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The constructivist consensus revisited: Towards theoretical integrity in educational research

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Abstract

This position paper critiques the pervasive, often uncritical, deployment of constructivism as a theoretical framework in educational research. Drawing on Laclau's theory of empty signifiers and Sartori's analysis of conceptual stretching, I argue that constructivism has become so semantically over-extended and theoretically diluted that it functions more as a legitimating device than an analytical tool. Its migration from developmental psychology into diverse educational contexts has produced systematic conflation of ontological and epistemological claims, methodological ambiguity, and a disconnect between theoretical claims and research design. Through analysis of contemporary educational research practices, I demonstrate how constructivism is routinely invoked to justify studies bearing little relationship to its foundational premises or what I term "theoretical window-dressing". The paper proposes alternative frameworks: cognitivism, critical pedagogy, activity theory, situated learning, connectivism, and humanism, which offer greater analytical potential and methodological alignment. I conclude by highlighting the dangers of theoretical promiscuity, advocating for renewed theoretical coherence, in educational scholarship.

Keywords: constructivism, empty signifiers, educational research, theoretical frameworks, cognitivism, situated learning

Introduction

In my four decades as an academic, journal editor, and adjudicator of teaching awards, I have reviewed hundreds of research proposals and journal submissions claiming to be grounded in constructivist theory. What strikes me most forcefully about this experience, is not the ubiquity of constructivism, but its elasticity. I have seen constructivism invoked to justify quantitative experimental designs and qualitative phenomenological studies, to explain individual cognitive development and collective knowledge production, to undergird behaviourist interventions and radical relativist epistemologies. Constructivism, it seems, can mean almost anything, which raises the troubling possibility that it might mean nothing at all.

This paper emerges from a growing unease about what I perceive as the “theoretical promiscuity” that characterises aspects of contemporary educational research and builds on my earlier allusion in this journal on the use of “empty signifiers” in educational research (Dhunpath, 2025). Constructivism has achieved such dominance in educational discourse that it functions less as a specific theoretical position and more as what Ernesto Laclau (1996) calls an "empty signifier": a concept so semantically overloaded, that it loses analytical precision while gaining rhetorical power. When a theoretical framework can be stretched to accommodate fundamentally incompatible epistemological positions, when it can be deployed across radically different methodological approaches without apparent tension, we should question whether it retains meaningful content (Collier & Mahon, 1993; Sartori, 1970).

The stakes of this critique extend beyond mere academic pedantry. Theoretical frameworks are not decorative accessories to research; they are the conceptual architecture that shapes what questions we ask, what data we gather, how we analyse them, and what claims we can legitimately make. When frameworks become divorced from their epistemological foundations, when they function primarily as citations of convenience rather than genuine tools of inquiry, the integrity of our research enterprise is compromised. We create what might be called zombie theories (Krugman, 2020): Concepts that continue to shamble through our literature despite being intellectually lifeless (Anderson, 2012; Phillips, 2000; Terhart, 2003).

This paper argues that constructivism has exceeded its analytical grasp and that it now obscures more than it illuminates. Drawing on Sartori's (1970) analysis of conceptual stretching and Collier and Mahon's (1993) work on conceptual validity, I examine how constructivism's migration across disciplinary boundaries and methodological paradigms has resulted in semantic incoherence. I explore the epistemological tensions within constructivist discourse, the methodological ambiguities it generates, and most critically, the systematic misalignment between constructivist theory and actual research practice that pervades contemporary educational scholarship.

My argument proceeds through four stages. First, I establish a theoretical framework for understanding conceptual over-extension, drawing on Laclau's (1996, 2005) theory of empty signifiers and Sartori's (1970) analysis of concept formation in comparative research. Second, I trace constructivism's genealogy from its origins in developmental psychology through its increasingly capacious deployment across educational contexts, documenting how this migration has produced theoretical dilution. Third, I examine the epistemological and methodological problems that arise when constructivism is stretched beyond its foundational premises. Fourth, I analyse specific instances where constructivism is inappropriately invoked, creating what I call "theoretical window-dressing." Finally, I propose alternative frameworks that offer greater analytical potential, while avoiding the conceptual overextension that plagues constructivism.

Let me emphasise at the outset that this critique is not a rejection of constructivism's genuine insights and potential, nor an argument for theoretical purity for its own sake. Rather, it is a call for greater rigour, intellectual honesty and theoretical coherence in educational research. If we are to make meaningful contributions to understanding teaching and learning, we have an

obligation to move beyond the reflexive invocation of theoretical frameworks that have lost their analytical edge. We must, as Weber (1949: 90) insists, pursue 'conceptual clarity' if our concepts are to 'perform their methodological functions'.

Theoretical lenses: Empty signifiers and conceptual stretching

To understand how constructivism has become theoretically overextended, we need to first establish a framework for analysing conceptual inflation in academic discourse. Two complementary theoretical traditions provide crucial analytical tools: Laclau's (1996, 2005) post-Marxist political theory of empty signifiers and Sartori's (1970) empiricist analysis of concept formation in comparative research. While emerging from different intellectual traditions, these frameworks converge on a central insight: concepts can become so semantically overloaded that they lose analytical precision while retaining, or even gaining, rhetorical power.

Laclau and the logic of empty signifiers

Ernesto Laclau's (1996) theory of empty signifiers emerged from his analysis of political discourse and hegemonic struggles. For Laclau (1996), an empty signifier is a concept that hegemonizes a certain political space precisely through its semantic indeterminacy. These signifiers work by creating chains of equivalence among heterogeneous demands, unifying disparate groups under a common banner without requiring genuine reconciliation of their differences. The signifier becomes "empty" not because it lacks meaning entirely, but because it means too many things simultaneously, its specific differential content evacuated in favour of a vague universality (Laclau 2005).

Laclau's (2005) account of how signifiers become empty involves what he calls equivalential logic. Initially, a signifier has relatively determinate meaning within a specific discursive system. However, as it is mobilised to unite different political projects, each with their own particularistic demands, the signifier must become increasingly abstract to accommodate this heterogeneity. This abstraction is not a weakness, but a political necessity: only by evacuating specific content can the signifier function as a nodal point around which diverse constituencies can rally (Laclau 1996)

While Laclau developed this theory to analyse political discourse around terms like "democracy" and "justice," his framework illuminates how academic concepts can undergo similar processes of semantic dilution. When a theoretical framework becomes a mandatory citation, when it must legitimate increasingly diverse research practices, it faces pressure to become emptier, to mean more by being less specific. The framework's rhetorical power derives precisely from its capacity to unite otherwise incompatible approaches under a common theoretical banner, even as this unity comes at the cost of analytical precision (Žižek, 2000).

Sartori and the problem of conceptual stretching

Giovanni Sartori's (1970) analysis of concept formation provides a complementary, more empiricist perspective on conceptual inflation. Sartori (1970: 1041-1042) argues that concepts

exist on a 'ladder of abstraction', where movement up the ladder involves reducing the concept's intension (its defining properties) while increasing its extension (the range of cases it covers). The relationship between concept and referent is inverse: 'the more abstract a concept, the less it refers to' (Sartori 1970: 1033-1053). Conceptual stretching occurs when researchers extend a concept's application to new cases without adjusting its defining properties, creating what he calls 'definitional elasticity' that undermines conceptual validity (Sartori, 1970: 1040).

For Sartori (1970), the danger of conceptual stretching lies in its effects on comparative research. When concepts are stretched to cover increasingly heterogeneous phenomena, they lose their capacity to "travel" meaningfully across contexts. What appears to be theoretical generalisability is actually analytical confusion: we use the same word to describe fundamentally different things, creating false equivalences that obscure rather than illuminate. Sartori's (1970: 1052) solution involves either reconstructing concepts with clearer boundaries or developing 'second-order concepts' that explicitly acknowledge variation within broader categories.

Collier and Mahon (1993) extend Sartori's analysis, arguing that conceptual stretching creates a fundamental tension between two attributes of social science concepts. Concepts must be sufficiently narrow to maintain analytical precision and causal specificity, enabling rigorous comparison and explanation. Yet, they must also be sufficiently broad to enable generalisation across contexts, facilitating theory-building beyond single cases. This tension becomes particularly acute when concepts migrate across disciplinary boundaries or methodological paradigms, where the pressures toward breadth may overwhelm demands for precision (Collier & Mahon, 1993).

Synthesising the framework

Together, Laclau and Sartori provide complementary lenses for analysing conceptual overextension. Where Laclau illuminates the political and rhetorical dynamics that drive semantic inflation, Sartori clarifies its methodological consequences. Where Laclau emphasises how empty signifiers enable hegemonic projects by papering over differences, Sartori shows how conceptual stretching undermines analytical validity by creating false equivalences. Both theorists, however, point to the same fundamental problem: concepts can become so capacious that they cease to perform their primary analytical function of making meaningful distinctions (Gerring, 2001, Goertz, 2006).

This framework enables us to analyse constructivism not merely as a theoretical position with which one might disagree, but as a concept that has undergone systematic over-extension. The question is not whether constructivism is "correct" in some absolute sense, but whether it retains sufficient semantic determinacy to function as a meaningful guide to research. Has constructivism become an empty signifier in Laclau's sense, a concept whose rhetorical power derives from its capacity to legitimate heterogeneous practices without requiring genuine theoretical coherence? Has it been stretched, in Sartori's terms, beyond the point where it maintains conceptual validity? These are the questions that animate the analysis that follows.

The genealogy of conceptual inflation: Constructivism's migration and transformation

To understand how constructivism became overextended, we trace its intellectual genealogy. Constructivism did not emerge as a single, unified theory, but rather as a family of related positions developed across multiple disciplines. Its migration from developmental psychology into broader educational discourse involved successive reinterpretations that gradually attenuated its conceptual specificity, transforming a relatively precise set of claims about cognitive development into an increasingly vague epistemological stance (Phillips, 1995; Steffe & Gale, 1995).

Origins in developmental psychology

Constructivism's foundational moment lies in Jean Piaget's genetic epistemology, developed through decades of research on children's cognitive development. For Piaget (1970), knowledge is neither passively received from the environment nor innately present in the mind, but actively constructed through the child's interaction with the world. This construction proceeds through processes of assimilation (incorporating new experiences into existing cognitive structures) and accommodation (modifying those structures when experiences cannot be assimilated). Critically, Piaget's constructivism was grounded in specific empirical claims about developmental stages, domain-general cognitive structures, and the primacy of individual sense-making (Inhelder & Piaget, 1958).

Vygotsky's (1978) sociocultural theory offered an alternative constructivist framework that emphasised the social origins of individual cognitive development. Where Piaget foregrounded the individual child's interaction with the physical world, Vygotsky stressed how higher mental functions emerge from social interaction, mediated by cultural tools and language. His concept of the zone of proximal development (ZPD) positioned learning as fundamentally social, occurring in the space between what a child can do independently and what they can accomplish with guidance (Vygotsky, 1978; Wertsch, 1985).

These foundational frameworks, despite significant differences, shared certain core commitments: knowledge as actively constructed rather than passively received; learning as involving conceptual reorganisation rather than mere accumulation; and the learner as sense-maker rather than empty vessel. Critically, however, both Piaget and Vygotsky developed their theories within specific empirical contexts with particular methodological commitments and relatively bounded scope conditions (Lourenço and Machado 1996).

The educational migration

Constructivism's migration into broader educational discourse during the 1980s and 1990s involved significant theoretical transformation. What began as specific claims about cognitive development became generalised into prescriptive pedagogical principles. The early constructivist education literature translated Piaget's insights into arguments for hands-on learning, discovery methods, and student-centred pedagogy (Brooks & Brooks, 1993; Fosnot

1996). Vygotsky's work was similarly appropriated to justify collaborative learning, scaffolding techniques, and social constructivist approaches (Palincsar, 1998).

This pedagogical translation involved what Fox (2001) calls "the normative fallacy": the assumption that descriptions of how learning occurs automatically translate into prescriptions for how teaching should proceed. That children actively construct knowledge does not entail that direct instruction is always inappropriate or that discovery learning is universally superior. Yet much constructivist pedagogy made precisely these leaps, transforming empirical claims about cognition into ideological commitments about proper teaching (Maye,r 2004).

Simultaneously, constructivism underwent a transformation that was at once epistemological and, crucially, ontological in character. Piaget's original theory had operated within a broadly realist ontology, that there is an external world, and knowledge is actively constructed in relation to it. What began as claims about individual cognitive processes expanded into arguments about the nature of reality itself. Radical constructivism, particularly as articulated by von Glasersfeld (1995), transformed Piaget's epistemological theory into an explicitly anti-realist ontological position: not merely that knowledge is constructed, but that "reality" itself is constituted through experience, rendering the concept of a mind-independent world theoretically incoherent.

The shift from Piaget to von Glasersfeld is therefore not simply a matter of epistemological degree; it marks a categorical ontological step, one that carries profound and distinct consequences for research design. Social constructivism similarly expanded beyond Vygotsky's focus on development to encompass constructionist claims about the social constitution of reality and this relativising has implications for the claims that can be derived from research. If one follows the ontological anti-realist route, then there is no basis for generalisability beyond the specific case/context (Berger & Luckmann, 1966; Gergen, 1999).

Contemporary over-extension

By the early 21st century, constructivism had become what Matthews (2000) calls "an educational Rorschach": a conceptual placeholder onto which diverse theoretical commitments could be projected. Contemporary educational research invokes constructivism to legitimate everything from guided inquiry to radical discovery learning, from qualitative interpretivism to design-based interventions, from cognitive apprenticeship to unstructured exploration. The concept has been stretched so extensively that it now encompasses positions that are epistemologically and pedagogically contradictory (Bredo, 2000; Phillips, 2000).

This overextension manifests in several patterns. First, constructivism is routinely invoked without specifying which variant is intended: cognitive or social, radical or moderate, Piagetian or Vygotskian. Second, researchers claim constructivist foundations while employing methods fundamentally at odds with constructivist epistemology, such as measuring learning through standardised tests assuming objective, stable knowledge. Third, constructivism functions increasingly as theoretical window-dressing: a legitimating citation that bears minimal relationship to actual research design or analysis (Howe & Berv, 2000; Prawat, 1995;).

Recent empirical research confirms these practical challenges. Nguyen (2024) documents persistent conceptual, pedagogical, and technological dilemmas facing teachers implementing constructivist practices in EFL classrooms, noting that many educators possess only superficial or misguided understandings of constructivism, due to insufficient training or cultural barriers. Similarly, Çibukçu (2025) found that while constructivist approaches can promote inclusive education, their impact on critical thinking and instructional quality remains modest, suggesting that teachers need to actively foster critical dialogue and structured feedback alongside constructivist activities. These findings underscore the gap between constructivist rhetoric and classroom reality. The question we must confront is whether this semantic inflation has progressed to the point where constructivism can no longer meaningfully guide research.

Epistemological and methodological incoherence

The conceptual overextension of constructivism generates profound philosophical and methodological problems, operating simultaneously at the ontological level (what kind of reality, if any, exists independently of the knower) and the epistemological level (how knowledge of that reality, or of experience, is formed). When a framework encompasses contradictory positions, when it is stretched across incompatible paradigms, it necessarily produces incoherence. This section examines four dimensions of this incoherence: epistemological inconsistency, the operationalisation problem, assessment paradoxes, and methodological misalignment (Kim & Sankey, 2024; Colasante, 2024).

Epistemological inconsistency

Constructivism's most fundamental incoherence lies in its epistemological heterogeneity. The framework encompasses positions ranging from moderate realism to radical relativism, positions that are philosophically incompatible (Phillips, 1997). Cognitive constructivists like Piaget (1970) remained committed to a broadly scientific epistemology: knowledge representations are constructed, but they correspond to (and are constrained by) an external reality. Radical constructivists like Von Glasersfeld (1995: 18) explicitly reject this: 'knowledge does not reflect an "objective" ontological reality, but exclusively an ordering and organisation of a world constituted by our experience'. This distinction marks a critical but often overlooked difference between ontological and epistemological claims. Piaget's constructivism is primarily epistemological: it describes how knowledge is actively constructed by a knowing subject, without denying the existence of an external, mind-independent world. Von Glasersfeld's radical constructivism, by contrast, advances a more fundamental ontological position: not merely that knowledge is constructed, but that "reality" itself is constituted through experience, rendering a correspondence between knowledge and an objective world theoretically incoherent. The conflation of these two positions, epistemological and ontological, is a significant source of the framework's internal incoherence and deserves explicit acknowledgement.

This epistemological diversity creates insurmountable problems for research grounded in "constructivism." If knowledge represents reality (moderate constructivism), then we can

meaningfully compare competing knowledge claims against empirical evidence, develop increasingly adequate theories, and speak of learning as progressive approximation to truth. If knowledge merely orders experience without corresponding to reality (radical constructivism), then such comparisons become incoherent: competing theories cannot be evaluated against an inaccessible reality, and "learning" means only constructing increasingly viable (not increasingly true) representations (Bredo, 2000; Matthews, 2000).

Yet, educational research routinely conflates these incompatible positions. Studies claim constructivist foundations while simultaneously assuming that learning outcomes can be objectively assessed, that some understandings are more adequate than others, and that knowledge progresses toward truth. This represents a conflation of two distinct philosophical registers that the paper's critique requires us to hold apart: the ontological question of whether an external reality exists independently of mind, and the epistemological question of how, and how reliably, we can know it. Constructivist variants differ on both counts, but in different directions and to different degrees. Treating them as a unified theoretical tradition obscures this fundamental divergence (Garrison, 1997; Salomon, 1998).

The operationalisation problem

Constructivism's internal divergence, spanning both epistemological and ontological registers, generates acute operationalisation problems, though these are not uniformly distributed across its variants. For constructivists operating within a broadly realist ontology, such as Piaget, operationalisation remains possible in principle: knowledge constructions can be evaluated against an independently existing world, however incompletely accessible. The acute difficulties arise specifically under ontological constructivism, where, following Von Glasersfeld, reality itself is constituted through experience and any correspondence between knowledge and an external world is rendered theoretically incoherent. The individualistic emphasis shared across variants nonetheless creates what might be called the uniqueness problem: if every learner's construction is fundamentally particular, research findings cannot travel beyond individual cases (DiSessa, et al., 2004; Howe & Berv 2000).

This problem is not merely technical but conceptual. Constructivism's core insight, that learning involves individual sense-making seems to preclude the kind of systematic, generalisable research that educational scholarship requires. Researchers typically respond through one of three strategies, each problematic. First, they simply ignore the tension, conducting conventional research while citing constructivism for legitimacy (Prawat, 1995). Second, they retreat to purely idiographic methods, producing rich case studies with minimal generalisability (Cobb, 2007). Third, they attempt methodological innovations like design-based research that aim to study learning processes systematically while respecting their situated, constructed nature, but these innovations often struggle to produce the cumulative, generalisable knowledge that theory-building requires (Kelly, 2004). I emphasise the condition of generalisability from my own standpoint as a policy scholar, whose research of and for education policy demands evidence

that sufficiently transferable to guide broader debates and practices and that can inform decision-making at systemic levels rather than remain limited to localised settings.

Assessment paradoxes

Constructivism presents profound paradoxes in the domain of assessment: If knowledge is understood as individually constructed where learners generate personal meanings that may legitimately diverge, then the question arises: how can learning be legitimately evaluated? What standards or criteria can be applied? The relativist dimension of constructivist thought implies that no construction can be deemed inherently superior to another; rather, constructions may be judged only in terms of their viability for particular purposes. Yet education, by its very nature, requires evaluation. Certain understandings prove more adequate, more generative, and more consonant with disciplinary norms than others (Gardner, 1991; Shulman, 1986).

This tension manifests in practice as what might be called "covert objectivism." Researchers claim constructivist foundations while employing assessment methods that assume stable, objective knowledge: standardised tests, predetermined learning outcomes, rubrics that specify correct understandings. Such methods directly contradict constructivist epistemology, yet they pervade studies claiming constructivist credentials (Shepard, 2000). The alternative, assessment methods genuinely aligned with constructivist epistemology, would need to evaluate learning in terms of individual viability rather than correspondence to predetermined standards, but such methods would sacrifice comparability and may fail to identify inadequate understandings (Black & Wiliam, 1998).

Methodological misalignment

Perhaps most striking is the frequency with which constructivism is routinely invoked in studies whose methodologies bear little resemblance to constructivist principles. Quantitative experimental designs that compare the “effectiveness” of constructivist versus traditional instruction necessarily presuppose that learning outcomes can be objectively measured, that pedagogical “treatments” exert uniform effects across individuals, and that knowledge is sufficiently stable and standardized to permit meaningful comparison. These assumptions, however, stand in fundamental tension with the epistemological commitments of constructivism (Mayer, 2004).

Similarly, some qualitative studies citing constructivism employ methods that ignore its core insights. Interview studies that treat participants' statements as transparent windows into their thinking, rather than as contextually situated constructions requiring interpretation, contradict constructivist principles. Discourse analyses that claim to reveal "true" patterns of interaction without acknowledging their own constitutive role violate constructivist reflexivity. Survey research assuming consistent interpretation of items across respondents directly contradicts constructivism's emphasis on individual meaning-making (Eisenhart & DeHaan 2005).

These methodological misalignments are not mere oversights, but symptoms of constructivism's conceptual overextension. When a framework is stretched to cover

heterogeneous methods, when it legitimates incompatible approaches, it inevitably loses coherence between theoretical claims and methodological practice. Constructivism functions increasingly as what might be called methodological decoration: a theoretical citation that adds legitimacy without substantively shaping research design (Confrey, 1995).

The misalignment problem: When constructivism is the wrong tool

Beyond its internal incoherence, constructivism is routinely deployed in research contexts where alternative frameworks could provide far greater analytical precision. This section examines specific domains where constructivism's invocation represents what I call "theoretical misalignment": cases where the research questions, phenomena of interest, or methodological approaches are fundamentally ill-suited to constructivist analysis, yet constructivism is invoked nonetheless.

Quality assurance and institutional effectiveness research

Research on quality assurance, institutional effectiveness, and educational outcomes routinely claims constructivist foundations, while examining phenomena that extend far beyond individual knowledge construction. Studies evaluating programme effectiveness, institutional performance, or system-level outcomes necessarily address questions about: organisational structures and governance, resource allocation and efficiency, stakeholder satisfaction and accountability, policy implementation and compliance, and comparative institutional performance. Constructivism, focused on individual epistemology, offers minimal analytical leverage for these fundamentally organisational and political questions (Biggs, 2001; Harvey & Green 1993).

Alternative frameworks could provide far greater analytical power in these contexts: Organisational theory could illuminate how institutional structures shape educational processes (Bolman & Deal, 2017). New institutionalism would clarify how legitimacy pressures and isomorphic processes drive institutional behaviour (DiMaggio & Powell, 1983). Critical policy analysis would reveal how quality regimes embody particular values and serve specific interests (Ball, 2015). Systems theory would address the complex interactions among institutional components (Senge, 1990). Yet constructivism persists in such studies, typically cited perfunctorily before researchers proceed with analyses bearing no relationship to constructivist principles.

Curriculum design research

Curriculum design studies often claim constructivist foundations while addressing questions about content selection, sequencing, alignment, and assessment design that extend far beyond constructivism's core concerns. Constructivism offers insights into how individual learners might engage with content, but it provides limited guidance for the fundamentally normative questions that drive curriculum design: What knowledge is most worth learning? How should content be organised? What sequencing best supports learning progression? What constitutes adequate understanding? (Tyler, 1949).

These questions require engagement with disciplinary epistemology (what makes knowledge valid within a domain), learning progressions (how understanding develops over time), transfer research (how learning extends to new contexts), and assessment theory (how we validly evaluate understanding). Frameworks like Understanding by Design (Wiggins & McTighe, 2005), Knowledge Structures (Gagné, et al., 2005), or Variation Theory (Marton, 2015) address these questions directly. Constructivism, focused on individual sense-making processes, offers minimal analytical tools for normative curriculum decisions.

Academic literacies research

Research on academic writing, reading, and disciplinary discourse practices frequently invokes constructivism while examining phenomena better understood through alternative frameworks. Studies of how students develop facility with disciplinary ways of knowing, how they negotiate academic genres, or how they position themselves within scholarly conversations involve complex processes of socialisation, identity formation, and power negotiation that extend well beyond individual knowledge construction (Lea & Street, 1998; Lillis & Scott, 2007).

Academic literacies as social practice theory (Street, 1984) could provide richer analysis of how literacies are embedded in social institutions and power relations. Genre theory (Swales, 1990) could illuminate how disciplinary conventions shape communication. New Literacy Studies (Gee, 2015) could clarify how identities and discourses are mutually constitutive. Critical discourse analysis (Fairclough, 2013) could reveal how language both reflects and reproduces social structures. Yet studies routinely default to constructivism, treating literacy development as individual knowledge construction rather than as the fundamentally social, discursive, identity-constituting process it actually involves.

The pattern of misalignment

These examples reveal a consistent pattern: constructivism is invoked in research domains where it provides minimal analytical leverage, while more appropriate frameworks are ignored or marginalised. This misalignment is not random but systematic, reflecting constructivism's status as default theory in educational research. Rather than selecting frameworks that best address specific research questions, in my experience, researchers often begin with constructivism and force-fit their studies to its premises, or more commonly, cite constructivism while conducting research fundamentally inconsistent with its principles (Prawat & Floden, 1994).

This theoretical laxity comes at significant cost. When we deploy inappropriate frameworks, we ask less incisive questions, gather less relevant data, conduct less illuminating analyses, and produce less useful findings. We waste intellectual resources on theoretical window-dressing rather than substantive analysis. Most critically, we perpetuate the illusion that citing currently fashionable theory suffices as theoretical justification, rather than engaging in the hard work of identifying frameworks genuinely suited to our research questions (Howe & Berv, 2000).

Beyond constructivism: Alternative theoretical frameworks

If constructivism has become theoretically overextended, what alternatives exist? This section examines frameworks that offer greater analytical precision for specific domains of educational research. My goal is not to advocate for any single alternative as a universal replacement: that would simply repeat the mistake of theoretical monoculture. Rather, I want to demonstrate that educational research benefits from theoretical diversity and careful framework selection matched to research questions.

Cognitivism: Mental Processes and Information Processing

Cognitivism offers a fundamentally different approach to understanding learning by focusing on the mental processes underlying knowledge acquisition, storage, and retrieval. Unlike constructivism's emphasis on learner-created meaning, cognitivism examines how learners process information through attention, perception, memory encoding, and schema formation (Anderson, et al., 2000; Mayer 2011). This framework draws on cognitive psychology and neuroscience to explain how the architecture of human cognition, including working memory limitations, long-term memory structures, and cognitive load, shapes learning outcomes (Sweller, et al., 2019).

For educational research, cognitivism provides several advantages over constructivism's vague invocations of "knowledge construction." It offers specific, testable hypotheses about how instructional design affects learning: the role of worked examples in reducing cognitive load (Sweller, et al., 1998), the benefits of retrieval practice for long-term retention (Roediger & Butler, 2011), the importance of prior knowledge activation (Bransford, et al., 2000), and the conditions under which different instructional methods prove effective. These principles are grounded in experimental evidence and can be operationalised for empirical study (Mayer, 2011).

Cognitivism avoids many problems that plague constructivism. It does not rely on epistemological relativism, instead assuming that knowledge representations can be more or less accurate and that learning involves developing increasingly sophisticated mental models. It supports both qualitative methods (protocol analysis, think-aloud studies) and quantitative approaches (experimental comparisons, cognitive testing) without the methodological incoherence that characterises constructivist research (Kirschner, et al., 2006).

Cognitivism has been productively applied to diverse educational domains: designing multimedia learning materials (Mayer, 2014), understanding expertise development (Ericsson, 2006), improving reading comprehension instruction (Pressley, 2000), and developing effective problem-solving strategies (Jonassen, 2011). Its theoretical precision and empirical grounding make it particularly valuable for research requiring causal explanations of learning phenomena, precisely the domains where constructivism's relativism creates problems.

Critical pedagogy: Power, politics, and transformation

Critical pedagogy, drawing on Paulo Freire (1970) and subsequent critical theorists, offers a radically different framework from both constructivism and cognitivism by foregrounding

questions of power, oppression, and social transformation. Rather than treating education as politically neutral transmission or construction of knowledge, critical pedagogy examines how educational practices reproduce or challenge existing social hierarchies, whose knowledge is legitimated, and how pedagogy can serve emancipatory purposes (Giroux, 2011; McLaren, 2015).

For higher education research, critical pedagogy provides the analytical tools that constructivism lacks. It illuminates how curriculum content reflects dominant group interests while marginalising alternative knowledge systems (Apple, 2004). It reveals how assessment practices function as gatekeeping mechanisms that preserve privilege (Bourdieu & Passeron, 1977). It clarifies how institutional structures and pedagogical relationships embody and reproduce power relations (hooks, 1994). Most critically, it positions education not as neutral skill development but as inherently political practice that either maintains or challenges social inequalities (Freire, 1970; Giroux, 2011).

In the South African context, critical pedagogy offers particular analytical leverage for understanding how institutional structures, curriculum content, and pedagogical practices continue to reflect colonial and apartheid legacies despite formal transformation policies (Jansen, 2009; Soudien, 2010). It provides frameworks for examining student activism and demands for decolonisation not as disruptions but as pedagogical acts challenging epistemic violence (Ndlovu-Gatsheni, 2018). Morrow's (2007) concept of "epistemological access", the idea that students require access not merely to educational sites but to the disciplinary forms of knowledge operative within them, offers a particularly productive theoretical resource for South African higher education research. Similarly, Muller's (2000) work on knowledge, curriculum, and the sociology of education, and Luckett's (2009) analysis of epistemological diversity in South African universities, provide grounded theoretical alternatives that are attentive to the local context of epistemic inequality. Fataar's (2015) research on social justice and curriculum transformation in post-apartheid schooling further illustrates how alternative frameworks, rather than a generalised constructivism, enable sharper critical purchase in the South African context.

Activity Theory

Activity Theory, drawing on Vygotsky but extending well beyond his work, provides a framework for analysing human activity as mediated by tools and situated in social contexts (Engeström 1987, 2001). Rather than focusing on individual cognition, Activity Theory examines activity systems: the relationships among subjects (actors), objects (goals), tools (mediating artifacts), rules, community, and division of labour. The framework is particularly valuable for analysing how teaching and learning practices are shaped by institutional contexts, how contradictions within activity systems drive change, and how learning involves transformation of practice rather than mere knowledge acquisition (Artemova, 2024; Kwong, 2023; Loc, 2022; Roth & Lee, 2007).

For research on educational innovation or institutional change, Activity Theory offers analytical tools that constructivism lacks. It clarifies how institutional contexts, resource constraints, and competing priorities shape practice. It reveals how well-intentioned reforms may fail when they create contradictions within existing activity systems. Most critically, it shifts

analytical focus from individual cognition to collective practice, illuminating phenomena that individualistic frameworks necessarily obscure (Yamagata-Lynch 2010).

Situated learning: Authentic context

Situated learning theory, developed by Lave and Wenger (1991), posits that knowledge is best acquired in contexts that mirror real-world settings. Unlike constructivism's focus on individual cognitive processes, situated learning emphasises participation in communities of practice and learning through authentic activities embedded in actual contexts of use. Knowledge, from this perspective, is not abstract and decontextualized but fundamentally tied to the situations in which it is learned and applied (Herrington & Oliver, 2000; Stein, 1998).

In higher education, situated learning informs the design of experiential learning opportunities such as internships, simulations, work-integrated learning, and collaborative projects that engage students with authentic disciplinary or professional problems. Research grounded in situated learning is attentive to the sociocultural and institutional contexts in which learning occurs, offering insights into how context shapes knowledge construction and professional identity formation (Billett, 2001).

Situated learning avoids constructivism's individualistic focus by examining how learners develop competence through participation in socially organized practices. It provides frameworks for understanding how novices move from peripheral to fuller participation in disciplinary communities, how they appropriate tools and practices, and how their identities as practitioners develop through engagement with authentic work (Lave & Wenger, 1991). This perspective has been particularly valuable for research on professional education, workplace learning, and service-learning programs where the relationship between academic knowledge and practice is central (Cord & Clements, 2010; Moore, 2010).

Connectivism: Digital networks

Connectivism, proposed by George Siemens (2005) and Stephen Downes (2012), recognises the distributed and networked nature of knowledge in the digital age. This framework posits that learning occurs through connections, between people, digital resources, and communities, rather than solely within individuals. In an era of information abundance and rapid knowledge change, connectivism argues that the capacity to form and navigate networks of information sources becomes as important as the possession of particular knowledge (Artemova, 2024; Downes, 2012; Siemens, 2005).

In higher education, connectivism is particularly relevant for online and technology-enhanced learning environments, enabling research into how learners navigate, curate, and contribute to vast information networks. It illuminates how students develop what might be called "network literacy": the capacity to evaluate sources, identify relevant connections, and participate in distributed knowledge communities (Siemens, 2005). Connectivism is context-sensitive to rapidly changing technological landscapes and supports inquiry into the dynamics of contemporary digital learning.

Unlike constructivism's emphasis on individual meaning-making, connectivism focuses on how meaning emerges from patterns of connections across networks. It provides frameworks for understanding how Personal Learning Environments (PLEs), Massive Open Online Courses (MOOCs), and social media platforms function as spaces for distributed cognition and collective knowledge construction (Kop & Hill, 2008; Mackness, et al., 2010). This perspective has been particularly valuable for research addressing how digital technologies are transforming higher education pedagogy and learning processes.

Humanism: Learner-centered development

Humanism, drawing on the work of Abraham Maslow (1968), Carl Rogers (1969), and subsequent humanistic psychologists, centers on the holistic development of the learner, emphasising autonomy, self-actualisation, and personal growth. Unlike constructivism's focus on knowledge construction, humanism advocates for educational practices that respect individual differences, promote intrinsic motivation, and foster supportive learning environments that attend to learners' emotional and developmental needs (Maslow, 1968; Rogers, 1969).

In higher education, humanistic approaches inform research on student engagement, well-being, and identity formation, allowing for a nuanced understanding of learners' varied backgrounds, aspirations, and emotional needs, dimensions often overlooked by constructivist paradigms that prioritise cognitive processes. Humanistic frameworks illuminate how learning is inseparable from learners' sense of self, their relationships with others, and their pursuit of personally meaningful goals (Cornelius-White, 2007).

Humanism provides particular analytical leverage for research addressing mental health, student retention, and inclusive pedagogy. It offers frameworks for understanding how learning environments can be structured to support learner agency, cultivate intrinsic motivation, and foster authentic engagement (Cornelius-White, 2007). In contexts where student well-being and belonging have emerged as critical concerns, humanistic frameworks provide essential tools for research that constructivism's cognitive focus cannot adequately address (McCombs & Whisler, 1997; Weimer, 2013).

The case for theoretical multiplicity

These alternatives demonstrate that educational research need not default to constructivism. Multiple frameworks exist, each with particular analytical strengths and scope conditions. The challenge is not to replace constructivism's hegemony with another theoretical monopoly but to cultivate theoretical diversity: matching frameworks to research questions rather than forcing questions into fashionable frameworks (Bredo, 1994; Kelly, 2004; Luft, et al., 2022).

It is, however, worth distinguishing between two functional categories among the frameworks proposed here. Some frameworks are primarily instruments of conceptual clarification: they enable researchers to diagnose theoretical problems, critique overextended concepts, or map the terrain of a field's discursive formations. Laclau's theory of empty signifiers and Sartori's conceptual stretching belong here, as does, to a degree, humanistic theory in its

critical register. These frameworks are productive in the opening moves of scholarly argument: in identifying what is wrong with prevailing frameworks, in establishing the need for conceptual reform, or in generating the normative architecture of a critique. They are less suited to generating the kinds of middle-range, empirically testable propositions that enable researchers to design studies, collect data, and produce cumulative analytical findings.

A second category of frameworks is more directly generative of empirical analytical work. Cognitivism, activity theory, and situated learning offer not only conceptual description but operational constructs: mechanisms that can be observed, measured, or traced in research design. Critical pedagogy occupies a productive intermediate position, providing both conceptual critique and an agenda for participatory and action research. Researchers would benefit from being explicit about which functional type of framework they are drawing upon, and why, so that theoretical choice is matched not only to the subject of inquiry but to the kind of intellectual work the framework is required to do. Only through such theoretical seriousness can educational research move beyond the empty invocations that currently plague our literature (Bredo, 2006).

Practical implications: Toward theoretical coherence

Moving beyond constructivism's hegemony requires concrete changes to research practice, review processes, and researcher education. Researchers have an obligation to develop greater theoretical intentionality, selecting frameworks that genuinely address research questions rather than citing fashionable theory (Maxwell, 2012). Journal editors and reviewers too have the obligation to demand genuine alignment between theoretical claims and methodological practice (Schwandt, 2000). Graduate programs are duty bound to cultivate deep engagement with frameworks' epistemological foundations rather than superficial surveys of multiple paradigms (Burbules & Warnick, 2006). The field must recognise that theoretical diversity strengthens rather than weakens scholarship (Bredo, 1994).

Concluding observations: Reclaiming theoretical integrity

This paper has argued that constructivism exemplifies a broader pathology in educational research: the transformation of substantive theories into empty signifiers that legitimate diverse practices while providing minimal analytical potential. Through conceptual stretching and semantic inflation, constructivism has become so theoretically overextended that it encompasses positions that are incompatible at both the ontological level (what kind of reality exists) and the epistemological level (how we can know it), justifies methodologically contradictory approaches, and generates systematic misalignment between theoretical claims and research practice.

The problem is not that constructivism is "wrong" in some absolute sense. Within its appropriate domain, constructivism offers genuine insights. The problem is overextension: treating a framework with specific scope conditions as universally applicable, deploying it where alternative frameworks would provide far greater analytical precision. This overextension encourages theoretical laziness, enables theoretical window-dressing, perpetuates

epistemological incoherence, and diverts intellectual energy from substantive analysis to performative citation.

The alternative advances theoretical integrity: serious engagement with frameworks' epistemological foundations, careful attention to coherence between theory and methodology, principled selection of frameworks suited to research questions, and intellectual humility about frameworks' scope. This requires developing theoretical literacy, resisting theoretical hegemony, and cultivating disciplinary maturity to recognise when frameworks are genuinely illuminating versus merely fashionable (Maxwell, 2012).

Educational research can and should aspire to greater intellectual rigor. We may continue to permit theoretical fashions to dictate research agendas, while substantive frameworks risk deteriorating into mere rhetorical signifiers. Alternatively, we can reclaim theoretical seriousness: treating frameworks as genuine instruments of inquiry rather than ornamental citations, cultivating sustained engagement with a smaller set of theories, and insisting upon coherence between theoretical claims and methodological practice. The field deserves more than reflexive citation of fashionable paradigms; it requires a renewed commitment to theoretical depth and methodological integrity.

The path forward requires intellectual courage: the courage to resist theoretical fashions, acknowledge when frameworks fail, embrace theoretical diversity, and insist on coherence. It requires scholarly humility: recognising that no single framework addresses all questions, that theoretical adequacy matters more than popularity, and that productive research requires matching frameworks to questions. Most fundamentally, it requires reclaiming the principle that theory matters, not as performative citation, but as genuine intellectual architecture structuring our inquiries and enabling our insights. Only through such theoretical integrity can educational research fulfil its promise of genuinely understanding and improving learning.

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