Josh	<i>A-ni...</i> A-ni...	Josh starts spelling it syllable by syllable.
15	R: G	Gloria	NA! NA!	Gloria corrects the child's misspelt syllable. Then, she continues dictating the word by adding the missing syllables.
			- <i>Lizzato...</i> -Lysed...	

16	I: A	Teacher	<p><i>La poesie...</i></p> <p>The poetry...</p> <p><i>La canzone =</i></p> <p>The song =</p>	<p>The teacher keeps dictating the text to the whole class. In the turn, she has trouble; she uses a word that she thinks does not conceptually match the concept she was referring to. She self-repairs the mistake by using a different word to deal with this.</p>
17	I: H	Gloria	<p>= <i>E ascoltato</i></p> <p>= And listened</p>	<p>Gloria keeps repeating to Josh the teacher's words. However, she uses a different word, <i>listened</i>, as compared to the one previously dictated by the teacher to the whole class, <i>commented</i>.</p>
18	I: A	Teacher	<p><i>Oppure il brano musicale...</i></p> <p>Or the music piece...</p> <p><i>E meglio!</i></p> <p>It is better!</p> <p><i>Il brano musicale!=</i></p> <p>The music piece!=</p>	<p>The teacher makes a reflection aloud. She debates the best definition to give to the text she is referring to. Ultimately, she concludes that the best definition is a <i>music piece</i>. However, no clear explanation is provided to the whole class regarding the reasons for this choice.</p>
19	I: H	Gloria	<p>=<i>Ascoltato...</i></p> <p>=Listened...</p>	<p>In this turn, Gloria keeps dictating the "wrong" words to Josh, who slowly writes them down in his notebook.</p>

20	R: H	Josh	<i>Ascoltato...</i> Listened...	Josh writes the word <i>listened</i> and contemporarily reads it aloud.
21	I: A	Teacher	<i>Dopo aver analizzato...</i> After having analysed... <i>Come ho detto? =</i> What did I say? =	The teacher has trouble remembering what she has said earlier. Next, she asks the whole class what she said beforehand to deal with her trouble.
22	I: I	Gloria	<i>=il brano musicale</i> = The music piece	Gloria overlaps the teacher's talk to keep dictating the text to Josh.
23	R: A	Gloria	<i>E ASCOLTATO IL</i> <i>BRAN...</i> AND LISTEN TO THE <i>PIEC...</i>	Gloria assists the teacher by loudly repeating the sentence she thinks the teacher pronounced earlier. However, in the repetition, Gloria says the word, <i>listened</i> , which does not correspond to the one the teacher dictated.
24	F: A	Fabiana	<i>Ascoltato e commentato!</i> Listened and commented!	The child without SEND sat next to Josh (pseudonymous Fabiana) publicly corrects the TA's repair to the teacher's mistake.
25	I: J	Gloria	//	Gloria turns Josh's notebook upside so that she can face it. Then, she gets ready to write instead of Josh.

26	I: A	Teacher	<p><i>Scrivi...</i></p> <p>Write...</p> <p><i>I sentimenti...</i></p> <p>The feelings...</p> <p><i>Virgola...</i></p> <p>Comma...</p> <p><i>Le emozioni...</i></p> <p>The emotions...</p> <p><i>Che...</i></p> <p>That...</p> <p><i>Battisti...</i></p> <p>Battisti...</p> <p><i>Che Battisti...</i></p> <p>That Battisti...</p>	<p>The teacher keeps dictating to the whole class. She mentions Battisti, an Italian singer.</p>
28	R: A	Gloria		<p>Gloria writes instead of Josh.</p>
27	I: K	Josh		<p>Josh is seen daydreaming.</p>
29	I: L	Gloria	<p><i>Fa intendere...</i></p> <p>Shows...</p>	<p>Gloria gives the notebook back to Josh and dictates to him the last word just said aloud by the teacher.</p>
30	R: L	Josh	<p><i>Inten?</i></p> <p><i>Sho?</i></p>	<p>Josh has trouble understanding the word.</p>

31	I: M	Gloria	<i>Inten-dere!</i> <i>Sho-ws!</i>	Gloria breaks the word into its two syllables.
32	R: M	Josh		In the turn, Josh successfully writes down the last word of the dictation.

The second pattern of TA task engagement support consisted of Gloria (highly) managing the content and the timing of Josh’s contributions to the whole-class talk. An illustration of this is Extract 1, where Gloria interrupts the teacher’s whole-class conversation to start public interaction between herself and the child. Also, Gloria controlled Josh’s talk in public conversations with the teacher. This was possible as Josh frequently, if not always, whispered his potential answer to the teacher’s questions or public queries to Gloria beforehand. Next, Gloria either reassured the child about the correctness of his talk and prompted him to raise his hand and talk in public or stopped him from contributing to the whole-class talk when, for instance, he was incorrect.

6.4. Research Question 3

The final overarching research question (RQ3: *In Italy, how do TAs support the content learning of children with SEND?*) was addressed through systematic classroom observations and qualitative speech analysis. First, I show the results from the systematic observations of the TA’s pedagogical interactions (event sampling), followed by a more detailed qualitative investigation.

6.4.1. Research Question 3.1.

What types of pedagogical interactions, including repair and topic generation episodes, are available in the lessons?

Table 18 indicates that the most frequent pedagogical interactions were: a) other-initiated other-repair episodes showing Gloria correcting Josh's mistakes and troubles (54%); and b) Josh's quick, correct response to Gloria's questions (competent interactions, 24%). Rarer were the instances in which Gloria introduced the topic of the discussion privately with Josh (other-initiated topic generation, no.: 3). The episodic nature of the topic generation episodes, along with the episodes in the category Other in Table 18, made it difficult to conduct any further (qualitative) investigation.

Table 18 Types of interaction between Gloria and Josh

Types of interactional sequences	Frequency count	%
Other-Initiated Other-Repair (OIOR)	211	54%
Competent interactions	98	25%
Other-Initiated Self-Repair (OISR)	63	16%
Other (e.g., other-initiated topic generation, absent repair episodes)	19	5%

Note. The codes were coded as appeared in the video (i.e., event coding).

Absent repairs show Gloria avoiding correcting Josh's mistakes.


6.4.2. Research Question 3.2.

How do TAs design pedagogical interactions, including repair episodes [and topic generation episodes]?


Four interactional patterns were drawn from the analysis of Gloria's pedagogical interactions. The first (Extract 3) shows how Gloria supplied the correct answer on several occasions throughout the discussion of the task. She therefore did not give Josh the time to think and independently work out the answer for himself. In

Line 2, she gazes at him and supplies the answer by pointing at a word in his notebook. Josh reads the word aloud to the teacher but, unfortunately, his answer is treated as incorrect. Later, in Lines 12-14, Gloria gazes at the child again and whispers another possible answer to him. Josh's response is mispronouncing it when saying it aloud to the teacher. In response to the mistake, the teacher produces an embedded correction; that is, the teacher recasts the child's turn by inserting the correct answer. After this, the interaction ends.

Extract 3 Searching word: Multiple Other-Initiated Other-Repair interactions

	Turn	Speaker	Speech	Observer Comments
1	Initiation (I): A	Teacher	<i>Allora sempre Josh</i> So, always Josh <i>Mi puoi trovare</i> <i>cortesemente un</i> <i>pronome personale?</i> Can you find a personal pronoun, please?	In this turn, the teacher gazes at Josh. Then, the teacher asks Josh to find a given word in a poem. The poem is written in his notebook.
2	I: B	Gloria		Gloria captures Josh's attention by gazing at him. She then points to a word in the child's notebook.
3	Response (R): A	Josh	<i>Suo!</i> His!	Josh initially gazes at Gloria. Then, he looks at the word she was pointing at and reads it without vocalizing. Finally, he gazes at the teacher and

				loudly says the word. The answer, however, appears to be incorrect.
4	I: C	Teacher	<i>Pronome?</i> Pronoun?	The teacher rephrases her initial request. In so doing, she makes clear that Josh's answer was wrong.
5	R: C	Josh	<i>Ah!</i> <i>Ah!</i>	Josh acknowledges that his answer was wrong. To do so, he uses the exclamation <i>ah</i> . Then, he looks again at his notebook, searching for an alternative answer.
6	I: D	Teacher	<i>Che noi difficilmente oggi utilizziamo...</i> That is uncommon today...	The teacher gives Josh a clue. The cue provides Josh with additional but complementary sources of information to achieve self-repair.
			<i>Lo utilizziamo in maniera un po' più...</i> We use this in a way that is slightly more...	
7	//	Josh	//	Josh gazes at the teacher to hear the clue. Then he looks back at the poem in search of the correct answer.
8	I: D	Teacher	<i>Al femminile...</i> For females...	After a prolonged silence, the teacher gives another clue. She suggests

				that the pronoun she is looking for can be used only for female people.
9	//	Josh	//	Josh gazes at the teacher to hear the clue. Then he looks back to his text in search of the correct answer.
10	I: D	Teacher	...	After a pause, the teacher gives a third clue. She suggests where the word is located in the text, particularly next to the word <i>a bunch</i> .
			<i>Nel mazzolin....</i>	
			A bunch....	
11	I: E	Teacher	<i>Scrivete!</i>	While waiting for the answer, the teacher gazes at the whole class.
			Write down, you all!	Then, she orders all the other students to write down the question she asked Josh in their notebooks.
			<i>Trova un pronome personale...</i>	By doing so, she could give Josh extra time to think about the answer.
			Find a personal pronoun...	
12	I: F	Gloria		Gloria realises that the teacher is not looking at her and Josh in this turn. Then, she captures Josh's attention and points at another word in Josh's notebook.
13	R: E	Josh	<i>Ebbe!</i>	Josh reads the word and then loudly says it to the teacher in this turn. However, the child mispronounces the word, saying <i>ebbe</i> . In Italian,
			Was!	

ebbe has a similar sound to the correct answer pointed out by the TA, *ella*, but a completely different meaning.

14	I: G	Gloria	<i>No!</i> <i>No!</i> <i>Ella!</i> <i>She!</i>	Gloria gazes at Josh and immediately corrects the child's mistake. Then, she whispers the correct answer so the teacher cannot hear her talking.
15	R: G	Josh	<i>huh?</i> <i>huh?</i> <i>No Ebba?</i> <i>No Ebba?</i>	Josh gazes at Gloria and exclaims, suggesting how he did not correctly hear what was just said. Then, he silently asks Gloria whether <i>Ebba</i> is the correct answer. In Italian, the word, <i>Ebba</i> , does not have any meaning. Josh blends together the word he believes to have read in the text, <i>ebbe</i> , with the one he has just heard, <i>ella</i> .
16	I: H	Teacher	<i>Cosa hai detto?</i> What did you say?	The teacher did not hear the talk between Josh and Gloria. For this reason, she asked the child to say what he was saying to Gloria loudly.
17	R: H	Josh	<i>Eb...</i> <i>Eb...</i>	Josh replies to the teacher's question with two different syllables. Firstly, he uses the syllable, <i>eb</i> , and also used

				in the previous turn. Then, the child
			<i>El...</i>	says the initial syllable suggested by
			El...	Gloria, <i>El</i> .
18	Follow-up/Feedback (F): H	Teacher	<i>BRAVO!</i> GOOD BOY!	The teacher produced an embedded correction of Josh's last answer.
			<i>ELLA!</i>	
			SHE!	

In a second interactional pattern, Gloria did not graduate her assistance according to Josh's ongoing cognitive needs, following his troubles in completing classroom tasks. Hence, she did not support the child's additional thinking and self-repair. An illustration of this is Extract 4, showing Gloria questioning Josh on verb tenses. In Line 1, She asks Josh to grammatically analyse the verb "will do" by identifying the stem and tense. In the following turn, Josh incorrectly deals with the task. In Line 6, Gloria breaks down the broader task into multiple micro-goals to promote the child's self-repair. She initially plans to ask about the stem of the verb and, later, the tense. Despite the TA simplification of the task, Josh produces a second trouble. After that, Gloria recycles the same kind of questions repeatedly (Lines 7-9-11) and does not change or gradually raise the level of assistance to stimulate further thinking (lack of graduated support). In response to the repeated TA questions, Josh keeps producing troubles without achieving the repair (Lines 8-10-12). This back-and-forth of questions and troubles only ends when Gloria completes the task instead of Josh (Line 13).

Extract 4 Grammar exercise: multiple repair sequences


Turn	Speaker	Speech	Observer Comments
1	(I): I	Gloria <i>Farà, che tempo è?</i> What tense is it? <i>Mi vuoi coniugare farà?</i> Can you conjugate?	Gloria asks Josh a few questions.
2	//	Josh 	In this turn, Josh looks around, disengaged from Gloria's talk.
3	I: B	Gloria <i>A guarda a me!</i> Look at me! <i>Farà, che cos'è?</i> Will do, what is it?	With a punitive tone, Gloria orders Josh to focus on her. To do so, Gloria repeatedly touches him with his right hand. Next, she vocalises such requests for attention using the local dialect. She says <i>a guarda</i> instead of <i>devi guardare</i> or <i>guarda</i> . The occasional use of the dialect makes the message stand out and stresses the seriousness of the request. Then, she rephrases her previous question in a more unspecified fashion. The question " <i>what is 'will do'?</i> " may lead the child to

perform either the functional analysis of the word in a broader sentence (i.e., predicative: single vs compound; predicative vs nominal), which was also was the activity the whole class had dealt with a few minutes before, or the grammatical analysis of the verb *will do* (e.g., study the stem, tense, and mood of the verb).

4	Response (R): B	Josh	<i>Predicato...</i> Predicate...	In this turn, Josh says the function of the verb.
6	I: C	Gloria	<i>Voce del verbo?</i> The stem of the verb?	Gloria disapprovingly looks at Josh, indicating that the previous answer was wrong. Then, she asks a second question that prescribes a more accessible but related cognitive effort.
7	R: C	Josh	<i>Volce del verbo...</i> The stem of the verb...	Josh repeats the question and lengthens the last word of the sentence.
8	I: D	Gloria	<i>FARÀ!</i> WILL DO!	Gloria prompts Josh to answer by repeating the verb again. She uses a louder and more punitive tone.
9	R: D	Josh	<i>Voce del verbo...</i> Stem of the verb...	Josh repeats Gloria's question.

10	I: E	Gloria	<i>Del verbo!</i> Of the verb!	In this turn, Gloria prompts the child to answer with a more friendly tone.
11	//	Josh	😞	Josh looks intimidated.
12	I: F	Gloria	<i>Farà!</i> Will do! <i>Voce del verbo?</i> The stem of the verb?	Gloria prompts the child again.
13	//	Josh	(//)	Josh moves his lips and says something unrecognisable.
14	I: G	Gloria	<i>FARE!</i> WILL DO!	Gloria supplies the answer. The tone of the talk is still punitive.
15	R: G	Josh	<i>Fa...mm...fa...re!</i> Will...mm...do!	Josh stutters.
16	I: H	Gloria	<i>Modo?</i> Mood?	In a more friendly tone, Gloria asks a second question.
17	R: H	Josh	<i>huh?</i> huh?	Josh makes an exclamation that suggests he misheard the question.
18	I: I	Gloria	<i>Modo?</i> Mood?	Gloria repeats the question.

19	R: I	Josh	<i>Modo...</i> Mood...	Josh repeats the question and lengthens the last word of the sentence.
20	Follow-up (F): I	Gloria	<i>Modo indicativo!</i> Indicative mood!	Gloria supplies the answer. Now, the tone of the talk is less assertive and more friendly.
21	I: J	Gloria	<i>Che tempo?</i> What tense? <i>Fa...rà?</i> Will...do?	Gloria asks another question. Also, she gives Josh a clue by repeating the target word, <i>farà</i> . She also breaks the word into its two syllables and raises the intonation in its last, <i>rà</i> . In Italian, the last syllable of a word often gives a clear indication of the verb tense. In English, the comparative clue could be stretching the auxiliary <i>will</i> in such a case.
22	R: J	Josh	<i>Farà,</i> Will do, <i>Futuro semplice</i> Future simple	Josh repeats the question and lengthens the last part of the word. Then, he gets the correct answer.
23	I: K	Gloria	<i>Come fa?</i> How does it work? <i>Io farò,</i> I will do,	Gloria asks another question (i.e., the conjugation of the verb <i>will do</i>). Also, she starts answering.

24	R: K	Josh	<p><i>Tu farai,</i> You will do,</p> <p><i>Egli farà,</i> He will do,</p> <p><i>Noi faremo,</i> We will do,</p> <p><i>Voi farete,</i> You all will do,</p> <p><i>Egli faranno.</i> He will do.</p>	<p>Josh continues the conjugation of the verb from where Gloria left off. At the end of the answer, he mis-speaks the last person.</p>
25	F: K	Gloria	<p></p>	<p>In this turn, Gloria nods and accepts the answer.</p>

The third pattern of interactions depicted Gloria designing multiple-choice tasks, which closed down Josh's thinking on a few alternatives. When Josh produced the wrong answer, Gloria's aversive sounds, time-outs or single prompts were enough to redirect him towards the other alternative/s, and no additional thinking was needed to self-repair. An illustration of this pattern is the episode showing the teacher questioning a child without SEND about the grammatical nature of the pronoun, she. The teacher's question (*Can you tell me what it is? What gender, number?*) is phrased in a way that the answer should meet these conditions: a) it should provide the gender of the pronoun, and b) its number (i.e., singular or plural). Next, the teacher hints at the initial part of the expected answer

(*She, personal pronoun*). Before the teacher completes the question, Gloria overlaps the teacher's talk by turning to Josh. She narrows the teacher's turn by asking a closed question only about gender (*She, what gender is it?*). The next turn is important because she further narrows the options for Josh by suggesting only two possible answers (*Male or female?*). After hearing them, the child appears to answer quickly; unfortunately, his answer (*Male*) is the wrong one. To deal with the mistake, Gloria aversively repeats the question. In so doing, she makes it clear that the answer is wrong. Then, Josh takes a moment to think about the answer and self-repairs. After this exchange, Gloria moves to the second closed question (*What person?*). Once again, the child answers with a mistake (*plural*). However, the correction this time is indirectly produced by a child without SEND, who accurately answers the initial teacher's question.

The final interaction pattern showed Gloria designing questions that did not challenge Josh's cognition and were quickly addressed (i.e., competent interactions). For instance, Gloria was seen asking a closed question about the part of a sentence (i.e., subject). Josh quickly and correctly responded to it. Then, the interaction ended with positive feedback from Gloria.

6.5. Summary

The findings in this chapter indicated that the teacher ran the whole-class instruction; meanwhile, Gloria assisted Josh in the classroom. Gloria's support to Josh frequently involved promoting his task engagement by repeating the teacher's whole-class talk to keep him engaged with the classwork. In other instances, Gloria assisted Josh with completing pedagogical tasks. To do so, she either immediately provided Josh with the solution to classroom tasks,

emphasising task completion, or she asked closed and undemanding questions to Josh (i.e., competent interaction), which did not encourage elaborate thinking. The observations also showed that Gloria rarely supported Josh's socio-emotional development.

Chapter 7. Study 1 Discussion

7.1. Introduction

In this chapter, I discuss the TA deployment and practice observed in Study 1, alongside its possible effect on children's learning. Also, I identify what educational factors might shape TAs' deployment and practice, including their conditions of employment and preparedness. Where possible, I relate the discussions to the existing literature on TA deployment and practice. The chapter concludes by presenting Study 1's limitations.

7.2. Main findings: Research Question 1

In Italy, how are TAs deployed in mainstream primary schools?

The field notes and the classroom observations indicated that the participating TA (Gloria) and the classroom teacher chose "the one teaches and the other assists" co-teaching style (OTOA). The teacher mainly managed the whole-class activities. Meanwhile, Gloria was observed nearby, privately monitoring and supporting the classroom activities of a single child with SEND (Josh).

Despite using different techniques, prior literature shows similar findings. For instance, Nes and colleagues (2018), Borgonivi and Ciletti (2018), and D'Alessio (2009) found that TAs dealt with the individual instruction of children with SEND across more than 16 different Italian classrooms. In the meantime, teachers managed the whole-classroom instruction. Hence, the TA deployment found in Study 1 is consistent with a wider (even if still small) group of TAs across Italian primary schools.

In the international literature, this deployment style - alongside the insufficient training of TAs - was nevertheless considered a cause for concern in the education of children with SEND. Among the many others, Giangreco, Doyle, and Suter (2014) suggested that TAs could mishandle this extended opportunity for one-to-one interactions with the children with SEND by excessively controlling and assisting their task completion; thus, they might compromise children's thinking and learning potential. Whilst this was supposed to be avoided across Italian primary classrooms due to a population of trained TAs (and their whole-class duties), the Study 1 classroom observations showed otherwise (e.g., a lack of scaffolding). Section 7.3. will provide additional information on Gloria's ineffective practice and its effect on Josh's learning, along with explanations for this ineffective practice. The following sections discuss the reasons, including TAs' conditions of employment, that might cause this TA deployment.

7.2.1. Explanations for TAs' deployment

What factors, including conditions of employment and preparedness of TAs, may be associated with their deployment?

One potential justification for using OTOA in the participating classroom is that it is an optimal, if not the only, solution that allows the co-teachers to instruct the whole class and contemporarily supply Josh with extended individual assistance (i.e., 80% of in-classroom individual support). Perhaps the practitioners might have used alternative styles (such as parallel teaching and teaming) if they had dealt with children with minor needs (i.e., mild SEND).

Although convincing, this argument is not sufficiently supported by prior studies. Existing research has indicated that OTOA is the typical co-teaching style in

classrooms hosting children with both severe and mild SEND, and not one of the alternatives (Associazione Treelle et al., 2011; see also D'Alessio, 2008). OTOA could be therefore a purposeful (and stable) choice across Italian classrooms, which may sometimes be inadvertently consistent with children's severe needs (e.g., Study 1).

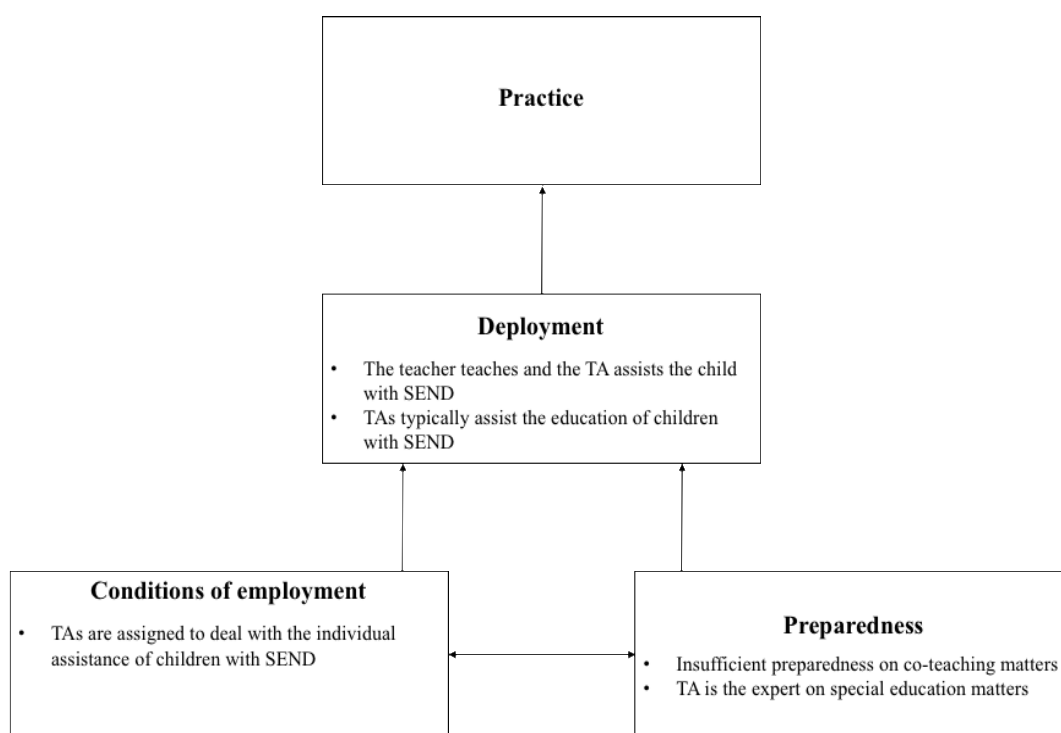
A sounder explanation for the use of OTOA across Italian classrooms, including in Study 1, is potentially found in TAs' (and teachers') training. Italian compulsory teacher training appears to equip TAs and teachers with solo classroom teaching methods and rarely, if ever, prepares them on co-teaching styles and project management (Gazzetta Ufficiale, 2012). As a result, TAs and teachers may be less prepared to co-plan and design more complex teaching practices (such as parallel teaching); this leads to regular, more accessible, uncollaborative teaching practices where one teaches and the other assists. More evidence for training's impact on TA preparedness and practice is nonetheless needed to confirm this initial hypothesis regarding co-teaching styles.

While co-teaching unpreparedness and SEND severity might explain the use of OTOA across Italy, they do not justify why TAs (rather than teachers) take the main role in educating children with SEND. The literature considers TAs' conditions of employment to be a better reason for this (lanes, 2014). Notably, the national regulation, which advises schools and teaching practitioners to use TAs as a primary resource for the individual education of children with SEND, seemingly creates a *de facto* right for children with SEND to benefit from the extra classroom support of TAs (and less from teachers), which schools and TAs need to be confronted with (lanes, 2014).

In addition, TAs' preparedness might play a role in their deployment. Gloria's education and, by extension, the education of most public-school TAs, deals with special education matters (and subject knowledge) (Borgonovi & Ciletti, 2018), whereas teacher training primarily focuses on mainstream pedagogical topics (lanes, 2014). Consequently, TAs and teachers may perceive that TAs could be better prepared to deal with children with SEND and design their practice accordingly (i.e., special education training trap).

This concludes the interpretations of TA deployment findings. As Figure 10 shows, the results appear consistent with the re-description of the Wider Pedagogical Role model's hypotheses in Chapter 1. TAs' conditions of employment and, notably, the national guidelines that invite the TAs to deal with the individual assistance of children with SEND are reflected in TAs' practice. Further, TAs' preparedness in special education and less in co-teaching matters appears to legitimise their educational responsibilities towards children with SEND, and also forms a barrier to sharing the whole-class instructional responsibility with classroom teachers.

Figure 11 The findings of TA deployment in the Wider Pedagogical Role model



7.3. Main findings: Research Question 2

In Italy, what types of support activities do TAs employ to support the classroom experience of primary-school children with SEND?

The systematic observations of the TA's behaviours indicated that Gloria preferred promoting Josh's engagement with the classroom tasks or his learning; this is also referred to in the rest of this section as "academic-based support" (i.e., TA task engagement support + pedagogical support, 93% of the total observations). At the same time, minor assistance was provided concerning Josh's socio-emotional education and procedural activities (7%). Comparable results were also found by D'Alessio (2009) and Borgonovi and Ciletti (2018).

This support model (predominantly focusing on academic instruction and subordinately on socio-emotional education) could be problematic for children with Communication and Interaction (C&I) difficulties, like Josh. Indeed, it might

not address his difficulties in interacting with peers and adults (nor enhance his social life outside school). As doing so, Gloria's support could have an adverse effect on the child's academic performance due to its fundamentally social nature (Dewey, 1958). Whilst these arguments sound theoretically convincing, more evidence is nonetheless needed concerning Josh's socio-emotional needs and academic performance in order to (empirically) substantiate their trustworthiness.

Potentially more concerning for Josh's education is the lack of scaffolding evident in most of Gloria's task engagement episodes – and pedagogical ones, as discussed in detail in Section 7.4. The qualitative analysis of TA task engagement interactions indicated that Gloria often completed dictation tasks instead of the child, as they were perhaps too demanding for him in the first place (e.g., Extract 2). As a result, Josh watched Gloria working for him or seemed utterly disengaged from the task. Rarely, if ever, did Gloria provide a gradual increase of assistance by, for instance, rephrasing and shortening the teacher's whole-class dictations to promote Josh's independent completion of the task. In other typical instances, Gloria was observed to be highly controlling (and not scaffolding) Josh's participation in the classroom activities by, for instance, limiting or promoting his contributions to the classroom talk. Despite sometimes encouraging his talk in circumstances in which he could be excluded (Extract 1), the high management of Josh's whole-class participation could potentially compromise his trust in his independent judgement; thus, Gloria might reduce his contributions in unassisted situations and prevent additional learning.

7.3.1. Explanations for TAs' typical support pattern

What factors, including the conditions of employment and preparedness, do TAs I perceive could be associated with their types of support for children with SEND?

In this section, I discuss what factors, including TA preparedness, might influence Gloria's pattern of assistance with children's socio-emotional and academic learning. The theoretical justifications for Gloria's lack of (task engagement) scaffolding, and its potential confirmation across Josh's pedagogical assistance patterns, are presented in the next section.

The classroom context is one possible explanation for TAs' neglect of any support strategies but academic-based assistance. Notably, regular OTOA seemingly minimises children's and TAs' procedural adjustments (e.g., moving chairs around and taking multiple materials). Similarly, teachers' whole-class teaching interactions and fewer group activities might constrain children's peer interactions and, consequently, reduce the need for TAs such as Gloria to facilitate children's social interactions. It follows that the few, if any, opportunities for students' social interactions and procedural activities could lead the TAs to focus on academic matters.

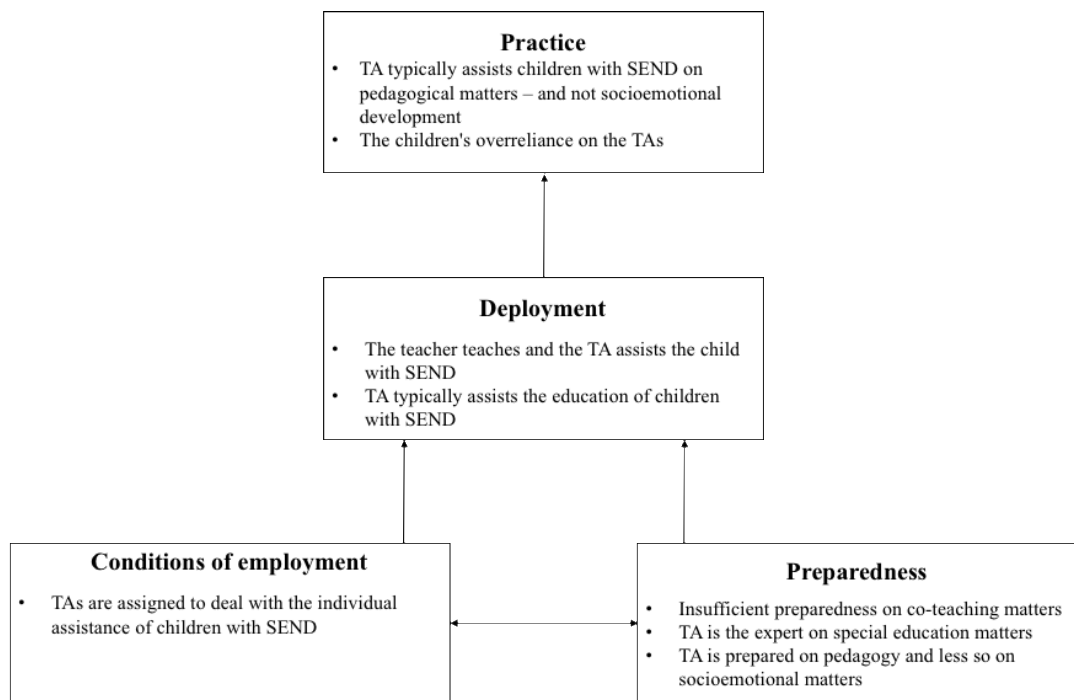
Nevertheless, these classroom conditions only partially prevented Gloria from designing individual tasks on socio-emotional matters (and procedural tasks). She seemed relatively free to interact privately with Josh on any matter, including socio-emotional and procedural aspects. Therefore, OTOA and, by extension, the classroom context might explain some of Gloria's decisions regarding support strategies, but not all.

Perhaps a more significant barrier to Gloria's support strategies was her preparedness. Gloria's training primarily concerned teaching and learning

academic content (98%), and was less focused on emotional, social, and procedural support (2%). As a result, she could be potentially less able to handle socio-emotional assistance and would hence prefer academic instruction. Further evidence on TA teaching practice and training is nevertheless needed to confirm this interpretation in a wider population of TAs.

Figure 11 gathers this and the other interpretations and findings in a new re-description of the WPR model; it confirms the significant role of preparedness in TA practice, coherent with the original conceptualisations of the model in the DISS project (Blatchford et al., 2011).

Figure 12 The findings of TA deployment and support strategies in the Wider Pedagogical Role model



7.4. Main findings: Research Question 3

In Italy, how do TAs support the content learning of children with SEND?

Perhaps the “most innovative” analysis of Study 1 concerned the exploration of TAs’ pedagogical practice. To my knowledge, the current study is one of the first to investigate it in-depth.

During the classroom observations, Gloria’s assistance model seemingly emphasised Josh’s task completion and not his thinking (i.e., a lack of scaffolding). For instance, the systematic observations of classroom interactions indicated that Gloria largely preferred to immediately correct Josh’s troubles (other-initiated other-repair, 54% of pedagogical instances). Other common interactional patterns showed Gloria asking questions that received an immediate and correct answer from Josh and, therefore, failed to potentially challenge the child’s thinking (competent interactions, 25%). Rarely did she provide clues to scaffold the child’s cognition and self-repair (other-initiated self-repair, 16%).

The more qualitative analysis of Gloria’s pedagogical support potentially confirmed the concerns about TAs’ lack of scaffolding. In particular, her assistance was seen to conflict with the two core principles of scaffolding: a) contingency of the tasks and b) transfer of the maximum task responsibility to the learner. In particular, Gloria rarely constructed her support/classroom tasks according to Josh’s cognitive capacities. For example, she used multiple-choice questions without exploring the child’s ability to deal with more complex ones, such as open questions. This might have constrained Josh’s more elaborate thinking and learning opportunities.

Also, Gloria provided a high level of support immediately to complete the tasks, such as the initial word/syllables of the solution (e.g., Extract 3). As a result, the child, with little cognitive effort, adds the missing words/syllable in the TA's talk and completes the tasks. When Josh did not answer correctly, Gloria rarely raised or changed the type of support to promote the child's self-repair. Instead, she supplied the answer, which constrained Josh's opportunity to think and learn for himself (e.g., Extract 4).

7.4.1. Explanations for the TA's pedagogical practice

What factors, including the conditions of employment and training, may be associated with their pedagogical practice?

The key conclusion from the study of TA pedagogical interactions is that Gloria adopted strategies that might have discouraged Josh's thinking and learning. As such, the findings potentially contradicted my initial theoretical hypothesis suggesting that pedagogically prepared TAs like Gloria would effectively support the education of children with SEND (see Section 2.4., for more detail).

In addition to other researchers (D'Alessio, 2012; D'Alessio & Cowan, 2013, see also Peruzzo, 2019), D'Alessio (2009) explained the possible inadequate mainstream instruction of children with SEND based on the theoretical underpinning of special education, such as medical and custodial care, seemingly informing the practice of school practitioners, including TAs. This may imply that the rich special education training that TAs receive (such as the master's in special education [MSE]) could prepare them to perform medical and custodial care and less effectively pedagogical support, which explains the results found in this study.

The theory, however, seems somewhat questionable when exploring current special education training more in detail (Florian, 2006). Whilst there is no doubt about the medical tradition of special education, recent special education training predominantly espouses pedagogical principles (e.g., scaffolding) as well as encouraging teaching practices to accommodate the education of children with SEND within mainstream settings (e.g., the use of apps and Augmentative and Alternative Communication). Hence, recent TAs may be better prepared to deal with and promote children's learning than their medical care, as D'Alessio (2009) potentially alluded to.

Furthermore, even if one accepts the controversial idea that special education still promotes custodial and medical care, there are reasons to believe that TAs would nevertheless prefer using pedagogical mainstream tactics. This is because, in Italy, TAs are mainly trained in mainstream pedagogy matters and less in special education (see Section 3.4.2., for more details).

That said, the TA compulsory training (master's in primary education [MPE] + MSE) received by Gloria could be critiqued on different theoretical grounds. Alongside subject knowledge (43% of the training), TA training seemingly relies on applied teaching solutions, including behavioural teaching approaches and scaffolding tactics such as praising, punishing, and cluing information to promote children's task completion (23%), and less on the theoretical underpinnings of such teaching strategies (developmental psychology and epistemology training, 11%). As a result, TAs are prepared to apply technical teaching models in their practice without perhaps a full theoretical awareness of their impact on children's learning.

Nevertheless, the unpredictability and uniqueness of classroom events might hinder the transferral of academic methods into practice (Collin et al., 2013). Among many other factors, the specific classroom context, type of children with SEND, and teachers' (subjective) relationship with students unevenly shape the TA classroom experience (Day et al., 2006; 2017; Sammons et al., 2007). Accordingly, this set of conditions may render the learned methodologies less transferable across teaching contexts or inapplicable (Schön, 1991).

To deal with this potential implementation gap, TAs (and teachers) may benefit from training that has a stronger focus on theoretical preparedness. This knowledge would allow them to make sense of the classroom context and children's ongoing learning needs and, accordingly, either adapt the learned solutions to the context or design unique, effective teaching solutions to promote children's learning (Schön, 1991).

Nonetheless, it appears Gloria's training did not adequately prepare her for theoretical, pedagogical principles, including in scaffolding (e.g., maximising the child's responsibility in task completion). Hence, Gloria's lack of scaffolding might be due to only learning the technical teaching solutions and not the theory underpinning scaffolding (Schön, 1991). More research is needed on TA training, preparedness, and practice to confirm this tentative theory.

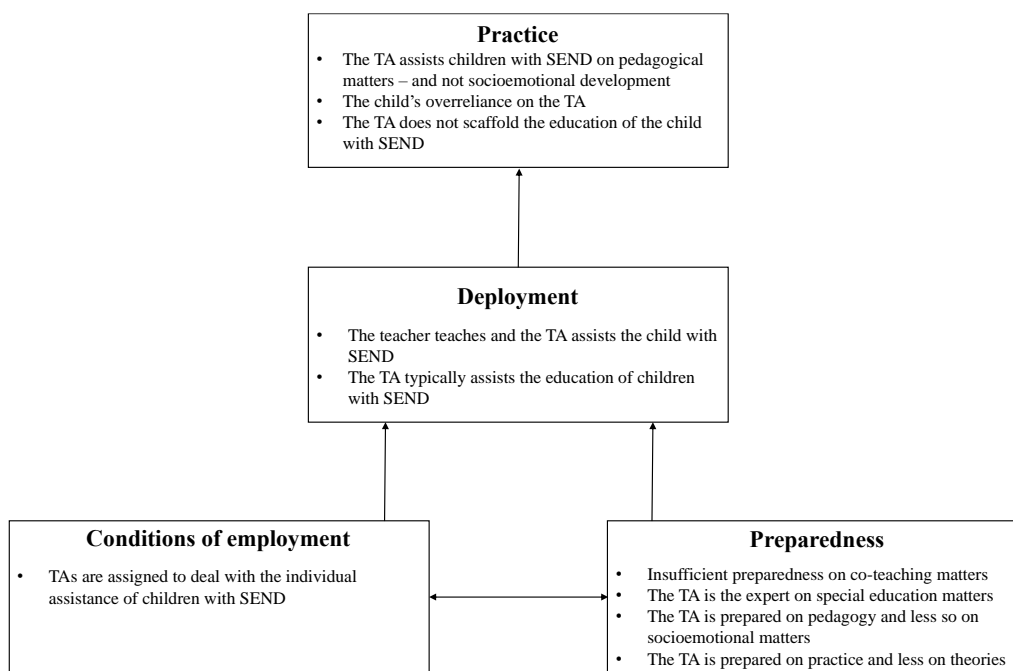
Existing research indicates that Gloria's applied knowledge – and its (adverse) supposed impact on practice - could be the case for a larger Italian population of TAs. For instance, Gianferrari's (2010) survey of 1,377 primary-school TAs indicated that, besides TA initial training (MSE + MPE), which is similar for all TAs in Italy, the TAs preferred in-service training (INSET) on methodologies; whereas

they rarely favoured INSET training on theoretical matters. Therefore, a larger group of primary-school TAs might have a rich knowledge of technical methods but not of theories, which arguably could negatively impact their practice (and children's learning).

7.5. Summary of the findings and interpretations

The WPR model (Figure 12) incorporates this chapter's key findings and interpretations. It shows that the OTOA style, seemingly a typical co-teaching style in Italy, might be a consequence of a) national conditions of employment linking TA deployment with the extra individual help for children with SEND, b) the special education preparedness of TAs, and c) the TA and teacher's insufficient preparedness in co-teaching theories and classroom planning. Additionally, the TAs' lack of socio-emotional education could result from their infrequent training and preparedness on socio-emotional matters (alongside the OTOA classroom context). Finally, the WPR model shows the tentative relationship between the applied training programme of TAs and their ineffective practice.

Figure 13 The findings of TA deployment and practice in the Wider Pedagogical Role model



7.6. Study limitations and future research

One potential problem of Study 1 and, by extension, any classroom observations, is that the presence of the observer, a camera, and microphones could shape the participants' natural behaviours and negatively impact the quality of the findings (Sackett, 1978). Whilst this was not apparent throughout the research observations, perhaps due to the use of a non-intrusive camera and microphones, there were nonetheless occasions when participants' behaviours were seemingly influenced by the external objects (e.g., when dropping their microphones on the floor). These unfortunate events, likewise, a few minutes after, were not analysed. This way, I hoped the participants would forget the events and restore their natural behaviours.

A more significant limitation of the study was the possibility that the small sample size could not adequately instantiate themes and logical constructs of TA

deployment and practice (e.g., TAs' socio-emotional education and procedural support). As a result, the findings might have overlooked some aspects of TA teaching practice and possibly undermined the robustness of the findings and interpretations.

To deal with this and address possible concerns about the transferability of the results beyond the single case observed, I designed a second study with a larger population of TAs (Study 2). The cross-checking of results and theories would potentially increase both the trustworthiness of the research findings and their applicability across a wider population of Italian TAs. The next chapter provides more information on Study 2.

Chapter 8. Study 2 Findings

8.1. Introduction

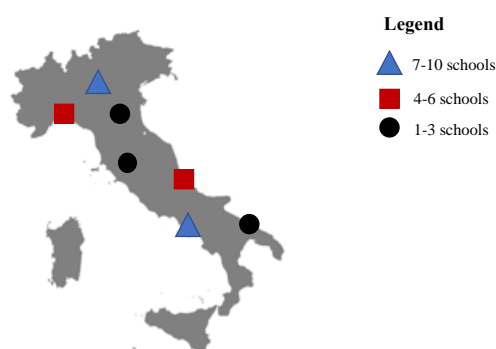
This chapter presents the findings of a study exploring the deployment and practice of a larger group of participants (31 TAs) than in Study 1 (one TA). This second study was designed to address possible concerns about the findings from Study 1, and thus sought to consider similar issues with a larger sample.

The chapter comprises three main sections, corresponding to the overarching research questions (RQs); it also answers their sub-questions, including but not limited to those unanswered in study 1 (e.g., *What do TAs perceive shapes their deployment and practice?*). Before delving into Study 2's findings, the following subsections provide additional information about the participants, including their training and conditions of employment.

8.1.1. Participating TAs: demographics, training, and conditions of employment

The TA questionnaires indicated that the 31 participants were all Italian women whose first language is Italian. They all stated that they had a national teaching contract and worked in public schools spread throughout Italy (see Figure 13).

Figure 14 Sample geographical distribution



Note. Data were retrieved from the TA questionnaire (Section 1)

The TAs reported that, in addition to a master’s in special education (MSE), they had achieved a master’s in Primary Education (MPE), a high-school diploma in education (HDE), or other educational qualifications. Table 19 shows that younger TAs tended to have an MPE and no other qualifications – due, perhaps, to the programme’s relatively recent introduction among the mandatory requirement to become a TA (GU, 1997).

Table 19 Age distribution/Latest education achievement

Age	< 30	30-39	40-49	50-59	60 ≤	Total
HDE	0 (0%)	0 (0%)	3 (10%)	4 (13%)	0 (0%)	7 (23%)
MPE	2 (6%)	5 (16%)	5 (16%)	0 (0%)	0 (0%)	12 (39%)
Other Educational University Degree	0 (0%)	2 (6%)	2 (6%)	1 (3%)	0 (0%)	5 (16%)
Non-educational University Degree	0 (0%)	2 (6%)	5 (16%)	0 (0%)	0 (0%)	7 (23%)

Note. Data retrieved from the TA questionnaire (Section 1).

Whilst seven of the TAs seemingly did not attend any In-Service Training (INSET), the other 24 reported continuing their professional learning over the three years prior to the study. The INSET training of this latter group of TAs focused on a) practical/administrative matters such as learning the use of home-schooling software/platforms (31% of the total courses); and b) applied teaching methods in special education (57%) or general education (13%), such as interventions for autistic children or whole-class teaching methods. No courses were attended on more theoretical matters (e.g., child developmental theories and epistemology).

8.1.2. Classroom characteristics: year groups and types of children

The participating TAs reported working primarily in UK equivalent Year 3 (no.: 10) and Year 6 (no.: 7), and slightly less in Year 4 and 2 (no.: 5 per year group) and Year 5 (no.: 4). They all declared that they provided most of their classroom

support to a child with a disability and with an Individual Educational Plan (IEP) (henceforth child/ren with SEND).

Table 20 shows that the children with SEND, whom they predominantly supported, had Cognition and Learning difficulties (C&L) such as mild, moderate, specific learning disabilities, or a combination of these cognitive difficulties with other types of needs. More rarely, they were children with a) Social, Emotional and Mental Health difficulties (SEMH), such as attention deficit hyperactivity disorders (ADHD) and related disorders; b) Communication and Interaction needs (C&I), including autism (ASD), language disorders, and/or their combination; c) Physical and/or Sensory Needs (P&SN), namely hearing impairments and motor disorders; and d) combinations among the above areas of need.

Table 20 Special needs of the participating children with SEND

Type of needs		Frequency counts	%
C&L		6	19%
C&I		4	13%
P&SN		3	10%
SEMH		2	6%
Total Single type of need		15	48%
C&L + SEMH		5	16%
C&I + C&L		3	10%
C&L + P&SN		2	6%
C&I + P&SN		1	3%
SEMH + P&SN		1	3%
P&SN	Two types of needs	1	3%
Total Two Types of needs		13	42%
C&I + C&L + P&SN		2	6%
P&SN	Multiple types of needs	1	3%
Total Multiple types of needs		3	10%

Note. Data were adapted from the TA questionnaire (Section 2).

Apart from those with P&SN, children were categorised as having a single type of need when they had single or multiple needs that were part of the same area of needs (e.g., mild learning needs + specific learning disabilities). Children with P&SN were instead categorised as a single type of need when, for instance, they had either vision or hearing impairments. Instead, children with multiple and unrelated P&SN impairments, such as hearing loss and epileptic spasms, were included in multiple needs categories.

8.2. Research Question 1

The first overarching question (RQ1: *In Italy, how are TAs deployed in mainstream primary classrooms?*) was addressed through the thematic analysis of interviews and the numerical results obtained from the questionnaires. This section comprises four subsections, each corresponding to the RQ1 sub-questions. The first focuses on the class co-teaching practices, the next two describe the TAs' classroom role, and the final one explores the factors that the TAs perceive shape their deployment, including TA preparedness.

8.2.1. Research Question 1.1.

What types of co-teaching styles are evident in lessons?

In the questionnaire, 24 participating TAs indicated that the classroom teachers predominantly taught the whole class; meanwhile, the TAs supported children with SEND either in one-to-one or group settings (i.e., OTOA style). The remaining small group of participants mentioned using alternative co-teaching styles, such as a) the teacher teaches, and the TA walks around and observes the students (OTOB) (four TAs) and teaming strategies in which both teacher and TAs contemporarily instruct the whole class (two TAs). Finally, only a single TA (pseudonym Angela) declared that she worked solely outside the classroom with the child with SEND.

In spite of the questionnaire answers, the interview data indicated similarities across classroom layouts and lesson management (apart from Angela). Classrooms seemingly all used a table-row layout, with the teachers facing the students, who were “*separated, every child by themselves, one by one, hence not next to each other*” (Alba, interview No. 1). Meanwhile, the TAs sat in the first

row, having “*a partial vision of the classroom ecologies*” (Giovanna, Interview No. 3). Lessons commonly followed three subsequent teaching contexts: a) generation of the topic of discussion, b) a whole-class question and answer session, and c) individual work performed by the children. Teachers primarily managed the whole-class interactions, and the TAs mostly stayed close to the child with SEND, thus largely echoing the questionnaire’s OTOA responses (see Table 21 for interview evidence). Rarely did the TAs start the lessons near the children with SEND to facilitate their understanding of the teacher’s talk and classwork and then move around the class to help other children in need.

By contrast, a few other TAs indicated changing positions across the three subsequent teaching contexts. For instance, Jemma and Laura (Table 21) mentioned that they started the lessons alongside the teacher to introduce the conversation topic to the class. Next, during the individual task, they may have either: a) moved around the classroom to help children complete their tasks or b) sat next to and helped the children with SEND with their tasks.

Table 21 Co-teaching styles

Co-teaching Styles		Description
THE TA STAYS IN POSITION	The teacher teaches, and the TA stays close to and assists "just" the child with SEND	<i>"For instance, [the teacher] introduces a new topic [...], I am close to the child with SEND [...] to check whether she makes mistakes [...]. [I may check if] she is attentive to the lesson and [if not so, I may] prompt her attention" (Imma, Interview No. 22).</i>
	The teacher teaches, and the TA stays near the children with SEND or in need.	<i>"In the last days, there has been a consolidation of the last topics. Therefore, the teacher may have given the children some semi-structured exercises on printed material. Once all children had their material, [the teacher] [then] explained the task. After this, every child independently worked on the task. [While the teacher was doing so], I assisted the child with SEND [...] to complete the task. Therefore, I have always been next to her, but not only [assisting] her; because other children [...] come close to me and asked me, 'please help me, I cannot do it by myself" (Lina, Interview No. 23).</i>
THE TA MOVES BETWEEN BASES	The TA and the teacher start the lesson alongside each other. Then, the TA moves towards the position of the child with SEND to help her.	<i>"Look, in general terms, you introduce a new topic [to the class], and there is an observation. There may be a role exchange between us. I can talk [to the class] and then pass the talk over to the teacher, who may add something. [...] While I talk, [the teacher] may observe the class. Alternatively, the colleague may talk, and I observe. [...]. This situation may change when I see that [for instance] my child [with SEND] gets distracted [...], so I need to leave the colleague and get closer [to the child]." (Jemma, Interview No. 17).</i>
	The teacher and the TA start the lesson alongside each other. Then, the TA (and teacher) walk around the class to help those in need.	<i>"It may happen that the teacher starts the lesson [presenting the new topic]. I am next to her and observe the children. Suppose I notice that the [children's] attention diminishes or see that a child did not understand the [new] topic [...]. In that case, I rephrase [the teacher's explanation] so that the children may understand it better. Alternatively, I may [...] draw something on the board [...]: an image, some schemes, or a map of the topic [...]. [Then, when] the children are involved in an individual task [...], the teacher and I move around the classroom to check what the children are doing and assist whether they cannot accomplish the task [...]" (Laura, Interview No. 5).</i>
	The teacher teaches, and the TA starts the lesson close to the child with SEND. Then, the TA may move around the classroom to help those in need.	<i>"It may happen that initially, when [the teacher] introduces a new topic and task [...], I assist the child [with SEND] by providing more explanations. Then, if I notice that the child with SEND can handle the task by herself, all right, I look around and may move around [the classroom], and another child may ask me for a clarification" (Paula, Interview No. 15)</i>

8.2.2. Research Question 1.2.

Who do TAs predominantly work with? Where do they predominantly work (e.g., inside or outside the classrooms)?

In the questionnaire, 25 TAs declared that children with SEND were *never* or *rarely* taken outside for individual interventions; they (mostly) worked inside the classrooms. Rarely did the TAs indicate having *sometimes* (two TAs), *very often* (three TAs), or *always* (Angela) withdrawn them from their classrooms.

The time logs (Table 22) somewhat confirmed the wide selection of OTOA styles (and the frequent in-classroom work of children with SEND and TAs). Notably, they replicated the centrality of TAs in the education of children with SEND and the little support they provided to the whole class and children without SEND. The episodic nature of TAs' support for children without SEND hindered further investigation of this. The qualitative and quantitative analysis and findings in the following sections and subsections target the more common interactions between the TAs and the children with SEND.

Table 22 Time-logs: the deployment of TAs inside the classroom

TA audience/auditor	Frequency counts	%
Child with SEND	225	83%
<i>One to one</i>	201	74%
<i>Group settings</i>	24	9%
Child without SEND	15	6%
<i>One to one</i>	14	5%
<i>Group settings</i>	1	> 1%
Whole classroom	27	10%
Teacher	3	1%
No interaction or focus on people	0	0%
Other	0	0%
<i>Total</i>	<i>270</i>	<i>100%</i>

Note. Data were collected in intervals of 20 min. Apart from Angela, all participants are reported in the table.

The categories coloured in grey are of no occurrence (0%) or coded intervals with the Other's code.

8.2.3. Research Question 1.3.

How (e.g., private conversations and group interactions) and what types of support do TAs provide to the children with SEND (e.g., curricular or differentiated activities), whole class (e.g., curriculum), and teachers (e.g., administrative)?

The interviews indicated that the TAs predominantly supported the curricular activities of children with SEND, along with previously “*design[ing] and review[ing] them in] the Individual Educational Plans for the children [that teachers] just sign without reading them*” (Paula, Interview No. 15). TA classroom support was frequently, if not always, delivered through private interactions. Hence, they promoted children’s engagement and learning on different/simplified activities compared to the rest of the class or on themes corresponding to the whole-class talk (see Table 23).

Table 23 Private interactions

Private interactions	Description
Private interactions typically different from whole-class conversations	<i>Ida: "I work just with [the child with SEND], and we do just a few activities with the classroom [...]. For instance, in one of the last classes, [the teacher] introduced the verb tenses. Obviously, the verb tenses cannot be comprehended by the child with SEND, [...] hence, we worked on motor activities"</i> (Interview No. 21).
Private and whole-class conversations are on the same topic	<i>Lina: "My role has been facilitating the learning [of a child with SEND]. Because I have been lucky to work with a child with mild learning difficulties [...]. [That is to say, while], the role of the teacher was of transmitting the learning to the whole class [...], [I was] targeting my assistance to the child [with SEND]"</i> (Interview No. 23).

8.2.4. Research Question 1.3.

What factors, including conditions of employment and training of TAs, do TAs perceive could be associated with their deployment?

TA interviews indicated that multiple factors shaped their educational role and working relationship with the classroom teachers. In the first part of the subsection, I discuss what set of conditions impacts the classroom co-teaching decisions; and in the second, the TAs' centrality in the education of children with SEND.

8.2.4.1. Co-teaching style

One potential factor influencing the classroom co-teaching style was the severity of the needs of children with SEND. Ida (extract below) argued that children with severe learning difficulties, such as Profound and Multiple Learning Disabilities (PMLDs), cannot follow whole-class instruction because they are excessively demanding. As a result, they require curricular adjustments (IEP) and the continuous individual assistance of an educator, the TA. In the meantime, the classroom teachers cannot do anything else but teach the rest of the class.

“The child with SEND [I work with] has a cognitive age of three years old. Hence, the ability of this child cannot match the curriculum of the class [...]. Consequently, the teacher cannot always calibrate the lesson to a nonverbal child [with a cognitive age of] three [and] I work on a different task [...] in one-to-one mode [with the child with SEND].” (Ida, Interview No. 21)

By contrast, although this occurred more rarely across the participating classrooms, the TAs and teachers also had more freedom to choose alternative co-teaching styles in classrooms hosting children with mild learning difficulties, and thus fewer individual needs (see the extract below).

“If the child [with SEND] [...] has a mild intellectual difficulty, of course, you can work with the class because the child follows the classroom curriculum” (Alba, Interview No. 1)

Furthermore, the TAs believed that the co-teaching unpreparedness in jointly planning the lessons also contributed to the frequent selection of the least collaborative co-teaching styles across the participating classrooms (i.e., OTOA). For instance, Leonida told me about structuring the class tasks and curriculum of children with SEND by herself; whereas her colleague, the classroom teacher, was responsible for designing the lesson plan for the whole class without negotiating and exchanging information with her beforehand (see the extract below for evidence). It follows that Leonida entered the classroom unaware of the whole-class activities, and thus saw no alternative role but to stay in the corner of the classroom and perhaps assist the children with SEND, for whom she made a plan.

“It is tough to [...] jointly plan the class activities, also because, alas, the teachers [...] do not have or share the lesson plan [...] and so we [as TAs] have to clutch at straws.” (Interview No. 25).

Kim conceptualised co-teaching unpreparedness in a slightly different fashion. In the extract below, she suggested that the practitioners may have little knowledge of the more diverse and complex co-teaching styles, such as parallel teaching

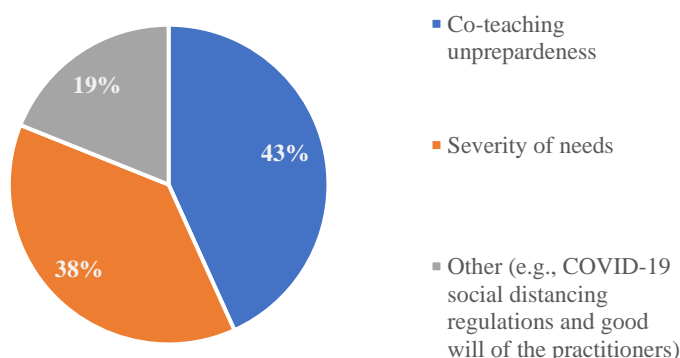
and teaming, and therefore opted for the more intuitive and straightforward OTOA style.

Interviewer: "This [OTOA] selection may be connected to the fact that there is a dearth of training courses on how to instruct a class with two teachers. Hence, why do you [and the teacher] select the easiest approach available, in which one teaches the class and the other works with the child with SEND? Or am I talking nonsense?"

Kim: "I cannot say no because I have never thought of taking a course on these matters. Nor has [this type of course] been proposed to me. [...] I was reflecting, and you may be right. Honestly, I have worked like this for 15 years [...] in a classroom corner [with the child with SEND]. I choose my position [...] without questioning it." (Kim, Interview No. 28).

Finally, other factors (Figure 14) were also perceived to shape the class co-teaching styles; nevertheless, their episodic occurrence in the interviews and, therefore, minor relevance for the TAs themselves, justified their cursory analysis here and in the rest of this research.

Figure 15 Factors shaping co-teaching practices



Note. Frequencies of the subthemes in the interview data (event coding). Coding was not mutually exclusive and could be multiple in the same interview extract.

8.2.4.2. TAs' special role

The interviews indicated that the factors influencing the widespread selection of OTOA (such as children's high severity of SEND) failed to explain why the TAs and not the teachers deal with the children with SEND or why the two practitioners rarely exchange their classroom roles. More plausible justifications for the TAs' (and teachers') classroom roles include their preparedness differential in special education. For example, Carla and Julia (Table 24) told me that TAs frequently earn an MSE and attend INSET courses in special education, whereas class teachers primarily undertake courses on mainstream pedagogy. As a result, teachers tend to take the lead for the instruction of the whole class, which they feel prepared for, and TAs work with children with SEND.

Table 24 Teacher training traps

Preparedness differential	Description
Qualification differential	<p><i>Interviewer: "Why are you the only one working with the child with SEND, although you and [the teacher] are [by law] equal partners?"</i></p> <p><i>Carla: "Because we have an additional qualification [so] we can say that we are better prepared to work with the child [with SEND]. I believe this is the reason" (Interview No. 10)</i></p>
INSET training differential	<p><i>Julia: "We attend training courses [on special education matters]. The teachers do not. Some [teachers] believe that they have [just] the class burden [and so do not need training on SEND matters]." (Interview No. 18)</i></p>

In addition to the training differential, Linda suggested that TAs' conditions of employment might play a role. Notably, she argued that the hiring of TAs as a

proportion of schoolchildren with SEND, as well as the ministerial advice that schools mainly deploy TAs to support the individual needs of children with SEND, make them *de facto* teachers of those children (see the extract below for evidence).

Interviewer: "Is the TA designated to work with the entire class?"

Linda: "Theoretically, TAs are designated to work with the class."

Interviewer: "In theory. And what about the practice?"

Linda: "In practice, they assign you to the child [with SEND]. Moreover, there are many teachers convinced [...] that you are [there] because there is a child [with SEND], and you are there just for her." (Interview No. 24).

Barbara and others believed that such "special" conditions of employment could also sway the social understanding of the TA role, leading parents and headteachers to associate TAs with the education of children with SEND. Moreover, they might directly shape TAs' beliefs. For instance, Manuela (extract below) convincingly argued that TAs are contractually bound to deal with the education of children with SEND, who consequently and "legitimately" work with children with SEND.

Manuela: "I am the TA, and rightly so, [I teach the child with SEND]. We cannot change the roles."

Interviewer: "By law?"

Manuela: "By law! [...] The TA and teachers have different contracts. I have the TA role and so must teach [the children with SEND]." (Interview No. 16).

Finally, Table 25 also shows that other factors were perceived to influence the TAs' class role. Nevertheless, their rare appearance justifies their summary mention in the thesis.

Table 25 Factors shaping TA roles

Factors	Occurrences	%
Condition of employment	139	77%
<i>School community misbelief (including Cultural misunderstanding of TAs' role)</i>	85	47%
<i>De facto conditions</i>	56	31%
Preparedness differential	39	22%
<i>TA SEND preparedness</i>	36	20%
<i>Teacher SEND unpreparedness</i>	10	6%
Other (i.e., Goodwill)	2	1%

Note. Frequencies of the subthemes (e.g., condition of employment) and codes (e.g., de facto conditions) in the interview data (event coding).

8.3. Research Question 2

The second overarching research question (RQ2: *In Italy, what types of support activities do TAs employ to support the classroom experience of primary-school children with SEND?*) was answered via a qualitative and quantitative analysis of interviews and questionnaire data. In the following two sections, I describe the results regarding the multiple TA support strategies, completed with an investigation of the factors supposedly underpinning them (e.g., TA preparedness and the classroom context).

8.3.1. Research Question 2.1.

What types of TA support strategies, such as behavioural management and enhancement of on-task behaviours, are used in the lessons?

The time logs (Table 26) indicate that the TAs primarily supported classroom procedures, task engagement, and the learning (pedagogical support) of children with SEND. Rarely did the TAs report providing socio-emotional and behavioural management. The episodic nature of the socio-emotional and behavioural practice, and of their support for children without SEND, prevented their adequate investigation in the interview process. The following subsection provides further information on task engagement and procedural support for children with SEND; TAs' pedagogical assistance is explored in the next section.

Table 26 TA support in different settings

TA Type of support	Child with SEND (one-to-one)	%	Child with SEND (group Setting)	%	Children without SEND in all settings (e.g., whole class)	%
Pedagogical support	93	35%	13	5%	17	6%
Procedure/Routine	40	15%	0	0%	1	0%
Task engagement support	36	13%	4	1%	9	3%
Social support	12	4%	6	2%	10	4%
Behavioural management	9	3%	1	0%	4	1%
Emotional support	3	1%	0	0%	0	0%
No support	2	1%	0	0%	1	0%
Other	6	2%	0	0%	0	0%
Total	201	75%	24	9%	42	16%

Note. Time logs data were collected in intervals of 20 min. The TAs reported information on TA support strategies across three different hours of literacy.

8.3.2. Research Question 2.2.

What are the tactics that TAs use to: a) manage disruptive behaviours, b) support the task engagement, and c) support the learning of social skills of children with

Table 27 gathers the key strategies used by the TAs to promote the task engagement and procedural management of children with SEND. Task engagement strategies were primarily provided through stereo-teaching practices, where TAs such as Donna repeated the teacher's talk to children. In this way, she assisted the child's engagement with the whole-class task (such as dictation). Secondly, Sarah (Table 27), among others, indicated using praise (positive reinforcement) to respond to and further stimulate children's on-task behaviours. In addition, she used punishments or their prospect to deal with and/or discourage their inattentiveness.

Also, procedural support was widely framed in the terms of task engagement support. For instance, Domenica revealed to manually assist or give the order to the children to sort their desks and remove unnecessary class material in order to a) speed up those activities and increase the time on the task and b) reduce their distractions due to gazing at and playing with useless materials on the desk. With a similar task engagement intent, Gina indicated structuring systematic minibreaks throughout the school day. As a result, she potentially prevented children's task disengagement due to tiredness and hoped to recharge their mental energy to promote enhanced on-task behaviour. More rarely, the TAs suggested that their procedural support was designed to prevent children's emotional flare-ups. For instance, Giulia (Table 27) reported designing drawing activities, referred to as procedural activities, to avoid the children's anxiety at the uncertainty of downtime.

Table 27 TA support strategies

TA support		Description
Task engagement support	Stereo teaching	<i>"For instance, [the child with SEND] gets anxious when the teacher dictates a text and becomes worried about lagging behind. [...] to deal with this, [...] I tell him, 'Do not worry! I am your external memory storage [...]', that is, I memorise the words that the teacher dictates [...], and then I help you [when you lag behind]" (Donna, Interview No. 31)</i>
	Punishment and praises	<i>Interviewer: "How do you support the attentiveness of [the child with SEND]?" Sarah: "To support her attention, the activity should have a duration of a few minutes because she has to have a reinforcement immediately. The reinforcement may be negative or positive, followed by another tangible reinforcement. She likes tea, and so sips tea [...]. I also punish her when needed" (Interview No. 20).</i>
	Class readiness	<i>Interviewer: "[...] In the questionnaire, you indicated how at the beginning of the lesson you support the child [with SEND] in this procedural activity. In actuality, what do you do?" Domenica: "So, my child enters the classroom, says hi, sits, and then nothing. Therefore, in the initial part of the lesson, I must prompt her, '[...] Today, we have Italian so let us take the Italian book.' If I do not say so, she sits and does not do anything. [Therefore], these preparatory tasks consist of taking the book, notebook [...], pen, remove the bags [...]. All these [preparatory tasks] must be supported" (Interview No. 30)</i>
	Reducing external stimuli	<i>"To support the attentiveness of [the child with SEND], it is useful to [...] keep on her desk just a notebook and a pencil [...]. Therefore, remove everything unnecessary, such as food, backpack, and agenda. The more things that are on the desk, the more likely the child may be distracted" (Giovanna, Interview No. 3)</i>
	Minibreaks	<i>Interviewer: "[In the questionnaire], you indicated how you always procedurally support the child [with SEND] in the middle part of the lesson. [can you tell me] what happens?" Gina: "So, it happens that [the child with SEND] is less attentive, so she needs time outs, [for instance], getting up and walking around the classroom. Then, she needs to go back to work by taking the colours and notebook" (Interview No. 26)</i>
Emotion regulation	Structuring routines	<i>Interviewer: "How do you procedurally support the child [with SEND]?" Giulia: "[...] In the initial part of the lesson, [the child with SEND] panics. Although she can independently deal with [procedural activities], she arrives at school agitated [...], so she must be prepared to get ready to work, for instance, 'take this'" (Interview No. 19)</i>

8.3.3. Research Question 2.3.

What factors, including the conditions of employment and training, do TAs perceive could be associated with their types of support for children with SEND?

One of the potential factors influencing TAs' preference for (pedagogical) and task engagement support was the types of needs of the children they supported. For instance, Stefania reported working with children with attention difficulties, who asked for more task engagement support and less of other types.

"In my opinion, [my type of support] varies according to the children's problems and difficulties [...]. I have been assisting children with cognitive difficulties; hence I did not need to manage their [bad] behaviours because there was no need to do so. While with this current child [with SEND], I need to control her behaviour. Therefore, it depends on the children's difficulties." (Interview No. 8).

In addition to, and maybe regardless of children's needs, TAs such as Polly indicated that the national curriculum guidelines have a more structural influence on TA practice. They seemingly persuade schools, parents, teachers, and TAs to prioritise literacy and arithmetic basics and rarely promote socio-emotional matters. As such, they may create a social misconception (extract below) that schooling/education is about academic learning and nothing more.

Interviewer: "Why did [you provide majorly pedagogical] support and less [socio-emotional assistance]?"

Polly: "[...] Because they must learn. They must learn to read, write, and calculate. We go back to the 1950s, but it is like that" (Interview No. 12).

The prioritisation of academic learning was also perceived to be evident in the TA training programme. As a result, Francesca (extract below) indicated that most TAs feel unprepared to deal with anything but academic support, including socio-emotional education, and therefore omit them entirely from their practice.

Interviewer: “[...] Do you think that TA support activities and their variations are shaped by the TA training, which focuses less on relations [and emotions] and more on teaching and learning [contents]?”

Francesca: “Yes, probably. [...] In Italy, [...] the school focuses on learning [subjects] [...], while teachers do not take into consideration emotions and relations [...] and maybe we are less prepared and avoid those matters, yes.” (Interview No. 14)

Finally, more episodic factors influencing the TA support strategies included the COVID-19 social distancing regulations, seemingly limited group table settings, group activities, and the TAs’ consequent social support. Hence, they made academic assistance the only option for the TAs.

8.4. Research Question 3

The third overarching research question (RQ3: *In Italy, how do TAs support the content learning of children with SEND?*) was addressed in the following four subsections through a thematic analysis of both conventional and video elicitation interview data. The next subsection gathers and answers the two sub-questions on TA pedagogical practice: a) *What types of pedagogical interactions, including repair and topic generation episodes, are available in the lessons?* and b) *How do TAs design pedagogical interactions, including repair and topic generation episodes?* The second addresses TAs’ pedagogical preparedness, and the latter

explores the factors (including TA training) that potentially influence their teaching performance.

8.4.1. Research Questions 3.1. and 3.2.

What types of TA pedagogical interactions, including repair and topic generation episodes, are available in the lessons and how do TAs design them?

The TAs reported designing four high-support strategies to promote children's quick completion of tasks or correction of their mistakes. First, TAs such as Lina indicated that they might initially prompt the children to correct their mistakes. Nevertheless, they would step in and repair the mistakes when the original assistance failed in its intent (i.e., other-initiated other-repair episodes).

Interviewer: "Tell me more, please. An example was when you were teaching [the child with SEND] with small balls. Or, also in other circumstances."

Lina: "No! Also, this example was right. The child with SEND often miscounted [the small balls] because she counted a ball twice or missed some balls. Therefore, we started to put a sign across the balls she had counted. If she counted the ball regardless of the sign, my support was by asking her to check what she had done [and so I would ask her]: 'Are you sure? Shall we recheck it?' [...]. After some attempts, we were counting altogether."

Interviewer: "All right! You would have counted together if the child had not got it right."

Lina: "Yes, because it becomes frustrating doing the same task multiple times. [...] Making her do the same task [multiple times] does not help. Therefore, I used to correct her [...]." (Interview No. 23)

Second, Lynn reported having designed closed questions. Next, she could have hinted at possible answers to the children (i.e., multiple choice tasks). This way, the children could quickly complete the task by “guessing” with one or two of the alternatives given.

“[The child with SEND] does not independently say whether [a word] is a verb, adjective, article, and the like. So, I ask [the child with SEND], ‘What is this? [...] Is this an adjective, name, or a verb?’, and she looks at [the word on his book] and says: ‘A verb!’ She needs these types of questions [...].” (Lynn, Interview No. 13)

Third, the TAs (Table 28) suggested making maps of speech/verb tenses available to the children with SEND. The maps seemingly provide children with information to easily retrieve the repair of their mistakes or initial answers to the tasks in the first place.

Table 28 Availability of tools for children with SEND

Tool use	Description
Task solution	Francesca: <i>“For instance, in mathematics, it is not a must that they need to learn the multiplications [...], so you give tools to [the child with SEND] that can help her with a given [task and/or] discipline”</i> (Interview No. 14)
Trouble repairer	Margherita: <i>“[When dealing with a mistake on verb tense, children with SEND] may use these tables where you can find all the verb tenses. In this way, you can say ‘Look at this and search for [the right] tense”</i> (Interview No. 7)

The last pattern of high support shows TAs such as Donna structuring (individual) or classroom tasks. These were too simple for the children with SEND, who quickly and correctly completed them (i.e., competent interactions). When they

did so faster than their peers, they could experience downtime; this prompted anxieties and behavioural flare-ups, which the TAs needed to confront afterwards (see the extract below).

“Last few days, we have worked on the attributional objects [...]. Children have some structured tasks [for all the children]. [...] So, I get close to the child [with SEND] and try to see what her difficulties may be. She has a high cognitive function [...] and quickly completes the task. [However], this often is not a merit. [...] When [the child with SEND] finishes, I must fill her dead moments because she cannot manage downtime. [The child with SEND] suffers from anxiety, and so I found some strategies [to deal with these dead moments and consequent anxious behaviour], [...] for instance, I say to her, ‘Let us make a drawing’.” (Donna, Interview No. 31)

Table 29 groups the frequencies of the different high-support strategies. It also shows some rare evidence of a low level of assistance in the interviews. For instance, Lorenza suggested prompting children’s *“independent self-repair of their mistakes by initially providing the lowest”* assistance (e.g., hints and clues) (Interview No. 9). Next, she might gradually increase the support but keep the children’s maximum cognitive responsibility for the task completion. Finally, Table 29 describes some rare memory-based strategies which promoted children’s self-repair or task completion via questions about past events. The questions (e.g., *“Do you remember yesterday when we worked on that sentence?”* [Barbara, Interview No. 29]) were often devoid of further semantic information, such as additional concepts; therefore, they mainly encouraged memory efforts but little, if any, cognition.

Table 29 Frequencies of TAs' pedagogical practice's codes – TA interviews

TA tactics	Occurrences	%
TA high support	47	78%
<i>Other-initiated other-repair strategies</i>	23	38%
<i>Tools</i>	17	28%
<i>Closed questions</i>	4	7%
<i>Competent interactions</i>	3	5%
TA low support	8	13%
Others (i.e., Memory-based teaching strategies)	5	8%

Note. Frequency of the subthemes (e.g., TA high support) and codes (e.g., tools) in the interview data (event coding).

8.4.2. Research Question 3.3.

How do TAs reflect on teaching practice? What are the theoretical principles upon which their approaches rely on?

Along with designing similar solutions, a consistent number of participants theoretically agreed with the emphasis on task completion shown in these two high-support pedagogical strategies, which they saw during the video elicitation part of the interviews:

1. Study 1 TA (Gloria) immediately supplied the answers to the child with SEND (Josh) for dealing with the teacher's questions (see Extract 3 for more details).
2. Gloria quickly repaired Josh's mistakes, hindering him from self-repairing (see Extract 4).

For instance, Manuela (Table 30) positively judged Gloria's work and reported having acted similarly in her own practice. Domenica, Margherita, and Ilaria concurred with Gloria's high-support model logic but proposed alternative (similar) techniques. Instead of supplying the answer aloud, they suggested they

would have a) pointed at the answer/repair in Josh’s notebook or verb map and b) asked Josh’s peers for them. In this way, Josh would end the episode by either reading the answer/repair aloud or repeating what was previously vocalised by a peer.

Table 30 Supplying the answer/repairer: “A good strategy.”

Good strategy		Description
	I would act like Gloria	<p>Interviewer: “After the TA asks the questions, what did she do?”</p> <p>Manuela: “She supplies the answer [...].”</p> <p>Interviewer: “Right! Would have you done the same thing?”</p> <p>Manuela: “Yes, it happened. In some circumstances, it clearly happens. For instance, my child [with SEND] has learning difficulties [...], so you give the answer for small things. It depends on the task. However, after you teach them, and they cannot learn [given things], you supply the answer” (Interview No. 16)</p>
Similar (alternative) solutions	Pointing at the answer/repairer	<p>Interviewer: “What does the TA in the video do?”</p> <p>Domenica: “OK! The TA turns the child’s notebook’s pages [...], then points to the answer and, at a given point in time, tells [the answer] to the child [...].”</p> <p>Interviewer: “I will ask you, ‘Is she doing the right thing?’”</p> <p>Domenica: “[...] If they search the word in a text, [...] suggesting the answer, maybe I do not know.”</p> <p>Interviewer: “Why this ‘I do not know?’”</p> <p>Domenica: “At most, if I had to suggest, if I had thought it was the case to suggest the answer, I would have done so by just pointing at the answer. I would not have said [the answer] aloud” (Interview No. 30)</p>
	Making available a tool with the answer/repairer	<p>Interviewer: “What happens in the video?”</p> <p>Margherita: “[...] The TA definitively knows the child’s learning potential and can ask an achievable question to the child. Can she? [..., Instead, I would] use these verb tables in which the child can find all the tenses so that I can tell the child, ‘Look here and search for the right tense’” (Interview No. 7)</p>
	That a peer supplying the answer/repairer	<p>Stefania: “It depends on the child. [...] I would have asked the question to another child. This often happens in my classroom. The teacher and I ask a peer to provide the answer when a child is in difficulty” (Interview No. 8)</p>

A different logic was used, but similar conclusions were reached by Barbara (“*Good if*” code, Table 31). She argued that she would have provided the solutions to the task/correction if “*the child knows the answer[/repair]*” (Interview No. 29). Hence, she might close down the child’s talk and thinking on tasks with low, if any, learning potential.

By contrast, TAs such as Angela (extract below) widely expressed condemnation of Gloria’s practices. Although scaffolding arguments were also used (e.g., promoting children’s independence), the TAs often provided an uncertain, conflicting, and unclear rationale to justify their negative judgements.

Interviewer: “Do you think the child learns [when you immediately supply the answer]?”

Angela: “Well, when looking at this video, I do not know. I would say no, and then.”

Interviewer: “So you would say that this is not the right [pedagogical] strategy?”

Angela: “In this video, it does not seem to work because [the TA] must tell him the answer. Therefore, no!”

Interviewer: “Besides what you see in the video, do you think this strategy could work?”

Angela: “Obviously, for goodness’ sake, after the thousandth repetition in a week, the child gets bored of listening to the answer [...] the child does it independently.”

Interviewer: “Do you think this is possible?”

Angela: “At this point, I would say that everything is possible. I honestly would not [supply the answer].” (Interview No. 6)

A final group of TAs was ready to justify Gloria's actions for other "educational" reasons, despite condemning her practices for the negative impact on Josh's academic learning. For instance, Megan (extract below) argued that Josh could have had a boost of self-esteem and task engagement from completing the tasks, whether Gloria helped him, or he did so by himself.

Interviewer: "What do you think of this strategy?"

Megan: "On this, I agree less. The child is highly supported, so he cannot learn. [...] However, this situation is hard to judge because I do not know the child. [...] I cannot really say if the TA had been right or wrong [...]."

Interviewer: "Can you tell me when this strategy is right?"

Megan: "This strategy may be right when I am not working on teaching concepts but on the child's level of satisfaction. A satisfaction that then may support his motivation to learn. Therefore, if my objective is to support the child's emotions because he may work better [...], I would [supply the answer]. I would do so for another reason, not obviously to support the learning of personal pronouns." (Interview No. 12)

These strategies might nonetheless be ineffective in promoting children's positive emotions (or academic learning). Indeed, the child's happiness and task engagement could potentially fall short when, for instance, the child fails to understand or complete tasks similar to that for which he or she has just received a solution.

With this, the findings regarding TAs' reflection on teaching practice (TA preparedness) ended. Table 31 shows the representativeness of the various TAs' arguments in the interview data set, with "Unclear, conflicting reasoning" taking the largest proportion and "Scaffolding reasoning" the smallest.

Table 31 The TAs' judgement of Gloria's practice

TA reasoning	Occurrences	%
Unclear, conflicting reasoning	37	31%
Positive judgement of Gloria's tactics (i.e., good strategy)	30	25%
<i>I would act like Gloria</i>	19	16%
<i>Similar (alternative) techniques</i>	11	9%
Good if (see Barbara's extract above)	17	14%
(Justify Gloria's practices for) Other Educational reasons	16	13%
Scaffolding reasoning	14	12%
Other	7	6%

Note. The table reports the frequencies of the subthemes in the interview data (event coding). The code "Other" refers mainly to the ecological justification of Gloria's practice (i.e., Gloria could not do otherwise because of the context and classroom layout). Such ecological justifications were not discussed in detail as episodic. The theme "Scaffolding reasoning" describes TAs using scaffolding principles to analyse (and critique) Gloria's practices.

8.4.3. Research Question 3.4.

What factors, including training, do TAs perceive could be associated with their pedagogical practice?

The training was the key and only factor associated with TAs' teaching performance and preparedness. Despite mentioning a few more favourable points about it and its impact on TA practice, the participants showed widespread discontent about its inapplicability. For instance, Lina argued that TAs' education and training provide idealised knowledge that is unusable in daily practice. As a result, she suggested relying on original craft practices or copying solutions from colleagues without understanding their effects on children's learning and development (but maybe on their behaviours).

Interviewer: "Right! I am going to ask the last few questions. You told me that the INSET training courses are idealised; therefore, you cannot apply them in practice [...]?"

Lina: "Also, the university courses are like that."

Interviewer: "All right! All courses."

Lina: "Of course. A course about northern European schools made a strong impression on me. [The educators] talked about moving [the classroom's] walls like in Star Wars. The courses are not modelled on reality."

Interviewer: "Therefore, the courses do not work because they are idealised?"

Lina: "Exactly! [...]"

Interviewer: "Therefore, you were unprepared on the first day of school after the [initial] teacher training. [...] What did you do? How did you actually learn to do your job?"

Lina: "Ah, so my first day [...]. I have tried to learn the most from the apprenticeship because you could actually see what happens in a real classroom there. And, I have been lucky to have two really good teachers that supported me throughout this period and allowed me to take part in teaching meetings and marking sessions. They asked me to help them with the lesson planning or homework marking [...]."

Interviewer: "You told me: I learn more from the teaching practice by looking at other teachers, but, for the sake of argument, if all teachers learn from other teachers, do you think it can happen that you learn from the bad teacher, and so you may interact in the wrong way with your students?"

Lina: "Of course! Therefore, you do not learn from all teachers. [However], how do you know who is a good teacher? Good question!"

Interviewer: "[Exactly!] How do you know who is [or is not] a good teacher [...] without being [pedagogically] prepared?"

Lina: "Eh, well, from the children's behaviours [...] For instance, when the Italian teacher goes to the classroom, the children are demons, while with the maths teacher, they change [and behave well]." (Interview No. 23)

Table 32 also shows that TA training curriculum gaps can contribute to TA training inapplicability (in addition to more unspecific reasons). For instance, Ida said that she dealt with children with hearing loss. Nevertheless, she “*did not know how to support them [...] and had to invent [her] strategies, because [she] did not receive the adequate training for supporting deaf children*” (Interview No. 21).

Table 32 Factors shaping TA practice: focus on TA training – TA interviews

The role of training	Occurrences	Frequencies
Ineffective in the TA practice	38	75%
Idealised courses	30	59%
Curriculum gap	4	8%
Unspecific	4	8%
Effective in shaping TA practice	13	25%

Note. The Table reports the frequency and occurrences of the subthemes in the interview data (event coding). Coding was not mutually exclusive and could be multiple in the same interview extract.

8.5. Summary

As well as revealing that the TAs perceived that TA education and training were mainly ineffective in promoting and guiding their teaching practice, the chapter provided two groups of results. The first was that the TAs’ special employment conditions (per child with SEND), extra training in special education, and the cultural (mis)understanding that the TAs’ role is “just” the educational support of children with SEND. Also, the TAs reported being unprepared to co-plan and design more complex teaching styles with class teachers or, more simply,

momentarily exchange their roles. As a result, the TAs and teachers were further trapped in their respective classroom roles.

The second group of findings indicated that TAs promoted task engagement and academic learning but provided less socio-emotional education. This support pattern resulted from TAs' academic-based training; national curricular guidelines encouraging mainly academic achievements; and the related cultural (mis)understanding of schooling, which seemingly did not promote any other TA assistance beyond academic support. Task engagement was mainly delivered through punishment and praise tactics or removing classroom materials that were felt to distract children from the classroom activities. By contrast, pedagogical assistance, echoing their reflection about teaching practices, meant emphasising the quick completion of the task (and less learning), via designing multiple-choice tasks or providing immediate solutions to classroom tasks.

Chapter 9. Study 2 Discussion

9.1. Introduction

In this chapter, I discuss the findings derived from the interview-based study (Study 2). The chapter comprises three key sections corresponding to the overarching research questions. In each section, I analyse the key results regarding TA deployment/practice and how they potentially impact the education of children with SEND. Next, I interpret the identified TA deployment and practice in relation to wider educational factors, including TAs' conditions of employment. Where appropriate, I relate the discussions to the existing literature, including but not limited to Study 1. The chapter concludes by presenting Study 2's limitations.

9.2. Main findings: Research Question 1

RQ1: In Italy, how are TAs deployed in mainstream primary schools?

Study 2 (and 1) introduced a quantitative investigation of TAs' deployment in the Italian context. This quantitative work suggested that the 31 TAs primarily dealt with the in-classroom education of children with SEND (84%). Rarely did they assist the education of the rest of the class (16%), which was more the prerogative of classroom teachers.

Study 2's results showed an unequivocal consistency with the systematic observations of Study 1. There, the single participant (Gloria) was seen supporting the education of a child with SEND (83%) and rarely helped to support or teach other children (17%). Concurrently, Gloria's colleague, the classroom teacher, was instructing the whole class.

Despite their use of qualitative methods, comparable results were also found by D'Alessio (2009) and Nes (2018); they indicated that the co-teaching practice, where the teacher instructs the whole class and the TA assists the children with SEND (OTOA), may be a standard co-teaching solution across a large(r) number of Italian classrooms.

In the international literature, this wide use of OTOA and the assignment of TAs to the education of children with SEND was considered a potential concern for the children's education (Giangreco et al., 2014). Indeed, when they conduct extensive one-to-one conversations with students, TAs could become overly supportive or, worse, complete the tasks instead of them (Giangreco et al., 2014). In so doing, they might constrain children's thinking and learning. Study 1's data involving a single TA suggests that this scenario is also plausible in Italy due to the TAs' insufficient knowledge of child developmental (theoretical) principles for scaffolding children's learning and their potential unawareness that overly supportive assistance can negatively affect children's learning. Section 9.4. discusses the practice of Study 2's participants and potentially corroborates these findings and interpretations.

9.2.1. Explanations for TAs' deployment

What factors, including conditions of employment and preparedness of TAs, may be associated with their deployment?

To my knowledge, Study 2 is the first research work to use interviews to systemically investigate TAs' interpretations of what educational factors explain classroom phenomena. Whilst interviews were designed to keep most interpretations contingent on the classroom context (e.g., see Appendix H, question 8), TAs frequently went beyond it (e.g., comparing present/past or

abstract reflections). As a result, their talk appeared to be a tentative source of information for providing insight into the nature of their classroom practice (i.e., classroom barriers and types of children they work with). TAs' interpretations will be therefore treated cautiously in this chapter and cross-checked with the questionnaire data, which are likely to be more connected with their current classroom practice (see Appendix B for more details).

In the context of TA deployment, Study 2's participants proposed several factors explaining the selection of OTOA alongside the effectiveness of their collaboration with class teachers. Also, they mentioned other factors affecting the centrality of their role in the education of children with SEND. This section first analyses the factors related to co-teaching matters; next, the TAs' classroom role.

In Study 2, most of the 31 participants (no.: 18) said that the severity of children's individual needs shaped their classroom co-teaching decisions. While children with severe educational needs require specialised educational plans (IEPs) and the continuous help of TAs, where the teacher manages the whole-class instruction (OTOA), children with mild educational needs follow the class curriculum and do not need constant assistance from TAs. This might imply that supporting children with more moderate needs allows the possibility of more complex co-teaching styles (e.g., teaming, One teaches and the other Observes [OTOB]).

Although the hypothesis linking severe SEND and OTOA partially echoes the questionnaire data, the counter-hypothesis (*Children with mild/moderate SEND open up to alternative co-teaching styles*) seems less convincing. For instance, all the TAs (no.: 3) who never/rarely taught children with a separate curriculum

from the whole class (i.e., mild SEND), nonetheless selected OTOA styles in the questionnaire.

Similar doubts about the selection of more creative co-teaching styles have been raised in the literature (Associazione Treelle et al., 2011; see also Ianes, 2014). Studies indicated that lessons are commonly run with standard OTOA in Italy and show little, if any, connection with the children's individual needs.

Perhaps a better explanation of the factors that shape class co-teaching styles is the lack of preparedness for co-teaching amongst TAs (and teachers). In Study 2, the participants acknowledged an insufficient knowledge of more complex co-teaching styles (such as station teaching). They also suggested having difficulties in co-planning more creative and complex styles (i.e., project management gaps). As a result, they rely on a more straightforward style (i.e., the OTOA).

Analogous concerns for co-teaching knowledge were also described by Gianferrari (2010). His survey research of 4,014 teachers (including 1,377 TAs) found that staff rarely attended co-teaching skills and project management courses in both initial and in-service training (INSET). Even when they did so, the courses were widely judged to be inadequate. Therefore, the extensive selection of OTOA seen across research studies could reflect practitioners' insufficient (and perhaps inadequate) co-teaching knowledge.

Although it may lead to OTOA styles, co-teaching (un)preparedness has little, if any, influence on why TAs and not teachers are primarily responsible for the education of children with SEND. Furthermore, Study 2 participants believed that TAs' special training was a key determinant. In the interviews, they suggested they had received extra training in special education, in addition to mainstream

teaching standards. Thus, they may be perceived by teachers as better prepared for SEND support and are assigned to working with children with SEND during the lessons (see Section 7.2.1. for a similar interpretation concerning Study 1's data).

In addition, Study 2's participants associated their (and the teachers') class roles with their employment conditions. They indicated that the ministerial advice to employ and deploy TAs to assist schoolchildren with SEND could create a set of circumstances for them to work with those children only (i.e., *de facto* conditions). This association might become (more) concrete when it promotes a cultural (mis)understanding of TAs' role as "just" the teacher of children with SEND (along with the perception that this is the way to maximise their expertise). When this happens, the TAs cannot do anything other than instruct the children with SEND and leave the whole-class instruction to teachers.

This concludes the theorisations and discussion of TA deployment. The following sections present the discussion of TA practice and how it relates to children's education.

9.3. Main findings: Research Question 2

In Italy, what types of support activities do TAs employ to support the classroom experience of primary-school children with SEND?

The current study has contributed to the existing literature by providing a frequency analysis of TA multi-dimensional support strategies (time logs), alongside an in-depth analysis of those strategies. Similar to the conclusions from D'Alessio (2008) and Study 1, Study 2's results suggested that Italian TAs primarily deliver academic-based support for children with SEND, such as

promoting the completion of the tasks, as well as task engagement, by punishing off-task behaviours (65 %). Rarely did they assist the children socio-emotionally (9%) (and with procedural tasks [18%]).

As I have argued elsewhere, this academic-based support could be a potential concern for children's education, especially for those with socio-emotional difficulties (see Section 7.3. for more details). Indeed, it might not sufficiently stimulate the learning of emotional regulation strategies and social skills required to effectively participate in group tasks or whole-class conversations – nor might it improve the children's social life outside school (Baines et al., 2017). It could also negatively affect children's academic performance due to its fundamentally socio-emotional underpinnings (Dewey, 1896; 1910; 1951). Nevertheless, more research is needed to confirm the impact of these practices on children's learning. Classroom observations could be an excellent method for this endeavour (Blatchford et al., 2016).

9.3.1. Explanations for TAs' typical support pattern

What factors, including the conditions of employment and preparedness, may be associated with their types of support for children with SEND?

In the interviews, most Study 2 participants (no.: 23) justified their support pattern according to the need type of the children with SEND whom they supported. For instance, they reported supplying pedagogical assistance and, less frequently, other types of support to children with Cognitive and Learning needs (C&L). By contrast, more socio-emotional assistance was delivered to children with Social, Emotional, and Mental Health difficulties (SEMH) or Communication and Interaction needs (C&I).

Although convincing, this interpretation seems inconsistent with Study 2's questionnaire data. In the time logs, the Study 2 TAs reported preferring academic-based support above all, regardless of the types of needs of children with SEND. To illustrate the point further, children with socio-emotional needs (SEMH) were reported to be supported academically; even more so than other categories of SEND (Pedagogical support + task engagement, 93 % vs an average of 65%), and they were the least supported socio-emotionally (7% vs an average of 9%).

The wider research also shows little confidence in the contingency of TA support to children's needs. Among others, Borgonovi and Ciletti (2018) observed classroom practices in which TAs predominantly, if not always, supported children's academic tasks regardless of the children's specific needs.

Another potential reason for the TA support pattern was perceived to be COVID-19 social distancing regulations, which seemingly invited schools to keep children solely at their desks, thus rendering children's social interactions impractical. For that reason, the TAs were supposedly constrained to design and deliver academic-based support.

Even this second interpretation, however, seems to be unconvincing. First, the COVID-19 social distancing regulations did not seem to entirely forbid group tasks and the associated TA social support, but only asked for precautionary measures beforehand (e.g., cleaning desks' surfaces and usage of masks) (Ministero dell'Istruzione, 2020). Second, the social distancing limitations and, by extension, any classroom constraints (see the TA one-on-one deployment argument in Section 7.3.1.) are not relevant barriers to promoting the children's learning of social skills individually. It follows that the classroom context might

partially shape TA practice, but it cannot by itself justify the academic-based assistance seen or reported here and elsewhere.

Perhaps a more pertinent explanation is the TAs' academic-based training. Study 2's participants suggested that they were trained to support academic subjects and received much less training in how to support socio-emotional development. Accordingly, they perceived that they were better prepared in academic instruction, and thus preferred this practice above all.

Evidence supporting this interpretation appears in the existing literature. For instance, Gianferrari (2010), in a study of 1,377 TAs, indicated that they had taken trained courses on methodologies and subject knowledge, but fewer on socio-emotional matters. Worryingly, they also judged socio-emotional education to be inapplicable to practice. As a result, they might provide limited support for this aspect of learning, preferring to provide academic-based support.

Finally, another factor shaping the TAs' teaching pattern was perceived to be the national curriculum. Study 2's participants suggested that the national curriculum prioritises academic learning, or – as Cerini, Fiorentini, and Testa (2007) perhaps more accurately put it – sets multiple, clear academic goals for literacy (and maths). With regard to socio-emotional learning achievements, the national curriculum is vaguer (Cerini et al., 2007). As a result, some participants seemingly (mis)understood it as supporting children's academic success only. Therefore, TAs' preparedness, resulting from their training or (mis)understanding of the curriculum guidelines, might be essential for guiding TA support patterns.

9.4. Main findings: Research Question 3

In Italy, how do TAs support the content learning of children with SEND?

Study 2 provided a nuanced analysis of TAs' practice and preparedness through video elicitation interviews (VEI) and conventional interviews. VEI data analysis indicated that TAs raised minor, if any, complaints about the high-support pedagogical practices of the TA in Study 1, who seemed to close down the thinking and learning of a child with SEND (Extracts 3 and 4). Instead, they reported using similar logical principles and strategies; for instance:

- Providing solutions to tasks when the children with SEND do not immediately find them.
- Showing the children maps and tables of verbs with the solutions to tasks.
- Designing multiple-choice tasks, which are simplified by providing viable solutions.

All of the above tactics potentially limit the children's elaborate thinking and lead to little learning.

9.4.1. Explanations for the TAs' pedagogical practice

What factors, including the conditions of employment and training, may be associated with their pedagogical practice?

Training was the crucial factor associated with TAs' teaching performance and preparedness. Despite a few more positive points about it and its impact on TA practice, most Study 2's TAs suggested that TA training provides idealised teaching models and tactics, which are untransferable into their daily practice. A

few others said that the inapplicability of the training could be related to the insufficient provision of sub-specific teaching solutions and tactics (such as sign language) that may be peculiar to their practice (teaching deaf children). Overall, the TAs concurred that training does not match the practice, so they necessarily design unique teaching solutions.

To perform this creative endeavour, the TAs might not rely on solid training on pedagogical principles, including maximising children's task responsibility in task completion based on scaffolding theories. Courses on theoretical matters are few in proportion to applied teacher training (i.e., teaching methods), and their quality seems critiqued by TAs in the wider literature (Gianferrari, 2010; see also Section 3.4.2 and Section 8.1.1). Hence, TAs might not have a complete awareness of scaffolding principles (as seen in this study) and do not implement them in their original solutions.

9.5. Study limitations and future research

One potential problem of Study 2 was the reliance on reported data to describe TAs' practice (i.e., questionnaires and interviews). While the use of VEI, among other methods, potentially closed the gap between classroom practice and self-reporting, there was nonetheless the possibility that classroom observations might have been a better tool for studying classroom events and could have helped to increase the reader's trust in the research results.

Secondly, Study 2's small sample size (31 TAs) and the uniqueness of the many research findings and interpretations (illustrated in Table 33) might generate scepticism regarding the broader transferability of the findings to other Italian TAs in other contexts. Future research should therefore explore the applicability of the

findings to a wider context and perhaps use classroom observations for this purpose. Research on TAs' practice could be prioritised, given that it is still under-researched and of primary importance for the education of children with SEND.

Table 33 Research contributions and confirmations

Themes	Findings	Research with similar results
Co-teaching styles	Predominant OTOA style/co-teaching unpreparedness	Treelle, Caritas Italiana & Fondazione Giovanni Agnelli, (2011)
TA classroom role	Predominant assistance of children with SEND	D'Alessio (2008); Nes et al., (2018)
TA support strategies	Prioritisation of academic-based support	Borgonovi & Ciletti (2018); D'Alessio (2008)
TA pedagogical practice	TAs do not frequently scaffold the learning of children with SEND	None
TA pedagogical preparedness	TAs do not frequently relate TA practice to sound theoretical principles (e.g., scaffolding)	None
TA training and education	The overreliance on TAs' education and training in teaching methods	Gianferrari (2009, 2010)
TA training and education	Insufficient training on co-teaching matters (and project management)	Gianferrari (2009, 2010)
Themes	Interpretations	Research with similar theorizations
Co-teaching styles	Co-teaching unpreparedness ⇒ OTOA styles	None
TA classroom role (1)	The atypical conditions of employment of TAs (according to children with SEND) ⇒ Predominant assistance of children with SEND	Ianes (2014; 2018)
TA classroom role (2)	TAs' extra training in special education ⇒ Predominant assistance of children with SEND	None
TA support strategies (1)	TAs' training on academic based support ⇒ prioritisation of academic activities	None
TA support strategies (2)	National curriculum centred on academic achievements ⇒ prioritisation of academic activities	Cerini et al. (2007)
TA pedagogical practice	Insufficient training on theoretical matters (child developmental theories) ⇒ Lack of scaffolding	None

Note. None reflects a lack of research on the related themes in Italy and not internationally.

Along with trustworthiness/transferability concerns, readers must be cognisant of the following limitations specific to the research tools, namely, questionnaires and interviews.

9.5.1. Questionnaire limitations

One potential problem with the questionnaire was its length. As a result, a few participants could not entirely complete it before the interviews and did so at a later stage (e.g., oral completion before the start of the interviews). Even when they had completed it, there was a feeling that they afforded it the due attention. To deal with this, I then triangulated the responses with the interview data; the cross-check showed general consistency and disconfirmed my doubts.

A second limitation was the reliance on lengthy intervals to measure TA practice (e.g., time logs [20 min] and co-teaching questions [3 h]). As Margherita put it, the intervals interfered with a fair representation of the practice, as “*I deliver many different types of support over 20 min and not just the one reported*” (Interview No. 7). Nevertheless, the limitation seems less of a problem when considering the broader research findings. In the interviews, the participants were therefore freer to describe their classroom activities; a benefit that outweighs the constraints of the questionnaire’s answers.

9.5.2. Interview limitations

The interviews were built around nine topics and lasted, on average, for about 1 hour and 18 min. Although some methodological books would consider the length appropriate (Ritchie et al., 2014), there was a sense that a few participants (no.: 3) became tired and limited their responses to a few words; especially in the answers concerning the last few questions (e.g., TA training).

A second limitation of the interviews was the possibility that a few participants were unwilling to critically analyse (or excessively critique) a colleague’s practices in the VEI. Consequently, they might have inaccurately reported their thinking

(Wildman & Niles, 1987). To deal with this, I asked the same participants questions about their practice; some of them seemed more inclined to respond and to do so more honestly. As a result, the triangulation of the two sources of information made the findings regarding TAs' pedagogical practice seemingly more trustworthy.

9.6. Conclusion

The key argument emerging from the analysis of the research findings is that TAs' preparedness, in all its shapes and forms, is primarily associated with the TAs' classwork. First, the (extra) preparedness of TAs in SEND matters, alongside their socio-cultural (mis)understanding of being the special teachers of children with SEND, is echoed in their practice. As a result, their colleagues, the classroom teachers, are left to deal with the whole-class instruction. Secondly, the TAs' (and teachers') insufficient co-teaching training/preparedness may lead to the straightforward OTOA style, further trapping the TAs in constantly working with children with SEND. Third, the lack of training on socio-emotional pedagogy and related (un)preparedness, combined with the potential (mis)belief that schooling is primarily about academic learning, leads the TAs to primarily, if not only, provide academic support. Third, (un)preparedness regarding theoretical and pedagogical principles may lead practitioners to construct practices intuitively, and thus negatively impact the education of children with SEND.

It follows that my initial problematisation of TAs' deployment and practice failed to entirely comprehend the centrality of TA preparedness. Originally, I relied on the Wider Pedagogical Role (WPR) model to describe TAs' classwork, and thus put conditions of employment and preparedness at the same level (Blatchford et al., 2011). In the next chapter, I explore further the findings and theorisations in

order to construct a more appropriate framework, which can enable novel implications for policy.

Chapter 10. Concluding Remarks

10.1. Introduction

In this chapter, I resume the discourse regarding the need to revise the Wider Pedagogical Roles of TAs (WPR) framework, by effectively summarising and explaining the research findings (Studies 1 and 2). After defining the new framework, I conclude the chapter by describing the key implications for policy and practice.

10.2. The new WPR framework of TAs

Although some of the research findings reflect negatively on the TAs' performance, TAs are nonetheless considered a valuable workforce. They have enormously contributed to the inclusion of children with SEND in mainstream classrooms across Italy during recent decades (Ianes, 2014). Also, they have substantially improved the education of children with and without SEND in mainstream classrooms (Merlo, 2016). Alongside existing research, this work lays the foundations for discussing further improvement in TA practice and performance. This section will summarise the research findings and interpretations in order to identify potential barriers and enhancers outside the control of TAs (such as their conditions of employment) in a synthetic and (more) appropriate conceptual model.

One of the main arguments of the previous chapter was that TA training feeds into the TAs' preparedness and ultimately shapes their deployment. An illustration of this was the role played by TAs' extra training in special education, which encourages their deployment in assisting children with SEND (see Sections 7.2. and 9.2 for more details). A second example was the potential link

between the insufficient training of TAs and teachers and their unpreparedness for co-teaching (e.g., co-planning lessons and available co-teaching practices). As a result, TAs and teachers seemingly select the most accessible joint teaching styles, where the teachers teach the whole class, while TAs, as experts in SEND matters, work with children with SEND (see Sections 7.2. and 9.2. for more details).

A similar discussion was also raised regarding TA practice. For instance, I suggested (as did Study 2's participants) that TA training gives insufficient and inadequate instruction on socio-emotional education (see Sections 7.3. and 9.3. for more details). Accordingly, TAs feel unprepared to work on children's emotions and interactions, preferring academic instruction.

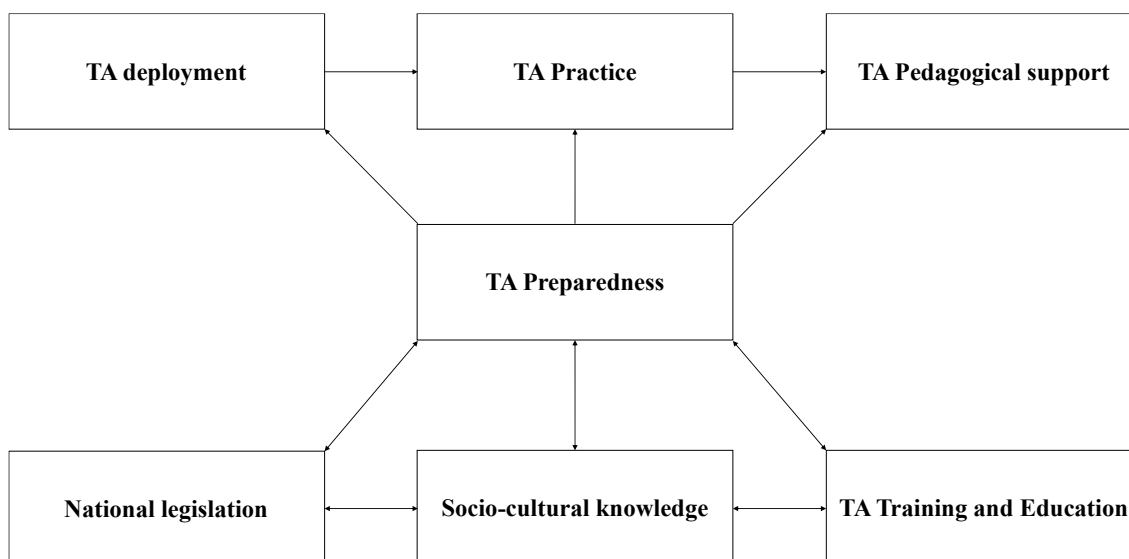
Furthermore, despite being better trained in academic practice, the way TAs may deal with it could be potentially concerning for children's education. For instance, the participating practitioners reported or were observed to be immediately correcting children's mistakes, which constrained their thinking in working them out independently and learning from doing so (see Sections 7.4. and 9.4 for more details). The insufficient theoretical training on sound child developmental and pedagogical principles, such as contingency of support to children's needs, could potentially explain such ineffective practice (along with TAs' preference for a teaching logic that emphasises children's quick task completion). Hence, the research findings and interpretations again confirm the relationship between TA training, preparedness, and practice.

The findings indicated that the broader legislation might also shape TAs' knowledge and, ultimately, their deployment and practice. To begin, I (and the

practitioners) reported that conditions of employment, including TAs working with schoolchildren with SEND, and teachers running the school classroom, sways TAs to believe that they are actually the teachers of children with SEND. As a result, TAs support children with SEND and leave classroom management to the teachers. A similar argument was raised in relation to national curricular legislation, although this has a more direct effect on TAs' practice than their deployment. There, I suggested that the national curricular guidelines seemingly set clear goals for academic standards and less so for socio-emotional education; this generates the potential misconception that instruction must prioritise only academic matters, as was repeated in the TAs' instruction styles (see Sections 7.4. and 9.4 for more details).

Figure 15 graphically reproduces the various arguments stated here. Unlike the prior versions, the updated WPR framework shows the centrality of TA preparedness in terms of how it relates to the broader educational context and TA deployment and practice. Among other aspects, it also recognises the possible bidirectional connections between socio-cultural values and wider legislation. In fact, if it is true that the legislation affects collective beliefs in current times, new information could also shift socio-cultural beliefs, thereby producing social movements and impacting existing laws (Nutely, 2007). It is hoped that the current research and the following discussion on policy and practice recommendations can provide some of this fresh information to propose a new direction for legislators and practitioners.

Figure 16 The new WPR role framework of TAs



10.3. Implications for policy and practice

This section describes the implications for TA deployment and practice that arose from the research findings and theories. First, recommendations for policy and practice are made concerning TA deployment. Next, changes to the training/national curriculum are indicated to maximise TAs' teaching performance. In the conclusive sub-section, I describe my dissemination plan for this PhD so as to allow both practitioners and policymakers to evaluate and possibly make good use of the research findings and their implications.

10.3.1. TA class role: a quest for policy clarification

National legislation promotes conflicting propositions regarding TAs' deployment. On the one hand, law No. 104 of 1992 legally binds TAs to instruct, by themselves or in partnership with classroom teachers, the whole classroom of students (Borgonovi & Ciletti, 2018). Similarly, TAs' and teachers' national contracts provide both of them with equal co-teaching roles. On the other hand, the employment of TAs on the basis of the school's number of children with SEND,

and their extra training in special education, encourage them to be the teacher of “just” children with SEND.

The widespread prevalence of the latter legislative “intention” should nevertheless not be underestimated due to its potential negative effect on TAs’ expectations (Borgonovi & Ciletti, 2018). Over the years, TAs have shown anger and frustration at a class deployment that systematically denies their whole-class rights (and duties) (lanes, 2014). As a result, they may display little personal investment in the job, where they repeatedly instruct children with SEND (Borgonovi & Ciletti, 2018).

To address these concerns, the Italian legislators should clarify TAs’ responsibilities by creating a coherent legislative package. For instance, they could keep the current *de facto* role of TAs by making it explicit in the national norm, as well as removing any reference to TAs’ whole-class responsibilities. Furthermore, legislators should promote a reform of the national contract in agreement with TA and teachers’ unions, unequivocally making TAs the special teachers of children with SEND. This might diminish the gap between the expectations for the job and classroom realities and potentially improve TAs’ motivation for the job and children’s learning.

Alternatively, the legislators could effectively convert the TAs’ role to that of a classroom teacher. To enact such a change, first, any link between TAs’ conditions of employment and the education of children with SEND should be scrapped. Second, any differences between TAs and teachers regarding employment and deployment procedures or training (and nomenclature) should be removed. Third, uniform training, hiring, and employment procedures should be designed for both teachers and TAs. Fourth, TAs and teachers should all be

trained in co-teaching skills to promote equal teaching and a productive co-teaching partnership.

There are a few reasons to support the latter option, regardless of whether a political decision is taken. Firstly, having a single teaching workforce (Single Teachers [ST]) might improve the alignment of the deployment of teaching resources with classroom needs (and not only those of children with SEND). For example, schools might use a single ST in classrooms with “low” needs, such as for a small-size classroom and children without SEND and use two or more in more complex contexts. This may improve the schooling education delivery and perhaps also schoolchildren’s academic achievements (Borgonovi & Ciletti, 2018).

Currently, this optimal use of resources is compromised by the national requirement to add TAs to classroom teachers “just” in classrooms that host students with a disability status and Individual Educational Plans (IEP) (D’Alonso, 2012). As a result, schools might deploy abundant teaching resources (TAs + teachers) across small-size classrooms of 15 students due to the presence of a single child with mild SEND but an IEP. By contrast, they might less effectively serve “needy” classrooms of 30 or more students, including many with SEND but without IEPs, by assigning them “just” single-classroom teachers (see Section 3.3 for more details). Similar concerns might also be raised in a legislative scenario that more explicitly converts TAs into special teachers. In line with what happens to special teachers in the USA (Giangreco et al., 2012; Scruggs et al., 2007), the Italian special teachers would be employed with the aim of assisting children with SEND, and not to serve the needs of the whole classroom.

Secondly, reforming TAs into STs would ensure an improved teaching partnership between co-teachers. Among other benefits, ST-enhanced co-teaching knowledge might be the key to promoting variable teaching strategies according to classrooms' needs. This means perhaps dividing the students into groups with mixed academic competencies across their classrooms in order to design contingent tasks and stimulate their full learning (academic) potential, but also more than that (Baines et al., 2009; 2017).

Currently, TAs' and teachers' co-teaching unpreparedness, alongside their different *de facto* statuses, renders any such effective collaboration impractical. As a result, they consistently select OTOA, which discourages different teaching approaches and learning experiences for the children. Similar conditions can be expected when TAs have been converted into special teachers, who would be solely concerned with the education of children with SEND and, therefore, not responsive to the needs of the whole class (Scruggs et al., 2007).

10.3.2. TA support strategies: multi-dimensional training and national curriculum

According to the new WPR model, the centrality of academic achievement and education in the national curriculum and training creates the conditions for TAs to design practices around academic-based instruction. As a result, TAs might overlook any other type of support for children, including but not limited to socio-emotional education.

However, this teaching pattern should not be taken lightly by the legislators or school practitioners, as it might:

1. Discourage children from learning effective social strategies to apply during their interactions with peers or when building social relationships.

Hence, it potentially increases the risk of children's self-isolation and social exclusion, especially for those with relational skills gaps (e.g., those with autism).

2. Insufficiently prepare children to regulate their (negative) emotions, especially during stressful situations, including public questioning and class exams (and possibly social exclusions), thus potentially leading to psychological and physical self-harms.
3. Inadequately support children to a) establish profitable instructive social exchanges with teachers (and peers) and b) regulate their emotional distress during classroom tasks; hence, they might withdraw from them and learn little.

In short, practices that neglect socio-emotional instruction, at best, minimise children's socio-emotional and academic achievement, and at worst, provoke psychological trauma and self-harm (Baines et al., 2009; 2017; O'Brien & Roberts, 2019).

To deal with this, the legislators should therefore remove all the barriers to TAs' multi-dimensional practice. This means eradicating the centrality of academic achievements in the primary school curriculum and making explicit references to children's socio-emotional development goals (e.g., improving social interactions and anger management). Second, socio-emotional pedagogies should form a more significant proportion of TA training. This would make TAs aware of the importance of designing balanced social, emotional, and academic instruction, thus reproducing multi-dimensional instruction in practice.

10.3.3. TA pedagogical support: the importance of theoretical training

Although they concentrate their practice on academic matters, TAs might not do so very effectively. For instance, the 32 participants of this research immediately supplied classroom tasks' solutions to children with SEND, thus closing down their thinking and learning. On other occasions, they designed undemanding tasks, which minimised children's cognitive effort and learning potential.

The overreliance on applied science in TAs' education and training, such as teaching methods and tactics, was seemingly a crucial factor in explaining their teaching practice. Firstly, it potentially provides core knowledge in sub-specific teaching solutions that are difficult to universally apply in practice due to the uniqueness of the children with whom TAs interact and the classroom context. Secondly, it may insufficiently promote TAs' child-development and pedagogical knowledge (i.e., theoretical, pedagogical knowledge). As a result, TAs might not completely understand the theoretical child-developmental fundamentals of the technical teaching methodologies learned throughout the training. Nor might they consciously readapt these strategies for their unique classroom conditions, while maintaining their original logic or being able to construct completely new teaching solutions. Instead, they might resort to copying colleagues' teaching solutions unsuccessfully and be unaware of their negative impact on children's learning (see Sections 6.4 and 8.4).

To promote the more conscious (and effective) practice of TAs, I urge Italian legislators to reform the current initial training curriculum. TA (and teacher) training should potentiate developmental and epistemological learning, including scaffolding theories. Furthermore, considering that most Italian TAs have already

undergone initial training (See Section 3.4.) and thus might not benefit from this change, the legislators should invest additional resources to enhance the number of In-Service courses on theoretical matters. Also, they should encourage teachers and TAs to attend this type of course (e.g., economic compensations or vouchers). As a result of these training reforms, TAs might be empowered with the theoretical principles to effectively adapt the technical teaching methods of the teacher training or to construct original, effective teaching practices.

10.3.4. Maximise the societal impact of the research results and policy

implications: my plan for dissemination and future research

Table 34 summarises the research findings/interpretations and related policy implications. It also shows that TAs and their colleagues (such as teachers) are among the many potential beneficiaries of this work. Notably, they might use the PhD's practical illustrations on how to design effective support strategies for the education of children with SEND. These guidelines rely on rigorous socio-cultural principles regarding how children best learn, particularly the need for instructors to effectively transfer the cognitive responsibility of task completion to learners to foster their thinking and learning. Policymakers may be also interested in the publication of the PhD's implications: in particular, the proposal to change the national initial training programmes for TAs by including more theoretical courses on socio-cultural child development principles. This type of training might enhance practitioners' awareness of the effect of their practices on children's learning. Thus, TAs might design more conscious and effective practices.

Table 34 Key research contributions and implications

Research findings and interpretations	Implications	Policy reforms	Beneficiaries
TA employment based on the number of schoolchildren with SEND makes TAs the <i>de facto</i> teachers of children with SEND (see Sections 6.2., 7.2., 8.2., and 9.2.)	Ineffective TA deployment. TAs always work with children with SEND regardless of their actual needs. They also do not vary their work, namely helping the teachers with classwork, even when it seems more appropriate to do so (e.g., in large size classrooms)	1) Convert the TAs into teachers (e.g., create equal employment practice for TAs and teachers)	1) The TA and teachers – They will collaborate more effectively and deliver better teaching. Also, they will produce more effective practices for instructing children with and without SEND 2) Children with and without SEND as they benefit from enhanced co-teaching collaborations and better instruction
TAs support children's academic achievement and rarely their socio-emotional development due to an academic-based curriculum and training overlooking socioemotional aspects of learning (see Sections 6.3., 7.3., 8.3., and 9.3.)	Ineffective TA practice (I) - TAs might overlook key dimensions of learning (such as socioemotional aspects) underpinning academic learning	1) Introduce added training on socio-emotional aspects of learning 2) Reform the national curriculum by listing socio-cultural and academic goals clearly	3) The legislators. This work identifies viable policy reforms to enhance the performance of TAs (e.g., TA training reform).
TAs do not effectively scaffold children's learning of academic content (e.g., supply the solutions to tasks), nor do they have a full understanding of the principles underpinning scaffolding. This supposedly is the result of a lack of TA training on (socio-cultural) child developmental principles, such as maximising children's thinking whilst completing tasks (see Sections 6.3., 7.3., 8.3., and 9.3.)	Ineffective TA practice (II) – children with and without SEND might not sufficiently learn (e.g., grammar and mathematics)	1) Introduce more theoretical training in the TA initial training and in-service training courses	4) The public purse – Most of the schooling provisions and salaries are paid by Italian taxpayers (see Section 3.4.). Thus, improved training and employment conditions of TAs and teachers will generate improved teaching practices, and so improved return on investment in teaching staff

These implications for policymakers (such as training reform) and perhaps for TAs may nonetheless be felt to be germane to the Italian context due to its unique characteristics internationally (e.g., trained TAs). That being said, some policy implications may be of use to countries with similar educational contexts or in the

act of reforming the training of TAs and teachers. Of note, the UK has been recently undergoing a process to review the training of teachers (and TAs), which practitioners perceive to be mostly inadequate in supporting the education of children with SEND (HM Government, 2022a; 2022b). Thus, this PhD might contribute to UK policy debates on improving teaching practitioners' training.

To maximise the outreach of the PhD dissemination and its operational use, I will work with my supervisors to produce a high-quality publication record in international (English-speaking) journals. My PhD publication plan includes submitting four papers to high-impact international academic journals that have been either outlined or written and are in the process of being reviewed by my supervisors. To address the Italian-speaking audience — a direct beneficiary of my PhD research, I also plan a series of publications in Italian. A book proposal has already been presented to an Italian journal in collaboration with a prior colleague (i.e., Professor Elio Borgonovi, Bocconi University). Thus, I will likely deal with preparatory work to write a book in the near future, such as the definition of its structure and the initial writing. Added “Italian” publications might be considered with other Italian academics — and prior colleagues — working in inclusive education. This way, I will increase my PhD's outreach to the Italian context (i.e., academia, legislators and practitioners).

Although academic publications are effective dissemination tools for researchers, they are believed to be less impactful across other social groups, such as practitioners and politicians (Nutley et al., 2007). Conferences, seminars, workshops, and audio media outputs (such as podcasts) are perhaps easier for politicians and practitioners to access. Thus, I plan to carry out, in the coming years, an intense agenda of presentations of my PhD research in: a) conferences

including practitioners, politicians, and academic audiences; and b) existing institutional podcasts, seminars, and workshops of my research organisation (the University College London). Due to the interdisciplinary nature of my work, which is seemingly interesting for educational psychologists and educators, conferences, seminars, podcasts, and publications will be selected to benefit these audiences equally.

Building on this work and publications, I also hope to contribute further to existing knowledge of TA classwork and thus maximise the impact of my scholarship in my academic field. Particularly, my ambition is to continue researching TA pedagogical practice in Italy due to the significant gaps in the field and its important implications for the education of children with SEND (See Section 9.5.). Large-scale research might be designed to confirm and develop the small-sized results of TA practice in this thesis. This new research should rely on classroom observations: the gold standard in exploring teaching practice and how it impacts children's learning (Borgonovi & Ciletti, 2018).

10.4. Summary and final thoughts

In this chapter, I have provided a nuanced and contextualised understanding of TAs' deployment and practice, in the form of a coherent new framework (the new WPR model of TAs). Firstly, the framework indicates that structural factors, including the hiring of TAs to assist children with SEND and extra training in special education, are related to the TAs' preparedness, and lead to their predominant practice of supporting children with SEND. In the meantime, the classroom teacher manages the whole-class instruction. Secondly, the framework suggests that TAs' education and training, alongside the national

curriculum, promote an understanding that schooling must prioritise academic learning. Accordingly, TAs design their assistance around academic teaching at the expense of socio-emotional education. Thus, TAs lack sufficient training and preparedness in theoretical, pedagogical principles to construct their instruction consciously. Instead, they rely on intuitions, which, at least across the practices explored in this research, do not seem to effectively support children's education.

Based on the critical considerations of the framework, I propose some suggestions for policy (and practice) reform:

1. Removal of the many legal and training differentials between TAs and teachers to create a single workforce. Consequently, better co-teaching partnerships between the practitioners can be produced.
2. Redesigning the national curriculum and TA training to underscore the centrality of both academic and socio-emotional themes. As a result, TAs may design a curriculum that balances children's socio-emotional, cognitive, and academic needs.
3. Modifying the structure of TA training by putting theory at the centre. Knowledge of theoretical principles encourages conscious teaching practice, continuous critical assessment, and improvement for better education provision.

Whilst the discussions presented here are based on findings from the Italian context, they nonetheless might have broader applicability across similar international educational systems. For instance, they are essential in raising awareness of the need for international research, policy, and practice to take account of the content of TA training and policy. It certainly cannot be taken for

granted that there will be a positive association between any training (and national laws) and classroom practice. More research is therefore urgently needed in Italy and elsewhere to extend the understanding of the most suitable conditions to produce an effective pedagogy for children with SEND. Teaching assistants are a valuable workforce worldwide, so we all must ensure that they have the best possible preparation and deployment for such a responsible role.

References

Agenzia per la Rappresentanza Negoziabile delle Pubbliche Amministrazioni (ARNPA) (2007). *Contratto Collettivo Nazionale di Lavoro relativo al personale del Comparto Scuola per il quadriennio normativo 2006-2009 e biennio economico 2006-2007*. Agenzia per la Rappresentanza Negoziabile delle Pubbliche Amministrazioni. <https://www.aranagenzia.it/contrattazione/comparti/scuola/contratti/512-ccnl-normativo-2006-2009-economico-2006-2007.html>.

Agenzia per la Rappresentanza Negoziabile delle Pubbliche Amministrazioni (ARNPA) (2018). *Contratto Collettivo Nazionale di Lavoro relativo al personale del reparto Istruzione e Ricerca Triennio 2016-2018*. Agenzia per la Rappresentanza Negoziabile delle Pubbliche Amministrazioni. <http://3.flcgil.stgy.it/files/pdf/20180419/ccnl-istruzione-e-ricerca-2016-2018-del-19-aprile-2018.pdf>.

Ainscow, M., & Booth, T. (1998). *From them to us: An international study of inclusion in education / edited by Tony Booth and Mel Ainscow*. Routledge.

Alwin, D. F. (2007). *Margins of error a study of reliability in survey measurement*. Wiley-Interscience.

Alwin, D. (2016). *Survey Data Quality and Measurement Precision* (pp. 527–557).

Amabile, T., & Stubbs, M. L. (1982). *Psychological research in the classroom: Issues for educators and researchers*. Pergamon Press. <https://www.sciencedirect.com/science/book/9780080280424>

Amatori, G. (2019). *Cornici pedagogiche per la formazione docente: Il ruolo dell'insegnante di sostegno nella co-costruzione di contesti inclusivi / Gianluca Amatori*. FrancoAngeli.

Armstrong, A. C., & Spandagou, I. (2010). *Inclusive education international policy and practice*. SAGE. <http://knowledge.sagepub.com.libproxy.ucl.ac.uk/view/inclusive-education/SAGE.xml>

Associazione Treelle, Caritas Italiana & Fondazione Giovanni Agnelli. (2011). *Gli alunni con disabilità nella scuola italiana: Bilancio e proposte*. Erickson.

Baines, E., & Blatchford, P. (2019). *School break and lunch times and young people's social lives: a follow-up national study*. UCL Institute of Education: London, UK

Baines, E., Blatchford, P., Kutnick, P. (2008). Pupil Grouping for Learning: Developing a Social Pedagogy of the Classroom. In: Gillies, R.M., Ashman, A.F., Terwel, J. (eds) *The Teacher's Role in Implementing Cooperative Learning in the Classroom*. Computer-Supported Collaborative Learning, vol 8. Springer, Boston, MA. https://doi.org/10.1007/978-0-387-70892-8_3

Baines, E., Rubie-Davies, C., & Blatchford, P. (2009). Improving pupil group work interaction and dialogue in primary classrooms: results from a year-long intervention study. *Cambridge Journal of Education*, 39(1), 95–117. <https://doi.org/10.1080/03057640802701960>

Baines, E., & Howe, C. (2010). Discourse topic management and discussion skills in middle childhood: The effects of age and task. *First Language*, 30(3-4), 508–534. <https://doi.org/10.1177/0142723710370538>

Baines, E., Blatchford, P., & Webster, R. (2015). The challenges of implementing group work in primary school classrooms and including pupils with special educational needs. *Education 3-13*, 43(1), 15–29. <https://doi.org/10.1080/03004279.2015.961689>

Baines, E., Blatchford, P., & Kutnick, P. (2017). *Promoting Effective Group Work in the Primary Classroom: A handbook for teachers and practitioners*. Routledge. <https://doi.org/10.4324/9781315730363>

Begeny, J. C., & Martens, B. K. (2007). Inclusionary Education in Italy: A Literature Review and Call for More Empirical Research. *Remedial and Special Education*, 28(2), 80–94. <https://doi.org/10.1177/07419325070280020701>

Beitin, B. (2012). Interview and Sampling: How Many and Whom. In *The SAGE Handbook of Interview Research : The Complexity of the Craft* (pp. 243–253).

Blatchford, P., Bassett, P., Brown, P., Martin, C., Russell, A., Webster, R., & others. (2008). *Deployment and impact of support staff in schools and the impact of the national agreement: Results from strand 2 wave 1, 2005/06*. Department for Children, Schools and Families.

Blatchford, P. (2009). *Deployment and impact of support staff in schools: The impact of support staff in schools (results from strand 2, wave 2)*. Department for Children, Schools and Families.

Blatchford, P., Russell, A., & Webster, R. (2011). *Reassessing the Impact of Teaching Assistants: How Research Challenges Practice and Policy*. Routledge, Taylor & Francis Group.

Blatchford, P., Pellegrini, A. D., & Baines, E. (2016). Adult–pupil interactions in the classroom. In *The child at school* (2nd ed., pp. 206–235). Routledge. <https://doi.org/10.4324/9781315726953-9>

Borgonovi, E., & Ciletti, L. (2018). *La rete pubblico-privato per l'inclusione scolastica dei bambini con bisogni educativi speciali: Teorie, legislazione e buone pratiche di leadership*. F. Angeli.

Bosanquet, P., Radford, J., & Webster, R. (2016). *The teaching assistant's guide to effective interaction how to maximise your practice*. New York, NY: Routledge. <http://www.tandfebooks.com.libproxy.ucl.ac.uk/isbn/9781315719832>

Bowles, D., Radford, J., & Bakopoulou, I. (2018). Scaffolding as a key role for teaching assistants: Perceptions of their pedagogical strategies. *British Journal of Educational Psychology*, 88 (3) Pp. 499-512. (2018).

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Braun, Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic Analysis. In *Handbook of Research Methods in Health Social Sciences* (pp. 843–860). Springer Singapore. https://doi.org/10.1007/978-981-10-5251-4_103

Braun, & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201–216. <https://doi.org/10.1080/2159676X.2019.1704846>

Canevaro, A., d'Alonzo, L., & lanes, D. (2009). *L'integrazione scolastica di alunni con disabilità dal 1977 al 2007: Risultati di una ricerca attraverso lo sguardo delle persone con disabilità e delle loro famiglie*. University Press Bozen.

Cerini, G., Fiorentini, C., & Testa, E. (2007). *Indicazioni per il curricolo: Analisi, proposte, percorsi possibili*. Centro Iniziativa Democratica Insegnanti (Ciid).

Collin, S., Karsenti, T., & Komis, V. (2013). Reflective practice in initial teacher training: Critiques and perspectives. *Reflective Practice*, 14(1), 104–117. <https://doi.org/10.1080/14623943.2012.732935>

Cornoldi, C., Terreni, A., Scruggs, T. E., & Mastropieri, M. A. (1998). Teacher Attitudes in Italy After Twenty Years of Inclusion. *Remedial and Special Education*, 19(6), 350–356. <https://doi.org/10.1177/074193259801900605>

Cazden, C. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Heinemann.

Creswell, J. W. (2007). *Designing and conducting mixed methods research / John W. Creswell, Vicki L. Plano Clark*. SAGE.

Croll, P. (1986). *Systematic classroom observation*. Falmer.

D'Alessio, S. (2008). *A critical analysis of the policy of integrazione scolastica from an inclusive education perspective: An ethnographic study of disability, discourse and policy making in two lower secondary schools in Italy*. Theses: (PhD) University of London Institute of Education, 2008.

D'Alessio, S. (2011). *Inclusive Education in Italy: A Critical Analysis of the Policy of Integrazione Scolastica* (Vol. 10). SensePublishers.

D'Alessio, S. (2012). "Integrazione Scolastica" and the Development of Inclusion in Italy: Does Space Matter? *International Journal of Inclusive Education*, 16(5–6), 519–6), 519–534. <https://doi.org/10.1080/13603116.2012.655495>

D'Alessio, S., & Cowan, S. (2013). Cross-Cultural Approaches to the Study of "Inclusive" and "Special Needs" Education. *International Perspectives on Education and Society*, 20, 227–261. [https://doi.org/10.1108/S1479-3679\(2013\)0000020021](https://doi.org/10.1108/S1479-3679(2013)0000020021)

Dal Passo, F. (2015). *Storia dell'Assistenza. Nascita, evoluzione e futuro del Welfare State*. https://www.academia.edu/10473221/Storia_dellAssistenza_Nascita_evoluzione_e_futuro_del_Welfare_State

Day, C., Kingon, A., Stobart, G., & Sammons, P. (2006). The personal and professional selves of teachers: stable and unstable identities. *British Educational Research Journal*, 32(4), 601–616. <https://doi.org/10.1080/01411920600775316>

Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers Matter: Connecting Work, Lives and Effectiveness*. Maidenhead: Open University Press.

Deplancke, C., Somerville, M. P., Harrison, A., & Vuillier, L. (2022). It's all about beliefs: Believing emotions are uncontrollable is linked to symptoms of anxiety and depression through cognitive reappraisal and expressive suppression. *Current Psychology* (New Brunswick, N.J.). <https://doi.org/10.1007/s12144-022-03252-2>

Derry, J. (2013). *Vygotsky: Philosophy and Education*. John Wiley & Sons, Incorporated.

DeWalt, K. M., & DeWalt, B. R. (2011). *Participant observation: A guide for fieldworkers*. (2nd edition). AltaMira. <http://www.vlebooks.com/vleweb/product/openreader?id=UCL&isbn=9780759119284>

Dewey, J. (1896). The reflex arc concept in psychology. *Psychological Review*, 3(4), 357–370. <https://doi.org/10.1037/h0070405>

Dewey, J. (1910). *How we think*. DCHeath & Co. <http://content.apa.org/books/2006-03523-000>

Dewey, J. (1922). *Human nature and conduct: An introduction to social psychology*. Holt. <http://content.apa.org/books/2014-41196-000>

Dewey, J. (1951). *Logic: The theory of inquiry*. Henry Holt and Co.,

Dewey, J. (1956). *The child and the curriculum; and The school and society*. University of Chicago Press.

Dewey, J. (1958). *Experience and nature*. Dover.

Dewey, J. (1998). *Experience and education / (60th anniversary ed.)*. Kappa Delta Pi.

DfE (2014). *SEND code of practice: 0 to 25 years*. GOV.UK. <https://www.gov.uk/government/publications/send-code-of-practice-0-to-25>

Dipartimento per il sistema educativo di istruzione e di formazione - Direzione generale per il personale scolastico. (2020). *Formazione docenti in servizio a.s. 2020-2021. Assegnazione delle risorse finanziarie e progettazione delle iniziative formative*. Ministero dell'Istruzione.

Dyer, W. G., & Wilkins, A. L. (1991). Better Stories, Not Better Constructs, to Generate Better Theory: A Rejoinder to Eisenhardt. *The Academy of Management Review*, 16(3), 613–619. <https://doi.org/10.2307/258920>

Dykhuizen, G. (1973). *The life and mind of John Dewey*. Southern Illinois University.

EFA Global Monitoring Report team (2015). *Education for all 2000-2015: Achievements and challenges*. The United Nations Educational, Scientific and Cultural Organization.

Efthymiou, E., & Kington, A. (2017). The development of inclusive learning relationships in mainstream settings: A multimodal perspective. *Cogent Education*, 4(1), 1304015–. <https://doi.org/10.1080/2331186X.2017.1304015>

Eisner, E. W. (1982). *Cognition and curriculum: A basis for deciding what to teach / Elliot W. Eisner*. Longman.

Eisner, E., & Eisner, E. W. (1985). *Learning and Teaching the Ways of Knowing*. University of Chicago Press.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes*. (2nd ed.). University of Chicago Press. <https://app.kortext.com/borrow/162697>

European Agency for Special Needs and Inclusive Education. (2017). *European Agency Statistics on Inclusive Education: 2014 Dataset Cross-Country Report*. European Agency for Special Needs and Inclusive Education.

European Agency for Special Needs and Inclusive Education. (2020). *European Agency Statistics on Inclusive Education: 2018 Dataset Cross-Country Report*. European Agency for Special Needs and Inclusive Education.

European Agency Statistics on Inclusive Education (EASIE). (2020). *EASIE 2018 Dataset Cross-Country Report*.

European Commission/EACEA/Eurydice (2018). *Teaching Careers in Europe: Access, Progression and Support*. Eurydice Report. Luxembourg: Publications Office of the European Union.

Fondazione Giovanni Agnelli (2009). *INDAGINE DOCENTI NEOASSUNTI 2009*. Fondazione Giovanni Agnelli. https://www.fondazioneagnelli.it/wp-content/uploads/2017/08/ricerca_neoassunti_-_primi_risultati.pdf.

Franciolini, L. (2011). *Dalla correzione alla condivisione dell'errore: Riflessione analitica sull'interazione verbale in classe intorno all'errore*. <https://boa.unimib.it/handle/10281/20452>

Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology & Health*, 25(10), 1229–1245. <https://doi.org/10.1080/08870440903194015>

Friend, M., & Bursuck, W. D. (2009). *Including Students with Special Needs: A Practical Guide for Classroom Teachers* (5th ed., p. 92). Columbus, OH: Merrill.

Fried, L. (2011). Teaching Teachers about Emotion Regulation in the Classroom. *Australian Journal of Teacher Education*, 36(3). <https://doi.org/10.14221/ajte.2011v36n3.1>

Garrison, J. (1996). Dewey, qualitative thought, and context. *International Journal of Qualitative Studies in Education*, 9(4), 391–410. <https://doi.org/10.1080/0951839960090403>

Gazzetta Ufficiale. (1975). *Decreto Presidente Repubblica 31 ottobre 1975, n. 970—(In GU 21 aprile 1976, n. 104)*. Gazzetta Ufficiale.

Gazzetta Ufficiale. (1994). *Decreto Legislativo 16 aprile 1994, n. 297—Testo Unico delle disposizioni legislative vigenti in materia di istruzione, relative alle scuole di ogni ordine e grado*. Gazzetta Ufficiale. n.115 del 19/5/1994.

Gazzetta Ufficiale. (1997). *Norme transitorie per il passaggio al sistema di formazione universitaria degli insegnanti della scuola materna ed elementare, previste dall'art. 3, comma 8, della legge 19 novembre 1990, n. 341. (GU Serie Generale n.175 del 29-07-1997)*. Gazzetta Ufficiale della Repubblica Italiana. <https://www.gazzettaufficiale.it/eli/id/1997/07/29/097A5928/sq>.

Gazzetta Ufficiale. (2011). *DECRETO 10 settembre 2010, n. 249. Regolamento concernente: «Definizione della disciplina dei requisiti e delle modalità della formazione iniziale degli insegnanti della scuola dell'infanzia, della scuola primaria e della scuola*

secondaria di primo e secondo grado, ai sensi dell'articolo 2, comma 416, della legge 24 dicembre 2007, n. 244». Gazzetta Ufficiale.

Gazzetta Ufficiale (2012). *DM 30.09.2011—Allegato B (articolo 2)—Insegnamenti, attività laboratoriali e di tirocinio, crediti formativi universitari.* Gazzetta Ufficiale.

Gazzetta Ufficiale (2013). *DECRETO 16 novembre 2012, n. 254. Regolamento recante indicazioni nazionali per il curricolo della scuola dell'infanzia e del primo ciclo d'istruzione, a norma dell'articolo 1, comma 4, del decreto del Presidente della Repubblica 20 marzo 2009. N.89. (13G00034).* Gazzetta Ufficiale.

Gazzetta Ufficiale (2020). *Concorso ordinario, per titoli ed esami, finalizzato al reclutamento del personale docente per i posti comuni e di sostegno della scuola dell'infanzia e primaria. (Decreto n. 498).* Gazzetta Ufficiale (n.34 del 28-04-2020).

Gestione Patrimonio Informativo e Statistica (GPID) (2020). *I principali dati relativi agli alunni con disabilità—Anno scolastico 2018/2019.* Ministero dell'Istruzione, dell'Università e della Ricerca.

Gianferrari, L. (2009). *Profilo professionale e competenze dei docenti neoassunti.* Fondazione Giovanni Agnelli (FDA).

Gianferrari, L. (2010). *I docenti neo-assunti nella scuola che deve affrontare i mutamenti epocali.* Fondazione Giovanni Agnelli (FDA).

Giangreco, M. F. (2010). One-to-One Paraprofessionals for Students With Disabilities in Inclusive Classrooms: Is Conventional Wisdom Wrong? *Intellectual and Developmental Disabilities, 48*(1), 1–13. <https://doi.org/10.1352/1934-9556-48.1.1>

Giangreco, M. F., & Broer, S. M. (2005). Questionable Utilization of Paraprofessionals in Inclusive Schools: Are We Addressing Symptoms or Causes? *Focus on Autism and Other Developmental Disabilities, 20*(1), 10–26. <https://doi.org/10.1177/10883576050200010201>

Giangreco, M. F., Doyle, M. B., & Suter, J. C. (2012). Demographic and personnel service delivery data: Implications for including students with disabilities in Italian schools. *Life Span and Disability, 15*(1), 97–123.

Giangreco, M. F., Doyle, M. B., & Suter, J. C. (2014). Teacher Assistants in Inclusive Classrooms. In *The SAGE Handbook of Special Education: Two Volume Set*

(Second Edition, Vol. 1–2, pp. 691–702). SAGE Publications Ltd.
<https://doi.org/10.4135/9781446282236>

Glassman, M. (2001). Dewey and Vygotsky: Society, Experience, and Inquiry in Educational Practice. *Educational Researcher*, 30(4), 3–14.
<https://doi.org/10.3102/0013189X030004003>

Global Monitoring Report team (2010). *Reaching the marginalized*. UNESCO.

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. SAGE Publications.

Gumperz, J. J. (2008). On interactional sociolinguistic method. In *On interactional sociolinguistic method* (pp. 453–472). De Gruyter Mouton.
<https://doi.org/10.1515/9783110208375.4.453>

Hardman, & Hardman, J. (2017). Systematic Observation: Changes and Continuities Over Time. In *Life in Schools and Classrooms* (pp. 123–137). Springer Singapore. https://doi.org/10.1007/978-981-10-3654-5_8

Have, T. P. (2007). *Doing conversation analysis: A practical guide* (2nd ed.). Sage Publications Ltd. <https://doi.org/10.4135/9781849208895>

Hegel, G. W. F. (2018). *Hegel's Introduction to the System: Encyclopaedia Phenomenology and Psychology / Georg Wilhelm Friedrich Hegel*. University of Toronto Press,. <https://doi.org/10.3138/9781442616547>

Helferich, C. (1979). *Georg Wilhelm Friedrich Hegel*. Metzler.

Henry, S. G., & Fetters, M. D. (2012). Video Elicitation Interviews: A Qualitative Research Method for Investigating Physician-Patient Interactions. *Annals of Family Medicine*, 10(2), 118–125. <https://doi.org/10.1370/afm.1339>

Highton, S. S. (2017). *Teaching assistants' influence on the peer relationships of pupils with SEND: A grounded theory study from the perspective of teaching assistants*. [Other, University of Essex and Tavistock & Portman NHS Trust].

HM Government (2022a). *SEND Review: Right support, right place, right time Government consultation on the SEND and alternative provision system in England*. Online. Available at: <https://www.gov.uk/government/consultations/send-review-right-support-right-place-right-time> (accessed 12.11.2022)

HM Government (2022b). *Opportunity for all: strong schools with great teachers for your child*. Online. Available at: <https://www.gov.uk/government/publications/opportunity-for-all-strong-schools-with-great-teachers-for-your-child> (accessed 12.11.2022)

Kington, A., Sammons, P., Day, C., & Regan, E. (2011). Stories and Statistics: Describing a Mixed Methods Study of Effective Classroom Practice. *Journal of Mixed Methods Research*, 5(2), 103–125. <https://doi.org/10.1177/1558689810396092>

Kington, A., Gates, P., & Sammons, P. (2013). Development of social relationships, interactions and behaviours in early education settings. *Journal of Early Childhood Research: ECR*, 11(3), 292–311. <https://doi.org/10.1177/1476718X13492936>

lanes, D. (2014). *L'evoluzione dell'insegnante di sostegno. Verso la didattica inclusiva*. Erickson.

lanes, D. (2015). Insegnanti di sostegno: Un'evoluzione necessaria. *ITALIAN JOURNAL OF SPECIAL EDUCATION FOR INCLUSION*, 2(2), 35-53–53. <http://ojs.pensamultimedia.it/index.php/sipes/article/view/1510>

lanes, D., & Macchia, V. (2008). *La didattica per i bisogni educativi speciali: Strategie e buone prassi di sostegno inclusivo*. Edizioni Erickson.

lanes, D., Zambotti, F., & Demo, H. (2013). Light and shadows in the inclusive Italian school system: A reply to Giangreco, Doyle & Suter (2012). *Life Span and Disability*, 16(1), 57–81.

ISTAT (2019). Scuole – Dati ISTAT. Istituto Nazionale di Statistica. https://dati.istat.it/Index.aspx?DataSetCode=DCIS_SCUOLE

ISTAT (2022). *Report Alunni con disabilità A.S. 2021-2022*. Istituto Nazionale di Statistica.

John, W. S., & Johnson, P. (2000). The Pros and Cons of Data Analysis Software for Qualitative Research. *Journal of Nursing Scholarship*, 32(4), 393–397. <https://doi.org/10.1111/j.1547-5069.2000.00393.x>

Kanter, A. S., Damiani, M. L., & Ferri, B. A. (2014). The Right to Inclusive Education Under International Law: Following Italy's Lead. *Journal of International Special Needs Education*, 17(1), 21–32. <https://doi.org/10.9782/2159-4341-17.1.21>

Kim, Y. (2011). The Pilot Study in Qualitative Inquiry: Identifying Issues and Learning Lessons for Culturally Competent Research. *Qualitative Social Work: QSW: Research and Practice*, 10(2), 190–206. <https://doi.org/10.1177/1473325010362001>

Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23(1), 4–41. <https://doi.org/10.1080/02699930802619031>

Lewisohn, D. (1972). Mill and Comte on the Methods of Social Science. *Journal of the History of Ideas*, 33(2), 315–324. <https://doi.org/10.2307/2708877>

Lincoln, Y. S., & Guba, E. G. (1984). *Naturalistic inquiry*. Sage Publications.

Low, J. (2019). A Pragmatic Definition of the Concept of Theoretical Saturation. *Sociological Focus* (Kent, Ohio), 52(2), 131–139. <https://doi.org/10.1080/00380237.2018.1544514>

Lowe, A., Norris, A. C., Farris, A. J., & Babbage, D. R. (2018). Quantifying Thematic Saturation in Qualitative Data Analysis. *Field Methods*, 30(3), 191–207. <https://doi.org/10.1177/1525822X17749386>

Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the Pilot Study: A Neglected Part of the Research Process? Methodological Findings Supporting the Importance of Piloting in Qualitative Research Studies. *International Journal of Qualitative Methods*, 18, 160940691987834–. <https://doi.org/10.1177/1609406919878341>

McAnuff, J., Gibson, J., Webster, R., Kaur-Bola, K., Crombie, S., Grayston, A. and Pennington, L. (2022). School-based allied health interventions for children and young people affected by neurodisability: a systematic evidence map. *Disability and Rehabilitation*, 45(7), 1239–1257. <https://doi.org/10.1080/09638288.2022.2059113>

Mercer, N. (2004). Sociocultural discourse analysis: Analysing classroom talk as a social mode of thinking. *Journal of Applied Linguistics*, 1(2), 137–168. <https://doi.org/10.1558/jal.v1i2.137>

Mercer, N. (2007). *Dialogue and the development of children's thinking: A sociocultural approach*. Routledge.

<http://www.dawsonera.com.libproxy.ucl.ac.uk/depp/reader/protected/external/AbstractView/S9780203946657>

Merlo, G. (2016). *L'attrazione speciale*. <http://bibliotecadigitale.maggioli.it/l-attrazione-speciale.html>

Mill, J. S. (1846). *A system of logic, ratiocinative and inductive: Being a connected view of the principles of evidence and the methods of scientific investigation*. Harper. <http://content.apa.org/books/2008-12811-000>

Ministero dell'Istruzione (MI) – Ufficio Regionale Scolastico (USR) per la Regione Lombardia (2022). *Open data*. Ministero dell'Istruzione. <https://usr.istruzione.lombardia.gov.it/open-data/>.

Ministero dell'Istruzione & Ministero delle Finanze (2020). *Linee Guida concernenti la definizione delle modalità, anche tenuto conto dell'accertamento di cui all'articolo 4 della legge 5 febbraio 1992, n. 104, per l'assegnazione delle misure di sostegno di cui all'articolo 7 del D.Lgs 66/2017 e il modello di PEI, da adottare da parte delle istituzioni scolastiche*. Ministero dell'Istruzione & Ministero delle Finanze.

Ministero dell'Istruzione, dell'Università e della Ricerca (2017). *La Buona Scuola—I DECRETI ATTUATIVI Schede di approfondimento*. Ministero dell'Istruzione, dell'Università e della Ricerca.

Ministero dell'Istruzione, dell'Università e della Ricerca (2020). *Elenco scuole speciali 2019/20*. Ministero dell'Istruzione, dell'Università e della Ricerca. <https://www.miur.gov.it/documents/20182/2182293/Elenco+scuole+speciali+201920.pdf/b03f205a-1e71-f2ea-0691-82ee5b706a4a?t=1562764085863>.

Ministero della Pubblica Istruzione (MPI) & EDS - Servizio di Consulenza all'Attività Programmatoria (2001). *L'Handicap e la scuola*. Ministero della Pubblica Istruzione.

Ministero dell'Istruzione (2020). *Adozione del Documento per la pianificazione delle attività scolastiche, educative e formative in tutte le Istituzioni del Sistema nazionale di Istruzione per l'anno scolastico 2020/2021*. (m_pi.AOOGABMI. Registro Decreti. R.0000039.26-06-2020). Ministero dell'Istruzione. <https://www.miur.gov.it/documents/20182/2467413/Le+linee+guida.pdf/4e4bb411-1f90-9502-f01e-d8841a949429>.

Moon, J. A. (1999). *Reflection in Learning and Professional Development: Theory and Practice*. Routledge. <https://doi.org/10.4324/9780203822296>

Morcom, V. (2014). Scaffolding social and emotional learning in an elementary classroom community: A sociocultural perspective. *International Journal of Educational Research*, 67(C), 18–29. <https://doi.org/10.1016/j.ijer.2014.04.002>

Morse, J. M. (2009). *Mixed method design: Principles and procedures*. Left Coast Press.

Navarro, F. M. (2015). *Learning support staff: A literature review*. OECD Publishing. <http://dx.doi.org/10.1787/5jrnzm39w45l-en>

Nes, K., Demo, H., & Ianes, D. (2018). Inclusion at Risk? Push- and Pull-Out Phenomena in Inclusive School Systems: The Italian and Norwegian Experiences. *International Journal of Inclusive Education*, 22(2), 111–129.

Newman, S. (1999). *Philosophy and teacher education: A reinterpretation of Donald A. Schön's epistemology of reflective practice*. Ashgate.

Noble, S. (2020). *Teaching Assistants' Views on Their Preparedness for Teaching, Following Evidence-Based Changes to Their Role in School*. ProQuest Dissertations Publishing.

Nutley, S. M. (2007). *Using Evidence: How Research Can Inform Public Services* (pp. xii–xii). Policy Press. <https://doi.org/10.46692/9781847422323>

O'Brien, T., & Roberts, A. (2019). A domains-based approach to meeting social, emotional and mental health needs. *Support for Learning*, 34(2), 179–192. <https://doi.org/10.1111/1467-9604.12247>

O'Connor, C., & Joffe, H. (2020). Intercoder Reliability in Qualitative Research: Debates and Practical Guidelines. *International Journal of Qualitative Methods*, 19, 160940691989922-. <https://doi.org/10.1177/1609406919899220>

Oliffe, J. L., Kelly, M. T., Gonzalez Montaner, G., & Yu Ko, W. F. (2021). Zoom Interviews: Benefits and Concessions. *International Journal of Qualitative Methods*, 20, 160940692110535-. <https://doi.org/10.1177/16094069211053522>

Organisation for Economic Co-operation and Development (2004). *Equity in Education Students with Disabilities, Learning Difficulties and Disadvantages*. OECD Publishing. <http://dx.doi.org.libproxy.ucl.ac.uk/10.1787/9789264103702-en>

Organisation for Economic Co-operation and Development (2019). *Educational personnel by age*. Organisation for Economic Co-operation and Development. https://stats.oecd.org/Index.aspx?DataSetCode=EDU_PERS_AGE#.

Palladino, P., Cornoldi, C., Vianello, R., Scruggs, T. E., & Mastropieri, M. A. (1999). Paraprofessionals in Italy: Perspectives from an Inclusive Country. *Journal of the Association for Persons with Severe Handicaps*, 24(4), 254–258. <https://doi.org/10.2511/rpsd.24.4.254>

Peruzzo, F. (2019). *The government of disability in times of austerity: Disability dispositif in Italian higher education*. UCL University College London.

Piaget, J. (1970). *Genetic epistemology*. Columbia UP, Columbia University Press.

Pinto, C., Baines, E., & Bakopoulou, I. (2019). The peer relations of pupils with special educational needs in mainstream primary schools: The importance of meaningful contact and interaction with peers. *British Journal of Educational Psychology*, 89(4), 818–837. <https://doi.org/10.1111/bjep.12262>

Radford, J. (2010). Practices of Other-Initiated Repair in the Classrooms of Children with Specific Speech and Language Difficulties. *Applied Linguistics*, 31 (1) Pp. 25-44. (2010).

Radford, J., Bosanquet, P., Webster, R., & Blatchford, P. (2015). Scaffolding learning for independence: Clarifying teacher and teaching assistant roles for children with special educational needs. *Learning and Instruction*, 36 Pp. 1-10. (2015).

Radford, J., Bosanquet, P., Webster, R., Blatchford, P., & Rubie-Davies, C. (2014). Fostering learner independence through heuristic scaffolding: A valuable role for teaching assistants. *International Journal of Educational Research*, 63, 116–126. <https://doi.org/10.1016/j.ijer.2013.02.010>

Radford, J., Ireson, J., & Mahon, M. (2006). Triadic Dialogue in Oral Communication Tasks: What are the Implications for Language Learning? *Language and Education*, 20(3), 191–210. <https://doi.org/10.1080/09500780608668723>

Renault, E. (2016). Critical Theory and Processual Social Ontology. *Journal of Social Ontology*, 2(1), 17–32. <https://doi.org/10.1515/jso-2015-0013>

Ritchie, J., & Lewis, J. (2003). *Qualitative research practice: a guide for social science students and researchers*. Sage Publications.

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2014). *Qualitative research practice: A guide for social science students and researchers* (Second edition.). SAGE. <https://app.kortext.com/borrow/368936>

Romney, A., Somerville, M. P., & Baines, E. (2022). The facilitators and barriers to implementing Emotion Coaching following whole-school training in mainstream primary schools. *Educational Psychology in Practice*, 38(4), 392–409. <https://doi.org/10.1080/02667363.2022.2125933>

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: the art of hearing data* (3rd ed.). SAGE.

Sackett, G. P. & National Institute of Child Health and Human Development. (1978). *Observing behavior / edited by Gene P. Sackett. Vol 2 , Data collection and analysis methods*. University Park P.

Sacks, H., & Schegloff, E. A. (2006). *Two preferences in the organization of reference to persons in conversation and their interaction* (pp. 23–28). Cambridge University Press. <https://doi.org/10.1017/CBO9780511486746.003>

Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A Simplest Systematics for the Organization of Turn-Taking for Conversation. *Language*, 50(4), 696–735. <https://doi.org/10.2307/412243>

Schegloff, E. (2000). When “others” initiate repair. *Applied Linguistics*, 21(2), 205–243. <https://doi.org/10.1093/applin/21.2.205>

Schön, D. A. (1987). *Educating the reflective practitioner*. Jossey-Bass.

Schön, D. A. (1991). *The reflective practitioner: How professionals think in action*. Ashgate.

Sammons, P., Day, C., Kington, A., Gu, Q., Stobart, G., & Smees, R. (2007). Exploring variations in teachers’ work, lives and their effects on pupils: key findings and implications from a longitudinal mixed-method study. *British Educational Research Journal*, 33(5), 681–701. <https://doi.org/10.1080/01411920701582264>

Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-Teaching in Inclusive Classrooms: A Metasynthesis of Qualitative Research. *Exceptional Children*, 73(4), 392–416. <https://doi.org/10.1177/001440290707300401>

Seleznyov, S., Roberts, A., Walker, R., Watson, S., & Hogan, M. (2020). Is there anything special about lesson study in special schools? *International Journal for Lesson and Learning Studies*, 9(4), 301–316. <https://doi.org/10.1108/IJLLS-12-2019-0084>

Sinclair, J. M., & Coulthard, R. M. (1975). *Towards an analysis of discourse: The English used by teachers and pupils*. Oxford University Press.

Skipp, A. (2019). *Deployment of teaching assistants in schools / Amy Skipp and Vicky Hopwood*. Department for Education.

Snell, J., Shaw, S., & Copland, F. (2015). *Linguistic ethnography*. Palgrave Macmillan.

<http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=nlebk&AN=1230856&site=ehost-live&scope=site>

Somerville, M. P., & Whitebread, D. (2019). Emotion regulation and well-being in primary classrooms situated in low-socioeconomic communities. *British Journal of Educational Psychology*, 89(4), 565–584. <https://doi.org/10.1111/bjep.12222>

Stern, P. (1993). *Socratic rationalism and political philosophy: An interpretation of Plato's Phaedo / Paul Stern*. State University of New York Press.

Tatto, M. T., & Menter, I. (2019). *Knowledge, Policy and Practice in Teacher Education: A Cross-National Study*. Bloomsbury Publishing Plc, Bloomsbury Academic.

Thiessen, V., & Blasius, J. (2016). *Another Look at Survey Data Quality* (pp. 613–629).

Unesco (2021). *Global Education Monitoring Report 2021 – Central and Eastern Europe, the Caucasus and Central Asia – Inclusion and education: All means all*. Unesco. <https://unesdoc.unesco.org/ark:/48223/pf0000375490>

USR Abruzzo (2022). *Elenco scuole non paritarie*. USR Abruzzo. http://www.abruzzo.istruzione.it/Informativa_scuole_non_paritarie.shtml.

USR Calabria. (2022). *Elenco scuole*. USR Calabria. <https://www.istruzione.calabria.it/elenco-scuole-non-paritarie/>.

USR Campania (2022). *Elenco Scuole*. USR Campania.
http://www.campania.istruzione.it/uffici_ambiti_territoriali/uffici_ambiti_territoriali.shtml.

USR Emilia-Romagna (2022). *Elenco scuole*. USR Emilia-Romagna.
<https://www.istruzioneer.gov.it/dati/registro-delle-scuole-non-paritarie/>

USR Friuli Venezia Giulia (2022). *Elenco scuole*. USR Friuli Venezia Giulia.
<http://www.usrfvg.gov.it/it/home/menu/uffici/Direzione/Ufficio1/Scuole-non-statali/Elenco-scuole.html>.

USR Lazio. (2022). *Elenco scuole*. USR Lazio.
<https://www.usrlazio.it/index.php?s=55>

USR Marche (2022). *Elenco scuole*. USR Marche.
<http://www.marche.istruzione.it/scuole.shtml>

USR Molise (2022). *Elenco scuole*. USR Molise.
http://www.istruzioneemolise.it/index.php?option=com_content&view=article&id=528:ret-e-scolastica&catid=32&Itemid=214

USR Piemonte (2022). *Elenco scuole non paritarie*. USR Piemonte.
<http://www.istruzioneepiemonte.it/paritarie/wp-content/uploads/sites/29/2021/07/DRPI21-8121-ElencoNONParitarie-as2122.pdf>

USR Puglia (2022). *Elenco delle scuole non paritarie della Puglia a.s. 2019/2020*.
USR Puglia. <https://www.pugliausr.gov.it/index.php/istruzione-non-statale/18595-16907-2019>

USR Sardegna (2022). *Elenco scuole non paritarie*. USR Sardegna.
http://www.sardegna.istruzione.it/scuole_non_paritarie.shtml

USR Sicilia (2022). *Elenco scuole non paritarie*. USR Sicilia.
<https://pti.regione.sicilia.it/portal/pls/portal/docs/153163823.PDF>

USR Toscana (2022). *ELENCO REGIONALE DELLE SCUOLE NON PARITARIE DELLA TOSCANA A.S. 2020/2021*. USR Toscana.
<https://www.miur.gov.it/documents/828576/0/elencoregionaleNonParitarie2020-21.pdf/7a1a1b89-6b65-0bf2-cc34-20fd601a3e49?t=1627375395632>

USR Umbria (2022). *Elenco scuole*. USR Umbria.
<https://usr.istruzione.umbria.gov.it/id.asp?id=1135>

Van De Pol, J., Volman, M., & Beishuizen, J. (2011). Scaffolding in Teacher-Student Interaction: A Decade of Research. *Educational Psychology Review*, 22(3), 271–296. <https://doi.org/10.1007/s10648-010-9127-6>

Vygotsky, L. (1962). *Thought and language*. MIT Press. <http://content.apa.org/books/2006-10268-000>

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press. <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=nlebk&AN=575543&site=ehost-live&scope=site>

Webster, R. (2022). *The Inclusion Illusion: How children with special educational needs experience mainstream schools*. UCL Press.

Webster, R. & Blatchford, P. (2013). *The Making a Statement study. Final report. A study of the teaching and support experienced by pupils with a statement of special educational needs in mainstream primary schools*. London: Nuffield Foundation

Webster, R. & Blatchford, P. (2017). The Special Educational Needs in Secondary Education (SENSE) study. *Final report. A study of the teaching and support experienced by pupils with Statements and Education, Health and Care Plans in mainstream and special schools*. London: Nuffield Foundation

Webster, R., Bosanquet, P., & Blatchford, P. (2020). Preparing Teaching Assistants for Including All Learners. In *Preparing Teaching Assistants for Including All Learners*. Oxford University Press.

Wildman, T. M., & Niles, J. A. (1987). Reflective Teachers: Tensions between Abstractions and Realities. *Journal of Teacher Education*, 38(4), 25–31. <https://doi.org/10.1177/002248718703800405>

Wood, D., Bruner, J. S., & Ross, G. (1976). THE ROLE OF TUTORING IN PROBLEM SOLVING *. *Journal of Child Psychology and Psychiatry*, 17(2), 89–100. <https://doi.org/10.1111/j.1469-7610.1976.tb00381.x>

World Health Organization. (2011). *World report on disability / The World Health Organization, The World Bank*. World Health Organization.

Appendix A. Filed notes example

FIELD NOTES: DAY

LAYOUT - TABLE-ROW

□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□

CLASSROOM TABLE-LESSON - WORKING CONTEXT

FIRST PART OF LESSON (PROB AND COMPLETION)

- TEACHER ASK CHILDREN PROB
- Q&A
- WHOLE CLASS TEACHING

SECOND PART (TABLE)

WHOLE CLASS TEACHING

CHILDREN WRITE DOWN THE QUESTION AND A. ANSWER SUBRICELY

- THE TEACHER DESIGN HOMEWORK
- THE TA IS ALWAYS NEXT TO THE CHILD WITH SEND AND SUPPORT

WHOLE CLASS TEACHING

THIRD PART OF THE LESSON (LOGICAL AND CUMULATIVE ANALYSIS OF THE SENTENCES)

- THE TEACHER Q&A
- HOMEWORK
- WHOLE CLASS TEACHING

Appendix B. Questionnaire (Translated version) Section 1 and 2

SECTION 1: TA QUESTIONNAIRE

Demographics

1. Could you tell me your age?

2. Could you tell me about your sex at birth?

Male

Female

3. Could you tell me if Italian is your first language?

Yes

No (if no specify your first language here
.....)

4. Could you tell me your ethnicity?

White (Italian)

White (Other nationalities)

Latino

Black

Asian

- Other ethnic group

Qualifications

5. What is your qualification level?

- Level 3 (*qualifications are: A level, access to higher education diploma, advanced apprenticeship, applied general, AS level, international Baccalaureate diploma, level 3 award, level 3 certificate, level 3 diploma, level 3 ESOL, level 3 national certificate, level 3 national diploma, level 3 NVQ, music grades 6, 7 and 8, tech level*)
- Level 4 (*qualifications are: certificate of higher education (CertHE), higher apprenticeship, higher national certificate (HNC), level 4 award, level 4 certificate, level 4 diploma, level 4 NVQ*)
- Level 5 (*qualifications are: diploma of higher education (DipHE), foundation degree, higher national diploma (HND), level 5 award, level 5 certificate, level 5 diploma, level 5 NVQ*)
- Level 6 (*qualifications are: degree apprenticeship, degree with honours - for example bachelor of the arts (BA) honours, Bachelor of Science (BSc) honours, graduate certificate, graduate diploma, level 6 award, level 6 certificate, level 6 diploma, level 6 NVQ, ordinary degree without honours*)
- Level 7 (*qualifications are: integrated master's degree, for example Master of Engineering (MEng), level 7 award, level 7 certificate, level 7 diploma, level 7 NVQ, master's degree, for example Master of Arts (MA), Master of Science (MSc), postgraduate certificate, postgraduate certificate in education (PGCE), postgraduate diploma*)
- Level 8 (*qualifications are: doctorate, for example Doctor of Philosophy (PhD or DPhil), level 8 award, level 8 certificate, level 8 diploma*)

6. Give the full details of your latest qualification and year of achievement.

Experience

7. Are you working (or have you worked) as a teacher in a mainstream school? *Specify the school year/s (e. g. 1999, 2000, 2019) you have worked as a teacher*

Yes (If Yes, Specify the school year/s (e. g. 1999, 2000, 2019) you have worked as a TA in mainstream classrooms
from..... To.....
...)

No

8. Are you working (or have you worked) as a Teaching Assistant (TA henceforth) in a mainstream school? *Specify the school year/s (e. g. 1999, 2000, 2019) you have worked as a TA in either special or mainstream classroom*

Yes (If Yes, Specify the school year/s (e. g. 1999, 2000, 2019) you have worked as a TA in mainstream classrooms
from..... To.....
...)

No

9. Are you working (or have you worked) as a teacher in a special school?
Specify the school year/s (e. g.1999, 2000, 2019) you have worked as a teacher in special classrooms.

- Yes (If this Specify the school year/s (e. g.1999, 2000, 2019) you have worked as a TA in special classrooms
from.....To.....
...)
- No

10.What is the name and address of your current school?

11.How many years have you been working as a TA in your current school?
*Specify the school year/s (e. g.1999, 2000, 2019) you have been as TA.
Also mention the school years that you have possibly been working as a teacher.*

Current contractual conditions and training

12. Your current contract is:

- Permanent
- Temporary all year
- Other (specify its nature

13. How many hours (or University Credits Equals) of training initial education (e. g. masters, initial training, etc.) have you been attending before becoming a TA? *(Specify the name/topics of the courses attended and type of training)*

14. Can you complete the table below regarding the In-Service Training (e.g. masters, in service training, etc.) you have been attending in the last three years? *(Specify the name/topics of the courses attended and type of training)*

Year	Course name	Duration (h)	Type of course
2020/2021	1. 2. 3.	1. 2. 3.	1. 2. 3.
2019/2020	1. 2. 3.	1. 2. 3.	1. 2. 3.
2018/2019	1. 2. 3.	1. 2. 3.	1. 2. 3.

SECTION 2: TA QUESTIONNAIRE

TA deployment and practice

To deal with the following questions, please select a classroom you are working in and a single child with SEND in this classroom (*if there are many children with SEND in the classroom, select the child you work with most of the time*).

First, tell us the year group of the classroom you have in mind:

- Year 2
- Year 3
- Year 4
- Year 5
- Year 6

Please, tell us the age and sex at birth of the child with SEND you have in mind within the selected classroom:

Could you tell me if Italian is the first language of the child with SEND?

- Yes
- No (if no, specify his/her first language here
.....)

Could you tell me the ethnicity of the child with SEND?

- White (Italian)
- Latino
- Black
- Asian
- Other ethnic group

Is the child entitled for:

- IEP
- PDP
- None of the above

Could you specify the primary types of need of the child? (*multiple answers are possible*)

- Sensory Impairment (if so, specify the impairment below

.....
.....)

- Physical Disability

- Specific Learning Difficulties (SpLDs)

- Moderate Learning Difficulty (MLD)

- Severe Learning Difficulty (SLD)

- Profound and Multiple Learning Difficulty (PMLD) (If so, specify below

.....
.....)

- Speech, language, and communication needs (SLCN).

- Social, emotional, and mental health (SEMH).

- Autistic spectrum disorder (ASD) or Asperger Syndrome (If so, specify which one here

.....
.....)

- Other difficulties/disabilities (if so, specify the difficulty/disability below

.....
.....)

Please, read the following categories. You will use them in the next questions.

Types of Audience/Auditors

TAs audience/auditor	Definition
<i>Child with SEND</i>	The TA is talking to/listening to the selected child with SEND.
<i>Another individual child with/out SEND</i>	The TA is talking to/listening to any other individual child in the classroom, who is not the selected child with SEND.
<i>Group of children – including the child with SEND</i>	The TA is talking to/listening to a group of children, which includes the selected child with SEND. This interaction may or may not involve the participant child with SEND. Also, the size of the group of children is not relevant.
<i>Group of children – excluding the child with SEND</i>	The TA is talking to/listening to a group of children, which does NOT include the selected child with SEND. The size of the group of children is not relevant.
<i>Whole classroom</i>	The TA is publicly interacting with the whole classroom. That is, the TA is talking to/listening to a child/ren in the classroom in a plenary mode.
<i>Teacher</i>	The TA is talking to/listening to the teacher.
<i>No interaction, audience or focus on people</i>	The TA is not interacting with anyone in the classroom. S/He is writing/marking/working individually. Or s/he is distracted/off task.
<i>Other</i>	This category includes any other circumstances, which are not defined in the previous categories.

Types of support/activity

TAs' support	Definition
<i>Pedagogical support (PS)</i>	Verbal and/or semiotic interaction (i. e. body language, facial expressions, etc.) used to support the child/ren with the learning objectives of the lesson (i. e. reading and comprehension, grammar exercises, repair of mistakes, etc.).
<i>Behavioural management (BM)</i>	Verbal and/or semiotic interaction that attempts to manage child/ren's poor behaviour affecting the other students of the classroom (i. e. bullying, throwing materials, etc.). The interaction focuses on child/ren's behaviours and does not relate to tasks and/or academic activities.
<i>Procedure/Routine (PR)</i>	Individual activity, verbal and/or semiotic interaction directed towards the organization of the materials, setting tasks, and the like.
<i>Engagement on task (ET)</i>	Verbal and/or semiotic interaction are designed to enhance children engagement on tasks and/or attention to the classwork (i. e. Praising accomplishment of a task/good behaviours, critiquing, or giving orders attention to the tasks, etc.).
<i>Social support (SS)</i>	Verbal and/or semiotic interaction are designed to enhance and/or facilitate children's peer interactions. All kind of peer interactions (i. e. social, task related, pedagogical, etc.) are included in this category.
<i>Emotional support (ES)</i>	Verbal and/or semiotic interaction about children and/or individuals' social status (i. e. appearance, health, etc.).
<i>Not supporting (NS)</i>	No direct support to children's activities, social and/or behavioural needs. This category includes the act of listening to children without being involved in the conversation. Also, interactions with the teacher/s and other adults are part of this category.
<i>Other (O)</i>	This category includes any other circumstances which are not defined in the previous codes.

Please, complete the *Table – time logs* of the following page. **Keeping in mind the selected classroom and the child with SEND, you should indicate the types of support/activities you provided to different audiences/auditors during 3 different lessons of literacy along three school days. The Time logs only consider in classroom-lessons. This means no lessons outside the classroom should be taken into account when completing the table – Time logs (i. e. ARP, remedial groups, etc.).**

In the *Time logs*, hours of literacy are divided into intervals of 20 min (first 20 min, central 20 min, last 20 min). **For every 20 min, you should think about the most frequent type of audience/audience you directed your support to (i. e. child with SEND, groups, etc.). Having in mind this typical audience/auditor, you should report then the most prevalent type of support/activity you provided to this audience/auditor. Please, use the categories of the previous table to complete the time-logs (i.e., SS, PS, BM, etc.).**

Categories are mutually exclusive. That is to say, you should only select a single type of support for a single audience within each 20 min interval. You should NOT report more than one type of support for one audience, NOR should more types of support be selected for many audiences in the same 20 min intervals.

Finally, as a consequence of the category structure, the following two combinations are prescribed: a) *Teacher* → *Not supporting (NS)/Other (O)*, b) *No interaction, audience or focus on people* → *Procedural/Routine (PR)/Not supporting (NS)/Other (O)*.

Audience/Auditor	Day 1		
	<i>0-20'</i>	<i>20'-40'</i>	<i>40'-60'</i>
Child with SEND			
Another child			
Group of children including the child with SEND			
Group of children excluding the child with SEND			
Whole class			
Teacher			
No interaction			
Other			

Please, wait the next day to complete the other time log

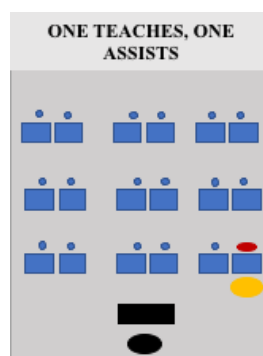
Audience/Auditor	Day 1		
	<i>0-20'</i>	<i>20'-40'</i>	<i>40'-60'</i>
Child with SEND			
Another child			
Group of children including the child with SEND			
Group of children excluding the child with SEND			
Whole class			
Teacher			
No interaction			
Other			

Please, wait the next day to complete the other time log

Audience/Auditor	Day 1		
	<i>0-20'</i>	<i>20'-40'</i>	<i>40'-60'</i>
Child with SEND			
Another child			
Group of children including the child with SEND			
Group of children excluding the child with SEND			
Whole class			
Teacher			
No interaction			
Other			

Having in mind the classroom and the child with SEND you selected, what types of teaching style (co-teaching) have you and the classroom teacher used for the past three lessons of literacy?

- The teacher instructs the whole class, while the TA supports the learning of the child with SEND.



- Legend**
- Teacher
 - TA
 - Child with SEND
 - Another child
 - Children's desk
 - Teacher and TA's desk

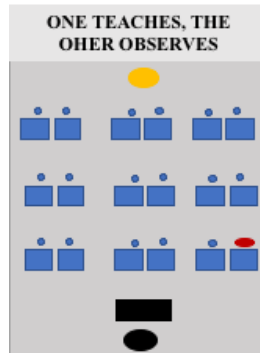
- The teacher instructs the whole class, while the TA supports the learning of a group of children, which includes the child with SEND.



- Legend**
- Teacher
 - TA
 - Child with SEND
 - Another child
 - Children's desk
 - Teacher and TA's desk

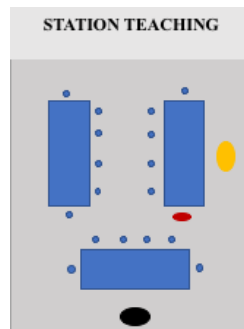
(In the next page, there are alternative answers. Have a look, please.)

- The teacher instructs the whole class, while the TA observes the children's behaviors, moving around the classroom.



- Legend**
- Teacher
 - TA
 - Child with SEND
 - Another child
 - Children's desk
 - Teacher and TA's desk

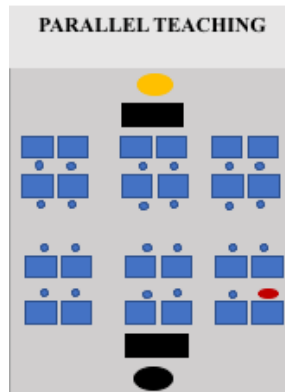
- Station teaching. The teacher and TA rotate instructions to three (or more) groups. Some groups work independently.



- Legend**
- Teacher
 - TA
 - Child with SEND
 - Another child
 - Children's desk
 - Teacher and TA's desk

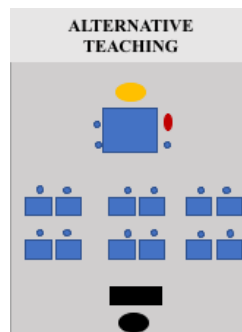
(In the next page, there are alternative answers. Have a look, please.)

- Parallel teaching. Teacher and TA splits the class in two equal groups and work with them independently.



- Legend**
- Teacher
 - TA
 - Child with SEND
 - Another child
 - Children's desk
 - Teacher and TA's desk

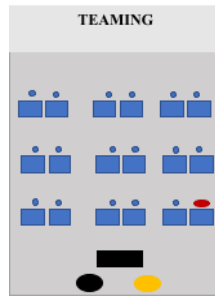
- Alternative teaching. The teacher instructs most of the children, while the TA works with a small group for remediation practice, assessment, and the like.



- Legend**
- Teacher
 - TA
 - Child with SEND
 - Another child
 - Children's desk
 - Teacher and TA's desk

(In the next page, there are alternative answers. Have a look, please.)

- Teaming. Both Teacher and TA instruct the whole class altogether.



- Other



Having in mind the classroom and the child with SEND you selected, how long have you supported the child with SEND on a differentiated (simpler activity) or different activity (on a different topic, subjects) as compared with the rest of the class in the last three school days?

- Always
- Very often
- Sometimes
- Rarely
- Never

Having in mind the classroom and the child with SEND you selected for the answers above, how long have you supported the child with SEND on literacy activities outside the classroom (i. e. ARPA, corridor, etc.) in the last three school days?

- Always
- Very often
- Sometimes
- Rarely
- Never

The end

Thank you!

Appendix C. Headteacher Consent form/Questionnaire

Date

Dear Headteacher,

Your school has agreed to take part in a project aimed at understanding the role of teaching assistants (TAs) in literacy education. The aim of this research project is to explore the TA activities and interactions with pupils with Special Educational Needs and/or Disabilities (SEND) during literacy hours. This research hopes to enhance existing knowledge about the TA role in schools.

As part of this research, the researcher asks you to complete the questionnaire attached to this information sheet. By and large, the questionnaire regards the demographics and the learning needs of the child with SEND that will participate in this research.

For further information, do not hesitate to contact me privately.

Your personal data will NOT be used in this research or for any other purpose.

Yours sincerely,

Lorenzo Ciletti

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Further information on how UCL uses participant information can be found here: www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice

The legal basis that would be used to process your personal data will be performance of a task in the public interest. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project.

If we are able to anonymise or pseudonymise the personal data, you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at dataprotection@ucl.ac.uk.

To get further information about Data Protection, Please read UCL's Participant privacy notice on the following page: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Lorenzo Ciletti; E-mail: lorenzo.ciletti.18@ucl.ac.uk [mailto:](mailto:lorenzo.ciletti.18@ucl.ac.uk) Tel. 07470 998928

Dr Julie Radford (Senior Lecturer and Project Supervisor); Email j.radford@ucl.ac.uk

Dr Matt Somerville (Senior Teaching Fellow and Project Supervisor); Email m.somerville@ucl.ac.uk

Respondent details

Name (in block letters): _____

Professional role in the school: _____

Date : _____

Signature _____

Pupil with SEND's Questionnaire

Demographics

1. Could you tell me the age of the child?

2. Could you tell me about the sex at birth of the child?

Male

Female

3. Could you tell me if Italian is the first language of the child?

Yes

No (if no specify his/her first language here

.....)

4. Could you tell me the ethnicity of the child?

- White (Italian)
- Latino
- Black
- Asian
- Other ethnic group

5. Is s/he eligible for Free School Meals?

- Yes
- No

Data on his/her difficulty/disability

6. Is the child entitled for:

- IEP support
- PDP plan
- None of the above

7. Could you specify the primary types of need of the child? (*more answers are possible*)

- Sensory Impairment (if so, specify the impairment below
.....)
- Physical Disability
- Specific Learning Difficulties (SpLDs)
- Moderate Learning Difficulty (MLD)
- Severe Learning Difficulty (SLD)
- Profound and Multiple Learning Difficulty (PMLD) (If so, specify
below
.....)
- Speech, language, and communication needs (SLCN).
- Social, emotional, and mental health (SEMH).
- Autistic spectrum disorder (ASD) or Asperger Syndrome (If so,
specify which one here
.....)
- Other difficulties/disabilities (if so, specify the difficulty/disability
below
.....)

Data on support received

8. Could you specify the kind of teaching extra help that the child receives from teaching assistants/other adults working for the school? (*Not considering medical and social care provided by third parties – Local Authorities - LAs, National Health Service – NHS or Voluntary Organizations*)

- Amount in hours of teaching assistant extra help

- % Of teaching extra help over a school week

9. Could you specify the help that the child receives from professionals of third organizations (e. g. NHS, LAs, Voluntary organizations) during school hours?

- Amount in hours and kind of extra help (*e. g. two hours of speech therapy provided by ...*) _____

- % Of total non-teaching extra help over a school week

10. Could you rate his/her level of needs from 1 to 5? (*1 is the minimum level of need and 5 the highest*)

Additional questions

Children of the school

Nursery school	Total children
Total children	

Primary schools	Number of classrooms	Total children
Year 2		
Year 3		
Year 4		
Year 5		
Participating Year 5		
Year 6		

Secondary school	Number of classrooms	Total children
Year 7		
Year 8		
Year 9		

Children with SEND

1. Nursery school

<i>Type of SEND and non-Italian</i>	<i>Total number</i>
Italian is not the first language	
Children with an IEP	
Children with Specific language impairments	
Other children with SEND	

2. Primary school

<i>Type of SEND and non-Italian</i>	<i>Total number</i>	<i>Participating classroom</i>
Italian is not the first language		
Children with an IEP		
Children with Specific language impairments		
Other children with SEND		

3. Secondary school

<i>Type of SEND and non-Italian</i>	<i>Total number</i>
Italian is not the first language	
Children with an IEP	
Children with Specific language impairments	
Other children with SEND	

Teaching staff – Full time equivalent

	<i>Nursery school</i>	<i>Primary school</i>	<i>Secondary school</i>
Teachers			
TA			
Additional teaching staff			
Others			

Appendix D. Systematic observation: coding process

TA behaviors, interactions, and support strategies were coded within intervals of 10 secs (see Table 42). Choices of coding were made on the basis of predominant activity sampling. Categories were mutually exclusive. Therefore, in every interval, the observer coded the longest-lasting category of the many listed in the observation schedules.

When selecting this strategy, a problem of coding arises when two or more mutual categories have the same time length. To cope with this, I chose to code the first behavior/interaction that appeared within the interval.

Table 35 Observational schedule (i): TA deployment

TA working with	Definition
<i>Child with SEND</i>	The TA is talking to/listening to the participant child with SEND.
<i>Another individual child with/out SEND</i>	The TA is talking to/listening to any other individual child in the classroom, who is not the participant child with SEND.
<i>Group of children</i>	The TA is talking to/listening to a group of children. This interaction may or may not involve the participant child with SEND. Also, the size of the group of children is not relevant.
<i>Whole classroom</i>	The TA is publicly interacting with the whole classroom. That is, the TA is talking to/listening to a child/ren in the classroom in a plenary mode.
<i>Teacher</i>	The TA is talking to/listening to the teacher
<i>No interaction, audience or focus on people</i>	The TA is not interacting with anyone in the classroom. S/He is writing/marking/working individually. Or s/he is distracted/off task.
<i>Other</i>	In this category, the observer coded any other circumstances, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.

Table 36 Observational schedule (ii): TA types of support

TA types of support	Definition
<i>Pedagogical support</i>	Verbal and/or semiotic interaction (i. e. body language, facial expressions, etc.) used to support the child/ren with the learning objectives of the lesson.
<i>Behavioural management</i>	Verbal and/or semiotic interaction that attempts to manage child/ren's poor behaviour (i. e. bullying, throwing materials, etc.). The interaction focuses on child/ren's behaviours and does not relate to tasks and/or academic activities.
<i>Procedure/Routine</i>	Individual activity, verbal and/or semiotic interaction directed towards the organization of lesson's materials, planning tasks, and the like.
<i>Engagement on task</i>	Verbal and/or semiotic interaction are designed to enhance children engagement on tasks and/or attention to classwork.
<i>Social support</i>	Verbal and/or semiotic interaction are designed to enhance and/or facilitate children's peer interactions. All kind of peer interactions (i. e. social, task related, pedagogical, etc.) are included in this category.
<i>Emotional support</i>	Verbal and/or semiotic interaction about children and/or individuals' social status (i. e. appearance, health, etc.).
<i>Not supporting</i>	No direct support to children's activities, social and/or behavioural needs. This category includes the act of listening to children and adults' speaking.
<i>Other</i>	In this category, the observer coded any other circumstances, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.

Table 37 Observational schedule (iii): TA types of interactions

TA interactions/not interaction		Definition
Questioning	Recalling facts	Questions that attempt to recall facts or learnings of previous lessons and/or hours-minutes.
	Offering ideas (closed)	Questions that ask for a Yes/No answer and/or multiple choice's questions.
	Offering ideas (open)	Questions that require the respondent to think and offer an opinion (i. e. why questions, what do you think's questions, etc.).
	Praising behaviour or work	Rhetorical questions to praise a good behaviour/answer/work.
	Critiquing behaviours or works	Rhetorical questions to critique a poor behaviour/answer/work.
	Imposing an order	Rhetorical questions to impose a behaviour/answer/work.
	Other	In this category, the observer coded any other questions, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.
Statements	Statement of facts, ideas, problems	Statements that attempt to recall facts or learnings of previous lessons and/or hours-minutes.
	Feedback (praise behaviour or work)	Statements to praise a good behaviour/answer/work.
	Critiquing behaviours or works	Statement to critique a poor behaviour/answer/work.
	Reading/Dictating	Statement that attempt to read or dictate words/texts.
	Imposing an order	Statement which imposes a given behaviour/answer/work.
	Other	In this category, the observer coded any other statements, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.
Body language	Gesturing	A movement of a part of the body that expresses an opinion and/or emotion towards the individual's behaviour/work/speak (i.e., HI five, winks, pointing, etc.).
	Focusing	Watching/looking other individual/s' working/speaking.
	Other	In this category, the observer coded any other silent interactions, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.
Listening	Listening reading	Listening other individual/s reading a text/word.
	Listening talk	Listening other individual/s interacting or talking individually.
	Other	In this category, the observer coded any other listening activities, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.

Table 38 Observational schedule (iii): location and working context

Contexts		Definition
Location	Inside the classroom	The participant dyad (TA and child with SEND) is recorded inside the classroom.
	Outside the classroom	The participant dyad (TA and child with SEND) is recorded outside the classroom (i. e. corridors, another room, Additionally Resourced Provisions - ARPs, etc.).
	Other	In this category, the observer coded any other circumstances, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.
Working Setting	Individual work	Children are reported working on their own (i. e. writing, reading, etc.). This activity is not directed but designed by teachers/TAs.
	Group work	Children work in group to accomplish a given task. The dimension of the group is not relevant in this category.
	Whole Class - Teacher led	In this category, the teacher is recorded interacting or talking to the whole classrooms. Also, it includes the occurrences in which the teacher is interviewing or talking publicly to individual children, while the rest of the class is listening to the discussion.
	Whole Class - TA led	In this category, the TA is recorded interacting or talking to the whole classrooms. Also, it includes the occurrences in which the TA is interviewing or talking publicly to individual children, while the rest of the class is listening to the discussion.
	Pupils' plenary	In this category, pupil/s speak to the whole classroom (i. e. present works, stories, writings, etc). In this category, the pupil/s own most of the talk, but it may be possible that the teacher/TA partially intervenes in the talk with questions/statements.
	Other	In this category, the observer coded any other circumstances, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.
Task's Content	Reading	In this category, the teacher/TA designs a reading task (i. e. Reading comprehension, reading aloud, etc.). In the case of whole class teaching or group work's working settings, this does not mean that all the children involved in the task are actually reading.
	Listening	In this category, the teacher/TA presents a topic and/or gives information and child/ren silently listen. In the case of whole class teaching or group work's working settings, this does not mean that all the children involved in the task are actually listening.
	Interaction	In this category, the teacher/TA interacts with child/ren. Teacher/TA may be reported asking various questions to child/ren, who has/have a brief amount of time to answer. In the case of whole class teaching or group work's working settings, this does not mean that all the children involved in the task are practically involved in an interaction.
	Dictation	In this category, the teacher/TA dictates a text to child/ren. In the case of whole class teaching or group work's working settings, this does not mean that all the children involved in the task are practically writing down under dictation.
	Writing	In this category, the teacher/TA designs a writing task for child/ren (i. e. writing a text, written exam, etc.). In the case of whole class teaching or group work's working settings, this does not mean that all the children involved in the task are practically writing.
	Talking	In this category, the teacher/TA designs a task in which children/individual child are requested to talk and/or present a work to the classroom/TA/teacher. Teacher/TA may be reported asking various questions/interviewing child/ren. In this task, children are designed to do most of the talking.
	Other	In this category, the observer coded any other circumstances, which are not defined in the previous codes. The observer used this category also when s/he was not certain of the above category suited to the phenomenon observed.

Differently, the classroom context was coded within intervals of 1 min. Coding decisions were made on the basis of predominant activity sampling in each of the 3 subthemes of the schedule (see Table above). When two or more mutual categories have the same time length, I arbitrarily selected those categories which were observed to have a lower frequency of occurrence. For example, “task differentiation” was positively discriminated against “same task” when both categories had a duration of 30 seconds in the intervals. In so doing, he allowed that categories with a natural brief duration were also represented in the analysis.

Table 39 Observational schedule (iv): TA (pedagogical) interactions

Pedagogical interactions		Definitions
Topic generation	Other-initiated Topic generation	In this category, the TA introduces a topic of discussion to the participant child with SEND. Absent is any form of negotiation of the topic with the child with SEND.
	Other-initiated self-topic generation	In this category, the TA presents a broad topic of discussion (i. e. verbs, paragraphing). Then, the child with SEND may express independently or be clued by the TA to express a preference in terms of specific features of the topic he/she would like to discuss.
	Child initiated topic generation	In this category, TA leaves to the child with SEND free decision about the topic of discussion. Or the child independently introduces the topic of discussion.
	Joint constructed Topic	In this category, the TA and the child with SEND construct the topic of discussion together. The dyad may negotiate the topic and reach a collective agreement. Or, the two actors may spontaneously build a topic with a sequential interaction, which is not predetermined either by the TA or the child with SEND.
Repair episodes	Other-initiated Other-repair	In this category, the child with SEND makes a mistake and/or error. To deal with that, the TA repairs the mistake/error in her/his turns.
	Other-initiated self-repair	In this category, the TA identifies and supports the self-repair of the child with SEND. In his/her turn/s, the TA gives the child verbal/symbolical clues which leads the child to an independent repair of trouble.
	Child-initiated other-repair	In this category, the child identifies and initiates to correct his/her trouble. Finally, the TA concludes the correction in her/his turns.
	Child-initiated self-repair	The child self-correct his/her own error. The TA does not provide any verbal or semiotic interaction in order to assist the child.
	Absent (Not followed up)	The mistake/error of the child with SEND is not followed up by the TA. The TA may not highlight the mistakes or catch it.
Other	Competent Interaction	In this category, the child with SEND competently answers/talks about pedagogical matters.
	Other	In this category, the observer coded any other pedagogical interactions, which are not defined in the previous codes (i. e. embedded corrections, etc.).

Finally, I chose a continuous-recording method to code all discrete categories in the TA pedagogical interaction's schedule. That is to say, the categories were coded when they appeared in the sessions. Their length was also measured.








Appendix E. Inter-Coder-Agreement (ICA)/Event sampling

I measured ICA using the time-window method for the categories coded with event sampling techniques (Mudford et al., 2009). Initially, he converted the video data into interval-format data streams of 1 second. Then, the agreement of the observations between I and a trained observer was measured when the two observers coded the same data streams with the same code (occurrence of targeted categories). A tolerance interval of ± 2 seconds was allowed to count agreement between the two data files. Non-target events that occurred in the recording were not studied (non-occurrence of targeted categories). Finally, I measured Kappa's Cohen. The process of measuring the agreement and its result are set out in the Table below.

Table 40 Inter-rater agreement: measuring Kappa with a time-window analysis

//		Main observer											Total
		Other-initiated Topic generation	Other-initiated self-Topic generation	Child initiated topic generation	Joint constructed Topic	Other-initiated Other-repair	Other-initiated self-repair	Child self-repair	Absent repair	Competent interaction	Other	Non-occurrence of targeted categories	
Trained Observer	Other-initiated Topic generation	10											10
	Other-initiated self-Topic generation		0										0
	Child initiated topic generation			0									0
	Joint constructed Topic				0								0
	Other-initiated other-repair					95							95
	Other-initiated self-repair						10						10
	Child self-repair							18					18
	Absent								70				70
	Competent interaction									50			50
	Other										0		0
	Non-occurrence of targeted categories					15	29	7	13	16		0	80
Total	10	0	0	0	110	39	25	83	66	0	0	333	
Agreement	10	0	0	0	95	10	18	70	50	0	0	253	
Agreement by chance	0.30	0.00	0.00	0.0	31.38	1.17	1.35	17.45	9.91	0.00	0.00	61.56	
Kappa	0.71												

Appendix F. Transcription rules for classroom interactions

Speech characteristics		Paralinguistic features	
WORD	The upper case indicates loud talk and shouting	...	Prolonged silence (when the symbol is by itself)
!	Emphatic and animated tone		Raised hand/s
?	Rising intonations (not always a question)		Nodding, confirming
...	The sound is drawn out and lengthened (when next to the speech)		Fearful, scared face
Heh	Laughing		Confused, disengaged face
Ah	Expression of surprise, understanding, and the fact that you notice something		Handwriting
Mm/Huh	Doubting tone	//	Unspecific paralinguistic features
=	Overlapping speech		Pointing at something or someone
(//)	Unrecognisable speech		Yawning, sleeping

Appendix G. Codebook Socio-cultural speech analysis

Table 41 Thematic codes classroom interactions: TA deployment

TA deployment		Definitions
SEND	TA direct support to Private interaction	The TA and participant child with SEND interact on a one-to-one or group mode, meanwhile the rest of the class is working on an individual task/listens to teacher/pupil's speech.
	Public interaction	The interactions between the TA and child with SEND are silently listened to the whole class.
TA indirect support to SEND	Correction of the child's written material	The TA reads and corrects the work of the participating child with SEND on his notebook. The child looks elsewhere and/or is unaware of the corrections.
	Joint correction of written material	The TA corrects the work of the participating child with SEND on his notebook. Also, the TA gazes at and/or explains the corrections to the child so that he can learn from his mistakes.
TA indirect support to Class	TA indirect support to SEND	The TA listens to the teacher and then facilitates the child's participation in the class activities by, for instance, repeating the teacher's questions, the topic of the conversations, and the like.
	TA indirect support to the class	The TA assists the teacher to deal with the curricular and procedural tasks (i.e., instructs the whole class, takes pen and pencils, etc.).

Table 42 Thematic codes classroom interactions: TA support strategies

TA support strategies		Definitions
TA task engagement	Stereo teaching	The TA repeats the teacher's questions, talk, or dictations to the participating child with SEND so that he could have a better understanding of and be engaged with the classroom task.
	TA direct the child participation	The TA enhances the classroom participation of the child with SEND. For instance, TA captures the teacher's attention through gestures or talk to allow the child to answer the teacher's questions, talk, and the like. Also, TA may stop the child from intervening in the class interactions, for example, when the classroom task seemed too challenging for the child himself.

Table 43 Thematic codes classroom interactions: TA pedagogical support

TA pedagogical tactics		Definitions
Pedagogical tactics	Immediately supply answer/re-pairer	The TA immediately supplies the right answer/correction to the child's troubles.
	No graduated support	The TA repeatedly uses the same kind of support (i.e., same type of questions, repetitions of the same information, etc.), and no gradual increase or decrease in assistance would be provided.
	Closed question	The TA designs closed questions that invites the participant child with SEND to think about two or more prescribed answers.
	Easy task	The TA designs easy tasks for the child with SEND. Then, the child immediately accomplishes the task.

Appendix H. Interview schedule

Topics	Main questions	Prompts / Further Questions	Comments
Introduction – Warm-up questions	1. Can you tell me about your role in the school?		This warmup question will help the TA familiarize with the interviewer and interview process.
		1.1. How does it differ from the role of classroom teachers?	
Literacy’s lesson topics and materials	2. Keeping in mind the classroom reported in the questionnaire, what were the learning objectives and tasks of the last classes of literacy?		
		2.1. What materials did the children use during these classes?	
Co-teaching style	3. In the questionnaire, you reported that you and the classroom teacher used the <i>One teach, one support’s</i> co-teaching style. Can you tell me a bit more about the real-world practice?		This question is just an example. It will vary on the basis of the co-teaching styles reported in the TA questionnaire. During the question, the interviewer will show the image of the selected co-teaching styles.
		3.1. Were or not your roles and positions stable throughout the lessons?	
TA deployment	4. In the questionnaire you reported frequently working with the child with SEND. Can you tell me more about this work?		This question is just an example. It will vary on the basis of a) what is reported to be the most supported child/ren in TA questionnaire; b) what was said earlier during the interview by the participant.

		4.1. How do you typically support the child: one-to-one support, small group work, etc.?	
Reasons/Decisions behind TA deployment	5. Could you tell me more about practical and pedagogical decisions for selecting a teaching style in which the teacher instructs the whole class, while you support the child with SEND.		This question is an example. It will vary on the basis of what the TA reports in the questionnaire and says during the interview.
	6. Could you tell me more about reasons, perhaps beyond your control (legal, pedagogical, training, or other reasons), that may shape your and the classroom teacher's decision about co-teaching styles.		
TA support	7. Keeping in mind the classroom reported in the questionnaire, can you walk me through the different ways that you support the child with SEND?		
<i>Example: TA enhancement on task</i>		7.1. In the questionnaire you reported supporting the classroom attentiveness of the child with SEND, what sort of things do you do or say to keep him/her on task?	This question is just an example. It will vary on the basis of a) what, in the questionnaire, is reported to be the most frequent type of support provide to the child with SEND; b) what was said earlier during the interview by the participant.
<i>Example: TA pedagogical support</i>		7.2. In the questionnaire you reported supporting the classroom learning of the child with SEND, can you explain what strategies you used to support the completion of	This question is just an example. It will vary on the basis of a) what, in the questionnaire, is reported to be the second most frequent type of support provide to the child with SEND; b) what

		the academic tasks?	was said earlier during the interview by the participant.
Reasons/Decisions behind TA deployment	8. Keeping in mind the classroom reported in the questionnaire, could you tell me more about practical/pedagogical decisions for providing procedural activities and, for instance, less relational support to the child with SEND?		This question is an example. It will depend on the basis of what the TA reports in the questionnaire and says during the interview.
	9. Could you tell me more about reasons beyond your control (i.e., legal, practical, national curriculum) that may affect the type of support you provide to the child with SEND?		
TA pedagogical interaction – pedagogical preparedness (1)	10. Can you describe what you see in the video?		To answer the question, participants will watch a video extract of the study I (twice or more times). This will show a good scaffolding performance of the teacher. Also, a bad TA scaffolding practice is shown (see x main text). Before starting the video, the interviewer will present the characters in the video (age groups, types of needs of the child with SEND); and the classroom context (i. e. task, interactional dynamic, etc.).
		10.1. What is the task about?	
		10.2. What do teacher and TA ask to the child	

		with SEND in the extract?	
		10.3. What is the response of the child with SEND?	
	11. What strategies does the teacher use to support the child's completion of the task?		Before asking this question, the researcher may show the video once more asking the interviewees to focus on the teacher's interactions.
		11.1. How does the teacher's interaction affect the child's learning of the concepts?	
		11.2. Why do you think so?	
		11.3. Why do you think the teacher interacted the way she did?	
		11.4. What are the factors that influenced her decision to act as she did?	
	12. What strategies does the TA use to support the child's achievement of the task?		Before asking this question, the interviewer may show the video once more asking the interviewees to focus on the TA interactions.
		12.1. How do TA interactions affect the child's learning of the concepts?	
		12.2. Why do you think so?	
		12.3. Why do you think the TA	

		interacted as she did?	
		12.4. What are the factors that influenced her decision to act as she did?	
	13. To what extent might you have done things differently and/or similarly to the TA in the video?		
		13.1. What other choices would you have made in the interactions?	
		13.2. What do you think would be the consequences of these other choices?	
TA pedagogical interaction – pedagogical preparedness (II)	14. Can you describe what you see?		Participants will watch a video extract of the study I of this research (twice or more times). This will show a TA bad scaffolding Practice (see Extract x main text). Before starting the video, the classroom context will be presented (i. e. task, interactional dynamic, etc.).
		14.1. What is the task about?	
		14.2. What do the TA ask to the child with SEND in the extract?	
		14.3. What is the response of the child with SEND?	

	15. What do you think about the strategies this TA used to support the child in this task?		
		15.1. How do TA interactions affect the child's learning of the task?	
		15.2. Why do you think so?	
		15.3. Why do you think the TA interacted the way she did?	
		15.4. What are the factors that influenced her decision to act as she did?	
	16. To what extent might you have done things differently and/or similarly to the TA in the video?		
		16.1. What other choices would you have made in the interactions?	
		16.2. What do you think would be the consequences of these other choices?	
Why the TA act as s/he does – TA training effectiveness	17. Can you tell me what drives your classroom practices interaction/support to children with SEND?		
	18. Do you use specific theories or teaching methods?		
		12.1.a. If so, what exactly? Could you give me some examples, please? 12.2.a How do you apply these theories/teaching	12.a and 12.b questions represent mutually exclusive scenarios.

		<p>methods? Could you give me some examples?</p> <p>12.3.a Why do you use these theories and not others?</p>	
		<p>12.1.b. If not so, why do not you use any theory or teaching methods?</p> <p>12.2.b. What does drive your practice instead?</p>	

Appendix I. Codebook Thematic analysis of interviews

Table 44 Thematic codes (interviews): co-teaching styles

Themes – subthemes- codes			Definition
What Co-teaching styles	Layout	TA and Child with SEND in the first row (Table rows layout)	The classroom has a classical table-row layout. The TA and the child with SEND are next to/in front of each other in the first row.
		TA and Child with SEND isolated from the rest of the classroom (Table rows layout)	The classroom has a classical table-row layout. The TA and the child with SEND sit isolated from the other rows. For instance, they are either in the last row or isolated from the other rows.
	Working Context	Whole class teaching - 3 moments	Three distinctive phases can be elicited in the class activities. Initially, the teacher generates the topic of discussion. Then, there is a question-and-answer session (Q&A) in which the teacher elicits the children's understanding of the topics. Finally, the children work individually on a task.
		Whole class teaching - 2 moments	Two distinctive phases can be elicited in the class activities. Initially, the teacher generates the topic of discussion. Finally, there is a question and answer's session (Q&A) in which the teacher elicits the children's understanding of the new topics.
	OTOA style	The teacher teaches and the TA stays in position	The teacher manages the overall classroom activities, meanwhile the TA keeps a stable position next to the child with SEND to help him with the understanding and completion of the classroom activities.
		The teacher teaches and the TA moves around bases	The teacher manages the overall classroom activities, meanwhile the TA moves across the classroom. For instance, the TA could work alongside the teacher and then move towards the desk of the child with SEND to assist her/him with the classwork. Also, the TA could walk around the class and support group/individual child/ren in need.
Why selecting a given co-teaching style	Severity of the needs	Co-teaching trap	The TAs must be in close proximity and provide constant assistance to children with severe needs (i.e., emotional and learning difficulties) as they cannot deal with the classroom activities by themselves.
		Co-teaching freedom	Children with mild needs deal with the classroom activities by themselves and thus leave the TA free to operate in the classroom (i.e., teaming, alternative teaching, etc).
	Co-teaching unpreparedness	No training on co-teaching matters	The lack of training on co-teaching matter constrains TAs and teacher to design the most intuitive co-teaching teaching approach, namely the OTOA.
		Unawareness of co-teaching styles	The TA seems to be unaware of alternative co-teaching solution other than OTOA.
		Inadequate joint planning of lesson	The TA complains of an inadequate collaboration between herself and the teacher. This poor collaboration has a negative impact on the way the two could plan and modify co-teaching styles throughout the lesson.
	Others	Good will	The TA complains of a lack of goodwill of TAs and teachers to collaborate with each other.
COVID-19 regulations		Covid-19 regulations constrain any co-teaching style but OTOA styles.	

Table 45 Thematic codes (interviews): TA class role

Themes – subthemes- codes		Definition		
TA Audience/auditor	TA direct support to children with SEND	The Teacher TA	The TA designs the classroom tasks of children with SEND and assists them in their completion.	
		The Assistant TA	The child with SEND deals with the classroom activities as much as any other children of the class. At times, the TA supports the child in dealing with the classroom tasks.	
	TA indirect support to children with SEND	Educational related activity	The TA is involved in many educational activities for the children with SEND such as the assessment of the children's needs, designment of IEPs, and the like.	
		Support to the child's inclusion	The TA assists the children with SEND inside the classroom by acting upon their peers and teachers. For instance, the TA can instruct/advise peers and teacher on how to interact with the child with SEND.	
	TA direct support to children without SEND	Direct support to the child with SEND and indirect benefit for the whole class	The TA individually supports the child with SEND so to keep the class up to speed.	
		Support to the teacher	The TA could play a different role in assisting the teacher's activity. For instance, the TA could advise the teacher to adapt or improve classroom methodologies. She can also assist the teacher with procedural tasks.	
		Teaching the whole class	The TA instructs the whole class. This often happens when the teacher is absent.	
	Why - TA audience	Preparedness Trap	TA training trap	The TA are better prepared than teachers on SEND matters and worse off on whole class instructions. Therefore, the TA tends to prefer dealing with the education of children with SEND.
			Teacher training trap	The TA suggests that teachers believe to be better prepared than TA on whole class teaching and worse off on in the education of children with SEND. Therefore, teachers tend to work with the whole class and leave the education of children with SEND to TAs.
TA condition of employment		Community misbelief (TA role)	Parents, school management, and children may believe that TA role just concerns with the education of children with SEND. This cultural misbelief could induce TA to work just with children with SEND.	
		De facto conditions	School policies may constrain TA to work only with children with SEND.	

Table 46 Thematic codes (interviews): TA support strategies

Themes – subthemes- codes		Definition	
TA support	TA Task engagement support	Praise and punish	The TA punishes off-task behaviours. Also, she might praise on-task behaviours so to promote the attentiveness of children with SEND.
		Stereo teaching	The TA repeats the teacher's questions, talk, or dictations to the participating child with SEND so that he could have a better understanding of and be engaged with the classroom task.
		Other - Constructivist approach	The TA designs achievable but not too easy tasks. In so doing, the children with SEND can deal and be engaged with the tasks.
	TA procedural support	Improve task engagement	The TA assists the children with SEND with procedural activities, for instance, by removing useless material from the task. In so doing, the children could reduce their time dealing with procedures and increase their on-task behaviours.
		Class readiness	The TAs assists the children with the organization of lesson materials so that s/he can be ready to deal with the class activates. The assistance is delivered before the start of the lesson or at the end of it.
		Emotional support	The TA sets routine for children with SEND. In so doing, they reduce the unpredictability of the class events and related anxieties.
	Social Support	TA manager of interaction	The TA manages the content and the type of interactions between the children with and without SEND.
		TA instruction of social skills	The TA supports the learning of social skills for children with SEND by directly instructing them on social skill matters, for instance, on how to deal with peer interactions, talk in public, and the like.
	Why TA support	Children type of needs	Diagnosed needs
Task related needs			TA type of support varies as the task changes. For instance, the child with SEND may face difficulties in dealing with a classroom activity and so be disengage with it. In such case, the TA would support the children with the task and his engagement with it. Perhaps, in a subsequent task, the children may be engaged and need no specific support.
Remitting needs			The needs of children with SEND could vary throughout a school year and this seems to influence the way the TA assists such children. For instance, at the beginning of the year, the children may show difficulties in interacting with peers and thus may need to be supported in such regard. Meanwhile, at the end of the school year, they could establish good relationship with the peers and thus they may not need social support anymore.
Preparedness Trap		No training on relational and emotional support	The TA suggests that there is a limited availability of training on non-pedagogical matters, for instance, emotional regulation strategies, social skill support.
		Theoretical unpreparedness	The TA seem to show inadequate preparedness on non-pedagogical matters. The TA does not have a clear idea in mind on how to support the socio-emotional development of children with and without SEND.
Conditions of employment		National Curriculum	The TA suggests that the national curriculum hinge on and encourage academic activities over socio-emotional work.
COVID-19 regulations		COVID-19 social distancing regulations limits the children's proximity and so their chances to interact. Consequently, TA cannot provide support on peer interactions to the children.	
Other		In this category, I coded any other factor that influence TA class role, which are not defined in the previous codes (i. e. good will, etc.).	

Table 47 Thematic codes (interviews): TA pedagogical preparedness

Themes – subthemes- codes		Definition	
TA pedagogical interactions	High support	Competent interactions	The TA designs easy tasks for children with SEND, who immediately completes them.
		Closed questions	The TA uses closed question and constrains the cognitive effort of the children with SEND on prescribed answers.
		Tools	The TA provides the child with SEND with compensatory tools such as multiplication tables, tables with grammar rules, and the like. The children could use such tables throughout the classroom activities.
		Other initiated other repair	The TA initiates and repair the children's mistakes
	Low support	The TA uses repair and support tactics conforming to scaffolding principles (i.e., graduated support, etc.).	
	Memory-based strategy	The TA asks the child to recall previous activities and solutions to deal with the current tasks.	
Reflection on TA practice (video eliciting practice)	Unclear, conflicting reasoning	The TA does not raise clear pedagogical arguments. The TA provides uncertain, conflicting, and unclear rationales to justify her/his judgements.	
	Good solution (I would act like Gloria & similar alternative solutions)	The TA suggests that immediately providing the task's solution/repair to children with SEND is a good pedagogical tactic.	
	Good if	The TA reports that an immediate correction to children's mistakes may be a good tactic just in given circumstances, for instance, at the start of the school year, when the child knows the answer, and the like.	
	Other educational reasoning	The TA suggests that an immediate repair of children's mistake is the wrong pedagogical solution. Nevertheless, the child could have an emotional boost as a result of receiving the answer and publicly communicating it to the rest of the class.	
	Scaffolding reasoning	The TA provides scaffolding rationales of why providing an immediate repair to children's mistake may be unhelpful for children's learning.	
Other	In this category, I coded any other types of rationale that the TA provides in the interview, which are not defined in the previous codes (i. e. ecological rationale, etc.).		
The role of training in the pedagogical practice	Ineffective training	Curriculum gap	The TA reports how the TA training and courses have some methodological gaps. It does not provide TA with important information, for instance, co-teaching courses, pedagogical course, and the like.
		Idealised courses	The TA reports that TA training hinges on idealised methodologies that cannot be applied into practice.
		Little if any impact	The TA Training have little, if any, effect on TA practice.
	Other	In this category, I coded any other types of rationale that the TA provides in the interview, which are not defined in the previous codes (i. e. ecological rationale, etc.).	

Appendix J. Interview extracts

Quale è il ruolo del docente di sostegno? Similarità e differenze di ruolo con il docente ordinario?

00:00:31 Altoparlante 1

Allora, per quanto mi riguarda, il mio ruolo come docente di sostegno e paritario a quello del docente di classe. Non mi sento assolutamente un docente e collaboratore, ma mi sento un docente organizzatore dove le attività... dove chiedo alla collega le cose che durante la programmazione quindi settimanale, chiedo quale sarà le attività che farà durante la settimana, dopodiché io preparo il materiale a casa.

Commented [CL1]: The TAs do not want to collaborate, it is easy

Ovviamente l'alunno di cui io ho menzionato nel questionario è un alunno di classe quinta che ha un ritardo cognitivo lieve e da una manifestazione oppositiva provocatoria, nonché una bassa autostima.

Quindi il mio lavoro come docente di sostegno va soprattutto ad andare a rafforzare la sua autostima e poi dopo iniziamo... perché all'inizio della delle attività, qualunque essa sia il bambino assume un atteggiamento oppositivo e non vuole quindi lavorare e spesso e volentieri va in comportamento problema.

Prima di iniziare qualsiasi attività didattica devo far sì che il bambino rientri in sé, che sia propositivo e abbia voglia, poi, dopo di lavorare, perché spesso accade che comunque con i bambini che hanno un ritardo cognitivo lieve ma hanno questa manifestazione oppositiva provocato hanno una scarsa motivazione allo studio, anche perché pensano di non poter arrivare da nessuna parte. Hanno poca fiducia in sé, e nel caso specifico del bambino che io seguo.

Non ha un'autonomia sociale e conseguenza lo devo aiutare nell'organizzazione del materiale scolastico. Se ti dico prendi il libro di italiano lui prende il quaderno: non ha l'autonomia sociale.

E di conseguenza, una volta preso tutto il materiale, se la docente di italiano sta facendo un esercizio di grammatica che riguarda per esempio l'analisi logica, il bambino ha una programmazione differenziata perché sta ancora acquisendo quella che la strumentalità di base.

Commented [CL2]: The teacher teaches and the TA moves around bases

00:03:02 Altoparlante 2

La docente ordinaria cosa fa?

La docente ordinaria spiga... Spiega quello che diciamo ha... Aveva già programmato, quindi, di conseguenza fa lezione frontale... lezione frontale.

Commented [CL3]: 3 moments - Topic generation, Q&A sessions and individual task

00:03:29 Altoparlante 2

A livello di legge ci sono delle differenze di ruolo tra docenti, sostegno e docente ordinario?

Absolutamente no, Assolutamente no. Anzi, ti dirò che con il nuovo pei i docenti di sostegno, i docenti curricolari, ancor di più rientrano all'interno di un progetto educativo, progetto di vita degli alunni e quindi non ci può più essere questo modo di pensare al docente di sostegno come docente del bambino.

Perché nell'immaginario collettivo, per lo meno per tutte le scuole che ho girato e questo, il docente di sostegno e docente dell'alunno disabile e che se ne occupa in tutto e per tutto, dove la docente curricolare si occupa degli altri alunni.

Quindi, di conseguenza, in Italia non c'è il distinguo tra docente di sostegno e docente di classe docente curricolare. Hanno la contitolarità della classe, cioè io docente di sostegno, ovviamente anche negli schemi che te mi hai inviato ((co-teaching))... C'è questo interscambio tra docente di classe, docente di sostegno. Io quest'anno mi sono capitate pochissime occasioni, per quello non l'ho menzionato.

Commented [CL4]: The TAs do not want to collaborate, it is easy

00:04:46 Altoparlante 2

Appendix K. Translation interview extracts

Interview (reference)	Original Version	Translated version
Alba, interview n. 1	Lore sono distanziati, ognuno per conto suo, uno per uno, e quindi non uno di fianco all'altro.	They separated, every child by themselves, one by one, hence not next to each other.
Giovanna, Interview n. 3	Le insegnati di sostegno spesso siedono a fianco al bambino disabile e pertanto hanno una visione parziale della ecologia della classe.	The TAs often sit next to the children with SEND and have a partial vision of the classroom ecologies.
Imma, Interview n. 22	Ecco allora, per esempio, se c'è un momento di spiegazione più di un argomento nuovo [...] e, io sono vicina tra l'altro alla bambina con disabilità [...], così dai un po' un occhio se la bambina sta seguendo la lezione, la solleciti a non distrarsi.	For instance, [the teacher] introduces a new topic [...], I am close to the child with SEND [...] to check whether she makes mistakes [...]. [I may check if] she is attentive to the lesson and [if not so, I may] prompt her attention.
Lina, Interview n. 23	Allora negli ultimi giorni era più un consolidamento degli ultimi apprendimenti, per cui il docente ordinario consegnava magari degli esercizi principalmente su schede. E poi una volta che tutti i bambini l'avevano davanti spiegava la scheda, e poi tendenzialmente la maggior parte di loro svolgeva il compito in autonomia. Io dovevo seguire [...] per riuscire a completarla. Quindi io sono sempre stata con lei, ma non solo con lei, perché comunque i bimbi [...] più venivano magari a chiedermi "aiutami, maestra per favore non ce la faccio".	In the last days, there has been a consolidation of the last topics. Therefore, the teacher may have given the children some semi-structured exercises on printed material. Once all children had their material, [the teacher] may have [then] explained the task. After this, every child independently [would have] worked on the task. [While the teacher was doing so], I had to assist the child with SEND [...] to complete the task. Therefore, I have always been next to her, but not only [assisting] her; because other children [...] come close to me and asked me, 'please help me, I cannot do it by myself.
Jemma, Interview n. 17	Allora guarda, in linea di massima, una spiegazione, c'è un'osservazione. Magari, c'è uno scambio sicuramente tra noi. Quindi potrei parlare io, poi potrei passare la parola alla collega, potrei aggiungere. Lei potrebbe intervenire, è proprio un dialogo con la classe. Quindi, parlo io e la collega osserva parla la collega ed io osservo. [...] Questa situazione potrebbe cambiare nel momento in cui vedo che ci sono dei momenti di distrazione da parte dell'alunno; quindi, [...] mi porta ad allontanarmi dalla mia collega e avvicinarmi appunto all'alunno.	Look, in general terms, you introduce a new topic [to the class], and there is an observation. Perhaps, there is a role exchange between us. I can talk [to the class] and then pass the talk over to the teacher, who may add something. [...] While I talk, [the teacher] may observe the class. Alternatively, the colleague may talk, and I observe. [...]. This situation may change when I see that [for instance] my child [with SEND] gets distracted [...], so I need to leave the colleague and get closer [to the child]
Laura, Interview n. 5	Può succedere che l'insegnante inizia la lezione. Io sono vicina al bambino e osservo i bambini. Metti che i bambini diminuiscano l'attenzione o che il bambino non capisca un argomento [...]. In quel caso, io semplifico la spiegazione dell'insegnante così che i bambini possano comprendere meglio. In altri casi, io posso [...] disegnare qualcosa alla lavagna [...]: un'immagine, uno schema, una mappa dell'argomento [...]. I bambini lavorano in compiti individuali [...] e io e l'insegnante muoviamo tra i banchi per controllare cosa stanno facendo, e aiutarli nel compimento del compito [...].	It may happen that the teacher starts the lesson [presenting the new topic]. I am next to her and observe the children. Suppose I notice that the [children's] attention diminishes or see that a child did not understand the [new] topic [...]. In that case, I rephrase [the teacher's explanation] so that the children may understand it better. Alternatively, I may [...] draw something on the board [...]: an image, some schemes, a map of the topic [...]. [Then, when] the children are involved in an individual task [...], the teacher and I move around the classroom to check what the children are doing and assist whether they cannot accomplish the task [...].
Paula, Interview n. 15	Può succedere che inizialmente, quando l'insegnante introduce un nuovo argomento	It may happen that initially when [the teacher] introduces a new topic and task [...], I assist the

	[...] io aiuto il bambino, dando maggiori informazioni. Poi, se noto che il bambino ce la fa da dolo, va bene, guardo in giro e posso camminare, e un altro bambino può chiedermi maggiori chiarificazioni sul compito.	child [with SEND] by providing more explanations. Then, if I notice that the child with SEND can handle the task by herself, all right, I look around and may move around [the classroom], and another child may ask me for a clarification
Paula, Interview n. 15	L'insegnate di sostegno fa e revisiona i piani individuali dei bambini; loro li firmano senza neanche vederli.	The TA made and reviewed the Individual Educational Plans for the children; [while teachers] just sign without reading them.
Ida, Interview n. 21.	Io lavoro solo con il bambino, noi facciamo solo qualche attività con la classi [...]. Per esempio, in una delle ultime classi, lei ha presentato i tempi verbali. Ovvio, i tempi verbali non possono essere compresi dal mio bambino [...] ecco perché noi abbiamo lavorato su attività filo motorie.	I work just with [the child with SEND], and we do just a few activities with the classroom [...]. For instance, in one of the last classes, [the teacher] introduced the verb tenses. Obviously, the verb tenses cannot be comprehended by the child with SEND, [...] hence, we worked on motor activities.
Lina, Interview n. 23	Allora il mio ruolo quest'anno diciamo è stato quello di facilitatore dell'apprendimento, perché ho avuto la fortuna di lavorare con una bambina che insomma non aveva gravissime difficoltà [...]. il docente curricolare trasmette un insegnamento a tutta la classe. Il docente di sostegno focalizza la sua attenzione su un bambino in particolare.	My role has been facilitating the learning [of a child with SEND]. Because I have been lucky to work with a child with mild learning difficulties [...]. [That is to say, while], the role of the teacher was of transmitting the learning to the whole class [...]; [I was] targeting my assistance to the child [with SEND]"
Ida, Interview n. 21	Allora parlando del bambino che ho scelto io. Parliamo di un bambino che ha un'età cognitiva intorno ai tre anni, se va bene. [...] E mi sembra ovvio dire che non può un'insegnante calibrare sempre la lezione di una scuola primaria su un bambino di tre anni non verbale è molto difficile. Io lavoro quindi su altre attività [...] uno ad uno con lui.	The child with SEND [I work with] has a cognitive age of three years old. Hence, the ability of this child cannot match the curriculum of the class [...]. Consequently, the teacher cannot always calibrate the lesson to a nonverbal child [with a cognitive age of] three [and] I work on a different task [...] in one-to-one mode [with the child with SEND].
Alba, Interview n. 1	Nel senso che comunque, laddove è un [...] con un ritardo cognitivo lieve, OK, ma certamente che tu puoi lavorare con la classe, perché il bambino ti segue in tutto	If the child [with SEND] [...] has a mild intellectual difficulty, of course, you can work with the class because the child follows the classroom curriculum
Leonida, Interview n. 25	Allora, è veramente faticoso poi riuscire a cambiare e/a programmare insieme le attività, anche perché spesso, ahimè, lo dico, sarà che sono anni che le mie colleghe insegnano alle classi e spesso arrivano in classe con una con nulla di pronto, tra virgolette, e quindi noi dobbiamo arrampicarci sugli specchi.	It is tough to [...] jointly plan the class activities, also because, alas, the teachers [...] do not have a lesson plan [...] and so we [as TAs] have to clutch at straws.
Kim, Interview n. 28	Interviewer: "Ho capito un'altra cosa ti volevo chiedere, secondo te e mi puoi dire no, sì, quello che ti pare, non ti preoccupare, in parte e ho visto questa scelta qui dove c'è l'insegnante di sostegno vicina al bambino bambina, insegnante di classe, che insegna alla classe. Questa scelta qui può anche essere legata al fatto che c'è poca formazione, corsi di formazione su come si insegna in due in classe; quindi, si sceglie la strada un po' più facile, dove una insegna a tutta la classe e l'altra lavora sul bambino, o sto dicendo una fesseria?"	Interviewer: "This [OTOA] selection may be connected to the fact that there is a dearth of training courses on how to instruct a class with two teachers. Hence, why do you [and the teacher] select the easiest approach available, in which one teaches the class and the other works with the child with SEND? Or am I talking nonsense?" Kim: "I cannot say no because I have never thought of taking a course on these matters. Nor has [this type of course] been proposed to me. [...] I was reflecting, and you may be right. Honestly, I have worked like this for 15 years [...] in a classroom corner [with the child with SEND]. I choose my position [...] without questioning it."

	<p>Kim: “Non posso dirti di no perché non mi è mai capitato di poter pensare di prendere parte a un corso del genere, non mi è mai stato proposto, potrebbe essere, ora riflettevo su quanto hai detto e dico sì, in effetti io lavoro così perché sono 15 anni che lavoro così, cioè anche un po' frutto di un cliché, è sempre andata così, sono entrata da supplente nell' angolino e rimango lì. Non lo so, può anche essere un po' quello, cioè può anche essere in parte un ruolo che mi assegno, io non so una posizione all'interno della classe che mi assegno da sola, non lo so, mi stai mettendo in discussione”.</p>	
Carla, Interview n. 10	<p>Interviewer: “Perché poi sebbene corresponsabili sei solo tu da docente di sostegno a lavorare con il minore bes?” Carla: “Perché abbiamo una specializzazione in più. Diciamo abbiamo una preparazione in più che ci permette di intervenire. Ecco, però penso che sia così”.</p>	<p>Interviewer: “Why are you the only one working with the child with SEND although you and [the teacher] are [by law] equal partners?” Carla: “Because we have an additional qualification [so] we can say that we are better prepared to work with the child [with SEND]. I believe this is the reason”</p>
Julia, Interview n. 18	<p>A volte i corsi le facciamo noi, non li fanno le insegnanti di classe per dire no. Qualcuno pesa io ho fardello della classe.</p>	<p>We attend training courses [on special education matters]. The teachers do not. Some [teachers] believe that they have [just] the class burden [and so do not need training on SEND matters]</p>
Linda, Interview n. 18	<p>Interviewer: “Su questo punto, ma il docente di sostegno è assegnato alla classe?” Linda: “Alla classe, in teoria” Interviewer: “In teoria, e in pratica?” Linda: “In pratica, poi ti assegnano al bambino. Cioè, ci sono molte docenti curriculari comunque convinte ed è difficilissimo farle perdere questa convinzione, purtroppo, che tu sei lì perché c'è questo bambino con difficoltà e quindi tu sei lì per lui, loro se ne lavano le mani, tanto c'è l'insegnante di sostegno”.</p>	<p>Interviewer: “Is the TA designated to work with the entire class?” Linda: “Theoretically, TAs are designated to work with the class.” Interviewer: “In theory. And what about the practice?” Linda: “In practice, they assign you to the child [with SEND]. Moreover, there are many teachers convinced [...] that you are [in the classroom] because there is a child [with SEND] and you are there just for her”</p>
Manuela, Interview n. 16	<p>Manuela: “Io sono quella di sostegno ed è giusto che cioè deve essere così, non può. non possiamo invertire i ruoli. Per legge? Per legge! [...] Cioè quella di sostegno ha un contratto di... cioè abbiamo contratti diversi. Io sono stata assegnata sostegno [...] e devo lavorare con la bambina.</p>	<p>Manuela: “I am the TA, and rightly so, [I teach the child with SEND]. We cannot change the roles.” Interviewer: “By law?” Manuela: “By law! [...] The TA and teachers have different contracts. I have the TA role and so must teach [the children with SEND]”</p>
Donna, Interview n. 31	<p>Per esempio, lui va in ansia quando l'insegnante fa un dettato e ha paura di rimanere indietro [...] Quindi io ho innescato questo gioco nel senso che gli dico: io sono la tua memoria esterna [...] memorizzo le paroline che la maestra ha dettato cercando di trovare anche un</p>	<p>For instance, [the child with SEND] gets anxious when the teacher dictates a text and becomes worried about lagging behind. [...] to deal with this, [...] I tell him, ‘Do not worry! I am your external memory storage [...], that is, I memorise the words that the teacher dictates [...], and then I help you [when you lag behind]</p>

	accordo con l'insegnante [...] E quindi se tu resti indietro [...] ti aiuto.	
Sarah, Interview n. 20	Interviewer: "Come lo supporti, nell'attenzione?" Sarah: "Eh sì, perché per mantenere l'attenzione, le attività devono avere la durata di alcuni minuti, perché lui e deve avere subito il rinforzo. Il rinforzo può essere un rinforzo positivo. Il rinforzo sociale va sempre accompagnato da un altro tangibile materiale. A lui piace il tè, quindi fa un sorso al tè. Raramente, ma molto raramente, lo punisco".	Interviewer: "How do you support the attentiveness of [the child with SEND]?" Sarah: "To support her attention, the activity should have a duration of a few minutes because she has to have a reinforcement immediately. The reinforcement may be positive, followed by another tangible reinforcement. She likes tea, and so sips tea. Rarely, but rarely, I punish her when needed."
Domenica, Interview n. 30	Interviewer: "[...] mi ha indicato nel questionario che lo supporto in questa attività procedurale all'inizio della lezione, in sostanza che fai?" Domenica: "Allora il mio bambino entra in classe, saluta, poi si siede e finisce lì. Cioè, nella prima parte io lo devo spronare. Allora "quale maestra è entrata la maestra Claudia, OK, allora quindi oggi facciamo italiano, bene, prendiamo i libri di italiano". Cioè se non glielo dico non fa nulla. Quindi tutta questa parte di preparazione, che poi consiste nel prendere il libro, il quaderno a secondo di quello che dobbiamo fare, e una penna e poi mettere via il portapenne sennò lui tira fuori tutte le matite e cominciamo a giocare. Insomma, tutta questa parte deve essere per forza supportata".	Interviewer: "[...] In the questionnaire, you indicated how at the beginning of the lesson you support the child [with SEND] in this procedural activity. In actuality, what do you do?" Domenica: "So, my child enters the classroom, says hi, sits, and then nothing. Therefore, in the initial part of the lesson, I must prompt her, '[...] Today, we have Italian so let us take the Italian book.' If I do not say so, she sits and does not do anything. [Therefore], these preparatory tasks consist of taking the book, notebook [...], pen, remove the bags [...]. All these [preparatory tasks] must be supported."
Giovanna, Interview n. 3	Con questa bambina, ad esempio, una strategia per richiamare l'attenzione e quella di non so sgomberare il banco e tenere sul banco soltanto, quaderno e matita oppure foglio e pastelli. E quindi togliere tutto quello che accessorio la merenda e libro la cartelletta, il diario, più cose ci sono sul banco più cose disturbano l'attenzione.	To support the attentiveness of [the child with SEND], it is useful to [...] keep on her desk just a notebook and a pencil [...]. Therefore, remove everything unnecessary, such as food, backpack, and agenda. The more things that are on the desk, the more likely the child may be distracted
Gina, Interview n.26	Interviewer: "L'altra attività che mi hai detto nel questionario questa attività procedurale no me l'hai messa sempre in mezzo allora cosa succede?" Gina: "No, succede che cala l'attenzione. E ha bisogno di staccare, alzarsi, camminare per la classe, scaricare e riprendere la procedura di serve, il pennarello serve il quaderno, il cartellino e questo".	Interviewer: "[In the questionnaire], you indicated how you always procedurally support the child [with SEND] in the middle part of the lesson. [can you tell me] what happens?" Gina:" So, it happens that [the child with SEND] is less attentive, so she needs time outs, [for instance], getting up and walking around the classroom. Then, she needs to go back to work by taking the colours and notebook"
Giulia, Interview n. 19	Interviewer: "Come la aiuti a livello procedurale?" Giulia: "La faccio all'inizio alla fine. All'inizio, perché lei all'inizio ovviamente arriva impancata e quindi. Anche se sono cose che lei riesce a fare tranquillamente in autonomia, però arriva veramente agitata [...] quindi per forza di cose la si deve preparare, quindi "prendi questo!"".	Interviewer: "How do you procedurally support the child [with SEND]?" Giulia: "[...] In the initial part of the lesson, [the child with SEND] panics. Although she can independently deal with [procedural activities], she arrives at school agitated [...], so she must be prepared to get ready to work, for instance 'take this'"
Stefania, Interview n. 8	Dipende secondo me dai bambini, alle problematiche dei bambini, dalle difficoltà	In my opinion, [my type of support] varies according to the children's problems and

	che hanno i bambini [...] Adesso con questa bambina devo intervenire anche per rieducarla a livello di comportamento; quindi, dipende un po' dalle problematiche dei bambini non da altre da altre cause.	difficulties [...]. I have been assisting children with cognitive difficulties; hence I did not need to manage their [bad] behaviours because there was no need of doing so. While with this current child [with SEND], I need to control her behaviour. Therefore, it depends on the children's difficulties
Polly, Interview n. 12	Interviewer: "Perché più questa tipologia di supporto e meno altro?" Polly: "[...] Perché imparare a leggere, scrivere, e far di conto. Torniamo agli anni 50, però è così".	Interviewer: "Why did [you provide majorly pedagogical] support and less so [relations and emotions]?" Polly: "[...] Because they must learn. They must learn to read, write, and calculate. We go back to the 1950s, but it is like that"
Francesca, Interview n. 14	Interviewer: "Quindi vedi anche in questo il fatto che io vario, poca informazione su relazione; quindi, faccio più un'attività di apprendimento classica?" Francesca: "Sì, probabilmente sì [...] la scuola italiana [...] è basata sull'apprendimento, [...] mentre le insegnanti non considerano le emozioni e relazioni".	Interviewer: "[...] Do you think that TA support activities and their variations are shaped by the TA training, which focuses less on relations [and emotions] and more on teaching and learning [contents]?" Francesca: "Yes, probably. [...] In Italy, [...] the school focuses on learning [subjects] [...], while teachers do not take into consideration emotions and relations [...] and maybe we are less prepared and avoid those matters, yes." (Interview no. 14)
Lina, interview n. 23	Interviewer: "Fammi capire di più pensando ad un esempio, sempre delle palline o anche un altro esempio". Lina: "No, ma anche questo andava benissimo però lei spesso sbagliava a contare, perché magari un elemento lo contava due volte o uno non lo contava e quindi abbiamo iniziato a mettere sugli elementi da contare. una Crocetta o un segnetto con una penna o una matita colorata per fare in modo che a livello visivo lei si accorgesse di contarli tutti. Oppure, se contava due volte lo stesso elemento nonostante, succede, nonostante il segno, il mio intervento era di farle ricontrollare quello che aveva fatto. "Sei sicura? Ricontrolliamo? Potresti avere visto male" Intervenivo sul farle ripensare a ciò che aveva fatto, non sul farle notare l'errore. Dopo qualche tentativo ricontavamo insieme". Interviewer: "OK, se cioè se non ci fosse arrivato dopo qualche tentativo lo avreste contato insieme". Lina: "Sì, perché poi comunque diventa anche frustrante rifare la stessa cosa troppe volte. Per cui, insomma, se dirle che ha sbagliato era per non portarla alla frustrazione, anche farle rifare la stessa cosa tante volte non aiuta; perciò, poi alla fine intervenivo in qualche modo".	Interviewer: "Tell me more, please. An example was when you were teaching [the child with SEND] with small balls. Or, also in other circumstances." Lina: "No! Also, this example was right. The child with SEND often miscounted [the small balls] because she counted a ball twice or missed some balls. Therefore, we started to put a sign across the balls she had counted. If she counted the ball regardless of the sign, my support was by asking her to check what she had done [and so I would ask her]: 'Are you sure? Shall we recheck it?' [...]. After some attempts, we were counting altogether." Interviewer: "All right! You would have counted together if the child had not got it right." Lina: "Yes, because it becomes frustrating doing the same task multiple times. [...] Making her do the same task [multiple times] does not help. Therefore, I used to correct her [...]." (Interview no. 23)
Lynn, Interview n. 13	E quindi magari non dice da solo in autonomia il verbo, l'aggettivo, l'articolo eccetera. Gli dico "cos'è un aggettivo, un nome, un verbo". Lui lo guarda, dice "un verbo", quindi necessita sempre di essere affiancato di domande come queste.	[The child with SEND] does not independently say whether [a word] is a verb, adjective, article, and the like. So, I ask [the child with SEND], 'What is this? [...] Is this an adjective, name, or a verb?', and she looks at [the word on his book] and says: 'A verb!' She needs these types of questions [...].
Francesca, Interview n. 14	Ti faccio un esempio matematica, non è detto che debbano imparare le tabelline [...] tu metti gli strumenti che possono aiutare il bambino in quella determinata disciplina.	For instance, in mathematics, it is not necessary that they need to learn the multiplications [...], so you give tools to [the child with SEND] that can help her with a given [task and/or] discipline.

Margherita, Interview n. 7	Poi, ti dico, con queste tabelle dispensative dove ci sono tutti i verbi in modo tale: "Guarda vai a cercare il verbo.	[When dealing with a mistake on verb tense, children with SEND] may use these tables where you can find all the verb tenses. In this way, you can say 'Look at this and search for [the right] tense'
Donna, Interview n. 31	Quindi, per esempio, si è lavorato negli ultimi giorni sugli aggettivi qualificativi [...] Poi mi avvicino al bambino e cerco comunque di capire quali possano essere le difficoltà. [...] è un bambino che presenta difficoltà cognitive. È anche abbastanza veloce e questo non è sempre un pregio. Ti dirò [...] Quando finisce con il suo compito, devo riempire i suoi tempi morti che non sa gestire. Lui soffre di attacchi d'ansia. Quindi ho trovato alcune soluzioni. Per esempio, gli dico facciamo un disegno."	Last few days, we have worked on the attributional objects [...]. Children have some structured tasks [for all the children]. [...] So, I get close to the child [with SEND] and try to see what her difficulties may be. She has a high cognitive function [...] and quickly completes the task. [However], this often is not a merit. [...] When [the child with SEND] finishes, I must fill her dead moments because she cannot manage downtime. [The child with SEND] suffers from anxiety, and so I found some strategies [to deal with these dead moments and consequent anxious behaviour], [...] for instance, I say to her, 'Let us make a drawing'.
Lorenza Interview n. 9	lo faccio in modo che il bambino corregga i suoi errori da solo dando se mai inizialmente un aiuto minore, ma minimo.	I help the children's independent self-repair of their mistakes by initially providing the lowest assistance.
Barbara, interview n. 29	Oppure lo avrei riportato ad un'esperienza in cui abbiamo lavorato sul pronome. [...] Quindi: "Paolo ti ricordi ieri quando abbiamo lavorato sulla frase, abbiamo fatto quella frase lì...". Perché i bambini che hanno queste difficoltà non lavorano sull'astratto, non ce la fanno.	"[To deal with the mistake on pronouns], I would bring [the child with SEND] back to an experience in which we had worked on the pronouns [...]. [For instance, I would tell her]: "do you remember yesterday when we worked on that sentence, that sentence." [I would do so] because the children with [learning] difficulties do not work abstractedly, they cannot"
Manuela, Interview n. 16	Interviewer: "Ti faccio rivedere il video... vedi che dopo le domande?" Manuela: "Glielo dice lei. Fare lo dice lei". Interviewer: "Esatto, è così, cioè ti saresti comportata alla stessa maniera tu?" Manuela: "Sì, si è capitato, è capitato per forza, cioè in certi casi lo dici. Non imparano e i devi dire la risposta"	Interviewer: "After the TA asks the questions, what did she do?" Manuela: "She supplies the answer [...]." Interviewer: "Right! Would have you done the same thing?" Manuela: "Yes, it happened. In some circumstances, it clearly happens. For instance, my child [with SEND] has learning difficulties [...], so you give the answer for small things. It depends on the task. However, after you teach them, and they cannot learn [given things], you supply the answer"
Domenica, Interview n. 30	Interviewer: "Ma che cosa fa insegnante di sostegno nel video 1?" Domenica: "OK, l'insegnante di sostegno gli gira le pagine, mostra per fargli trovare la soluzione, poi credo che gliela indichi, e poi a un certo punto, forse è proprio lei che dice [...]." Interviewer: "Fa la cosa giusta?" Domenica: "Se cercano la parola nel testo.... Non lo so" Interviewer: "Perché questo "non lo so"?" Domenica: "Al limite, se avessi dovuto suggerire, se avessi pensato che era il caso di suggerire la risposta, l'avrei fatto indicando e basta. Non l'avrei detto ad alta voce".	Interviewer: "What does the TA in the video do?" Domenica: "Ok! The TA turns the child's notebook's pages [...] then points to the answer and, at a given point in time, tells [the answer] to the child [...]." Interviewer: "I will ask you, 'is she doing the right thing?'" Domenica: "[...] If they search the word in a text, [...] suggesting the answer may be... I do not know." Interviewer: "Why this 'I do not know!'" Domenica: "At most, if I had to suggest, if I had thought it was the case to suggest the answer, I would have done so by just pointing at the answer. I would not have said [the answer] aloud"
Margherita, Interview n. 7	Interviewer: "Cosa succede nel video?" Margherita: "[...] la collega sa le potenzialità e le carenze di quel bambino, può far porre delle domande al bambino accessibili al bambino? No. Poi, ti dico, con queste tabelle dispensative dove ci sono tutti i verbi in modo tale: "Guarda Paolo vai a cercare il tempo giusto"	Interviewer: What happens in the video? Margherita: "[...] The TA definitively knows the child's learning potential and can ask an achievable question to the child. Can she? [..., Instead, I would] use these verb tables in which the child can find all the tenses so that I can tell the child 'Look here and search for the right tense'"

Stefania, Interview n. 8	Eh, dipende sempre dal bambino [...] avrei chiesto ad un altro bambino. Questo spesso accade nella mia classe. L'insegnante chiede ad un pari che dia la risposta al bambino in difficoltà.	It depends on the child. [...] I would have asked the question to another child. This often happens in my classroom. The teacher and I ask a peer to provide the answer when a child is in difficulty
Barbara, Interview n. 29	Va bene quando il bambino sa la risposta.	[It may be] all right [to supply the answer/repairer] when the child knows the answer/[repairer].
Angela, Interview n. 6	Interviewer: "Eh, ma apprende, secondo te, facendo così?" Angela: "Ma visto in questo video, ma non so, cioè non si riesce non si direbbe, e poi". Interviewer: "Quindi diresti non è una strategia corretta da usare?" Angela: "Da questo video, no, non mi sembra. Perché lei poi appunto, glielo deve proprio dire. Di fatto no". Interviewer: "Potrebbe funzionare secondo te una strategia del genere al di là da quello che vedi nel video?" Angela: "Evidente che, per carità, magari alla millesima ripetizione poi non lo so tra una settimana, come dire, stufo di sentirti suggerire si decide di rassegnarsi [...] e piano piano lei inizia a dire di me non mi diventa più autonomo." Interviewer: "Ed è possibile secondo te una cosa del genere?" Angela: "Ah, guarda. Tutto è possibile a questo punto. Io non farei come lei onestamente".	Interviewer: "Do you think the child learns [when you immediately supply the answer]?" Angela: "Well, when looking at this video, I do not know. I would say no, and then." Interviewer: "So you would say that this is not the right [pedagogical] strategy?" Angela: "In this video, it does not seem to work because [the TA] must tell him the answer. Therefore, no!" Interviewer: "Besides what you see in the video, do you think this strategy could work?" Angela: "Obviously, for goodness' sake, after the thousandth repetition in a week, the child gets bored of listening to the answer [...] the child does it independently." Interviewer: "Do you think this is possible?" Angela: "At this point, I would say that everything is possible. I honestly would not [supply the answer]."
Megan, Interview n. 12	Interviewer: "Cosa pensi di questa strategia?" Megan: "Allora, se su questa sono un po' meno d'accordo. [...] Però, ripeto, queste sono situazioni nelle quali è difficile dare un proprio giudizio su questo bambino che non conosco, cioè io potrei dire se ha fatto bene o male [...]". Interviewer: "Mi fai capire quando invece questa strategia è giusta?" Megan: "Allora questa strategia potrebbe risultare giusta nella misura in cui io vado non a lavorare sul contenuto, ma magari vado a lavorare sul grado di soddisfazione del bambino. Perché quando il bambino arriverà a dare la risposta giusta avrà una certa soddisfazione e quindi la soddisfazione può motivare l'apprendimento. Quindi se il mio obiettivo è gratificarlo faccio così, non certo perché impari pronomi personali, insomma.	Interviewer: "what do you think of this strategy?" Megan: "On this, I agree less. The child is highly supported, so he cannot learn. [...] However, this situation is hard to judge because I do not know the child. [...] I cannot really say if the TA had been right or wrong [...]." Interviewer: "Can you tell me when this strategy is right?" Megan: "This strategy may be right when I am not working on teaching concepts but the child's level of satisfaction. A satisfaction that then may support his motivation to learn. Therefore, if my objective is to support the child's emotion because he may work better [...], I would [supply the answer]. I would do so for another reason, not obviously to support the learning of personal pronouns"
	Interviewer: "Bene! Ti faccio le ultime domande. Mi hai detto che i corsi di aggiornamento sono utopici, e quindi non li puoi applicare in pratica [...]?" Lina: "Anche quelli universitari!" Interviewer: "Esatto, tutti i corsi no, Dimmi". Lina: "Certo sì, non lo so io, ma a me è rimasto particolarmente impresso uno che si rifaceva alle scuole del Nord Europa, assurdi. I muri che si muovono, proprio star war!". Interviewer: "Non funzionano perché sono utopici?"	Interviewer: "Right! I am going to ask the last few questions. You told me that the INSET training courses are idealised, therefore you cannot apply them in practice [...]?" Lina: "Also, the university courses are like that." Interviewer: "Alright! All courses..." Lina: "Of course. A course about northern European schools made a strong impression on me. [The educators] talked about moving [the classroom's] walls like in Star Wars. The courses are not modelled on reality" Interviewer: "Therefore, the courses do not work because they are idealised?"

	<p>Lina: "Eh sì" [...].</p> <p>Interviewer: "E quindi nel primo giorno di scuola dopo non aver ricevuto alcuna formazione, come hai insegnato? Come hai imparato il tuo lavoro?"</p> <p>Lina: "Ah, il mio primo girono [...] Allora io ho cercato di apprendere il più possibile dal tirocinio che ho fatto all'università. Perché poi era quello in cui vedevi cosa accadesse realmente in una classe. E ho avuto la fortuna di avere due insegnanti che mi hanno seguito per il tirocinio molto, molto brave e soprattutto molto disponibili, che mi facevano assistere anche a qualche riunione, al controllo dei compiti... Mi chiedevano di aiutarle, che ne so, a correggere, a preparare le lezioni."</p> <p>Interviewer: "Tu dici, ho appreso un po' di più dalla pratica e vedendo come fanno le altre, come interagivano le altre docenti... Però se noi facciamo un ragionamento per assurdo, se tutti i docenti apprendono gli altri docenti, può capitare che il docente da cui tu apprendi non è bravo e quindi ti portano poi a interagire in maniera sbagliata?"</p> <p>Lina: "E sì! E non da tutti i docenti... e come fai a capire chi?"</p> <p>Interviewer: "Esatto. Come fai a capire tu che non hai gli strumenti, che quello è il docente bravo e l'altro no?"</p> <p>Lina: "Eh beh, dal comportamento dei bambini secondo me. [...] Nel senso io avevo delle classi in cui quando entrava la docente di italiano sembravano dei demoni, e come entrava quella di matematica si trasformavano. Quindi qualcosa di diverso c'era in queste due docenti. Di questa differenza ti accorgi subito, e poi stando insieme a queste insegnanti cerchi di capire come mai succede questa cosa."</p>	<p>Lina: "Exactly! [...]".</p> <p>Interviewer: "Therefore, the first day of school after the [initial] teacher training, you were unprepared. [...] What did you do? How did you actually learn to do your job?"</p> <p>Lina: "Ah, so my first day [...]. I have tried to learn the most from the apprenticeship because there, you could actually see what happens in a real classroom. And, I have been lucky to have two really good teachers that supported me throughout this period and allowed me to take part in teaching meetings and marking sessions. They asked me to help them with the lesson planning or homework marking [...]."</p> <p>Interviewer: "You told me: I learn more from the teaching practice by looking at other teachers, but, for the sake of argument, if all teachers learn from other teachers, do you think it can happen that you learn from the bad teacher and so you may interact in the wrong way with your students?"</p> <p>Lina: "Of course! Therefore, you do not learn from all teachers. [However] how do you know who is a good teacher? Good question!"</p> <p>Interviewer: "[Exactly!] How do you know who is [or is not] a good teacher [...] without being [pedagogically] prepared?"</p> <p>Lina: "Eh, well, from the children's behaviours [...] For instance, when the Italian teacher goes to classroom, the children are demons, while with the math teacher they change [and behave well]"</p>
<p>Ida, Interview n. 21</p>	<p>Non posso sapere come supportare bambini sordi perché non ho studiato in merito, pertanto le invento, sì, le strategie.</p>	<p>I do not know how to support them [...] and has to invent my strategies, because I did not receive the adequate training for supporting deaf children.</p>
<p>Margherita, Interview n. 7</p>	<p>Io faccio molte cose in 20 minuti e non solo il supporto riportato.</p>	<p>I deliver many different types of support over 20 min and not just the one reported.</p>

Appendix L. Consent forms

TAs (Study 1) (translated version)

Date:

Dear Teaching Assistant,

Your school has agreed to take part in a project aimed at understanding your role in literacy education. The aim of this research project is to explore Teaching Assistant activities (TAs) and interactions with pupils with Special Educational Needs and/or Disabilities (SEND) during literacy hours. This research hopes to enhance existing knowledge about TA role in schools.

As part of this research, the researcher and his team ask to video record you for two hours per day over 6 days of literacy education. Videos will be developed just in the 5th/6th Year primary classes selected and will exclusively involve you. The video-observations will be carried out in a non-disruptive manner. In addition, we may ask you some personal information in a small questionnaire attached to this consent form.

The researcher will explain the study to the pupil/s with SEND you are predominantly working with. Their carers will receive information about the project and will be asked whether they would be willing to participate in the research. Also, staff members and children not directly involved in the study will be informed of the research.

Your name and the names of the pupils will remain confidential (e.g., when we report on the findings from the research). In addition, there will be pseudo anonymization for the storage and public use of the video and audio data, avoiding that you and other individuals could be identified.

You can withdraw from the research at any point and data collected can be destroyed up to 15 days after having been collected, please contact the researcher if you wish to do this at the email address below. The videos/recordings may be used in both printed and digital form and will be stored safely. The images/recordings will be processed and used for a minimum of 10 years.

If you have any additional questions or queries regarding the research, please feel free to contact the researcher via email at lorenzo.ciletti.18@ucl.ac.uk

Yours sincerely,

Lorenzo Ciletti

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Further information on how UCL uses participant information can be found here: www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice

The legal basis that would be used to process your personal data will be performance of a task in the public interest. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project.

If we are able to anonymise or pseudonymise the personal data, you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at dataprotection@ucl.ac.uk.

To get further information about Data Protection, Please read UCL's Participant privacy notice on the following page: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Lorenzo Ciletti; E-mail: lorenzo.ciletti.18@ucl.ac.uk Tel. 07470 998928
Dr Julie Radford (Senior Lecturer and Project Supervisor); Email j.radford@ucl.ac.uk
Dr Matt Somerville (Senior Teaching Fellow and Project Supervisor); Email m.somerville@ucl.ac.uk

Teaching Assistant Consent

Name _____

I STATE

YES NO

to have read the information about the research and CONSEQUENTLY

I HERBY CONSENT

YES NO

Lorenzo Ciletti to publish in academic papers/books information of the questionnaire attached and part of the transcription of my conversations in a fully anonymized version

YES NO

Lorenzo Ciletti to store, process and use audio and video recordings taken of me on the occasion in question, in both printed and digital form, for research purposes

YES NO

Lorenzo Ciletti to process and use video recordings taken of me on the occasion in question, in both printed and digital form, for the purpose of public training events accredited by Education Institutions (e. g. University courses, training sessions)

Data ___/___/___/

(Signature)

Consent from parents of the participating child with SEND (Translated version)

Date:

Dear Parents,

The school of your child/ren has agreed to take part in a project aimed at understanding Teaching Assistant role (TAs) in literacy education. The aim of this research project is to explore TA activities and interactions with pupils with Special Educational Needs and/or Disabilities (SEND) during literacy hours. This research hopes to enhance existing knowledge about TA role in schools.

As part of this research, the researcher and his team ask to record your child for two hours per day over 6 days of literacy education. However, a video camera will be placed in the school, targeting the TAs. In case your child is inadvertently videoed, those recordings will be stored in a way that the identification of his/her person will be not possible in any circumstances. In addition, we ask the head teacher/SENco/class teachers the demographics and level of needs of your child.

Your child's name will remain fully confidential (e.g., when we report on the findings from the research).

The researcher will also explain the study to your child in a simplified sheet (attached here) and will be asked whether he or she would be willing to participate in the research.

You and your child can withdraw from the research at any point and data collected can be destroyed up to 15 days after having been collected, please contact the researcher if you wish to do this at the email address below. The recordings may be used in both

printed and digital form and will be stored safely. The recordings will be used for a minimum of 10 years.

If you have any additional questions or queries regarding the research, please feel free to contact the researcher via email at lorenzo.ciletti.18@ucl.ac.uk

Yours sincerely,

Lorenzo Ciletti

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Further information on how UCL uses participant information can be found here: www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice

The legal basis that would be used to process your personal data will be performance of a task in the public interest. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project.

If we are able to anonymise or pseudonymise the personal data, you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at dataprotection@ucl.ac.uk.

To get further information about Data Protection, Please read UCL's Participant privacy notice on the following page: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Lorenzo Ciletti; E-mail: lorenzo.ciletti.18@ucl.ac.uk Tel. 07470 998928

Dr Julie Radford (Senior Lecturer and Project Supervisor); Email j.radford@ucl.ac.uk

Dr Matt Somerville (Senior Teaching Fellow and Project Supervisor); Email m.somerville@ucl.ac.uk

Parents' Consent

Name (1st carer) _____

Name (2nd carer) _____

WE STATE

YES NO

to have read the information about the research and CONSEQUENTLY

WE HERBY CONSENT

YES NO

Lorenzo Ciletti to publish in academic papers/books information regarding my child's demographics, level of need and part of the transcription of his/her conversations in a fully anonymized version

YES NO

Lorenzo Ciletti to store, process audio (and video recordings inadvertently taken) of my child and appropriately pseudoanonymized for research purposes

YES NO

Lorenzo Ciletti to process and use audio (and video recordings inadvertently taken) of my child appropriately pseudoanonymized on the occasion in question for the purpose of public training events accredited by Education Institutions (e. g. University courses, training sessions)

Data ___/___/___/

(Signature 1st carer) _____

(Signature 2nd carer) _____

Consent from child with SEND (translated version)

Hi,

My name is Lorenzo. I would like to ask you for some help with a project I am doing. I am going to observe you and your teachers during some lessons. It would be great if you could help me with this project as I can help to improve your education.

Things you need to know



- If during my observation, you decide you do not want to take part any more that is fine. You can ask me to stop, and I will leave the room where you are.
- I would like to video record your conversation with the Teaching Assistant during literacy hours so I can remember what you say.

Do I have to take part

No, it is up to you. You can also ask me or your teacher if you have any questions.

If you would like to take part, please tick the box, and write your name and today's date below.

Please, tick the answer that suites you:

☺ Yes, I want to take part in the study.

☹ No, I do not want to take part in the study.

Your Name:

Date:

Consent form participant TA (Study 2)

Date:

Dear Teaching Assistant,

The aim of this research project is to explore Teaching Assistant activities (TAs) and interactions with pupils with Special Educational Needs and/or Disabilities (SEND) during literacy hours. This research hopes to enhance existing knowledge about TAs' role in schools.

As part of this research, the researcher will ask you to take part in an interview on an online platform (i.e., Zoom, Google team, etc.). Only the audio recording will be stored and processed. Also, some personal information will be asked in the small questionnaire attached to this consent form.

Your name and the names of the pupils will remain confidential (e.g., when we report on the findings from the research). In addition, there will be pseudo anonymization for the storage and public use of the video and audio data, avoiding that you and other individuals could be identified.

You can withdraw from the research at any point and data collected can be destroyed up to 15 days after having been collected, please contact the researcher if you wish to do this at the email address below. The videos/recordings may be used in both printed and digital form and will be stored safely. The images/recordings will be processed and used for a minimum of 10 years.

If you have any additional questions or queries regarding the research, please feel free to contact the researcher via email at lorenzo.ciletti.18@ucl.ac.uk

Yours sincerely,

Lorenzo Ciletti

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Further information on how UCL uses participant information can be found here: www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice

The legal basis that would be used to process your personal data will be performance of a task in the public interest. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project.

If we are able to anonymise or pseudonymise the personal data, you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at dataprotection@ucl.ac.uk.

To get further information about Data Protection, Please read UCL's Participant privacy notice on the following page: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Lorenzo Ciletti; E-mail: lorenzo.ciletti.18@ucl.ac.uk Tel. +39 349 5972775
Dr Matt Somerville (Senior Teaching Fellow and Project Supervisor); Email m.somerville@ucl.ac.uk
Dr Ed Baines (Senior Lecturer and Project Supervisor); Email e.baines@ucl.ac.uk

Teaching Assistant Consent

Name _____

I STATE

YES NO

to have read the information about the research and CONSEQUENTLY

I HERBY CONSENT

YES NO

Lorenzo Ciletti to publish in academic papers/books information of the questionnaire attached and part of the transcription of my conversations in a fully anonymized version

YES NO

Lorenzo Ciletti to store, process and use audio recordings taken of me on the occasion in question, in both printed and digital form, for research purposes

Data __/__/__

(Signature)

Information sheet school staff (translated version) – Study 1

Date

Dear Staff member,

Your school has agreed to take part in a project aimed at understanding the role of teaching assistants (TAs) in literacy education. The aim of this research project is to explore TA activities and interactions with pupils with Special Educational Needs and/or Disabilities (SEND) during literacy hours. This research hopes to enhance existing knowledge about the TA role in schools.

As part of this research, the researcher will video exclusively TAs and record their interaction with a pupil with SEND for two hours per day over 6 days of literacy education. Videos will be developed in the 5th/6th Year primary classes selected. The participating TA and the child with SEND have given their consent to the use their personal data. However, video recording will be carried out in your classroom. In the case you will be inadvertently videoed or recorded, those will be cancelled or pseudoanonymized, avoiding any possible identification with his/her/their person/s.

For further information, do not hesitate to contact me privately.

If you do Not wish that you, your image, and talk (inadvertently recorded or videoed) would be stored, processed, or possibly used for research or

professional training proposes, please complete the sheet attached and return it to the headteacher as soon as possible.

If up to 15 days after the collection of the data no communication is received, the researcher will respect all the obligations stated in the body of the information sheet regarding the treatment of data inadvertently recorded or obtained.

Yours sincerely,

Lorenzo Ciletti

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Further information on how UCL uses participant information can be found here: www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice

The legal basis that would be used to process your personal data will be performance of a task in the public interest. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project.

If we are able to anonymise or pseudonymise the personal data, you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at dataprotection@ucl.ac.uk.

To get further information about Data Protection, Please read UCL's Participant privacy notice on the following page: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Lorenzo Ciletti; E-mail: lorenzo.ciletti.18@ucl.ac.uk Tel. 07470 998928

Dr Julie Radford (Senior Lecturer and Project Supervisor); Email j.radford@ucl.ac.uk

Dr Matt Somerville (Senior Teaching Fellow and Project Supervisor); Email m.somerville@ucl.ac.uk

Staff member's Consent Denial

I do NOT consent to any storage, process or use of my personal data and I do NOT wish to be involved in any way in this research conducted by researchers from the UCL Institute of Education at my school.

Name (in block letters): _____

Class: _____

Date: _____

Signature: _____

**The parent consent form: non-participating children (translated version) -
Study 1**

Date

Dear Parents (Carers),

The school of your child/ren has agreed to take part in a project exploring the role of teaching assistants (TAs) in literacy education. The aim of the research project is to explore TA activities and interactions with pupils with Special Educational Needs and/or Disabilities (SEND) during literacy hours. This research hopes to enhance existing knowledge about the TA role in schools.

As part of this research, the researcher will video TAs and record their interaction with a pupil with SEND for two hours per day over 6 days of literacy education. Videos will be developed just in the 5th/6th Year primary classes selected. The participating TA and the child with SEND have given their consent to the use of those data. However, the video observation will be carried out in your child/children's classes. In case your child will be inadvertently videoed, those registration will be cancelled or pseudoanonymized, avoiding any possible identification with his/her person.

For further information, do not hesitate to contact me privately.

If you do Not wish that your child's, his/her image, and talk (inadvertently recorded or videoed) would be stored processed or possibly used for research or

professional training proposes, please complete the sheet attached and return it to the headteacher as soon as possible.

If up to 15 days after the collection of the data no communication is received, the researcher will respect all the obligations stated in the body of the information sheet regarding the treatment of data inadvertently recorded or obtained.

Yours sincerely,

Lorenzo Ciletti

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Further information on how UCL uses participant information can be found here: www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice

The legal basis that would be used to process your personal data will be performance of a task in the public interest. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project.

If we are able to anonymise or pseudonymise the personal data, you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at dataprotection@ucl.ac.uk.

To get further information about Data Protection, Please read UCL's Participant privacy notice on the following page: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Lorenzo Ciletti; E-mail: lorenzo.ciletti.18@ucl.ac.uk [mailto:](mailto:lorenzo.ciletti.18@ucl.ac.uk) Tel. 07470 998928

Dr Julie Radford (Senior Lecturer and Project Supervisor); Email j.radford@ucl.ac.uk

Dr Matt Somerville (Senior Teaching Fellow and Project Supervisor); Email m.somerville@ucl.ac.uk

Parents' (Carers) Consent Denial

I do NOT consent to any storage, processing or use of my child/children's data and I do NOT wish that my child/children are involved in any way in **this research** conducted by researchers from the UCL Institute of Education at the school of my child/dren.

Child's Name (in block letters): _____

Class: _____

Date: _____

Signature (1st career): _____

Signature (2nd career): _____