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## Introduction

Agency is a heavily used and often poorly-understood concept in education and rightly so: it is a complex quality that has developed over time, across many disciplines and is constantly shaped and reshaped by educational, societal and technological forces. *Learner Agency* sits at the heart of progressive and international education, while *protecting human agency* is core to evolving policy guidance on AI in education<sup>1</sup>. Concurrently, the rise of *agentic AI* influences human and learner agency through increasingly powerful decision-making and autonomy.

This annotated bibliography provides a curation of definitions and conceptualisations of agency, tracing historical roots across disciplines, including modern definitions of agency in the era of AI. There is far more to agency than meets the eye, and there are far more sources than this. It covers philosophical, sociological, sociocultural, ecological, psychological and neuroscientific views, as well as guidance on agency from policy, educational frameworks and practical models.

From these sources, it's possible to synthesise many definitions or visualisations of agency in the age of AI.

Here's my attempt, maybe you can do better:

*Learner agency is the culturally and ecologically situated, relationally constituted, and developmentally progressive capacity of individuals and groups to set goals, exercise judgment, regulate their own learning, think critically and creatively and act with purpose. They shape their own educational experiences and life trajectories in ways that are responsive to context and emerging technologies, sustained by hope, collectively oriented and grounded in both cognitive competence and affective engagement.*

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*AI transparency statement:* This is based on many years of reading as part of MA and EdD studies, work and interest. To get it into this format, I used some help from Claude to condense my notes into bullet points under each section. This still took many hours of checking and revisiting sources and human writing.

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## Philosophical Foundations: Pragmatism and Critical Pedagogy

Where the roots of agency go waaaay back to early philosophers, I pick up the thread with some of the theories that are most referenced in modern schooling. You might also consider Kant's perspectives on autonomy of freedom and moral responsibility, and Sartre's perspectives on existentialism as humanism: agency is in all, including the choices to not take action.

### **Dewey, J. (1859-1952). Pragmatism and Learner Agency in his collected works.**<sup>2-4</sup>

Dewey might be one of the most influential educational philosophers, and his ideas around agency span a lot of his work. These are quotes from some of his works that help frame learning as pragmatism: it is "*about living, and as such is lifelong*"<sup>5</sup>. He wrote a lot against learning that imposed ways, means and views on the learner, arguing for a progressive view in which the learner was able to learn through experience, reflection and participation in constructing their own learning.

*"The most important attitude that can be formed is that of desire to go on learning."*  
(Experience and Education, 1938)

- The goal of education is to create learners who have the will and capacity to want to learn more.

*"If an experience arouses curiosity, strengthens initiative, and sets up desires and purposes that are sufficiently intense to carry a person over dead places in the future, continuity works in a very different way. Every experience is a moving force."* (Experience and Education, 1938)

- "Experience is a moving force" is a quote that is fundamental to my personal beliefs, something that drives learners through the hard work of learning and a need to know more. I think this foreshadows Bandura and Zimmerman.
- Agentic learning compounds: agency and motivation breed further agency.

*"Education is not an affair of 'telling' and being told, but an active and constructive process."* (Democracy and Education, 1916).

- The learner is a *maker of meaning*, not a vessel to be filled.
- Dewey directly opposes what he calls the "*spectator theory of knowledge*": the assumption that understanding can be transferred whole from teacher to student.
- If education is constructive, then the learner must be doing the constructing.

*"There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active cooperation of the pupil in construction of the purposes involved in his studying."* (Experience and Education, 1938)

- To be agentic is to participate in forming the very purposes that direct one's activity.



- Traditional education is framed as *agency-denying* because it imposes purposes on the learner from outside.
- *Purpose-formation* is the central intellectual act of the learner, not a preliminary to learning but a form of learning itself.

*"A genuine purpose always starts with an impulse. Obstruction of the immediate execution of an impulse converts it into a desire. Nevertheless neither impulse nor desire is itself a purpose. A purpose is an end-view. That is, it involves foresight of the consequences which will result from acting upon impulse."* (Experience and Education, 1938)

- Distinguishes sharply between raw impulse (pre-agentic), desire (proto-agentic), and purpose (fully agentic).
- What converts desire into purpose is the *cognitive work of the learner*: observation, memory, and judgment about consequences.
- implications for AI-mediated learning: a tool that executes purposes on behalf of the learner removes precisely this cognitive work.

*"We always live at the time we live and not at some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future."* (Experience and Education, 1938)

- This example highlights his value on the purpose of education as being for learning itself, not as a function of some notion of future economic imperative.

### **Freire, P. Pedagogy Of The Oppressed (1968; 2017 edition)<sup>6</sup> and Pedagogy of Hope (2014)<sup>7</sup>**

*"I interpret the revolutionary process as dialogical cultural action which is prolonged in 'cultural revolution' once power is taken. In both stages a serious and profound effort at conscientização—by means of which the people, through a true praxis, leave behind the status of objects to assume the status of historical Subjects—is necessary."*

- Freire wrote of the *Banking Concept of Education* where *"the interests of the oppressors lie in 'changing the consciousness of the oppressed, not the situation which oppresses them,"* which is interpreted as making learners fit the mold, not shaping learning around their agency.
- He also wrote a lot about shifting the relationship between teachers and students, for example: *"Through dialogue, the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-student with students-teachers,"* which is often interpreted as a move towards a co-agency in constructivist learning.
- With the concept of *Praxis*, agency is an inseparable unit of action and reflection.
- This connects with hope as a prerequisite for agency; a vocation towards collective transformation, not individual advancement alone.
- *Conscientização+Praxis* is echoed in some works towards Regenerative Education.



## Psychological Traditions: Social-Cognitive Theory, Self-Determination and Self-Regulation

These sources move into the psychological elements of agency: what is driving the behaviours of self-regulated learning? The following sections are condensed summaries of complex works.

### **Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes.<sup>8</sup>**

Agency is not an intrinsic property of the isolated individual but is mediated by cultural tools (language, symbols, signs, and social practices) and develops through interaction with more knowledgeable others (MKO) within the zone of proximal development (ZPD): the space between what a learner can do alone and what they can achieve with support.

- *Mediation*: agency is exercised through cultural tools (language, writing, number, artefacts) that shape its form and scope. This leads into cultural-historical activity theory (CHAT), which has been expanded over “generations” by Engeström.
- *Zone of proximal development (ZPD)*: the developmental frontier where agentic capacity is actively being constructed through supported interaction.
- *Interpsychological before intrapsychological*: higher-order agentic functions appear first in social interaction before being internalised as individual capacities.
- *Cultural situatedness*: what counts as agentic behaviour, and what tools are available to support it, varies fundamentally across cultural contexts. Learning is scaffolded by social interactions.

### **Bandura, A. Social-Cognitive Theory: and Agentic Perspective.<sup>9</sup>**

Agency is the power to originate action for given purposes. It is characterised by four core properties: *intentionality* (purposive plans, not reactive behaviours); *forethought* (anticipating outcomes to guide action); *self-reactiveness* (self-regulation and monitoring through standards and self-sanctions); and *self-reflectiveness* (metacognitive examination of one's own thoughts, beliefs, actions and goals). Agency operates through interactions between person, behaviour, and environment.

- Bandura's essence of agency is close, I think, to the lived reality of learner agency in progressive and international education, as it breaks the process down into observable, teachable components.
- Self-efficacy is the foundation of agency, through which the other elements are developed, and from which further self-efficacy develops.

### **Deci, E. L., & Ryan, R. M. Self-Determination Theory.<sup>10,11</sup>**

Agency (framed as self-determination) flourishes when three basic psychological needs are satisfied: *autonomy* (the experience of volition and self-endorsement of one's actions), *competence* (the experience of effectiveness and mastery), and *relatedness* (the experience of genuine connection and belonging). The satisfaction of these needs produces autonomous (intrinsically motivated) regulation.



- *Autonomy as the core*: agentic action is action that the person experiences as self-initiated and self-endorsed, not externally pressured.
- *Continuum of internalisation*: agency ranges from pure external regulation through to full integration of values into the self.
- *Competence*: agency requires the experience of effectiveness; environments that support optimal challenge sustain agentic engagement. As we succeed, we are motivated to learn more, so succeed more.
- *Relatedness*: counter to purely individualist models, connection (to others and the learning) is a prerequisite for autonomous functioning, not a constraint upon it.

**Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective.**<sup>12</sup>

Agency is framed as *self-regulated learning* and proceeds through three recursive phases: *forethought* (goal setting, strategic planning, self-efficacy beliefs), *performance control* (self-monitoring, self-instruction), and *self-reflection* (self-evaluation, causal attribution, adaptive inference).

- This builds on those before, and is visible in various elements of inquiry cycles used in agency-focused education through a cyclical structure: a recursive process of planning, monitoring, and adjusting.
- *Forethought phase*: agentic learners set specific goals and plan the strategies they will use before engaging with a task.
- *Performance control*: during learning, agentic learners monitor their own comprehension and regulate their attention and effort.
- *Self-reflection phase*: after tasks, agentic learners evaluate their performance, attribute outcomes causally, and adapt future strategies.
- *Metacognition mechanism*: self-regulated learning depends on the learner's ability to think about their own thinking.

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**Sociological Perspectives: Moving Further Beyond the Self.**

These bridge and build on the philosophical and psychological, moving further in the roles of agency in societal change. In international schools with highly interactive learning environments and missions or programmes that aim towards various flavours of global citizenship or 'making a difference', these are worth considering.

**Bourdieu, P. (1989). The Logic of Practice.**<sup>13</sup>

Agency is exercised through habitus: the system of durable, transposable dispositions that structure perception and action in accordance with the conditions of one's social position. Evans (2007)<sup>14</sup> extends this as *bounded agency*: "the ways that people are socially situated and how far they can act in relation to their social environments: influenced but not determined by them."



- *Habitus*: the internalised social history that structures agentic dispositions, generating practices that are 'objectively adapted' to social conditions without conscious calculation.
- *Social position*: the form that agency takes is deeply structured by the economic, cultural, and social capital available to the actor.
- *Field*: agency is always exercised in relation to a specific social field with its own rules, stakes, and forms of capital.
- *Bounded but real*: Evans insists that structural constraints shape but do not eliminate agency; individuals can and do act in ways that exceed their social position.
- *Practical consciousness*: much agency operates at the level of practical mastery rather than explicit strategic deliberation.

**Giddens, A. (1984). The Constitution of Society: Outline of the Theory of Structuration.**<sup>15</sup>

Agency is about being able to make a difference in the world: the 'transformative capacity' of actors is the capability of intervening in a series of events so as to alter their course. Social structures are both the medium and the outcome of human action.

- *Transformative capacity*: the defining feature of agency is the ability to make something happen — to alter the course of events.
- *Duality of structure*: social structures enable and constrain agency simultaneously; agents reproduce and transform structures through their actions.
- *Power as inherent*: agency always involves the exercise of some form of power — the capacity to intervene in the world.
- *Knowledgeability*: agents are not cultural dupes; they have tacit and discursive knowledge of the conditions and consequences of their action.
- *Reflexive monitoring*: agentic actors continuously monitor the flow of their actions, adjusting on the basis of ongoing social feedback.

**Emirbayer, M., & Mische, A. (1998). What is agency?**<sup>16</sup>

Agency is a 'temporally constructed engagement by actors of different structural environments' that comprises three irreducible dimensions: the *iterational* (selective activation of past patterns and habits); the *projective* (imaginative generation of possible future trajectories); and the *practical-evaluative* (contextually sensitive judgment in the present).

- *Iterational dimension*: agency draws on repertoires of sedimented practices and schemas from the past: routine, habit, and precedent.
- *Projective dimension*: agency is inherently *future-oriented*; agents imagine alternative possible futures and orient action toward chosen trajectories.
- *Practical-evaluative dimension*: in the present moment, agents exercise judgment about which past patterns and future possibilities are relevant to current demands.
- *Temporal embeddedness*: agency cannot be understood outside its temporal situation. It is always constituted by past, present, and future simultaneously.



- *Variable composition*: the relative weight of the three dimensions shifts across contexts; routine situations foreground the iterational; novel situations foreground the projective and practical-evaluative.

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## **Sociocultural, Ecological & Capability Perspectives: Becoming Agentic**

Biesta and Sen think about how agency is achieved in an ecological sense, not something that we innately have in high resource. This is in contrast to some of the perspectives above.

### **Biesta, G., & Tedder, M. (2007). Agency and learning in the lifecourse.<sup>17</sup>**

Agency is not a capacity that individuals possess but an *achievement* that emerges from the engagement between an individual's past dispositions and the possibilities and constraints of their current *ecological context*. Agency is always relational and emergent, never simply intrinsic.

- *Achievement not possession*: agency is produced in and through engagement with context.
- *Ecological model*: agency emerges from the interaction of agentic dispositions with the enablements and constraints of specific social, material, and temporal ecologies.
- *Iterational dimension*: biographical resources (past experiences, dispositions, identities) form the raw material of agency.
- *Projective dimension*: agency involves the orientation toward future possibilities that an individual finds meaningful.
- *Practical-evaluative*: engagement with immediate contextual conditions and constraints shapes what agency is actually achievable.
- To support agency, educators must attend not only to individual capacities but to the ecological conditions that enable or disable agentic action.

### **Sen, A. (1999). Development as Freedom.**

Agency is the dimension of human development associated with *agency freedom*: the ability to pursue goals one has reason to value, not merely to achieve outcomes defined by others. The capability approach distinguishes between *functionings* (what a person actually does or is) and *capabilities* (what a person is genuinely able to do and to be).

- *Agency freedom vs. well-being freedom*: agency is the ability to pursue one's own goals and values, distinct from subjective well-being or material welfare.
- *Capabilities as real freedoms*: a person may nominally have a right to act but lack the actual capability to do so.
- *Conversion factors*: individual characteristics, social arrangements, and environmental conditions convert resources into actual capabilities — and thus into actual agency.
- *Voice and participation*: Sen's agency is inherently connected to democratic participation and the ability to shape collective decisions.



**Walsh, M., & Hoff, K. (2024). The agency paradox: How social support enables the freedom to act. Washington, DC: Brookings Institution.**<sup>18</sup>

The *agency paradox* is the finding that agency (though experienced and manifested in individual choices) is *constituted by*, rather than *constrained by*, the social supports that surround individuals. Agency does not thrive in isolation; it requires role models, relational infrastructure, and social scaffolding. The social environment that shapes our actions is also what makes genuine self-determination possible. We can see strong connections across theories here, as well as to *Creating Cultures of Thinking*.

- *Agency is socially constituted, not individually generated*: the paradox challenges individualist assumptions by showing that the conditions enabling agency are fundamentally social.
- *Role models as agentic infrastructure*: exposure to credible others who have exercised agency in relevant domains expands the imaginative horizon of agentic possibility.
- *Relational scaffolding*: the quality of social relationships (trust, support, challenge, accountability) directly determines the scope of agentic action available to individuals.

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## Neuroscientific Perspectives

What's going on in the brain when we think about (haha) agency?

**Immordino-Yang, M. H. (2016). Emotions, Learning, and the Brain: Exploring the Educational Implications of Affective Neuroscience.**<sup>19</sup>

Agency is grounded in the *emotional* and *embodied* processes that make learning meaningful. Immordino-Yang demonstrates that the neural systems supporting higher cognition (*creativity, abstract reasoning, moral judgment, and self-regulation*) are inseparable from those supporting *emotional processing*. Learning that lacks emotional significance limits genuine agentic thought. I love this book.

- *Emotion as prerequisite*: genuinely agentic learning is inherently *affective*. Cognitive engagement without emotional investment produces shallow processing.
- *Default mode network*: the neural system that supports self-reflection, narrative identity, and meaning-making is activated by emotional significance, not task compliance.
- *Embodied cognition*: agency is enacted through the body, not merely deliberated in the mind. Physical, emotional, and social experience is the substrate of agentic development.
- *Moral and narrative self*: the capacity for ethical agency depends on the development of a self that is narratively coherent and emotionally grounded.



**Haggard, P. (2017). Sense of agency in the human brain. *Nature Reviews Neuroscience*, 18(4), 196–207.**<sup>20</sup>

The *sense of agency* refers to the subjective experience of “controlling one's own actions and, through them, events in the outside world.” Neuroscientific research identifies two components: *predictive* (feedforward) models that generate expected sensory consequences of actions, and *retrospective attribution processes* that link actions to outcomes. Agency is fundamentally a metacognitive and self-monitoring phenomenon.

- *Sense of agency as metacognitive*: the feeling of being the author of one's actions depends on higher-order monitoring of one's own predictive and motor systems.
- *Intentional binding*: temporal compression of the perceived interval between action and outcome is a neural marker of experienced agency.
- *Predictive processing*: agency requires that the brain generates and updates predictions about the consequences of its actions — a process that is disrupted when AI systems make predictions on the learner's behalf.
- *Retrospective attribution*: agency also depends on post-hoc attribution of outcomes to one's own actions — undermined when AI completes tasks invisibly.

**Ojala, M. (2012). Hope and climate change: The importance of hope for environmental engagement among young people.**<sup>21</sup>

Agency is not the focus of this paper, but building connections between the emotional, sociocultural and neuroscientific perspectives, by way of Freire's hope<sup>7</sup>, makes it worth inclusion. *Constructive hope* is distinguished from *wishful thinking* by its combination of *realistic appraisal of threat with active orientation toward possibility*. Constructive hope does not deny the severity of the challenge but maintains the belief that meaningful action is possible and motivates such action. Unlike *passive optimism*, constructive hope is *agentically active*: it produces and sustains the engagement required for transformative action in the face of genuine uncertainty. In international schools, we want to create these conditions for effective learner agency and global citizenship, whilst avoiding the despair that might be paralysing.

- *Constructive vs. passive hope*: constructive hope is action-generating; passive optimism is comforting but demobilising.
- *Realistic appraisal*: genuine agentic hope does not require the denial of difficulty. It is sustained in full knowledge of the scale of the challenge.
- *Hope as motivational substrate*: constructive hope provides the motivational energy that sustains agentic engagement over time, especially in the face of obstacles.
- *Climate agency*: in the context of climate education, Ojala argues that constructive hope is the psychological precondition for genuine environmental agency.

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## Feminist and Postcolonial Perspectives

With increasing critique of international education as a potential form of educational colonisation, we need to consider agency through the lenses of power and power relations. I need to do a lot more reading in this domain.

### **Butler, J. Gender Trouble: Feminism and the Subversion of Identity<sup>22</sup> and The Psychic Life of Power: Theories in Subjection<sup>23</sup>**

Agency is not the expression of a pre-existing sovereign subject but is constituted through and by *power*. The subject who acts are themselves produced through the iterative performance of norms. Agency consists in *citational practice*: the capacity to repeat, resignify, and subvert the norms through which one is constituted, rather than escape from them altogether.

- *Performative constitution*: there is no prior self that exercises agency; the self is constituted through the very practices of agency.
- *Citatoriality*: agency operates through the repetition of social norms with the possibility of displacement. It is subversive iteration rather than creative origination.
- *Power as both constraining and enabling*: the same power relations that subordinate the subject also create the conditions for agentic acts of resignification.
- *No sovereign subject*: agency does not require a free, autonomous, pre-social self; it operates within and through the subject's subjection.

### **Mahmood, S. (2005). Politics of Piety: The Islamic Revival and the Feminist Subject.<sup>24</sup>**

Agency is “the capacity for action that specific relations of subordination create and enable.” This challenges assumptions that agency is synonymous with *autonomy* and *resistance*, arguing instead that agency must be understood in relation to the particular norms and practices within which it is constituted.

- *Agency beyond resistance*: agentic action includes compliance, submission, and self-cultivation as well as subversion — agency is not synonymous with opposition to power.
- *Constituted by relations of power*: the forms of agency available to individuals are produced, not constrained, by the specific power relations and normative frameworks they inhabit.
- *Embodied agency*: agency is enacted through the body and its practices, not only through cognitive deliberation.
- *Cultural specificity*: liberal assumptions about autonomy as the precondition of agency are themselves culturally particular and cannot be universally applied.

## Learner Agency in Collectivist Cultures

*I need to go much deeper on this: what does effective learner agency look like within cultures that have stronger collectivist, rather than individualistic perspectives?*



In this 2006 paper by Jin Li<sup>25</sup>, focused on conceptualising agency in Chinese adolescents, we see the framing of agency as a *moral self-cultivation within a social world*: socially situated, but strongly enacted through personal effort and self-regulation. This connects elements of Confucian “learning virtues” such as diligence, perseverance, endurance of hardship, concentration, self-discipline, initiative and humility, alongside some independence and self-directed learning. Social agency appears mainly in relation to significant adults and peer support, but it is comparatively limited.

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### **Practical Agency Across Educational Frameworks & Models**

Perhaps some of the most practical conceptualisations of agency for teaching and learning come from the accrediting bodies, researchers and frameworks that are used in international schools. I think they are more likely to have been read or interacted with by teachers than many of the sources referenced here.

### **International Baccalaureate Organization: Voice, Choice & Ownership.**<sup>26</sup>

The IB conceptualises student agency as comprising three interlocking dimensions: *voice* (the capacity to express oneself and have one's perspective genuinely heard); *choice* (the opportunity to make meaningful decisions about learning); and *ownership* (a sense of authorship and responsibility for one's learning and its outcomes). Agency is understood as developing progressively from the Primary Years Programme through the Diploma Programme.

- *Voice*: agency requires that learners can express their views, questions, and identities and that these are genuinely received.
- *Choice*: meaningful choice — not mere selection from a pre-determined menu — is a prerequisite for genuine agency.
- *Ownership*: agency is fully realised when learners experience their learning as authentically theirs, not something done to them.
- *Developmental progression*: what agency looks like and what it requires differs across the primary, middle, and diploma years.
- *Transdisciplinary/interdisciplinary inquiry*: the IB's inquiry-based curriculum is designed to create the conditions in which voice, choice, and ownership can be exercised.

### **OECD Learning Compass 2030**<sup>27</sup>

Student agency is defined as '*the capacity to set a goal, reflect and act responsibly to effect change*.' It implies having a sense of purpose and the motivation, knowledge, skills, and attitudes to effect change for the well-being of oneself and the community. Agency is developed through *co-agency*: the supportive, interactive relationships with teachers, peers, families, and communities that enable learners to navigate toward their goals. It is sustained by the *Anticipation-Action-Reflection (AAR) cycle*.



### **NEASC ACE 2.0 Learning Principles<sup>28</sup>**

Agency is conceptualised by the New England Association of Schools and Colleges through their ACE 2.0 Learning Principles, which include progressive views on purposes and dimensions of learning, how students evidence their learning, perspectives on learning (which draw from the learner and community). This is driven by learner autonomy and engagement, in which learners have “*age-appropriate autonomy over the learning and make informed choices supported by guidance within and beyond the classroom.*”

### **University of Melbourne: New Metrics<sup>29</sup>**

New Metrics frames *Agency in Learning* as an assessable, observable complex competency. Defined as “*the capacity to produce learning of value to self or community,*” this is a complex relationship of interacting elements and includes: *acting with autonomy, acting with courage, being open to the new, being reflective, building social alliances, demonstrating drive, developing skill or craft, engaging in dialogue, generating feedback loops, managing ambiguity & uncertainty, striving for mastery and using reason.* Through these identified elements, we can see the connections to all of the theories of agency above, founded on observable progressions of learning. Although the competency of agency can be seen in collective micro-observations by multiple people (and in context), artefacts of learning are not assessable as proxies of competence: it is about the *doing*, not the product.

### **Ritchhart, R. (2015). Creating Cultures of Thinking<sup>30,31</sup>**

Agency is framed as the emergent property of eight “cultural forces” that operate within learning environments: *expectations, language, time, modelling, opportunities, routines, interactions, and environment.* Together these constitute a “culture of thinking” in which agentic dispositions can flourish, and draws strong connections to Vygotsky. Individual agentic capacity is insufficient without institutional cultures that value, model, and make time for thinking.

### **Hattie, J. (2023). Visible Learning: The Sequel.<sup>32,33</sup>**

Agency is neither innate nor individually produced but is “*enabled by collective teacher efficacy, instructional clarity, and teacher mindframes*” that position learners as the primary agents of their own learning. Teachers are ‘change agents’ whose effectiveness is measured by their impact on student thinking, not merely student performance. Founded on meta-meta analyses, various teacher and learner impacts are framed as effect sizes, with a hinge point of  $d=0.4$  reflecting an average year’s worth of growth.

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## Agency in Policy/Guidance (including AI)

Policymakers and institutions set the tone for agency in all its forms, from the language that is used to the systemic supports, constraints and expectations that are placed on societies and schools. These papers from UNESCO, OECD & Brookings frame agency and situate it in their guidance for AI.

### **UNESCO. 2021. Reimagining Our Futures Together: A New Social Contract for Education.**<sup>34</sup>

Agency is framed as “relational and collective”: the capacity to act not merely as an individual pursuing personal goals but as a participant in collective, democratically organised knowledge-making and social transformation. The report argues that curricula must “*motivate agency and action that is relational and collectively distributed,*” recognising our shared existence within a *more-than-human (ecological) world*.

- *Plural Futures*: agency in its many forms is a pathway to more collective flourishing and potential futures.

### **UNESCO. 2023. Guidance on Generative AI in Education & Research.**<sup>1</sup>

Among the key policy recommendations of The Guide is “*Protecting Human Agency*”, constituted through *data protection, motivation, opportunities, social interaction, minimizing academic pressure, consultation and accountability*. Tracing roots back to the theories of agency above, we can see connections between many of the sociocultural and psychological perspectives. To see an example of Carol Bacchi’s *What’s the Problem Represented to Be?* (WPR) model of policy analysis, see here:

<https://sjtylr.net/2024/09/06/whats-the-problem-represented-to-be-in-unescos-genai-guidance/>

### **OECD. 2025. Education for Human Flourishing: A Conceptual Framework.**<sup>35</sup>

Agency is framed primarily as *purposeful action oriented toward human flourishing*. It is not treated as simple autonomy or choice, but as *the capacity to form intent, find meaning and act responsibly in the world, supported by ethical judgement and adaptive problem-solving*. Flourishing is framed as meaning, accomplishment and fulfilment across a lifetime, not just short-term autonomy. Agency is conceptualised as relational, developmental and value-laden. This involves “acting in the world” as a central competency, so agency is understood as *informed, morally guided and socially embedded* rather than purely individualistic.

### **OECD/Kucirkova. 2025. An Agenda for Student Agency in the AI Era.**<sup>36</sup>

Agency is framed as *the developmental capacity of young people to take an active, self-regulated role in shaping their learning and futures, expressed through goal-setting, decision-making and purposeful action that influences both personal trajectories and wider communities*. It is conceptualised as *multidimensional and relational*, emerging through interactions with family, school and socio-cultural environments (“*co-agency*”), and grounded in competencies such as autonomy, cognitive control, moral responsibility and



identity formation. Agency must be *actively scaffolded and protected in AI-mediated contexts*, where technological design can either strengthen agency by making choices visible and supporting reflective action, or erode it through opaque automation and engagement-driven systems.

**Venetis et. al/Brookings. 2026. A New Direction for Students in an AI World: Prosper, Prepare, Protect.**<sup>37</sup>

Agency is framed as *a capacity that can either be strengthened or eroded by AI use, depending on how technologies are designed and integrated into learning*. Agency is understood as students' ability to *engage cognitively, regulate their learning, and exercise autonomy within supportive social relationships and pedagogical structures*. The report emphasises that *meaningful agency develops through productive struggle, human interaction and intentional decision-making*, while warning that excessive reliance on AI can lead to cognitive offloading, dependence and diminished motivation. Agency is conceptualised as a developmental outcome that education systems must *actively cultivate and protect*, ensuring AI augments rather than substitutes learners' thinking and participation in learning. It frames two potential trajectories for learning and agency in relation to AI: *AI-enriched learning and AI-diminished learning*.

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## **Where to Next: Regenerative Education**

Moving forwards with this literature review, I want to go deeper into *Regenerative Education*, which has echoes of Freire's *Conscientização+Praxis* as communities work together on social-ecological issues, collective agency and stronger connections between people, planet and flourishing. There are so many connections to the theorists above, along with the protective and inspirational nature of... nature.

So far I've read:

- *Imagining, Designing & Teaching Regenerative Futures: Art-Science Approaches and Inspirations From Around the World*, edited by Julia Bentz & Jelena Ristić Trajković (2025).<sup>38</sup>
- *The End of Education as We Know It: Regenerative Learning for Complex Times*, by Ida Rose Florez (2025).<sup>39</sup>
- [\*Regenerative Hope: Pedagogy of Action and Agency in the Learning Gardens\*](#), by Dilafruz Williams (2015).
- The Prism Sustainability Directory resources on [Regenerative Pedagogy](#).

I'd love to know what else I should be reading.

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I used superscript numbers in the text to keep flow. The references below have active links to the research/books.

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