

Conceptualisations of neurodiversity and barriers to inclusive pedagogy for early career teachers

Project Overview

Aims and Research Questions

The aim of this project is to advance understanding of conceptualisations of neurodiversity by Early Career Teachers (ECTs) in relation to beliefs in their capacity for inclusive practice. Its contribution aims to challenge the prevailing assumptions of normalcy in education, reliance on diagnostic labels and the perception of difference as deficit causing unwillingness by teachers to adapt their teaching in a way that could lead to systematic change. Since most existing literature about diversity in education explores factual knowledge/pedagogical strategies, this project aims to provide an alternative conceptual framework for teacher education design to prepare ECTs to teach for neurodiversity. It will apply existing knowledge about the role of reflective thinking in promoting change in teachers' beliefs and attitudes towards neurodiversity. Drawing on the theory of teacher agency for social justice (Pantić, 2015), the project aims to explore connections between conceptualisations of neurodiversity, reflective thinking, teacher efficacy and agency for inclusive practice in a holistic sense. This project will furthermore explore the perspectives of teacher educators in relation to their perspectives of neurodiversity in teacher education programmes. Contingent on a possible change of emphasis following the engagement of co-production groups (CPGs), the **research questions** (RQs) are:

- (1) How do ECTs conceptualise neurodiversity?
- (2) What are the influences on ECTs' conceptualisations of neurodiversity?
- (3) How do conceptualisations of neurodiversity affect ECTs' ways of working?
- (4) How do teacher educators' conceptualisations of neurodiversity affect teacher education programme design and implementation?

Research Methodology

A mixed-methods analysis will be employed, that takes account of ECTs' beliefs and context-embedded practices. This project will primarily focus on ECTs working in Key Stage 2 (with learners aged 7-11), since evidence and understanding of effective pedagogy at Key Stage 2 has been identified as a gap in the research literature (Archer, 2018). Additionally, whilst for most pupils, identification of needs occurs in Key Stage 1 (Ofsted, 2020), many pupils' needs continue to go unmet, so this is a critical stage for inclusive practice. A **literature review** in the first four months of the project will identify previous published research exploring relationships between the concept of neurodiversity, teaching, and teacher education, and ensure that the final research design for Work Packages 1-3 (outlined below) is informed by prevailing knowledge/theories combined with questions relevant to real-world cases raised by the CPGs.

Work Package 1: Changes in ECT conceptualisations of neurodiversity, inclusion, and teacher agency – a longitudinal cohort study (Sep 24 – June 27)

To address RQ1 and 2, surveys will be administered to 300 student teachers from HEIs in two contrasting regions, enrolled on a primary-phase 1-year teacher education programme at 4 time-points (Time 1 (T1): pre-training; Time 2 (T2): post-training; Time 3 (T3): halfway through Early Career Framework (ECF); Time 4 (T4) post ECF). **Surveys** will be designed in collaboration with CPGs and will include scales that measure teacher conceptualisations of neurodiversity and inclusion, teacher agency/efficacy for inclusive practice and reflective thinking. **Interviews** will be conducted in June 2027 (at the end of T4) with ten ECTs whose capacity to teach in a neurodiverse classroom remains high throughout the research period. These are likely to explore ways in which they developed agency for working in neurodiverse classrooms and how their conceptualisation of neurodiversity translates into inclusive pedagogy.

Work Package 2: ECT conceptualisations of neurodiversity in context – exploratory case studies (Sep 25 – June 26)

To address RQs1 and 3 in further depth, an exploratory case study design will be employed to investigate this contemporary phenomenon in depth within real-world contexts (i.e., mainstream primary schools in England). Data will be collected from multiple sources and examined for areas of convergence. In this study each 'case' is an ECT and four ECTs will be recruited, located in either large urban or small rural schools, and

trained following a SEN pathway or a generalist pathway. Selecting four cases enables feasibility and comparisons to be drawn across cases. Cases will be identified from T2 of WP1 (i.e., post teacher training) as (a) those consenting to participate, (b) showing average scores on survey scales within their pathway sample and (c) having the most available data sources within their school setting. Findings will be explored in relation to training pathway and school demographics. The design of case study elements will be developed in collaboration with CPGs but is likely to draw on Florian and Spratt's (2013) framework for interrogating inclusive practices of teachers that brings together teachers' 'believing' (in their capacity to support all children), 'knowing' (about neurodiversity/inclusion perspectives on learning as well as theoretical, policy and legislative issues) and professional 'acting' (ways of working that create adequate conditions for all learners). **Data collection procedures:** Data sources will be utilised to gain a detailed view of ECTs' experiences, thoughts and beliefs about neurodiversity, inclusion and agency in relation to those of others within the context of a complex and dynamic school system. These will include: observations of meetings attended by the ECT; analysis of documents (e.g., ; interviews with the ECT, their mentor, the Head Teacher and Special Educational Needs Coordinator (SENCo) and focus groups with members of teaching staff, including teaching assistants (TAs) and neurodiverse samples of 10 children aged 10-11 who are taught by the ECT, from each case school. Participants will also be asked how they analyse their own knowledge base to be better equipped to act in theoretically informed ways (e.g., sources of information and engagement in reflective thinking either individually or with colleagues/mentors/wider teaching community). The rich data collected from these case studies will help to contextualise findings from WP1, enabling a more comprehensive understanding of the research area.

Work Package 3: Teacher educator perspectives on teaching for neurodiversity – a qualitative analysis (Sep 26 – March 27)

To address RQ4, a qualitative design will be employed to explore in depth the positionality, beliefs, attitudes, skills, and knowledge of teacher educators regarding the preparation of student teachers for teaching in neurodiverse classrooms. Employing a qualitative approach allows teacher educators to expand on their views in depth, helping to build a detailed picture of complex issues that are to date, under-explored (Rowan et al, 2021). By combining analysis of documentation with that of semi-structured interviews, themes can be identified, enabling both explicit and implicit attitudes and beliefs to be explored, including the impact these may have on course design and implementation. **Data collection:** A sample of 12-15 primary phase teacher educators will be recruited through purposive sampling from universities in England representing a spread of geographical regions. The sample will include training providers for Qualified Teacher Status (QTS) only routes. Semi-structured interviews will cover teacher educators': worldview / philosophy of education; understanding, views and beliefs about neurodiversity; sources of knowledge that support these views and beliefs; self-identity in their role as teacher educator; and perceived effectiveness of programme to prepare student teachers for neurodiversity. Responses to these areas of questioning will elucidate teacher educators' own perspectives and the relationship between these and the ways they teach about theoretical perspectives on neurodiversity and time allocated to critical reflection within teacher preparation programmes. Initial teacher education programme documents utilised by participating teacher educators will be analysed for coverage of critical perspectives on neurodiversity including the study of diversity and social justice in education.

Online resource development (April – November 2027)

In collaboration with CPGs, a co-created online resource will be developed for incorporation within ECF Programmes, providing strategies for ECTs wishing to learn more about teaching for neurodiversity. The online resource will be evaluated by ECTs who consented in the WP1 survey to test it and provide feedback. This will be launched with an event, (co-presented with the CPGs) for practitioners, policymakers, and researchers. The resource will be in the form of a self-study element within programmes such as the UCL Early Career Teacher Development Programme. It would also work as a self-contained Continuing Professional Development resource, which can be drawn on by leaders of teachers' professional learning in schools. Content will be illustrated by examples of inclusive practice identified from the research findings.

References

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