Supplementary Materials

We have considered the following learning models:

1.Connectionism / Associationism / Behaviorism (Watson, 1913; 1998; Thorndike, 1898; 2000a; 2000b; Skinner, 1938/1991; 1953/1974).

2. Genetic Cognitivism (Piaget, 1932/1995; 1932/1977; 1975; Piaget & Inhelder, 2008).

3. Socioconstructivism (Vygotsky, 1978; 2012).

4. Classical Cognitivism (Bruner, 1960; 1961; 1966; 1990).

5. Meaningful Learning (Ausubel, 1963; 1968; 2000).

6. Experiential Learning (Dewey 1938, 1980 y Kolb 1984; 2015).

7. Transformative learning theory (Mezirow, 1991).

8. Self-Regulated Learning (SRL) (Zimmerman 1989, 2000; Winne & Hadwin 1998)

9. Self-Determination Theory (SDT) (Ryan & Deci, 2020).

10. Social Interdependence Theory and Cooperative Learning (Johnson & Johnson, 2009).

11. Community of Inquiry –CoI– (Garrison, Anderson, & Archer, 2000).

12. Relational Pedagogy or Ethics of Care (Noddings, 1984).

13. Enactivism / Participatory Sense-Making (De Jaegher & Di Paolo, 2007).

14. Situated Learning and Communities of Practice –CoP– (Lave & Wenger, 1991; Lave, 1991).

15. Anthropology of Education Approaches (Mean, 1928, 1943; Keller & Greenfield, 2000, Greefield et al., 2003; LeVine, 1988; Rogoff, 1995; Rogoff et al., 1993).

16. Cognitive Apprenticeship and Situated cognition (Collins, Brown, & Newman, 1989; Matsuo, 2020; Brown, Collins, & Duguid, 1989).

17. Cultural–Historical Activity Theory –CHAT– and Expansive Learning (Engeström, 2001).

18. Connected Learning (Connected Learning Research Network) (Ito et al., 2013).

In the contemporary landscape, numerous valuable proposals abound which, however, do not properly constitute learning models, but rather partial or applied approaches. Thus, among others, the Cognitive Flexibility Theory (CFT) of Spiro, Coulson, Feltovich, and Anderson (1988) is an instructional theory aimed at the design of environments to address complexity through constructivist strategies. Along the same line is the Cognitive Load Theory (CLT) of Sweller and collaborators (Sweller et al., 2011), also an instructional theory, whose focus is on optimizing cognitive load in the transmission of content. For its part, the framework of Social and Emotional Learning (SEL) (Durlak et al., 2011) corresponds to an educational intervention program supported by focal research on the relationship between socio-emotional skills and academic performance.

Complementarily, the neuroeducational works of Immordino and Damasio (2007) and of Damasio (1994, 1999) likewise represent focal research, as they show how emotion and corporeality are constitutive of cognition. Something similar occurs with studies on Teacher–Student Relationship (TSR) Quality (Roorda et al., 2011), which constitute a focal research field concerning the impact of the affective and academic bond on motivation and achievement; as well

as with the Model of Interpersonal Teacher Behavior (MITB), focused on classroom climate (den Brok, Brekelmans & Wubbels, 2006), which is also a focal research program on relational factors.

By contrast, the notion of Relational Agency (Edwards, 2005) is a focal conceptual construct in the field of collaborative work, which explains how subjects expand their resources through interaction with others. Finally, the proposal of Connections-based Learning (CBL) (Robinson, 2017) is a methodological approach that guides teaching practice toward the creation of networks and meaningful connections as the driving force of learning.

1. Connectionism / Associationism / Behaviorism

This proposal is initially based on Watson, taken up again by Thorndike, and finally developed by Skinner. The theory of connectionism, also known as associationism, grounded in animal experimentation, posits that learning consists in the formation of associations between stimuli (E) and responses (R), which are strengthened or weakened according to the consequences that follow them. These E–R connections are generated through the method of trial and error and in accordance with certain laws formulated by Watson: responses that produce satisfactory states tend to be repeated, while those that cause discomfort tend to be weakened (law of effect); repetition fosters association (law of exercise); what is not repeated or used is lost (decay law). Transfer occurs when there are common elements between events. All of this laid the groundwork for Skinner's proposal, in which he developed operant conditioning and distinguished between positive and negative reinforcement (physical or verbal, as evocation of physical experiences).

His model does not change significantly when applied to humans. In Watson, the reference to consciousness is denied, and in Thorndike, it is merely tangential and conceptual, without the need to appeal to the subject's interiority. Skinner admitted thoughts and emotions, but these are likewise subject to the same laws. Thorndike acknowledged that everything works better if the subject is in good physical and dispositional conditions (law of readiness). The teacher guides entirely from the outside, in a wholly instructive manner. The model is radically individualistic, reducing relationships to mere contingencies or to just another stimulus. It lacks a philosophical framework, although it shows affinity with an empiricist mechanism and with a determinism rooted in experimental psychology (it takes up Pavlov).

Although a greater complexity can be observed as the model is deepened through the succession from Watson to Skinner, the difference with our proposal is radical at the ontological, epistemological, and relational levels, since it does not accept that learning is a mechanism of associations. Their model does not integrate subjective aspects (emotions, intentionality, etc.) and conceives interpersonal relationships as mere contingencies, whereas in our proposal they are essential, ontological, and constitute the very goal of all action. The student's authorship is reduced, if not denied. Ultimately, the student neither knows the world nor knows themselves: they simply acquire behaviors. The relationship is merely contingent, an accident and an instrument, functioning only as a resource in the instructive process. In contrast to the mere repetition of associationism, cycles of crisis and resolution are proposed, integrating all personal, relational, and non-personal processes. In the new learning model, behavior is the manifestation of relational inner experience.

2. Genetic Cognitivism

In this proposal, knowledge is the result of the subject's activity, constructed through their

relations with the physical and social world. It is called "genetic" because it understands that knowledge arises in this way. It is governed by the laws of assimilation (incorporation), accommodation (internal change), and the equilibrium of the two, depending on how knowledge is created (internalized) and evaluated for its benefit in life experiences, to be maintained or discarded. The process is internal (cognitive), individual, and relationships function as data, catalysts, or contexts. Nevertheless, at certain moments—such as in play and cooperation—they become normative in order to achieve autonomy. Relationships and affection can mobilize the process, but they do not properly affect the indicated laws, which are merely cognitive. Its references are mainly psychologists (such as Alfred Binet), as well as Kantian philosophy and pragmatism, among other currents.

It coincides with the proposal of our model in acknowledging the necessity of the subject's internal activity; however, it is not solely a cognitive matter, but rather the mobilization of all faculties within personal interaction. Our model does not deny Piaget's three laws but situates them in a much broader context of interpersonal relations, which constitute the true driving force. In Piaget, relationships are fundamentally circumstantial, although in certain moments they are essential (for play and autonomy), yet always with an instrumental value. Cognitive growth in Piaget is what directs and structures development; in our model, it is relational experience, which is manifested both in the cognitive and in other dimensions. Piaget does not integrate into his proposal the knowledge of the other and of oneself, nor does he recognize that personal knowledge takes place in relation to knowledge of the world. The progress of knowledge—as in the increasingly complex ways by which the child orders objects by their length—which Piaget associates with advancing age and the satisfactory completion of prior processes, in our model is not a mere biological automatism but a new relational experience.

3. Socioconstructivism

It explains how higher mental processes are attained through social mediation in a co-constructive process. It also accounts for the emergence of culture as tied to symbols and the symbolic, whose highest expression is found in language. The cycle is such that everything begins in the social sphere before taking place individually. He likewise established the expansion of knowledge, starting from what is already established in the proximal zone toward new knowledge situated within a space of social interaction. His proposal is grounded in cultural-historical psychology, Gestalt psychology, Luria's functional neuropsychology, Marxism, and dialectical materialism.

While it is true that in Vygotsky relational experience is indispensable for learning and development, his theoretical framework conceives the product of that experience as the formation of internal structures of thought, not the permanent constitution of a being-in-relation. In Vygotsky, the relationship is origin and means, but rarely appears as an explicit goal, which leaves it within an instrumental understanding and shifts the focus toward the acquisition of individual capacities. It is not about integrating knowledge or ability into the relational space, but about the individual's internal coherence and competence. In this way, the three forms of knowledge—of oneself, of the other, and of the world—are separated as distinct domains.

The new model differs in its ontological point of reference, as well as in the end of learning and its process. Vygotsky's notion of the expansion of the zone of development could be taken up and extended in the new model by reference to crisis. His way of conceiving interpersonal

relations is essentialist, as in our model; however, for him they function as instruments and means at the service of the individual, whereas in the new model they are understood as ends.

4. Classical Cognitivism

Bruner builds on Piaget and draws upon elements of Vygotsky to take a step forward. His philosophical references are pragmatism and constructivism. He emphasizes the active role of the student in constructing knowledge through guided discovery. In contrast to the passive transmission of information, Bruner argues that learning is more effective and lasting when the student reorganizes information for themselves, integrating it into prior cognitive structures. Knowledge is represented in enactive form (action), iconic form (images), and symbolic form (language). He breaks with Piaget's rigidity regarding learning capacity, affirming that any subject matter can be taught if its complexity is adapted and revisited progressively, thereby deepening its scope. He stresses that the student must be a discoverer, following what we today understand as the scientific method of hypotheses, experimentation, and so forth. He adopts Vygotsky's idea of scaffolding, in which the educator accompanies without being the center of change. Learning, although centered on individual cognitive activity, relies on social interaction for the co-construction of meaning, especially in the initial stages. Nevertheless, the ultimate goal remains for the student to attain intellectual independence in order to think and solve problems.

Although the union of Piaget's and Vygotsky's contributions is helpful for Bruner, and we support his proposal that the student act as a researcher, there remain significant distances from the new model. For example, in Bruner the student's activity is not the expression of a person acting from their interiority, but rather the unfolding of operational efficiency. Our model integrates the knowledge of oneself, of the other, and of the world, whereas in Bruner this is, at best, something that might occur. The relationship, though considered essential as in Vygotsky, ultimately remains instrumental. Trust is conceived as a mere contextual requirement and not as the expression of interpersonal encounter. Emotions play a role, but they are not fully integrated with cognition. Observations already made regarding Piaget and Vygotsky apply here again when comparing Bruner with the new model. By maintaining the emphasis on the individual, knowledge is not integrated into the relational space.

5. Meaningful Learning

He proposes a cognitive theory of instruction centered on the integration of new information into the student's existing cognitive structures. In contrast to mechanical or rote learning, meaningful learning occurs when new content is related substantively and non-arbitrarily to relevant concepts already present in the student's mind. Particular emphasis is placed on the cognitive structure the student already possesses, which becomes the subject of study for the educator. However, this is done with a strategic vision of guiding the student and connecting what they know with what they do not yet know, within a framework that is, in some way, standardized for all. It presents a constructive view of knowledge in which contents are gradually added and connected, without acknowledging processes of crisis. The educator must provide advance organizers to connect with the student and offer feedback so that the student discovers the logic of what is presented. This, therefore, demands a much more active and participatory stance from the teacher. Yet the teacher remains an external agent, and thus interpersonal relationship once again becomes instrumental—a means of transmitting and structuring

information rather than a constitutive component of learning. Learning occurs when the new is incorporated coherently and logically into what the student already has. It is not, consequently, the product of relational experience. Knowledge of oneself, of others, and of the world appears as independent domains, and knowledge does not properly transform the bond. Moreover, the model favors a standardized definition of knowledge.

It is a constructive process of "addition and continuation," which, although it allows for a re-examination of prior knowledge, appears more as an adjustment than as a crisis or a process of deconstruction.

Although the student must be highly active, this does not imply freedom, for even if some margin exists, everything ultimately follows a logical process of connecting the preexistent with the new, to which the student must submit. Meaningfulness is not a co-creative act of the agents of learning but the result of a logic. Nor does the teacher possess much freedom, as they are confined to identifying the logical and coherent linkage. In fact, Ausubel was not satisfied with Bruner's discovery learning approach.

The student's uniqueness is blurred. It is not conceived as novelty—as the new model proposes—but is reduced to the uniqueness of prior knowledge and cognitive structures, with nothing properly to be expected from the person as such.

The new model coincides with Ausubel in the effort to understand the student's way of knowing, but it does not do so in a reductive manner—limited to cognition—and certainly does so with a different intention and purpose. Ausubel's model remains purely cognitivist and leaves aside the other dimensions and aspects of the person. Moreover, it maintains a markedly individualistic and instrumental view of relationship, which is regarded as merely circumstantial. Its ultimate goal is the comprehension and retention of academic content, not the strengthening of relational bonds or the improvement of coexistence.

6. Experiential Learning

Experiential learning is understood as a process in which knowledge is created through the transformation of experience (Kolb, 1984). Its theoretical roots are found in the pragmatism of John Dewey, who conceives education as a continuous reconstruction of experience that integrates thought and action (learning by doing) (Dewey, 1938).

We certainly think that experience must be the starting point, but not as the experience of an isolated self encountering something new. Both Dewey and Kolb share with the new relational model of learning the conviction that learning is active, situated in experience, and dependent on interaction with the environment. Yet, while in Dewey and Kolb experiences can be many and varied, they are always understood as a process between the self and the non-self. The new model, by contrast, proposes an integrated understanding of all experience within an interrelational space, for every experience of non-personal reality is a projection of relational experience. It is not the isolated self who experiences, but the we. The access of an isolated self to reality is more a matter of laboratory abstraction than of lived reality.

We also share the necessity of the reflective process; however, although this may be undertaken by an individual, it is always in truth a reflection from within the space of interpersonal relation, a thinking in dialogue with the other and with the horizon of encounter.

Reasoning belongs to the individual, but it is never strictly individual. The principles of continuity and interaction remain in the new model, but with the emphasis that what prevents continuity from becoming mere succession depends on how what is lived is inserted into the interrelational space, which serves to evaluate experiences and unify them under a higher principle.

The stages of Kolb's cycle are considered more as a pedagogical resource than as a normative proposal about how knowledge advances in its apprehension of reality, since the sequence is in some sense artificial in separating the cognitive from the emotional or the abstract. For something to be perceived meaningfully, coherence among the cognitive, emotional, and other aspects is required. Although Kolb builds on Dewey, and it is not uncommon to find Dewey and Whitehead presented together (for example, Frisina, 2002), we believe they cannot be equated.

In Whitehead's philosophy, Process and Reality (1929/1978), perception is articulated around two fundamental "modes" that constitute the core of concrete experience (actual occasion). The first, termed causal efficacy, designates the primary, vague, and affective experience through which the past exerts its influence on the present. It is a primitive mode of perception, described as the feeling of "weight" or "compulsion" of what has occurred and continues to operate in the actuality of experience (Whitehead, 1978, pp. 120–124). The second mode, presentational immediacy, corresponds to the clear and defined sensory perception of qualities such as colors, forms, or sounds, organized spatially and endowed with immediacy, but which, taken in isolation, lack the ontological density provided by their link to causal efficacy (Whitehead, 1978, pp. 125–130).

These modes are not separate experiences nor phases of a temporal sequence, but complementary dimensions that coexist in concrete experience. Causal efficacy and presentational immediacy are articulated through what Whitehead calls symbolic reference, that is, the interpretive process by which the immediate data of sensory perception are linked to the causal efficacy that sustains them, so that experience is unified in a coherent and meaningful perceptual act (Whitehead, 1978, pp. 131–133).

Experience is not a juxtaposition of perceptual states nor a passive reception of external objects, but a complex phenomenological unity in which the affective and temporal dimension of the past intertwines simultaneously with the sensory clarity of the present. Heiner R. Desmet, in the Stanford Encyclopedia of Philosophy, emphasizes that human perception occurs primarily in the mixed mode of symbolic reference, in which the data of presentational immediacy acquire meaning through their relation to the data of causal efficacy. In this way, the empiricist reduction that attends only to sensory clarity is avoided, and the temporal and ontological depth of experience is restored (Desmet, 2024).

This is much closer to what the psychologists of reference for the new learning model affirm, in which the unity of knowledge of self, other, and world is recognized, and where the first step is primary intersubjectivity and then secondary intersubjectivity (Trevarthen, 1979, pp. 321–322; Stern, 1985, pp. 138–141). That is, the first space from which the child accesses the world is shared by mother and child, who are not properly an I before a you, but a we. Only gradually, as interaction with the world increases, does secondary intersubjectivity appear, where the I, the you, and the world are distinctly identified.

Kolb's proposal does not properly integrate emotion, perception, thought, and action, but instead sequences them. To recognize mutual influences is not sufficient to say they are

integrated. In the second edition of his book, where he responds to objections, he continues to present a modular view of the brain, now outdated in the understanding of human psychological processes (cf. Kolb, 1984; Kolb, 2015).

A truly integrated and holistic presentation would imply recognizing that differentiation arises from relationship, from the way of relating and contributing to it, and is more cognitive than real.

Kolb's learning styles, moreover, have been overstated, even though Kolb himself, in the 2015 edition, acknowledges that people change styles depending on external demands and that those who are proficient in one tend to be proficient in the others. There is no reason to deny subjective preferences of the student, but beyond the criticisms directed at the learning styles proposal (Nancekivell et al., 2020; Newton, 2015; Muck et al., 2022), in relation to the new model the relevant point is not the specialization of the learner in a style, but the expansion of resources to integrate what is known in the interpersonal space. Therefore, it is not a matter of specializing the student in one style (if their existence is granted), but of expanding the student's capacities so as to dispose of as many resources as possible.

The role of the teacher as active agent and facilitator should be integrated into a model in which the teacher's own growth is also discovered.

In Dewey, community is seen as a moral obligation but not as an ontological reality, which weakens his proposal. In Kolb, by contrast, the communal dimension is blurred by a proposal of a much more individualistic character. Both have individual empowerment as their horizon; but community, even in Dewey, is not presented as the fulfillment of the individual, but as a moral requirement at the service of a democratic system. It seems that in both there underlies a purpose of strengthening the individual's competence. It is, therefore, a pragmatic and instrumental vision. It should not be forgotten that behind Dewey lies the psychology of William James, of individualist orientation. In both, relationship ends up being considered circumstantial and instrumental, although in Dewey it takes the form of a moral obligation.

The self is presented as a prerequisite of experience; neither Dewey nor Kolb offers any explanation for the emergence of the self. Nor do they consider how experience reconfigures the self in its interiority, as person and in its entirety, reshaping self-understanding, the understanding of the other, and one's way of being situated in the world.

7. Transformative learning theory

This proposal was originally conceived for adult education. Drawing on Habermas, it values communicative rationality, according to which truth and validity are achieved in dialogue free of coercion, and it proposes a process—disorienting dilemma; self-examination with feelings of guilt or shame; critical assessment of assumptions; recognition that transformation is shared; exploration of options for new roles, relationships, and actions; planning a course of action; acquiring knowledge and skills to carry out the plans; provisional experimentation with new roles; development of confidence and competence in the new roles; reintegration into life with the new perspective—through which individuals critically review and transform their frames of reference, that is, their sets of assumptions, beliefs, values, and perspectives, in order to develop more inclusive (insofar as they make space for each person), differentiated, and change-oriented interpretations (Mezirow, 1991).

While Mezirow's proposal clearly highlights the transformation of the subject and

acknowledges various dimensions of the human, it nonetheless emphasizes the cognitive dimension, albeit as a means to achieve a more inclusive stance. This presupposes a positive view of diversity and of the singularity—at least cognitive—of each person. The dialogical community is indispensable: without intersubjective contrast, there is no authentic transformation. Nevertheless, Taylor's systematic review (2007) shows that this proposal remains overly centered on the individual's cognitive-rational reflection, relegating the affective, relational, and cultural dimensions of transformative learning. For Mezirow, the central objective is that each person achieves autonomy (understood as individual emancipation) in judgment and in action. The community thus functions more as context and catalyst than as a good in itself.

He also appeals to meaningfulness, though differently from Ausubel. While in Ausubel information is defined in relation to what is already known, seeking a logical harmonization for the learner to integrate it, in Mezirow meaningfulness resides in the critical revision of one's own thought structures, prompted by the initial disorientation provoked by the educator. His proposal does not aim at a mere substitution of thought, its criteria, and its modes of reasoning, but rather at a growth of thought itself.

With the new model of learning it shares the notion of crisis (disorienting dilemma), dialogical interaction with others, and the need for profound change. Mezirow's emphasis on rethinking one's own thought makes evident that the aim of learning is not merely to acquire new knowledge, but to bring about a transformation of the individual, which also brings him closer to the new model.

However, it must be noted that in Mezirow these realities are still conceived in a cognitive or individual key. In the end, for him, relationship is circumstantial and instrumental, whereas in the new model it is essential and ultimate.

8. Self-Regulated Learning (SRL)

Self-Regulated Learning (SRL) encourages students to proactively activate and sustain thoughts, emotions, and behaviors oriented toward achieving learning goals. It seeks a conscious and strategic management of one's own learning and self, involving metacognition, motivation, and behavioral self-regulation.

It is grounded in Bandura's social cognitive theory, where the social is conceived as the realm in which the individual must assert him- or herself; in a metacognition understood as control of cognitive processes; and in a motivation which, although described as intrinsic, remains individualistic, oriented toward overcoming difficulties.

Zimmerman's cycle (forethought; performance; self-reflection) and Winne and Hadwin's cycle (task definition; goal setting and planning; strategy implementation; adaptation) resemble an engineering project oriented toward efficiency and the transformation of a practice, rather than a process of personal growth. What emerges is not a profound rethinking but a search for task efficiency, envisioned as something to be carried out individually at every stage.

These are highly individualistic models, in which relationships are circumstantial, though necessary as a means to strengthen the individual. The relationship with the educator and the educator's feedback are reduced to mere strategies for learning effectiveness. The ultimate aim is for the individual to be able to pursue his or her learning path without anyone's help, treating relationship as something to be overcome.

Emotional reality is conceived as another aspect to be controlled, whose evaluation—positive or negative—is determined according to its efficiency for learning.

The new model of learning radically distances itself from these approaches. It could not even accept that SRL fosters intrinsic motivation, for such motivation is considered intrinsic only in light of the efficiency achieved in mastering an external reality presented to the learner. In this sense, it is better described as extrinsic motivation, since what is valued lies in efficiency with respect to something external to the subject.

It also diverges in its conception of the learner's activity, for the SRL model does not propose that the student be the true creative author of his or her activity, but rather a good executor of processes capable of maximizing the efficiency of an internal learning mechanism.

The personal growth of the learner is not considered, and the unity of knowledge and action concerning oneself, the other, and the world is disintegrated. Relationship is understood as circumstantial: necessary, yet circumstantial nonetheless—something to be respected but ultimately overcome. Accordingly, it is conceived instrumentally and medially, not as an ultimate reality to which learning is ordered. Within this framework, the educator is reduced to a component of that necessary, though ideally surmountable, assistance.

9. The Self-Determination Theory (SDT)

SDT takes as its point of departure the premise that human beings possess a set of basic psychological needs (autonomy, competence, and relatedness), that must, normatively, be fulfilled. Among these, for the purposes of our discussion, particular attention should be given to the need for relatedness. Relatedness refers to "feeling connected to others, to caring for and being cared for by those others, [and] to having a sense of belonging both with other individuals and with one's community." This need is regarded within SDT as *essential for ongoing psychological growth, integrity, and well-being*. Importantly, it is conceptualized as independent from the other basic needs, which reflects not a holistic but rather a comprehensive approach. Autonomy is ultimately understood as the individual's capacity to act without needing others. This understanding of autonomy stands in contrast to the proposal of the new model of learning, which, far from aiming at enabling each person to carry out projects independently of others, emphasizes doing so with others. The goal is to transform the world through a co-active act that introduces it into the interpersonal space—that is, to humanize the world by turning it into a place of encounter.

What Self-Determination Theory (SDT) calls autonomy and competence would, in the new model, be integrated into the development of authorship, understood as the creative capacity to generate one's own acts. Competence is not conceived as an end in this model of learning, but rather as a means, a resource, and never as a finality.

In this framework, relatedness becomes a necessary, yet ultimately circumstantial, condition for the constitution of the individual. It is not valued intrinsically, nor is it a relationship sought universally; rather, it is limited to specific contexts or groups. In fact, there are instances in which the sense of satisfaction derived from belonging to a certain group may be set in contrast to dissatisfaction in relation to those outside it. Such a dynamic imposes limitations on both personal growth and learning, insofar as the boundaries of the individual's development tend to align with the boundaries of the group.

Although SDT claims inspiration from the work of Rogers and Maslow, its engagement with

these authors appears selective, adopting certain ideas without fully embracing their central anthropological commitments. Notably, the theory does not affirm the inherent value of the person as such, and its reduction of human flourishing to the fulfillment of three psychological needs may be interpreted as a form of functional reductionism. Moreover, it fails to integrate—at the conceptual depth found in Rogers and Maslow—the dimensions of openness and transcendence that are essential to a richer account of human development.

The strong individual emphasis of Self-Determination Theory (SDT) prevents it from integrating knowledge of the self, the other, and the world, conceiving them instead as distinct and independent domains.

10. Social Interdependence Theory and Cooperative Learning.

The Johnson brothers in this model conceive that interpersonal relationships are necessary for fostering positive interdependence, promotive interaction, and both individual and group responsibility. Group membership is regarded as a structural condition for success, functioning primarily as a means to achieve individual goals. The underlying vision is predominantly instrumental, with a strong emphasis on the efficiency of the work accomplished. While some scope is afforded to the subject—such as through role rotation, which aims to develop a range of competencies—the framework ultimately operates within a competence-based model.

The activity of the person is defined primarily in relation to the non-personal reality that presents itself and upon which he or she must work. What remains unaddressed is the work on oneself, oriented toward personal growth and the cultivation of the interpersonal relationship as such. Whenever self-work or group-work is considered, it always appears under the horizon of efficiency, treating the interpersonal encounter as a means to action. Thus, the ultimate horizon of the relationship ends up being the maximization of individual performance.

The Johnsons refer to Kurt Lewin and Morton Deutsch as foundational figures for their proposal, both recognized for their contributions to the psychosocial theory of cooperation and conflict.

In Resolving Social Conflicts, Lewin (1948) addresses problems of group dynamics in postwar contexts, minority integration, and processes of democratic re-education. He argues that social conflicts require both scientific analysis and a program of transformation. The core of his proposal is that the individual can only be understood in relation to the group: "the group to which an individual belongs is the ground of his perceptions, feelings, and actions" (Lewin, 1948, p. vii). Conflict resolution, therefore, entails altering the structural conditions of the group, especially its leadership, which must be democratic.

Deutsch, by contrast, formulates in A Theory of Cooperation and Competition (1949) a more systematic and formal account. He defines cooperation and competition in terms of goal correlation: "when the goals of individuals are positively correlated, there is cooperation; when they are negatively correlated, there is competition" (Deutsch, 1949, p. 129). In his conception, cooperation is associated with trust, mutual facilitation, open communication, and constructive conflict resolution (Deutsch, 1949, pp. 138–140), while competition entails reciprocal obstruction, distrust, and hostility. Unlike Lewin, Deutsch's proposal is less situated in the sphere of transformative social praxis and more in the construction of a theoretical framework capable of explaining and predicting the consequences of different types of interdependence.

If these theories are interpreted through the conceptual lens of Michael Tomasello, particularly

in A Natural History of Human Thinking (2014), important nuances arise. Tomasello distinguishes between "individual intentionality" and "shared intentionality." The former refers to situations in which each individual pursues his or her own interest ("I want to eat") but cooperates instrumentally because it increases the likelihood of success; here, the group functions as an instrumental good. The latter entails that individuals represent themselves as part of a collective "we" ("we want to feed the tribe"), where the group itself is a final good and trust is a necessary precondition.

From this perspective, Deutsch's definition aligns more closely with individual intentionality: it suffices that goals be positively correlated for cooperation to occur, even if each actor pursues only his or her own benefit (Deutsch, 1949, p. 129). The secondary effects he describes—trust, openness, facilitation—can approximate a form of "we," but they are not a logical condition of the concept (Deutsch, 1949, pp. 138–140).

Lewin, by contrast, though he does not articulate a cognitive theory of we-intentionality, does propose democratic practices (leadership, group decision-making, we-feeling) that tend to institute an operative and normative "we" (Lewin, 1948, pp. xi–xiii). His horizon thus comes closer to Tomasello's notion of shared intentionality, even though it can ultimately still be explained in terms of individual interest.

In the Johnsons' proposal, however, parameters of efficiency become predominant, and as a result the relationship is ultimately instrumentalized. The relationship itself is never explicitly affirmed as an end in itself. Learning is not directed toward the flourishing of the community as such, but toward the strengthening of the individual.

11. Community of Inquiry -CoI-

Within the Community of Inquiry framework, a coordinated integration of social, teaching, and cognitive presence is proposed. Each member projects their personal characteristics into the dialogical investigation, thereby presenting themselves as real persons; the central function of this is to support a sustained cognitive presence. Such interaction is, at times, deemed essential for the creation of meaning and for the attainment of academic outcomes.

However, the framework does not conceive this process as a space for the holistic growth of the person *as such*. Rather, it is framed as a space for the development and construction of shared thinking, culminating in what is described as *fruitful critical inquiry*. In this perspective, the Community of Inquiry itself becomes the guarantor and enabler of learning. The approach retains an instrumental orientation, as explicitly stated: *"The ultimate goal of a community of inquiry is to realize educational outcomes through a collaborative process of critical reflection and discourse"* (Garrison, p. 6).

The framework is grounded in the work of Dewey (1938) and Vygotsky (1978), emphasizing the collaborative construction of knowledge through discourse and reflection (Garrison), and it also draws on Short, Williams, and Christie (1976), whose work provides the conceptual basis for understanding how individuals present themselves as real in mediated communication. In this view, community is regarded as a necessary but not sufficient condition for learning. The model remains instrumental in orientation and offers no articulated theory of the self.

Although not formulated with the same precision as in Community of Inquiry, dialogue has received increasing attention in learning. Systematic reviews (Howe & Abedin, 2013) show that dialogue is considered a substantive reality that enhances reasoning and comprehension. It

explicitly affirms that the quality of the exchange is a necessary condition for the generation of meaning, and it attributes to dialogue an ethical value that is not merely instrumental.

However, the ethical value ascribed to dialogue is not derived from the ontological worth of the person or the encounter itself. Rather, it is linked to the premise that, since learning cannot occur without dialogue, a corresponding responsibility emerges. In this way, the normative weight of warm interpersonal relationships is acknowledged, yet without offering an account of why they are inherently valuable. The intrinsic significance of interpersonal relationships is not uncovered; instead, such relationships are consistently framed as prerequisites for achieving the objectives of learning

12. Relational Pedagogy or Ethics of Care

Noddings' proposal centers on the presence, receptivity, and care of the educator. In her framework, the relationship is no longer conceived merely as a necessary condition for learning, but as a necessary condition for *being a person*, and, by that very fact, also for learning. Care is understood as an end in itself. Learning is thus to be directed toward the care of the relationship—not as a critical contingency to be managed, but as a final aim. In this sense, Noddings inverts the orientation found in Johnson and Johnson: in her approach, learning is subordinated to care, rather than care being subordinated to learning.

A central nuance in Noddings' thought lies in her rejection of an individualistic or unilateral conception of care, such as "caring for the other" understood merely as an assistential act. The focus is on caring for *the relationship* itself, because, in her view, the relationship—not the isolated individual—is the basic ontological unit: *"Our aim is to establish, maintain, and enhance caring relations"* (p. xiv). The "uniqueness of human encounter" must be protected (p. 5). Within this framework, the *one-caring* is the person who offers attentive presence and responds ethically to the concrete needs of the other, while the *cared-for* is the one who receives that care and participates in the relationship by acknowledging and accepting it. These roles are neither symmetrical nor simultaneous, but alternate throughout life, such that all of us are *cared-for* many times and, ideally, also *one-caring*. Reciprocity is built over time, and both roles are indispensable for care relationships to flourish and to serve as a foundation for education and moral development. All of this is in line with the proposal of the new learning model, since in fact, both take the child's early development as the starting point of their analysis.

Her theoretical references include Buber (the *I–Thou* relation and relationality), James (the interplay between emotion and cognition), R. S. Peters (the cognitive content of emotions), Dewey (education as experience), and Gilligan (the ethics of care within moral feminism). Noddings' vision resonates strongly with the model proposed here, as both share the conviction that the earliest years of life reveal the ontological weight of the relationship. However, she does not provide a detailed account of the learning process itself, nor of the cognitive reorganization it entails, and thus does not explain how cognitive change occurs.

Another point of difference is that, by placing such decisive emphasis on care, Noddings does not allow us to recognize that caring for the relationship requires that the world—the non-personal reality—be assumed as a locus of encounter. The learning of reality cannot be treated as a domain separate from the relationship. The interplay between the principles of reality and satisfaction highlights the need for the dynamic of distance–encounter within the relational world, since the "world" is inserted into the very space of the relationship. In the new model,

without this insertion of the world into the relational space, there can be no authentic care.

Although Freud was the first to formulate this binomial, from a perspective far removed from that of the new model, the subsequent resignifications of Winnicott and Kohut make it possible to take the reality–satisfaction pair as a hermeneutical key for understanding the term "crisis" in the new model of learning.

In Freud (1911; 1920), psychic life is initially oriented by the pleasure principle, which seeks the immediate satisfaction of drives. However, the subject must progressively incorporate the reality principle, which introduces the postponement, inhibition, or transformation of satisfaction in accordance with external conditions.

Winnicott (1971, chap. Transitional Objects and Transitional Phenomena) reworks this tension from the early experience of the mother–infant relationship. For him, access to reality is not a mere imposition but rather a gradual achievement made possible by the facilitating environment. The infant initially lives within an illusion of omnipotence, in which the mother almost completely adapts to his or her needs. Subsequently, through a process of "progressive disillusionment," the mother introduces difference, allowing the child to discover the existence of an external and independent reality without annihilating the child's creative capacity. In this way, the pleasure principle is linked to experiences of illusion and satisfaction originating within the primary interpersonal relationship.

Kohut (1977), for his part, replaces the Freudian drive economy with a theory centered on the cohesion of the self. Development requires that the mother function as a selfobject, enabling the child both to make sense of lived experience and to strengthen personal cohesion in relation to her. The pleasure principle is thereby transformed into the search for experiences of acceptance and validation, while the reality principle is reconceptualized as the internalization of selfobject functions, which make it possible to tolerate frustration without fragmenting self-cohesion.

13. Enactivism / Participatory Sense-Making

This proposal is grounded in the idea that meaning emerges through interpersonal coordination. As De Jaegher and Di Paolo affirm, *"Knowledge arises from the dynamic interaction between the organism and its environment"* (2007, p. 2), and *"Meaning is generated in interaction, in the coupling between the subject's actions and the responses of the environment, which includes other subjects"* (2007, p. 3). Furthermore, *"Learning takes place in dialogue and in the coordination of perspectives"* (2007, p. 4). In this view, learning must be understood as an embodied, situated, and co-regulated activity among participants (Stewart, Gapenne, & Di Paolo, 2010).

Enactivism emerged in the early 1990s as a proposal that redefines the understanding of cognition, departing from representationalist models and asserting that knowledge arises from the active interaction between the organism and its environment. Its initial formulation is due to Francisco Varela, Evan Thompson, and Eleanor Rosch (1991), who, in *The Embodied Mind*, argued that cognition is "enacted" through situated and embodied action, and that meaning is generated in the dynamic coupling between subject and world. Although the foundational work was primarily situated within cognitive science and philosophy of mind, its emphasis on situated interaction opened the way for applications in the field of education.

Nevertheless, the enactivist model does not fully recognize human uniqueness, except insofar as it acknowledges certain distinctive capacities, without affirming equally distinctive ontologies. Its focus is not on seeking interpersonal encounter but on sustaining life as an organism. The

emergence of uniquely human capacities—such as language, symbolism, and culture—does not, in this framework, lead to the recognition of new ends beyond maintaining self-constitution. Thus, while enactivism is a profoundly relational paradigm, it retains a strong individualistic emphasis: relationships are not pursued as ends in themselves. Moreover, the model does not account for the inherent asymmetry of roles within educational relationships.

Enactivism does not address the integrated understanding of oneself, others, and the world. Rather, it is based on a strong definition of the self. It is a self that is determined to control the environment.

14. Situated Learning and Communities of Practice –CoP–

The central premise of this proposal is that learning is fundamentally a matter of participating in, and constructing one's identity through, social practices. It focuses primarily on describing the process of moving from novice to expert, emphasizing that the meaning of learning emerges from concrete social dynamics rather than from abstract cognitive processes. Learning is thus situated within, and inseparable from, authentic relationships with others, embodied in shared practices. As stated in their work, *"Learning is an integral part of generative social practice in the lived-in world"* (Lave 1991 p. 35), making it a process of identity formation and belonging that is embodied in the community. *"Legitimate peripheral participation provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice"* (lave 1991 p. 29). In this sense, identity and learning are intrinsically linked: learning constitutes the pathway to community membership. *"A person's intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice"* (lave 1991 p. 29). That is to say, there is a closeness with the new learning model in which the knowledge of oneself, of the other and of the world appear reciprocally affected, but they are not considered as diverse considerations of the only learning process.

Although the community is not presented as an end in itself, it is asserted that all actions acquire meaning when oriented toward belonging within it. The proposal is grounded in a sociocultural and anthropological framework that draws directly on authors such as Lev Vygotsky, whose theory of socially mediated learning provides the basis for understanding the relational dimension of knowledge; John Dewey, who links learning to practical experience; Harold Garfinkel, whose ethnomethodology examines how interactions produce and reproduce social order; and Lucy Suchman, who demonstrates how action is situated in specific contexts. These intellectual references enable Lave and Wenger to articulate a vision in which learning is, in essence, participation in real social practices that shape both knowledge and identity. The identity Lave and Wenger speak of does not refer so much to the identity of the subject itself, but rather to a relationship of belonging to the group. Identity is a derivative of belonging to the group. While the new model also assumes that one's identity is defined in relation to another person, that other does not have to be the group. The group remains an institution, not a person. Furthermore, identity does not require adherence to the group, as non-adherence would also be another possible identity process.

However, the proposal does not understand community as an ultimate ethical end. Lave and Wenger frame the declared objective as becoming a full participant in a sociocultural practice and developing the competence required to sustain it. The strengthening of the community is a natural by-product of this process, but it is not posited as an explicit moral criterion for the

legitimacy of actions. Nor is there any sustained reflection on the ethical character or way of life of the community, thereby implicitly accepting any communal configuration as valid.

15. Anthropology of Education Approaches

This perspective conceives of education as a process of enculturation, i.e., as participation in culturally organised activities, rather than as the transmission of content. One of the authors representing this vision, Margaret Mead, regards education as the incorporation of children into the ways of life, values, and expectations of their society. For her, education is not an isolated system, but rather a cultural mechanism that expresses the structure and continuity of the human group. For instance, in her work *Coming of Age in Samoa*, Mead (1928) shows that issues assumed to be universal (adolescent conflicts, for instance) are in fact cultural products, and that education must understand these variations so as not to project ethnocentric models.

Accordingly, learning is regarded by this author as internalising cultural patterns through participation in social life, which involves ways of working, cooperating and solving conflicts; expectations about the adult role or the transition to adulthood; and emotional and relational norms. Mead (1943) author analyses how societies emphasise different educational objectives according to their cultural structure, showing that learning occurs in informal, everyday contexts, not just in institutional structures. The cross-cultural differences documented by Mead show that learning is always socially mediated and depends on the relational fabric in which the child is embedded (Mead, 1943).

Heidi Keller and Patricia Greenfield states that education must be understood within different cultural trajectories, as there is no single valid model of development or learning. Education and culture are intertwined: the former expresses the goals and values of the latter (Keller & Greenfield, 2000). Greenfield et al. (2003) propose that cultures generate different educational pathways — oriented towards independence or interdependence — and that these pathways determine educational expectations, support systems, and the ways in which learning experiences are structured throughout the life cycle. All learning, defined as a process of acquiring skills, values, and forms of attention, is therefore culturally constituted (Greenfield et al., 2003). As such, learning cannot be understood without analysing the particular ways of ecology (rural/urban), family structure, values and sociocultural history. For instance, in contexts oriented towards interdependence, children learn through collaboration, observation, and shared responsibility. Differently, in contexts oriented towards independence, learning privileges autonomy, individual exploration, and explicit verbalisation.

Rogoff et al. (1993) empirically show how children and caregivers participate together in meaningful activities, formulating learning as a participatory, collaborative and situated process, dependent on how each community structures interaction and shared responsibility. For these authors, learning occurs when children participate in cultural activities with support, observation, collaboration, shared attention and contingent correction. Therefore, children do not learn in isolation, but rather by gradually integrating into existing practices under the guidance of more experienced members.

In Rogoff (1995), education is conceptualised as a phenomenon that must be analysed simultaneously on three planes: 1) personal plane, which considers the transformation of the individual, 2) interpersonal plane, in which collaboration between participants is considered, and 3) community plane, which encompasses the cultural practices which structure the activity.

Robert A. LeVine (1988) shows that a society's educational objectives derive from parental goals and ecological and demographic conditions. He highlights that education should be understood as cultural adaptation, each society emphasising certain skills — verbal, social, practical, self-control — depending on what is locally adaptive. Therefore, what one culture considers an "educational standard" cannot be universalised without distortion. He also warns that Western educational theories often assume an "optimal environment" that is not universal, and that parenting and learning practices should be evaluated according to their adaptive coherence, not according to a single academic or psychological canon. LeVine shows that children learn within environments designed by parental goals. For instance, in the case of the Gusii, children's learning is indirect, based on observation, peripheral participation, and care from older siblings, rather than intense verbal interaction. In this social group, priority is given to survival, emotional self-regulation, and integration into the peer group, resulting in a learning pattern that differs from that in the West. According to LeVine, learning should be evaluated not according to a single standard, but according to its cultural relevance and consistency with the demands of the environment.

16. Cognitive Apprenticeship and Situated Cognition

In the late 1980s, Allan Collins and John Seely Brown advanced, almost in parallel, two lines of work that are now read as complementary: cognitive apprenticeship (Collins, Brown, & Newman, 1989) and situated cognition (Collins, Brown, & Duguid, 1989).

Cognitive apprenticeship emerged as an instructional model based on craft learning and was later adapted to the classroom (Collins, Brown, & Holum, 1991) to teach complex cognitive skills through modeling, scaffolding, coaching, and fading, as well as articulation, reflection, and exploration—with the aim of making expert thinking and the culture of practice visible within academic domains.

Situated cognition, by contrast, was conceived as a theoretical reflection on learning, asserting that knowledge is inseparably tied to the activities, contexts, and cultures in which it is used. Hence its critique of decontextualized schooling and its defense of learning as enculturation within communities of practice.

These two lines, initially connected but with distinct intentions, eventually converged. Greeno, Collins, and Resnick (1996) situated cognition as a paradigm and identified cognitive apprenticeship as one of its most influential instructional implementations.

The core elements of this proposal are modeling, scaffolding, coaching, articulation, reflection, and exploration. They try to combine the logic of traditional apprenticeship with principles from cognitive theory and situated learning, with the explicit aim of teaching complex cognitive and metacognitive skills that are not directly observable. The approach seeks to cultivate four types of expert knowledge: domain knowledge, heuristic strategies, control strategies, and learning strategies. Instruction is sequenced according to principles that move from the global to the local, from lower to higher complexity, and from narrower to broader variation.

Its stated objective is to empower the learner to perform domain-specific tasks autonomously and to transfer these skills across diverse contexts, *"to make thinking visible"* and *"to enable students to acquire, develop, and use cognitive tools in authentic activity"* (Collins, Brown, & Newman, 1989, p. 456). As Collins et al. note, the model is designed *"to help students learn the cognitive and metacognitive skills required for complex tasks in a variety of settings"* (1991, p. 2).

While it relies on community and social interaction as vehicles for instruction, the model is ultimately oriented toward strengthening individual performance. The community is regarded as a context and a means rather than as an end in itself; the primary goal is for the learner to act autonomously and competently. The emphasis lies in acquiring, developing, and transferring cognitive skills and strategies already established within an expert domain, rather than in the original creation of new knowledge. Although learners engage in authentic tasks and may produce creative outputs, the core of the model is the internalization of the cognitive practices and tools characteristic of an expert community.

Cognitive Apprenticeship draws explicitly on theoretical influences such as Vygotsky's sociocultural theory—particularly the notions of scaffolding and the zone of proximal development—Bandura's social and observational learning, situated learning and communities of practice, and the historical tradition of craft apprenticeship. However, these influences do not coalesce into a unified conceptual framework or coherent philosophical foundation. Rather, the authors deliberately integrate theoretical and empirical contributions in an eclectic and pragmatic manner, selecting them for their utility in designing an instructional model capable of teaching complex cognitive skills in authentic contexts. This operational, non-doctrinal orientation means that describing the approach as theoretically eclectic and functionally driven is consistent with the authors' own declared intentions.

17. Cultural-Historical Activity Theory (CHAT) and Expansive Learning

It presents a new current of learning, framed within Activity Theory yet developed in its own right, moving beyond its classical formulations.

In this approach, learning is understood as a collective process situated within historically evolving activity systems, where subjects, mediators (tools, signs), rules, division of labor, and community interact around a shared object. The core of Engeström's proposal is expansive learning, which is not limited to the acquisition of predefined knowledge or skills but involves the joint transformation of both the object and the activity system itself.

In this model, interpersonal relations occupy a central place, but not merely as direct ties between individuals: they are mediated by the activity system and oriented toward addressing collective tensions and contradictions that drive change. Learning occurs when the community of practice reconceptualizes its object of work and collectively redesigns its tools, rules, and organization.

Efficiency gains, knowledge growth, and the strengthening of relationships are conceived as interdependent goals of equal practical standing, whose mutual attainment sustains the viability and continuity of expansive change.

Engeström's expansive learning does not prescribe a single, rigid, or sequential model of the learning process. Rather, it identifies structural features that must be present for expansive learning to occur, regardless of context. These include: orientation toward a collective object susceptible to transformation; analysis and resolution of internal contradictions within the activity system; broad participation of the involved members, with reconfiguration of roles and rules; and joint production of new knowledge and practices.

Its theoretical foundations lie in Vygotsky (semiotic mediation and historical–cultural development), Leontiev (hierarchical structure of activity and the notion of object), and Luria (neuropsychological and cultural dimensions of human activity). It also draws on developmental

psychology (Cole, Scribner), organizational learning studies (Argyris, Schön), and contemporary sociocultural research (Wertsch, Rogoff). In its more mature formulation, Engeström turns to empirical examples from workplace and educational settings to articulate his "second- and third-generation" activity system models, which expand the classical triangle to include community, rules, and division of labor.

However, in the framework of expansive learning, relation and encounter do not ultimately appear as ends in themselves. Their value is both constitutive and instrumental. Constitutive, because without sustained interaction and genuine collaboration the activity system could neither detect contradictions nor generate expansive solutions. Instrumental, because these relations are oriented toward a purpose that transcends them: the collective transformation of the object of activity and the improvement of the system as a whole.

In sum, interpersonal relation is indispensable and carefully fostered, yet not pursued for its intrinsic worth, but rather as an essential means for enabling expansive change.

18. Connected Learning (red CLRN)

This proposal advocates for socially embedded, interest-driven, and opportunity-oriented learning, guided by the involvement of significant adults. It has its roots in research on informal, digital, and interest-based learning. Within this framework, learning is conceived as a process that connects personal interests, peer relationships, and academic or civic achievements, with the aim of fostering full participation in social, cultural, and economic life.

Interpersonal relationships play an essential role: peer communities and mentors facilitate the transition between individual interests and academic or professional opportunities. As stated, *"Connected learning is socially embedded, interest-driven, and oriented toward educational, economic, or political opportunity"* (Ito et al., p. 4). The approach is not merely a motivational tool, but a space for co-creation and the circulation of knowledge, supported by open environments and digital networks to broaden reach and promote equity in access to learning.

The value of social connection is presented primarily as an empirical observation, an observable condition in environments where learning flourishes, rather than as the conclusion of an anthropological reflection on the relational nature of the person. Consequently, while it is recognized as an essential requirement, there is no normative claim that learning ought to be explicitly oriented toward the care and strengthening of relationships for their own sake. The focus remains on how such connections mobilize interests and provide access to educational, economic, or civic opportunities, rather than on cultivating the relationship as an intrinsic goal.

Social connections are the indispensable medium within which connected learning occurs, but the objective is not to achieve strong relationships per se; rather, it is to leverage that medium to attain accomplishments and expand opportunities. The model integrates insights from sociocultural learning theory (Vygotsky), the concept of communities of practice (Lave & Wenger, 1991), and research on participatory culture in digital environments (Jenkins et al., 2006). These references serve primarily to support and align the model with previously documented empirical findings, rather than to constitute a theoretical framework that shapes the research and data interpretation from the outset. This strategy lends interdisciplinary legitimacy and recognition but carries the limitation that the conceptual foundation functions chiefly in a confirmatory role, rather than as a critical-analytical instrument for model development.

The perspective remains instrumental: relationships are regarded as the indispensable

ecosystem in which learning occurs, yet the model offers no theory of epistemic change in the self.

Other analyses of proposals that are not actually learning models.

Connections-based Learning

Connections-based Learning is not so much a model as it is a methodology—a specific pedagogical approach rather than a general theoretical current in learning theory. Its core lies in placing real connections—personal, social, and community-based—at the center of educational experience design. Robinson's focus is not on developing curriculum, projects, or lessons per se, but on fostering personal growth understood as empowerment through relationship. What differentiates educational projects, in this view, is not primarily *what* is done but *with whom* it is done (p. 3); accordingly, the starting point is always the question: "with whom will I connect?" (pp. 14–15, 69). As Robinson defines it, "Connections-based learning is an approach to teaching and learning that puts classroom connections at the core" (p. 10), where learning is grounded in "forming and leveraging real-life connections for learning" and where every meaningful action arises from a genuine connection. This entails that teacher and student co-define objectives, guided by the relevance brought by the people with whom they interact. Learning is thus conceived as a collaborative process oriented toward "a better you, a better me, and a better us" (p. 142), aimed at mutual support and at both individual and collective improvement.

Robinson explicitly states that this approach is not age-specific (p. 12) and that competence and skills acquire meaning only insofar as they respond to needs ultimately rooted in interpersonal relationship (p. 78). He affirms that "your identity is formed in community" (p. 80) and that teachers are also active participants in the process, since "we are all made for relationships" (p. 70).

Model for Interpersonal Teacher Behavior (MITB) / Classroom Climate

The Model for Interpersonal Teacher Behavior (MITB) posits the centrality of teacher proximity and influence as predictors of student engagement and learning achievement. It does not constitute a theoretical model of learning as such, but rather an analytical and methodological framework designed to describe, measure, and understand teacher — student interaction and its impact on classroom climate. Its focus is not on articulating a general theory of how learning occurs, but on providing conceptual and empirical tools to evaluate the quality of interpersonal relationships in educational contexts and their correlation with variables such as motivation, perceived support, and academic performance.

Developed from Wubbels and colleagues' *Model for Interpersonal Teacher Behavior*—itself inspired by Leary's model of interpersonal interactions — the MITB organizes teacher conduct along two primary dimensions: influence (the degree of control or direction exercised by the teacher) and proximity (the degree of closeness, cooperation, or antagonism perceived). The combination of these dimensions yields specific interaction profiles, which can then be analyzed statistically to identify patterns associated with classroom climates that are more or less conducive to learning.

Among its principal contributions are: a clear and operational analytical structure that facilitates comparison across classrooms, educational levels, and school cultures; standardized instruments (questionnaires, observations) validated empirically to capture both student and teacher perceptions; and diagnostic as well as formative potential, since the results not only describe classroom climate but also offer concrete guidance for improving teaching practices.

The model does not present any articulated theory of the self or of learning per se, and it maintains a predominantly instrumental view of the interpersonal relationship.

Relational Agency.

This approach emphasizes the need to align intentions and resources with others in order to act jointly. It does not constitute a comprehensive model of learning as such, but rather a conceptual and analytical framework designed to investigate how actors in educational and professional contexts collaborate and learn through the reciprocal mobilization of resources, knowledge, and capabilities. Its purpose is not to provide an overarching explanation of how learning occurs, but to offer a specific lens for analyzing and understanding interactions within complex collaborative environments.

It is therefore both a theoretical and methodological tool: it enables researchers to identify when and how participants recognize the value of others' experience, negotiate meanings, and jointly adjust their actions to address shared problems. The framework has been applied particularly in research on professional learning, inter-institutional work, and collaborative networks, rather than in classroom-based studies in the strict sense — although its principles are transferable to formal educational settings.

Its main contributions include: a precise conceptualization of collaboration as a process of jointly constructing meaning and action, beyond the mere coordination of tasks; an emphasis on shared agency, whereby an individual's capacity to act is expanded through the ability to recognize and leverage the resources of others; and clear methodological implications for studying collaborative interactions, including the analysis of critical episodes of negotiation and co-construction of solutions.

In similarity to the model proposed here, it underscores the co-authorship of learning. However, it does not connect this to any underlying ontology, to a vital end, or to the process of learning itself in the fuller sense, nor to the construction of the self.

Teacher–Student Relationship (TSR) Quality.

This meta-analysis highlights the centrality of warmth and conflict within the teacher–student relationship, insofar as these dimensions predict both learning achievement and student engagement. It is not a model or a theoretical proposal, but an empirical synthesis of existing studies. The analysis reports that positive and negative teacher–student relationships have medium to large effects on engagement, and small to medium effects on achievement.

Its conclusions are limited to affirming the magnitude of this influence; it does not claim that the relationship is a necessary condition for learning, but rather that it constitutes a factor of moderate weight. The study operates without theoretical presuppositions or an explicit conceptual framework, focusing solely on quantifying the relationship's effect on student engagement.

While it identifies the value of the interpersonal bond as a condition that affects learning, it does not advance any theory of learning and retains a purely instrumental view of the teacher–student relationship.

Social-Emocional Learning (SEL)

It is not a model per se, but rather a recommendation to develop certain competencies as beneficial for learning, following an intentional selection of authors with whom the CASEL model is formed. The central aim of this proposal is the acquisition of socio-emotional competencies and the cultivation of relational climates. Among the five competencies it identifies, two are particularly relevant: Relationship skills—"the abilities to establish and maintain healthy and rewarding relationships with diverse individuals and groups"—and Social awareness—"the ability to take the perspective of and empathize with others from diverse backgrounds and cultures." While comprehensive in scope, the model is not holistic, as these competencies are conceived as being acquired separately rather than as facets of an integrated whole.

The stated goal is to prepare students to achieve academic success, to develop life skills, and to contribute to both individual and collective well-being, integrating cognitive, emotional, and social dimensions. Notably, equity and excellence are framed in relation to learning outcomes rather than as qualities inherent to the community or collectivity. Collaboration among schools, communities, and families is presented as a necessary condition for fostering a positive environment, yet not as an end in itself.

The proposal does not arise from, nor does it rest upon, a fully articulated theoretical or philosophical foundation; rather, it draws on the applied research of James Comer, Daniel Goleman, and Linda Darling-Hammond. It is thus better understood as a curricular program than as a theory of learning. Its vision of the relationship is distinctly instrumental, with the emphasis placed on strengthening the individual as the ultimate goal.

Within the umbrella of SEL, we can also refer to the research of Damasio, later applied to education by Immordino-Yang. Strictly speaking, this cannot be considered a learning model, but rather a focused line of inquiry that seeks to draw educational implications from the intrinsic relationship between emotion and cognition, since emotions constitute the neurobiological and motivational substrate of learning, memory, and decision-making (Immordino-Yang & Damasio, 2007; Damasio, 1994, 1999).

The new learning model shares with this perspective the recognition of the importance of emotions, but understands them as condensed expressions of interpersonal experiences. What Immordino-Yang and Damasio describe in emotions as the means by which reality is appraised, memories are organized, and decision-making is motivated and directed, the new model attributes to the history of relational experiences, which are subsequently condensed into emotional experience. Immordino-Yang and Damasio thus assign to emotions a weight they do not intrinsically bear, since emotions are not the primary referential entity but rather interpersonal relations themselves. This distinction is crucial, as it prevents learning from being subjectivized within the individual and safeguards its foundational relational character. In the new model, emotions are understood as a privileged pathway to knowledge of oneself, the other, and the world, precisely because they converge all these dimensions. Indeed, Immordino-Yang and Damasio find that the connection between emotional experience and social connection provides stability to the motivational and decision-making system, yet they ultimately treat these

as two distinct realities. Moreover, their differentiation between primary, secondary, and other emotions functions more as a classificatory scheme than as an ontological distinction, suggesting a conceptual division rather than an analysis of entities that exist as independent realities.

The educational relevance of this perspective is considerable: the task is not so much to aim directly at eliciting emotional responses in students and subsequently associating these with pleasant personal relationships, but rather to propose learning experiences that are embedded within intrinsically valuable interpersonal relations.

It is true that Immordino-Yang and Damasio do not posit emotions as wholly independent referents, acknowledging that emotions can reflect the traces of prior cognitive processes and are therefore not "raw" reactions. However, their dependence on Ekman prevents them from fully recognizing how the human dimension as a whole is integrated within emotional experience. Recent work by Lisa F. Barrett (2017) has revealed significant flaws in Ekman's (1992) postulates, and has revived alternative proposals such as that of Catherine Bridges (1932), contemporaneous with but divergent from Ekman, in order to understand emotional experience in a more integral way—precisely in line with the new learning model.

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