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FROM INFORMATION TO INTEGRATION: INTEGRATIVE CAPACITY AND EDUCATIONAL TRANSFORMATION IN CONTEMPORARY UKRAINE IN THE CONTEXT OF COLLECTIVE TRAUMA, ARTIFICIAL INTELLIGENCE, AND SOCIAL CHANGE

Abstract. Purpose. This paper argues that the dominant model of education, which assumes that access to information produces developmental change, is no longer adequate under conditions of collective trauma, symbolic acceleration, and AI-driven informational transformation. The paper introduces Integrative Capacity (IC) as a central developmental construct and proposes a reconceptualization of educational purpose: from information delivery to the cultivation of integration. **Methodology.** The paper employs theoretical-conceptual analysis, drawing on developmental psychology, clinical neuropsychology, and educational theory. The KINERGIA framework, a multi-level analytical model operating across intrapersonal, interpersonal, and collective domains, is applied as a theoretical architecture for understanding and addressing this challenge. **Scientific novelty.** To the author's knowledge, Integrative Capacity as formulated here – modeling coordination across three simultaneous substrates (biological regulation, symbolic meaning, relational consciousness) and three systemic levels (intrapersonal, interpersonal, collective) – has not been explicitly formulated in the existing educational literature in this form. Its educational manifestation, Integrative Perception, is introduced as an observable and assessable indicator of IC development in educational practitioners. **Conclusions.** The paper demonstrates that educational transformation in Ukraine requires not only resources and training, but a reconceptualization of educational purpose itself: from knowledge transmission to the cultivation of Integrative Capacity across all three levels – nervous system regulation, relational attunement, and collective meaning-making. Implications for Ukrainian education during wartime reconstruction are discussed.

Key words: educational transformation, integrative capacity, symbolic acceleration, collective trauma, KINERGIA framework, integrative perception, Ukraine.

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ВІД ІНФОРМАЦІЇ ДО ІНТЕГРАЦІЇ: ІНТЕГРАТИВНА ЗДАТНІСТЬ І ТРАНСФОРМАЦІЯ ОСВІТИ В СУЧАСНІЙ УКРАЇНІ В КОНТЕКСТІ КОЛЕКТИВНОЇ ТРАВМИ, ШТУЧНОГО ІНТЕЛЕКТУ ТА СУСПІЛЬНИХ ЗМІН

Анотація. Мета. Метою статті є теоретичне обґрунтування концепції Інтегративної здатності (Integrative Capacity, IC) як центрального конструкту розвитку в освіті та розробка багаторівневого аналітичного фреймворку КІНЕРГІЯ для розуміння і подолання освітньої кризи в сучасній Україні в умовах колективної травми, символічного прискорення та трансформацій, спричинених штучним інтелектом. **Методологія.** Застосовано



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теоретично-концептуальний аналіз, що спирається на психологію розвитку, клінічну нейропсихологію та освітню теорію. Фреймворк КІНЕРГІЯ, багаторівнева аналітична модель, що охоплює інтраперсональний, інтерперсональний і колективний виміри, застосовується як теоретична архітектура для розуміння і подолання виклику. **Наукова новизна.** Інтегративна здатність у запропонованому вигляді моделює координацію через три одночасні субстрати (біологічна регуляція, символічний смисл, реляційна свідомість) і три системні рівні (інтраперсональний, інтерперсональний, колективний) як єдину інтегровану розвивальну здатність – що до знань автора, явно не формулювалось в існуючій освітній літературі в такому вигляді. Її освітній прояв, інтегративне сприйняття (*Integrative Perception*), вводиться як спостережуваний і оцінюваний індикатор розвитку ІС у освітніх практиків. **Висновки.** Обґрунтовано, що Інтегративна здатність є центральним розвитковим конструктом в освіті, що моделює координацію біологічної регуляції, символічного смислу та реляційної свідомості на трьох системних рівнях – інтраперсональному, інтерперсональному та колективному. Фреймворк КІНЕРГІЯ є аналітичною архітектурою для розуміння, оцінювання та культивування ІС в освітніх контекстах. Трансформація освіти в Україні потребує не лише ресурсів і навчання, а переосмислення освітньої мети: від передачі знань до формування інтегративної здатності на всіх рівнях – нервової системи, стосунків і колективного смислу.

Ключові слова: трансформація освіти, інтегративна здатність, символічне прискорення, колективна травма, фреймворк КІНЕРГІЯ, інтегративне сприйняття, Україна.

Problem Statement. Ukrainian education has been navigating compounded crisis since the Revolution of Dignity and the beginning of Russian aggression in 2014 – through the occupation of Crimea, the war in Donbas, the COVID-19 pandemic, and the full-scale invasion of February 24, 2022 – and what it now faces is not a single disruption but more than a decade of layered, unresolved stress whose cumulative weight no single adaptation can adequately address.

Analysis of Recent Research and Publications. The mismatch between the accumulation of information and developmental integration has been examined in the contemporary research literature from a number of positions. Studies of collective trauma under conditions of armed conflict in Ukraine [5; 6; 7] document its systemic consequences for the educational environment: dysregulation of the nervous system, disruption of relational structures, and fragmentation of collective meaning. In developmental theory, Valsiner [13] emphasizes that development is not the accumulation of information but the transformation of meaning structures through processes of internalization and reorganization. Porges's polyvagal theory [10] and Siegel's account of regulatory states [12] establish the neurobiological preconditions of learning and development. Research on the role of artificial intelligence in education [11] indicates a fundamental shift in the function of the teacher, from a transmitter of information to a developmental guide. At the same time, none of the available frameworks offers an integrative construct that would encompass the

biological, relational, and collective dimensions of developmental capacity simultaneously within an educational context. It is precisely this gap that the proposed concept of Integrative Capacity addresses.

Purpose of the Article. The purpose of this article is to provide a theoretical foundation for the concept of Integrative Capacity (IC) as a central developmental construct in education; to set out its structure, levels, and educational manifestations; and to present the KINERGIA framework as a multi-level analytical architecture for cultivating IC under conditions of collective trauma, symbolic acceleration, and the challenges posed by artificial intelligence in contemporary Ukraine. To this end, the article examines in sequence: the specific character of the current educational crisis in Ukraine; the concept of symbolic acceleration and its educational consequences; the distinction between information acquisition, conceptual understanding, and developmental integration; the structure of IC and its educational manifestation, Integrative Perception; and the practical implications for educational transformation under conditions of wartime reconstruction.

Presentation of the Main Material.

1. The Educational Crisis in Contemporary Ukraine

To understand what Ukrainian education currently faces, it is necessary to name the specific pressures operating simultaneously, not as a list of problems to be solved, but as a systemic field that defines the conditions under which learning, development, and professional functioning must occur.

The first and most acute pressure is collective trauma. Since 2022, millions of Ukrainian

children, adolescents, and adults have experienced displacement, loss, prolonged threat exposure, and the disruption of foundational structures of daily life. Research on collective trauma consistently demonstrates that sustained threat exposure reorganizes the nervous system toward defensive rather than developmental priorities [15; 8; 10]. When survival is the primary organizational demand, the conditions that support learning (attentional flexibility, relational safety, tolerance of uncertainty) are systematically compromised. Ukrainian classrooms now contain children whose nervous systems are, in clinically significant numbers, not organized for the kind of receptive engagement that traditional pedagogy assumes.

The second pressure is the accelerated digital transformation of the information environment. The COVID-19 pandemic forced Ukrainian education, as elsewhere, into rapid and largely unprepared digital adaptation. This adaptation was incomplete and uneven, and it coincided with the broader global acceleration of AI-generated content, algorithmically curated information environments, and the continuous availability of symbolic material across all domains of knowledge. Students in Ukrainian schools today have access, via their smartphones, to more information than any previous generation in human history. What they do not automatically have is the developmental capacity to organize, evaluate, contextualize, and act coherently on that information.

The third pressure is the reorganization of authority structures in education. The teacher, historically positioned as the primary source of knowledge and social orientation, now operates in an environment where that positioning has been fundamentally destabilized. Students access information independently of teachers, often in greater volume and with greater immediacy. The result is not simply a shift in the teacher's informational function but a reorganization of the relational and regulatory function of the educational relationship itself. Selwyn [11] notes that the integration of AI into educational environments fundamentally challenges assumptions about what teachers are for, without yet providing a coherent alternative account of their developmental role. What remains, once information transmission is no longer the teacher's

defining contribution, is something that existing educational frameworks have undertheorized: the teacher as a developmental presence, a relational regulator, and a carrier of cultural meaning.

The fourth pressure is institutional fragmentation. War has disrupted the organizational structures, routines, and collective practices through which schools function as coherent developmental environments. Rituals of belonging, transition, and meaning-making, which serve regulatory as well as symbolic functions, have been interrupted or lost. At the same time, Ukrainian communities continue to preserve, adapt, and create new collective rituals of cohesion. Practices such as Vyshyvanka Day, collective commemorations, and shared symbolic acts of solidarity demonstrate that rituals are not only inherited traditions but living mechanisms through which collective identity and resilience are actively maintained. From the perspective of the KINERGIA framework, such practices are not merely cultural expressions: they are collective regulatory responses through which Integrative Capacity is rebuilt under conditions of sustained threat. The collective field of the school, which in stable conditions provides a containing environment for individual development, has itself been destabilized.

These four pressures (collective trauma, informational acceleration, authority reorganization, and institutional fragmentation) do not simply add to one another. They interact. A child whose nervous system is organized around threat will not benefit from increased information access in the way that educational optimists assume. A teacher who has lost her regulatory anchor in the institutional structure will not be able to provide relational safety to students regardless of her informational competence. A school that has lost its collective rituals will not develop belonging through curriculum alone. This convergence of pressures constitutes the educational crisis, and it requires a conceptual framework capable of holding multiple levels simultaneously.

Ukrainian educational thought has long recognized that education must cultivate the whole person rather than merely transmit knowledge. The humanistic pedagogy of Vasyl Sukhomlynsky (1918–1970), whose work continues to shape Ukrainian educational values,

emphasized the moral, emotional, intellectual, and relational dimensions of development, insisting that there is no abstract child: each child must be understood in their lived individuality and full human complexity. Sukhomlynsky understood the school not as an institution of information transfer but as a community of human formation, anticipating many contemporary concerns about reductionist models of schooling [17]. However, the combined pressures of collective trauma, symbolic acceleration, and artificial intelligence introduce developmental challenges that exceed the frameworks available in his era. If Sukhomlynsky reminded educators that teaching requires giving one's heart to children, contemporary Ukraine confronts an additional challenge: the heart itself may be traumatized, dysregulated, and exhausted. The crisis confronting Ukrainian education today is not a repudiation of its humanistic foundations but a call to expand them. Integrative Capacity, as introduced in this paper, represents one such expansion: a contemporary developmental framework built on the recognition, already present in Ukrainian educational thought, that knowledge and human formation are not the same thing.

2. Symbolic Acceleration and the Transformation of Educational Conditions

The concept of symbolic acceleration, introduced by the present author [14], refers to a specific and measurable developmental condition: the rate at which individuals and collectives are exposed to symbolic content (language, image, narrative, concept, and data) now routinely exceeds the rate at which that content can be developmentally metabolized and integrated.

This is not a claim about cognitive overload in the traditional sense. Cognitive overload refers to a temporary excess of information relative to attentional capacity: a processing bottleneck that resolves with reduced input. Symbolic acceleration describes something structurally different: a persistent mismatch between the velocity of symbolic input and the developmental architecture required to make that input available for coherent functioning, identity organization, and adaptive behavior.

The distinction matters educationally. A student experiencing cognitive overload needs a reduction in information load or an improvement

in processing efficiency. A student living under conditions of symbolic acceleration faces a different challenge: the informational environment itself has outpaced the developmental structures that would allow any quantity of information to become functionally integrated. More time, better teaching, or reduced load does not solve the underlying mismatch. What is required is the cultivation of the integrative architecture itself.

Symbolic acceleration produces several observable educational consequences. The first is the proliferation of pseudo-understanding (the appearance of knowledge without the structural change that would make that knowledge available in perception, reasoning, and action). Students who can reproduce information in assessment conditions but cannot access that information under conditions of novelty, stress, or relational complexity are demonstrating pseudo-understanding, a condition that traditional educational measurement systems are largely unable to detect.

The second consequence is identity fragmentation under symbolic load. When symbolic input exceeds integrative capacity, the result is not simply confusion but a specific kind of developmental arrest in which identity cannot consolidate around stable organizing principles. The individual accumulates self-descriptions, narratives, and conceptual frameworks without being able to integrate them into a coherent developmental trajectory. This fragmentation is particularly acute in adolescents and young adults, whose identity formation processes are developmentally sensitive to exactly the kind of overload that symbolic acceleration produces.

The third consequence is what might be termed the authority vacuum. When everyone has access to the same symbolic content simultaneously, the traditional developmental function of the authority figure (to organize and contextualize knowledge within a relational frame) is disrupted. The educational implication is not that teachers have become unnecessary, but that their developmental function has shifted from transmission to integration, and most educational systems have not caught up with this shift.

In the Ukrainian context, symbolic acceleration intersects with collective trauma in ways that amplify both. Trauma reorganizes the nervous system toward pattern-matching

and threat-detection, cognitive modes that privilege speed over depth. Symbolic acceleration rewards exactly this kind of rapid, pattern-matching engagement with information, while systematically undervaluing the slower, more demanding processes of reflection, contextualization, and integration. The combination produces educational environments in which students are simultaneously overwhelmed by information, emotionally dysregulated, and operating in cognitive modes that prioritize survival over development.

3. Why Information Does Not Guarantee Development: The Central Educational Distinction

The foundational assumption of traditional educational models is deceptively simple: if students encounter the right information, in the right sequence, delivered by a competent teacher, development will follow. This assumption, traceable to transmission-oriented pedagogical traditions [2; 4], served educational systems designed for conditions of information scarcity. This assumption was never fully articulated. It operated as an implicit premise, embedded in curriculum design, assessment practice, and institutional architecture. It has become visible only now that the conditions which made it approximately workable have disappeared.

The assumption rests on a conflation of three distinct processes that are, in fact, separable: information acquisition, conceptual understanding, and developmental integration.

Information acquisition refers to the encoding and storage of symbolic content. A student who has read a text, attended a lecture, or completed an exercise may acquire information in this sense: she can reproduce it, recognize it, and in many cases apply it in familiar contexts. Information acquisition is necessary for development. It is not sufficient.

Conceptual understanding refers to the capacity to organize information within a conceptual framework, to recognize relationships between ideas, and to apply those relationships in contexts that differ from the original learning environment. Understanding is a structural achievement beyond acquisition. It requires the construction of internal representational architectures that can accommodate new information without collapsing. From the

perspective of cultural-developmental psychology, development requires more than the accumulation of information: it requires transformation of meaning structures through processes of internalization, differentiation, and reorganization, allowing knowledge to become functionally integrated into the person's regulatory and identity systems [13].

Developmental integration is the deepest of the three processes. It corresponds to what Bruner [1] identified as the meaning-making dimension of education: the process through which learning reorganizes how a person understands and inhabits their world. Integration refers to the incorporation of symbolic content, and the understanding derived from it, into the regulatory, relational, identity, and metacognitive structures of the person such that new knowledge becomes functionally available in perception, decision-making, emotion regulation, and adaptive behavior. A person who has achieved integration does not merely know something differently: she sees differently, responds differently, and relates differently. The change is not informational. It is structural.

The distinction between these three processes has profound educational consequences. Conventional educational measurement almost exclusively assesses information acquisition and, to a lesser extent, conceptual understanding. It has virtually no tools for assessing developmental integration, and this is not an accidental limitation. It reflects a deeper theoretical omission: the absence of a coherent account of what integration is, what produces it, and what prevents it.

The current educational crisis makes this omission visible. Under conditions of symbolic acceleration, collective trauma, and institutional disruption, the gap between information acquisition and developmental integration widens dramatically. Students who have acquired enormous quantities of information, through digital environments, crisis experience, and the sheer acceleration of symbolic exposure, may be developmentally less integrated than earlier generations who encountered far less. This is the educational paradox of the current moment: more information, proportionally less integration.

The central educational task of our historical moment is not the delivery of information but the cultivation of the capacity to integrate

it. This distinction represents not merely a refinement of existing educational practice but a reconceptualization of educational purpose.

4. Integrative Capacity: The Construct That Explains the Gap

Why do some individuals, relational systems, and collectives integrate successfully under conditions of complexity, disruption, and accelerated symbolic exposure – while others accumulate information without transformation? The answer, to the author's knowledge not yet explicitly formulated in the educational literature in the form proposed here, lies in what this paper introduces as Integrative Capacity (IC).

Integrative Capacity (IC) refers to the ability of an individual, relational system, or collective environment to metabolize and reorganize biological regulation, symbolic meaning, and relational consciousness into coherent adaptive functioning and developmental growth.

Several features of this definition require elaboration. First, IC is explicitly multi-substrate: it involves biological regulation (nervous system states and their regulatory dynamics), symbolic meaning (the capacity to organize and contextualize information within a coherent representational framework), and relational consciousness (the reflexive, meaning-laden awareness that emerges within and through co-regulatory and attachment processes). These three substrates are not independent: they interact, and IC reflects the capacity to coordinate them rather than the strength of any one in isolation.

IC overlaps partially with several established constructs, and these overlaps require acknowledgment. Resilience, as typically formulated, describes the capacity to recover from adversity, a valued outcome that IC may support but does not define [9]. Cognitive flexibility, executive function, and metacognition describe intrapersonal regulatory and representational capacities that contribute to IC but constitute only its first substrate. Reflective functioning and mentalization [3] describe the capacity to hold mental states in mind, primarily an interpersonal capacity that maps onto IC's second substrate. None of these constructs, to the author's knowledge, explicitly models the simultaneous coordination of all three substrates – biological regulation, symbolic meaning, and relational consciousness – as a unified

developmental capacity. IC is proposed not as a replacement for these constructs but as an integrative framework that situates them within a common developmental architecture and explains why competence in any one substrate does not guarantee integrative functioning.

Existing constructs typically model one substrate or one systemic level in isolation. IC uniquely models the coordination across three simultaneous substrates – biological regulation, symbolic meaning, and relational consciousness – and three systemic levels – intrapersonal, interpersonal, and collective – as a single unified developmental capacity. It is this cross-substrate, cross-level coordination that existing frameworks do not explicitly address.

Second, IC is not a performance variable. It is a structural capacity, a property of the system's architecture, not of any particular output the system produces. A student may demonstrate high informational performance while operating with limited IC; she will appear to have understood when in fact she has acquired. Conversely, a student with high IC may appear to perform less impressively in conventional assessments while demonstrating, in clinical and observational contexts, a qualitatively different relationship to what she has encountered.

A third feature is particularly significant for educational application: IC is distributed. An individual may have limited IC in isolation and substantially greater IC within a well-regulated relational field. This means IC is not solely an intrapersonal variable. It is also a property of dyads, classrooms, institutions, and collective systems. A school with high collective IC, characterized by regulatory coherence, relational safety, cultural meaning-making, and institutional holding, will support the development of individual IC in its members. A school whose collective IC has been depleted by trauma, institutional disruption, or the loss of regulatory rituals will undermine individual IC development regardless of curriculum quality.

This distributed character of IC has immediate implications for how educational intervention is conceptualized. If IC is primarily intrapersonal, educational response should focus on individual students and teachers (training, therapy, remediation). If IC is distributed, then educational response must also address the relational and

collective levels, including the regulatory architecture of the classroom, the school culture, the institutional practices that carry or fail to carry collective meaning. The KINERGIA framework, introduced in Section 6, is designed to address this distributed structure directly.

IC failure, the condition in which IC is insufficient for the integrative load presented, produces a recognizable cluster of outcomes. These include: fragmentation (the inability to hold multiple simultaneous inputs within a coherent representational frame); rigidity (defensive closure to new input in order to protect existing coherence); maladaptive stabilization (organization around a symptom, behavioral pattern, or partial identity structure that reduces load at the cost of developmental mobility); and pseudo-understanding (the accumulation of symbolic content without structural change). The first two describe process-level mechanisms; the latter two describe developmental outcomes. Each is observable in Ukrainian educational settings today, in students, in teachers, and in institutions. They are not pathologies. They are predictable systemic responses to integrative overload.

IC failure is not, however, a permanent state. IC is developmentally modifiable, both within individuals and within relational and collective systems. The conditions that cultivate IC are specific: regulatory safety, relational attunement, graduated symbolic challenge, access to cultural meaning-making resources, and institutional holding structures that provide the external scaffolding for integration that the individual system cannot yet provide for itself. These conditions are not uniformly present in contemporary Ukrainian education. Identifying and restoring them is the practical educational task that IC theory points toward.

A central diagnostic principle follows from the framework: the visible problem is often not the causal layer. A practitioner who can only see what is visible will always intervene at the symptomatic level, while a practitioner who has developed the capacity to perceive beneath the surface is practicing something qualitatively different. That capacity is what this section defines.

5. Integrative Perception: The Educational Manifestation of Integrative Capacity

In educational settings, Integrative Capacity becomes visible not through abstract theory but

through how practitioners actually perceive and formulate the challenges they encounter. This domain-specific expression is what this paper terms Integrative Perception.

Integrative Perception refers to the capacity to perceive, formulate, and reason about an educational challenge simultaneously across intrapersonal, interpersonal, and collective levels, allowing the practitioner to move beyond symptom-level interpretation toward multi-layer causal understanding.

The construct of Integrative Perception emerges from a practical observation that any experienced educational practitioner will recognize: the same presenting problem (classroom disengagement, behavioral dysregulation, academic underperformance, teacher-student conflict) can be formulated at very different levels of causal complexity. And the level at which it is formulated determines, in a direct and often overlooked way, the level at which intervention is designed.

A practitioner operating with limited Integrative Perception will formulate presenting problems at the level of visible symptoms. She identifies what is observable and interprets it through the most immediately available causal frame. This is not incompetence but reflects a genuine structural limit in the representational complexity she can hold under working conditions.

A practitioner with developed Integrative Perception formulates the same problem through multiple simultaneous causal layers, recognizing that the visible problem is often not the causal layer. She can hold intrapersonal, interpersonal, and collective dynamics in view simultaneously, identify which level is generating the presentation, and locate an intervention at the causal rather than the symptomatic level.

The developmental movement between these levels, proposed here as an observable indicator of IC development in educational practitioners, can be illustrated through contrasting formulations of a single presenting challenge:

Presenting situation: Students in a secondary school classroom show persistent disengagement – low participation, apparent apathy, difficulty sustaining attention.

Low Integrative Perception formulation:

"Students are unmotivated. They don't care about learning. Possibly related to the war and

everything happening, but mostly they seem passive and resistant."

Moderate Integrative Perception formulation:

"Student disengagement may reflect elevated stress levels that are impairing executive function access, combined with weakened relational connection to the teacher following displacement and school changes."

High Integrative Perception formulation:

"Persistent disengagement in this classroom appears to emerge from the convergence of several interacting layers: at the intrapersonal level, chronic sympathetic hyperarousal is impairing prefrontal access and attentional flexibility; at the interpersonal level, insecure relational dynamics between teacher and students – reflecting both attachment disruption from displacement and the teacher's own unprocessed distress – are preventing the co-regulatory conditions that support engagement; at the collective level, the fragmentation of school rituals and shared meaning-making practices has depleted the collective field that would normally provide an organizing context for individual effort."

The shift across these formulations is not a matter of vocabulary or theoretical training alone. It reflects a structural change in the representational complexity the practitioner can hold simultaneously: the capacity to see multiple causal layers without reducing them to one, and to locate intervention at the level where leverage actually exists rather than where the problem is most visible.

This shift in representational complexity, the development of Integrative Perception, is proposed here as an observable educational manifestation of IC development in practitioners. It is not a test score or a certification outcome. It is a qualitative change in how an educational professional perceives and formulates the environments she works within. As such, it constitutes a meaningful, assessable, and educationally significant developmental outcome, one that conventional educational evaluation has lacked both the theoretical framework and the methodological tools to address.

The development of Integrative Perception in educational practitioners may be assessed through structured qualitative analysis of written

formulations across repeated observational timepoints. This methodological approach compares the complexity and multi-leveledness of practitioner formulations at the beginning and end of a structured educational intervention, and represents a research direction that the KINERGIA framework opens. The specific coding protocol for such assessment will be described in subsequent methodological publications. The present article introduces the conceptual rationale for the method; psychometric development and validation are the subject of separate work currently in preparation.

6. The KINERGIA Framework: A Multi-Level Architecture for Cultivating Integrative Capacity

The theoretical developments in the preceding sections converge on a practical question: if Integrative Capacity is the central developmental construct, and if it is distributed across intrapersonal, interpersonal, and collective levels simultaneously, what analytical architecture can a practitioner actually use to cultivate it? The KINERGIA framework is proposed as the answer to that question – not as an additional novelty, but as the multi-level scaffolding through which IC is understood, assessed, and developed in educational contexts.

KINERGIA proposes that human development, and by extension educational development, can be understood as occurring across three interacting levels: intrapersonal, interpersonal, and collective. These are not stages, domains, or separate systems. They are simultaneously co-present dimensions of any developmental process, each with its own characteristic structures, vulnerabilities, and resources. The central claim of the KINERGIA framework is that intervention at any single level, without regard for the others, will produce limited or paradoxical results, because IC is distributed across all three (Fig. 1).

The intrapersonal level encompasses the regulatory and representational architecture of the individual. This includes the nervous system's regulatory states (the autonomic hierarchy described by Porges [10], including dorsal vagal withdrawal, sympathetic mobilization, and ventral vagal social engagement), executive functions and metacognitive capacities, and identity organization – the structures through which a person maintains coherent selfhood

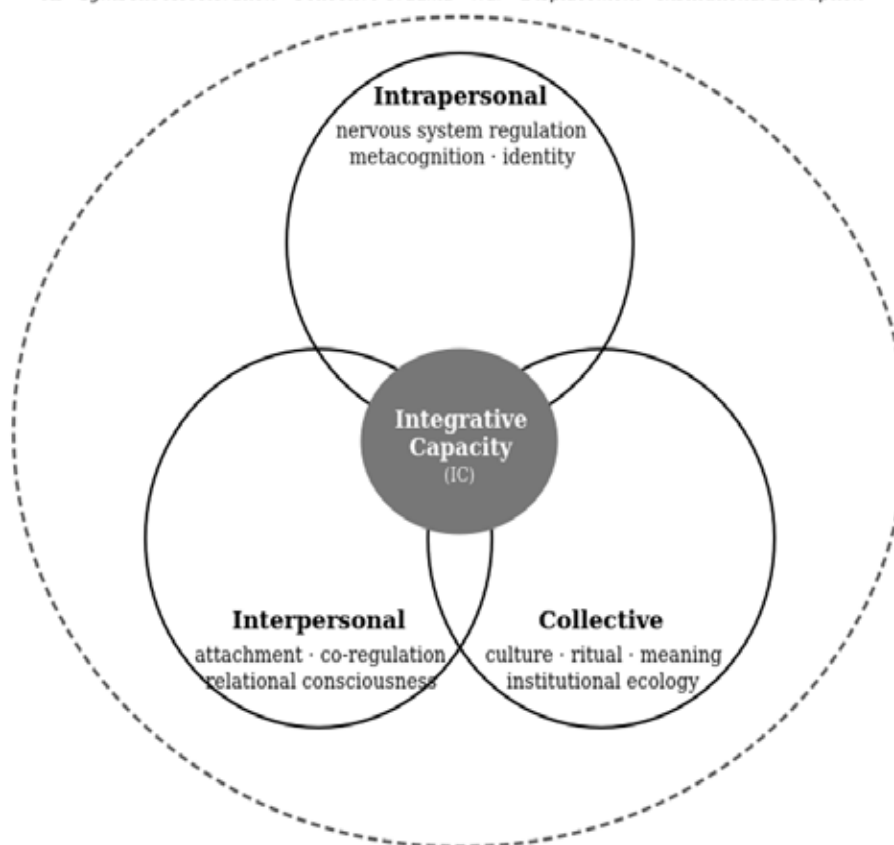


Fig. 1. Distributed Architecture of Integrative Capacity within the KINERGIA Framework. IC occupies the center as the central developmental construct; each domain represents a level at which IC is simultaneously distributed. The outer ring represents the contemporary pressures – AI, symbolic acceleration, collective trauma, war, displacement, institutional disruption – that load IC across all three levels

across varying conditions. At the intrapersonal level, IC reflects the individual's capacity to maintain regulatory flexibility under symbolic and relational load: to remain engaged rather than shutting down, to reflect rather than react, to hold complexity without fragmenting.

The interpersonal level encompasses the relational field within which development occurs. Attachment processes, co-regulatory dynamics, the structure of educational relationships, and the quality of relational safety in learning environments all operate at this level. IC at the interpersonal level reflects the capacity of a relational system (a teacher-student dyad, a classroom, a supervisory relationship) to provide the regulatory scaffolding that individual IC development requires. Research consistently demonstrates that the development of reflective function, executive capacity, and identity coherence are relationally mediated processes: they emerge within, and depend

upon, relationships that provide what Winnicott [16] termed a holding environment [3; 12]. The educational implication is direct: a classroom that cannot provide relational holding cannot cultivate IC, regardless of curriculum design.

The collective level encompasses the cultural, institutional, and systemic dimensions of educational environments. School culture, collective rituals, institutional meaning-making practices, the transmission of cultural identity across generations, and the shared organizational response to collective experience all operate at this level. In Ukrainian education under wartime conditions, the collective level has sustained the most visible disruption: school communities have been fragmented, collective rituals have been interrupted, and the shared cultural field that organizes individual experience within a larger meaningful narrative has been strained to its limits. The KINERGIA framework proposes that collective IC, the capacity of a school

community to metabolize collective experience without fragmenting into defensive isolation, rigid ideology, or helpless passivity, is a developmental resource as real and as educationally significant as individual cognitive capacity.

The KINERGIA framework does not prescribe specific interventions at each level. It provides an analytical lens through which educational practitioners can identify which level is generating a presenting challenge, what resources are available at each level, and where intervention would address causal rather than symptomatic layers. It is, in this sense, a diagnostic and developmental architecture rather than a program or protocol.

The KINERGIA framework provides practitioners with the conceptual tools to look beneath the visible presentation and locate the level at which their intervention will actually make a difference.

Based on this theoretical framework, an eight-module educational intervention has been developed to operationalize integrative learning in practicing educational professionals. The intervention is designed to cultivate Integrative Perception incrementally, building practitioner capacity to formulate educational challenges across all three KINERGIA levels over the course of eight structured sessions. The development and outcomes of this intervention will be reported in subsequent publications.

Discussion: Implications for Ukrainian Education

The theoretical framework developed in this paper carries several implications for Ukrainian education during the current period of wartime disruption and anticipated postwar reconstruction.

First, the reconceptualization of educational purpose proposed here, from information delivery to integration cultivation, requires a corresponding reconceptualization of what educational success means. If integration, not information, is the developmental goal, then educational evaluation must develop tools capable of assessing integrative outcomes. This is not a call for the abandonment of content assessment; it is a call for the recognition that content assessment measures only one layer of what education can and should accomplish. Ukrainian educational policy, in its reconstruction planning, has an opportunity to build integrative assessment

frameworks that are not simply imported from Western educational models but developed from within the specific developmental and cultural conditions that Ukrainian educators and students are navigating.

Second, the distributed character of IC, its dependence on relational and collective as well as intrapersonal conditions, implies that teacher wellbeing is not a secondary or welfare consideration. It is a primary educational variable. A teacher whose own IC is depleted by trauma, institutional disruption, and the loss of regulatory anchors cannot provide the relational holding that student IC development requires, regardless of her content competence. Educational investment in teacher regulation, relational safety, and collective meaning-making is, from this framework's perspective, investment in student developmental outcomes.

Third, the reconstruction of collective IC in Ukrainian schools, through the deliberate restoration and creation of rituals, shared practices, and cultural meaning-making structures, is an educational priority that existing frameworks have not yet named. Future educational programs for Ukraine should attend to the cultivation of multi-level integrative environments: regulatory safety at the intrapersonal level, relational attunement at the interpersonal level, and collective meaning-making at the cultural and institutional level.

Finally, the construct of Integrative Perception opens a research direction of practical significance: the systematic study of how educational practitioners' representational complexity develops in response to structured intervention, and what conditions most effectively support that development. This research agenda connects educational psychology, clinical neuropsychology, and developmental theory in ways that are particularly suited to the interdisciplinary conditions under which Ukrainian education is currently being reimaged.

Conclusions. The present study establishes that the educational crisis in contemporary Ukraine is first of all a crisis of theoretical framework rather than merely a shortage of resources or curricula. The dominant educational model, built on the premise that access to information automatically produces development,

reveals its fundamental limitation under conditions of symbolic acceleration, collective trauma, and institutional disruption.

Under conditions of symbolic acceleration, collective trauma, and institutional disruption, the gap between information and integration becomes structurally visible. The students and teachers of Ukrainian schools today are, in many cases, not failing to access information. They are carrying more symbolic content than their integrative architectures can metabolize, while the educational systems designed to serve them lack a theoretical framework adequate to this condition.

The constructs introduced in this paper, Integrative Capacity and its educational manifestation Integrative Perception, situated within the KINERGIA multi-level framework, represent, to the author's knowledge, an approach not yet explicitly formulated in the existing educational literature in this form. They are proposed not as a replacement for existing educational knowledge but as a conceptual addition that addresses a theoretical gap: the absence of a coherent account of what integration is, what produces it, and what conditions support its cultivation across the multiple levels at which human development occurs.

Accordingly, in answer to the purpose set out above, Integrative Capacity is established as the central developmental construct around which the response to the following question must be organized: not only what students should know, but who they should become and what educational conditions will make that becoming possible. The KINERGIA framework provides the analytical architecture for putting this reconceptualization into practice across three levels: intrapersonal, interpersonal, and collective.

Future research should focus on three directions. First, empirical validation of the Integrative Perception construct through a structured psychometric protocol currently in development, including inter-rater reliability testing and longitudinal tracking of practitioner formulation complexity. Second, cross-contextual investigation of IC cultivation under conditions of collective adversity, with Ukraine providing a developmental laboratory for understanding how educational communities rebuild integrative capacity following sustained disruption. Third, the development of collective IC assessment tools that can capture school-level integrative functioning and inform evidence-based approaches to educational reconstruction.

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