

Case Study: Woodland Academy Trust

PROJECT DETAILS

Trust: Woodland Academy Trust, England

Project Leader: Daniel Davies, Trust-wide and National Strand Lead

Research Strand: Early Years

Research Question:

What is the impact of structured AI-supported planning on Reception teachers' pedagogy for oracy and early language acquisition, and how does its use influence predicted pupil outcomes, inclusive practice, and professional confidence?

Timeline: 2025–2026 academic year and beyond

Participants: Reception teachers and Early Years practitioners across participating schools

Study Team: Trust Assistant Headteacher, school-based digital leads, Reception teaching teams

Key Data Collection:

- Teacher-predicted Communication and Language outcomes aligned to EYFS ELGs (Spring and end-of-year, cross-school moderated)
- Anonymised planning samples and AI usage logs
- Half-termly practitioner reflections and end-of-year surveys
- Optional interviews exploring teacher experience and perceived impact
- Contextual comparison with historical cohort assessment data

The Rationale

Speech, language and communication needs continue to rise across the early years, and evidence consistently shows that early oracy predicts later literacy, attainment, and social development. At the same time, Reception teachers are planning for increasingly diverse language profiles within significant time and administrative constraints.

Reception classrooms generate rich observational data. Teachers know their children well. The challenge lies not in insight, but in the cognitive demand of synthesising that insight into sharply targeted, developmentally coherent oracy planning at cohort, group, and individual levels.

Within this context, Woodland Academy Trust is exploring whether structured use of large language models, accessed through a trust-designed prompting framework and used exclusively by staff, can support teachers' analytical thinking. Practitioners input anonymised observation summaries and cohort-level language patterns. The AI generates draft suggestions such as vocabulary progressions, adult modelling prompts, questioning stems, and inclusive adaptations. These outputs function as thinking tools.

Teachers remain the decision-makers at every stage, refining, adapting, or rejecting suggestions as appropriate.

The project does not assume that AI improves practice. Instead, it asks whether AI can sharpen professional reasoning and planning precision while preserving the relational, context-sensitive nature of early years pedagogy.

The Challenge

Across England, speech, language and communication needs are now the fastest growing area of identified special educational need in the early years. Post-pandemic cohorts frequently present with delayed expressive vocabulary, reduced listening stamina, and uneven early language exposure. Woodland Academy Trust serves communities where these pressures are acutely felt.

Reception classrooms include children with emerging SLCN, pupils learning English as an additional language, and children whose early language environments vary widely. Teachers are skilled observers of communication. Translating that insight into systematic vocabulary sequencing, explicit adult modelling strategies, and barrier-aware inclusive provision is time-consuming and cognitively demanding.

Daniel Davies, Trust-wide and National Strand Lead, frames the challenge carefully. The project does not position AI as a solution in search of a problem. It tests a focused proposition: can structured AI-supported planning help teachers think more precisely about language data and generate more coherent oracy provision without diluting professional judgment or oversimplifying developmental complexity?

The stakes are significant. Early oracy strongly predicts later literacy and attainment. Planning precision in Reception matters if gaps are to be addressed before they widen.

The Action Research Approach

The project adopts a mixed-methods action research design that recognises both the complexity of early language development and the centrality of teacher expertise.

AI is used only by staff and never by pupils. Its role is deliberately constrained to planning support: interpreting anonymised baseline and observational data, suggesting vocabulary targets aligned to EYFS Communication and Language ELGs, generating adult modelling prompts, and proposing inclusive adaptations for children with emerging communication needs or EAL profiles. Teachers retain full professional agency, treating outputs as provisional drafts rather than prescriptions.

Reception practitioners receive introductory CPD on ethical AI use and effective prompting, alongside ongoing support from school-based digital leads and the trust leadership team. AI-supported planning is trialled flexibly at cohort, group, or individual level according to practitioner judgment.

Data collection runs in parallel. Planning samples across the year are examined for evidence of increasing precision in oracy design, including clarity of vocabulary progression, explicit modelling strategies, anticipation of communication barriers, and alignment with ELG expectations. Predicted Communication and Language outcomes are gathered in Spring and at the end of the year, aligned to the EYFS framework and moderated across schools to strengthen consistency. These outcomes are treated as indicative markers rather than causal proof and are considered alongside historical cohort patterns, acknowledging demographic variation.

A distinctive feature of the design is its attention to teacher experience. Alongside pupil-related indicators, the study examines teacher confidence in addressing SLCN and EAL, perceived planning clarity, and workload impact. The project therefore evaluates not only whether AI-informed planning appears effective, but whether it is sustainable and professionally empowering.

Inclusion, Oracy, and Professional Judgment

The project is grounded in a clear pedagogical stance: oracy develops through meaningful interaction, sustained shared thinking, and responsive adult-child dialogue. AI is not positioned as a teaching agent. It functions as a planning scaffold intended to strengthen teachers' anticipation and design.

Inclusive practice is examined through the lens of Universal Design for Learning. The research explores whether AI-supported planning helps teachers anticipate barriers to communication, broaden participation in talk, sequence vocabulary systematically, and design multiple entry points for expressive language.

Central to the inquiry is the relationship between AI suggestions and professional judgment. How do teachers accept, adapt, or reject AI-generated ideas? When does AI sharpen thinking, and when might it risk flattening nuance? These questions remain integral to the study.

The Broader Significance

This case study examines the balance between technical capability and pedagogical wisdom in one of education's most relational phases. Early years classrooms are context-sensitive and resistant to standardisation. If AI is to have any legitimacy here, it must demonstrate value within clear ethical boundaries and teacher-led workflows.

Success in this project is defined primarily as evidence of increased precision in oracy planning over time, planning that is more explicit, developmentally aligned, and barrier-aware. Secondary indicators include moderated improvement in predicted Communication and Language outcomes and increased teacher confidence in addressing SLCN and EAL.

If AI-supported planning enhances coherence without increasing cognitive burden, the findings may inform trust-wide and national guidance on responsible AI use in EYFS

planning. If its impact proves limited, inconsistent, or administratively heavy, that too provides important evidence.

Either way, the project models careful leadership: beginning with a defined classroom challenge, applying structured experimentation, and testing AI as a tool whose educational value must be demonstrated rather than assumed.