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From Vygotsky's defectology to inclusion: Cultural-historical perspectives on inclusive practice in *Te Whāriki*

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Many contemporary understandings of inclusion have their roots in Lev Vygotsky's early twentieth-century research with children who experienced disability. Although the field he called *defectology* reflects the deficit-oriented language of its time, Vygotsky's work presented a profoundly social and emancipatory view of human development. Emerging from the collectivist ethos of post-revolutionary Soviet society, his theory reframed disability as a sociocultural rather than biological phenomenon. His idea that difference generates new developmental pathways prefigures the social model of disability and continues to inform inclusive pedagogy. This article revisits Vygotsky's *defectology* within its historical context and explores its influence on inclusive education, with reference to the New Zealand early childhood curriculum framework *Te Whāriki*. It argues that inclusive practice is grounded in Vygotsky's vision of education as social reconstruction, where inclusion involves transforming the social world to accommodate diverse ways of learning. The article concludes that Vygotsky's relational humanism continues to shape contemporary frameworks that emphasise equity, relational pedagogy, and mana-enhancing participation for all learner.

Introduction

Inclusive education rests on the assumption that every learner is entitled to meaningful participation and recognition within their educational community. In early childhood contexts, this philosophy is embedded in *Te Whāriki* (Ministry of Education [MoE], 2017), which positions all children as competent, capable learners and asserts their right to equitable and mana-enhancing learning opportunities. Yet the conceptual roots of inclusion extend well before contemporary movements for disability rights or educational reform. They can be traced to the cultural-historical psychology of Lev Vygotsky, whose writings on defectology (Vygotsky, 1929/1993) were among the first systematic efforts to conceptualise human development as socially mediated rather than biologically determined (Smagorinsky, 2012).

Working with traumatised children in post-revolutionary Soviet Russia, Vygotsky sought to show how social and cultural environments could transform learning and development (Van de Veer, 2017). While the term *"defectology"* may sound pejorative to contemporary readers, Vygotsky's intent was profoundly anti-deficit. In the revolutionary climate of the 1920s, he rejected medical models that pathologised disability and instead proposed that social and cultural participation could compensate for biological limitations (Smagorinsky, 2012). When Vygotsky declared that "a defect is not a minus but a plus" (1929/1993, Section 3), he was not trivialising impairment but reframing it as a site of potential transformation, where difference invites new forms of learning and participation through sociocultural means. This foundational idea that impairment is understood through sociocultural contexts anticipated the social model of disability and continues to inform inclusive pedagogies today.

Cultural-historical theory, as developed by Vygotsky and expanded by later scholars such as Leontiev (1978) and Engeström (1987), offers more than a historical account of development. It provides a framework for understanding learning as a socially mediated and culturally situated process. This perspective has profoundly influenced contemporary educational theory, giving rise to sociocultural and ecological models that view knowledge, identity, and development as relational achievements and that underpin inclusive approaches to teaching and learning.

Cultural-historical foundations

Understanding how Vygotsky's cultural-historical perspective developed within the social reconstruction of post-revolutionary Russia reveals how his thinking about disability and education prefigured later inclusive approaches (Stetsenko, 2017). Early Soviet education sought to dismantle inherited hierarchies and establish schooling as a collective endeavour that served the development of all citizens. The goal was universal participation in the social and productive life of the community, regardless of individual ability or background (Bakhurst, 2007). Within this revolutionary context, defectology emerged not as a segregated field of "special" education but as a science of rehabilitation through culture. Vygotsky's conviction that "through others we become ourselves" (Vygotsky, 1931/1997, Section 15) captures his belief that personhood arises through participation. Education was therefore not compensatory but constitutive, providing the social and symbolic means through which learning becomes possible.

Rejecting biological determinism, Vygotsky (2012) argued that development is shaped through cultural tools such as language, symbols, and social interaction, which reorganise psychological functions. He maintained that development proceeds through qualitative transformation rather than quantitative accumulation. "A child whose development is impeded by a defect is not simply a child less developed than his peers but is a child who has developed differently" (Vygotsky, 1929/1993, Section 1). This distinction between more and different reframed disability as a variation in developmental organisation rather than a measure of deficit. Education, in this sense, is the process through which such qualitative reorganisation becomes possible.

Smagorinsky (2012) describes this conception of defectology as deeply humanistic, grounded in the belief that participation in social and cultural life can transform individual developmental pathways. Bakhurst (2007) likewise emphasises that Vygotsky focused on transformation in the structure and function of psychological processes rather than their rate or volume. Development therefore involves qualitative reconfiguration, as cultural mediation reorganises perception, emotion, and cognition. From this perspective, disability is not an individual limitation but a dynamic relation among biological, psychological, and social forces, anticipating sociocultural theory's emphasis on relational and contextual learning (Van der Veer, 2017).

Key concepts in cultural-historical theory

A central principle within Vygotsky's cultural-historical understanding of disability is the distinction between a primary and a secondary disability. The primary disability refers to the biological condition itself, while the secondary disability arises from the social and psychological barriers that limit a child's participation in cultural life (Vygotsky, 1929/1993). For Vygotsky, these secondary effects were often more disabling than the original impairment, as they reflected environmental exclusion rather than inherent limitation. The psychological impact of such exclusion could be profound, shaping the child's self-concept, motivation, and sense of belonging within the social world. Education therefore holds a rehabilitative and transformative function: by providing access to mediating tools and social interaction, it can reorganise experience and reduce the impact of secondary disability. This insight foreshadowed later social and ecological models of inclusion, which locate barriers to learning in context rather than within the individual.

Many of Vygotsky's most influential concepts, including social mediation and the zone of proximal development (ZPD), originated in his studies of children who were blind, deaf, or cognitively diverse (Van der Veer, 2017). These studies demonstrated that learning potential is not constrained by impairment but enabled through collaboration and symbolic mediation. Within the ZPD, learners develop through shared activity with others, illustrating that education is inherently relational. In inclusive terms, the ZPD represents a model of mutual support rather than hierarchy, dissolving distinctions between "normal" and "special" education. Del Río and Álvarez (2007) extend this relational focus in their ecofunctional interpretation of the ZPD, which includes the material and environmental as

active participants in learning. For children with disabilities, such distributed cognition highlights that borrowing the capacities of others and the affordance of the environment is a normal feature of human development.

This ecological view aligns with Vygotsky's broader notion of compensation through culture, which holds that society provides the means for development through social and cultural participation. Learning arises through engagement in mediated activity, a principle consistent with inclusive pedagogy's emphasis on environmental adaptation and equity (MoE, 2017). For Vygotsky, disability becomes significant only when it restricts access to the mediating systems of culture, language, symbols, and shared activity, through which mind and self are formed. Inclusion therefore entails creating conditions in which culture is accessible to all learners. In this respect, defectology prefigures what later became known as the social model of disability, reframing inclusion as a process of social transformation. Education, he argued, must reconstruct environments to enable every child's full participation, a principle reflected in *Te Whāriki's* expectation that kaiako "actively respond to the strengths, interests, abilities, and needs of each child" (MoE, 2017, p. 13).

From the social to the relational model

Vygotsky reminds us that human thought is mediated through cultural tools and social relations; to exclude a learner from these mediational processes is to deny them the very means through which human personhood develops. Inclusion, therefore, involves more than participation within existing structures. It is an ethical and pedagogical commitment to ensuring that all learners can engage with the cultural, symbolic, and relational systems through which knowledge and identity are formed. Contemporary inclusive education extends Vygotsky's sociocultural insights by moving beyond the binary of medical and social models toward relational and ecological perspectives that foreground interconnectedness among people, places, and things (Bronfenbrenner & Morris, 2006; MoE, 2017).

These approaches are especially evident in New Zealand early childhood education, where *Te Whāriki* (MoE, 2017) and *He Māpuna te Tamaiti* (MoE, 2019) emphasise holistic, relational, and mana-enhancing learning. Both frameworks position inclusion as a living relationship between learners, kaiako, and environments, sustained through reciprocity and shared meaning-making. The relational model of inclusion aligns with Vygotsky's view of education as co-construction. It understands learning not as an individual adaptation but as a collective process in which knowledge emerges through mutual engagement and transformation. This orientation also anticipates posthuman and sociomaterial theories that decentre the human subject and recognise the agency of materials, environments, and affective relations (Hopwood, 2015). While posthumanism extends Vygotsky's relational thinking into more-than-human domains, its ethical foundation remains consistent with his collectivist humanism: the world is co-created through relation, and development arises through participation in that shared world. Viewed through this lens, Vygotsky's defectology can be reinterpreted as an early relational theory of inclusion. His conviction that education must transform society to enable the participation of all learners continues to resonate in current emphases on equity, sustainability, and interdependence across inclusive pedagogies.

Implications for inclusive early childhood practice

In New Zealand, inclusive early childhood education is grounded in the principle that every tamaiti is a taonga, a treasure with inherent mana and potential. This ethical commitment finds philosophical support in Vygotsky's cultural-historical vision, which positions difference as a source of creative possibility rather than limitation. For kaiako, this perspective invites a shift from remediation to participation, where diversity becomes a catalyst for shared learning. In practice, this orientation is expressed through pedagogies that emphasise collaboration, reciprocity, and co-construction. Teachers who draw on Vygotskian principles engage in sustained shared thinking, observe learning-in-action, and co-create narratives that recognise multiple ways of knowing (Hedges, 2012). These practices parallel the social mediation Vygotsky described and embody the relational ethics central to *Te Whāriki* (MoE, 2017).

Wertsch (2007) explains that mediation operates both explicitly, through intentional scaffolds and tools, and implicitly, through the cultural and communicative patterns that shape participation. Inclusive pedagogy requires attentiveness to both dimensions: ensuring that deliberate supports are in place while acknowledging that inclusion also unfolds through everyday language, interaction, and shared meaning-making (Whyte, 2024). Recognising "incongruence" between learners and environments encourages educators to question how institutional structures, daily routines, or behavioural expectations might inadvertently exclude some children. From this perspective, inclusion becomes an ongoing process of redesigning systems rather than merely supporting individuals in isolation (Whyte, 2024). Vygotsky's conception of defectology remains radical in this sense, calling educators to reconstruct the social and educational contexts in which learning occurs so that all children can participate fully and meaningfully in the collective life of their community.

Conclusion

Reconsidering Vygotsky's defectology through its historical and ideological context reveals it not as a relic of deficit thinking but as a foundation for inclusive and relational pedagogy. His conviction that development is always socially and culturally mediated anticipated both the social model of disability and the relational frameworks that now shape inclusive education. In the New Zealand context, this philosophy is embodied in *Te Whāriki's* vision of empowerment, holistic development, and equity, where every tamaiti is recognised as a taonga whose learning contributes to the collective life of the community (MoE, 2017). Vygotsky's legacy reminds us that inclusion is not the accommodation of the "other" but the ongoing reconstruction of educational and social environments so that all learners can participate meaningfully. Within *Te Whāriki,* this ethos is expressed through pedagogies of reciprocity, co-construction, and mana enhancement, which honour diverse ways of knowing and being.

References

Bakhurst, D. (2007). Vygotsky's demons. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 50–76). Cambridge University Press. https://doi.org/10.1017/CCOL0521831040.003

Bronfenbrenner, U., & Morris, P. A. (2006). *The bioecological model of human development.* In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (6th ed., pp. 793–828). Wiley.

Del Río, P., & Álvarez, A. (2007). Inside and outside the zone of proximal development: An ecofunctional view. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 276–303). Cambridge University Press.

Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Orienta-Konsultit.

Hedges, H. (2012). *Teachers' funds of knowledge: A challenge to evidence-based practice. Teachers and Teaching: Theory and Practice, 18*(1), 7–24. https://doi.org/10.1080/13540602.2011.622548

Hopwood, N. (2015). Sociomaterialism, practice theory, and workplace learning. In N. Hopwood (Ed.), *Professional practice and learning: Times, spaces, bodies, things* (pp. 53–115). Springer International Publishing. https://doi.org/10.1007/978-3-319-29064-7_3

Leontiev, A. N. (1978). *Activity, consciousness, and personality*. Prentice Hall.

Ministry of Education. (2017). *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa/Early childhood curriculum.*

Ministry of Education. (2019). *He Māpuna te Tamaiti: Supporting social and emotional competence in early learning.*

Smagorinsky, P. (2012). Vygotsky, "Defectology," and the inclusion of people of difference in the broader cultural stream. *Journal of Language and Literacy Education, 8*(1), 1–25. https://jolle.coe.uga.edu/wp-content/uploads/2012/05/Vygotsky-and-Defectology.pdf

Stetsenko, A. (2017). *The transformative mind: Expanding Vygotsky's approach to development and education.* Cambridge University Press. https://doi.org/10.1017/9781316493969

Van der Veer, R. (2018). *Lev Vygotsky*. Bloomsbury Academic. https://doi.org/10.5040/9781474279752

Vygotsky, L. S. (1929/1993). *The fundamental problems of defectology*. In *Collected works of L. S. Vygotsky* Vol. 2. Plenum Press. (Transcribed by A. Blunden). Retrieved October 24, 2025, from https://www.marxists.org/archive/vygotsky/works/1929/defectology/index.htm

Vygotsky, L. S. (1931/1997). *The genesis of higher mental functions.* In R. W. Rieber (Ed.), *The collected works of L. S. Vygotsky: Volume 4. The history of the development of higher mental functions* (pp. 97–120). Plenum Press. Retrieved October 24, 2025, from https://www.marxists.org/archive/vygotsky/works/1931/higher-mental-functions.htm

Vygotsky, L. S. (2012). *Thought and language* (A. Kozulin, Ed.). MIT Press. https://doi.org/10.7551/mitpress/9862.001.0001

Wertsch, J. V. (2007). *Mediation*. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 178–192). Cambridge University Press.

Whyte, M. (2024). What is inclusion? A focus on disabled children and their families. *He Kupu, 8*(2), 84–95.