

Craft as Self-Becoming: Toward an Ontological Turn in Vocational Higher Education

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Abstract: Vocational bachelor's education is charged with cultivating highly skilled personnel, yet under the dominant logic of instrumental rationality, skill learning is often reduced to technical training external to the student's life-world, leaving learners trapped in a state of "self-instrumentalization." This paper revisits the problem of skill learning in vocational bachelor's education at the ontological level, advancing four progressive lines of inquiry: what skill learning ought to be (the philosophical dimension); what ontological insights Chinese educational thought offers (the cultural dimension); what cognitive characteristics skill learning actually exhibits (the tacit-knowledge dimension); and what socio-historical roots underlie the alienation of skill learning (the Marxist dimension). Drawing on this framework, the study examines three forms of alienation in skill learning and their generative mechanisms, and proposes a four-level strategy of reconstruction oriented by the Chinese concept of *xingfa* (awakening-and-inspiration). The paper argues that skill learning should be the unity of craft acquisition and individual self-becoming: vocational bachelor's education must shift from "making instruments" to "cultivating persons," transcending the binary opposition between instrumental and value rationality, in order to cultivate highly skilled personnel who possess both refined craft and integrated personhood.

1. Introduction: The Ontological Predicament of Skill Learning

Since 2019, China's vocational bachelor's education has transitioned from pilot programs to scaled development. In January 2025, the Central Committee and the State Council of China issued the *Outline of the Plan for Building a Leading Country in Education (2024–2035)*, calling for "accelerating the construction of a modern vocational education system and cultivating great craftsmen, skilled artisans, and highly skilled personnel" ^[1]. In February 2026, the Ministry of Education released the *Opinions on Deepening the Reform of Key Elements of Vocational Education Teaching* (Document No. JZC [2026] 1), positioning the reform of key teaching elements as "a foundational project for building the vocational education system and a crucial measure for cultivating highly skilled personnel" ^[2]. Driven by this policy momentum, how to cultivate

genuinely "highly skilled personnel" remains a question that vocational education theory and practice must answer.

A closer look inside the practical training classrooms of vocational bachelor's programs, however, reveals a clear gap between policy aspirations and everyday instruction. In a soldering practicum for electronic information technology majors, students are required to complete fifty standardized solder joints within four class hours, with assessment based solely on whether the geometric dimensions and surface finish of the joints meet specifications—whether students understand the thermodynamic principles underlying the soldering process, or whether they can experience the intrinsic satisfaction of craft refinement through the luster and morphological changes of flowing solder, falls entirely outside the assessment criteria. In nursing clinical simulations, students proficiently complete vital sign measurements and data recording according to protocol, yet when asked what a change in indicators "means" or which value should be prioritized when readings become abnormal, most can only recite procedural rules and cannot make independent clinical judgments. In intelligent manufacturing PLC programming practicums, students can complete assignments by filling in teacher-provided program frameworks, yet cannot articulate the correspondence between the ladder diagrams they write and the physical movements of the production line. What these scenes share is this: skill training trades wholeness for efficiency, and what is excised is not merely some operational step but the learner's curiosity, judgment, aesthetic experience, and sense of professional identity. As Nel Noddings argued in her care theory of education, when educational aims are wholly appropriated by instrumental logic, the learner is demoted from end to means, and the inner needs of the learner as a whole person are systematically disregarded ^[3].

Taken together, these classroom observations suggest that skill learning in vocational bachelor's education exhibits three typical forms of deviation. First, the motive for learning derives from employment pressure, credential acquisition, or wage expectations rather than the cognitive challenges and spaces for self-realization inherent in the craft itself—skill becomes a commodity exchanged for economic return rather than a mode through which individual life unfolds. Second, the curriculum is highly fragmented, with skill training decomposed into isolated competency points or operational modules, severing the organic connections between knowledge and action, cognition and emotion—John Dewey criticized this "preparatory education" for treating present learning merely as preparation for future livelihood, thereby obscuring the formative significance of the learning process itself for the learner's present life ^[4]. Third, under the logic of instrumental rationality that dominates training, the aesthetic pleasure, creative passion, and meaningful experience of learning cannot emerge—Paulo Freire called this condition the "banking model of education": students become passive containers, receiving "deposits" of fragmented skills from teachers, never experiencing the awakening of subjectivity through learning ^[5].

If these three symptoms could be resolved merely by improvements in teaching methods or curriculum design, the problem would remain at the methodological level. Closer examination reveals, however, that all three point toward a more fundamental dimension—the existential relation between the learner and the skill. That students do not feel their own life participating in learning is not merely a technical problem of "poor pedagogy"; it concerns what kind of existential relation holds between "I" and "what I learn": is the skill an extension of myself, a part of me, or an external object that can be detached and held? At this level, the inquiry is no longer about how vocational education might "do better" but about what skill learning means existentially for the learner—this is an ontological question.

In *What is Education?*, Karl Jaspers distinguishes three types of education—*training*, *education*, and *discipline*—and notes that "training" addresses only the acquisition of skills and the shaping of behavior, an activity in which minds remain apart; only "education" can reach the spiritual

dimension of the human being and enable the person to become fully human ^[6]. This distinction reveals an ontological divide: in "training," skill is an external object separated from human existence; in "education," the acquisition of skill and the self-formation of the person are two sides of the same process. From this, the present paper advances the core proposition of "ontological reconstruction": can skill learning in vocational bachelor's education return from mere "instrument-making" to a holistic "person-cultivation"? Can the meaning-foundation of skill learning be reconstructed at the ontological level, so that it concerns not only the external acquisition of craft but also the inward unfolding of individual life?

2. Theoretical Framework: Four Progressive Dimensions of Ontological Analysis

Answering the above question cannot rely on a single theoretical resource. Its complexity lies in simultaneously engaging multiple levels: it must inquire into what skill learning "ought to be" (the normative dimension), understand what cognitive characteristics skill learning "actually" exhibits (the epistemological dimension), examine the socio-historical roots of its alienation (the critical dimension), and remain rooted in the intellectual resources offered by its own cultural tradition (the cultural dimension). This section constructs four progressive dimensions: Western philosophy of education establishes the normative standard; Chinese educational thought provides indigenous cultural resources; tacit knowledge theory reveals the actual cognitive characteristics; and Marx's labor theory uncovers the social roots of alienation.

2.1. Western Philosophy of Education: Normative Reference for Skill Learning

Jaspers proposes in *What is Education?* that "education is the education of the human soul, not the accumulation of intellectual knowledge and cognition" ^[6]. This proposition fundamentally establishes a criterion: genuine education presupposes the mutual understanding of persons, and through authentic dialogue and spiritual exchange between teacher and student, awakens the student's inner possibilities, enabling them to become a "whole person"—spiritually autonomous and integrated in character. For skill learning, this means that the acquisition of craft should simultaneously be a process of spiritual maturation—not filling an empty person with skills, but through the growth of craft, enabling the person to become more fully themselves.

In *Democracy and Education*, Dewey further developed this position from the perspective of experiential philosophy^[4]. He argued that education should not be a "preparatory" process for future adult life but should attend to the learner's present needs for growth, enabling them to achieve the reconstruction and reorganization of experience through continuous interaction with their environment. Dewey emphasized "learning by doing," yet "doing" itself does not guarantee that learning occurs—genuine learning requires a cycle between action and reflection, integrating thinking, feeling, and bodily action. For vocational education, this means that if skill learning is reduced to the repetitive rehearsal of preset operational procedures, losing the moments of reflection and creation, it has already degenerated from "education" into "training." Jaspers and Dewey jointly establish a normative proposition: skill learning that does not simultaneously advance the self-formation of the person is fundamentally defective educationally.

2.2. Chinese Educational Thought: From Classical Xingfa to Contemporary Life-Practice Theory

While the above proposition is articulated in Western philosophy of education as "awakening the soul" or "cultivating the whole person," Chinese educational thought offers its own systematic expression, forming a progressive lineage from the classical to the contemporary.

At the classical end is the tradition of *xingfa* ("awakening-and-inspiration") running from Confucius onward. "Stirred by poetry, established by ritual, perfected by music" (*Analects*, *Tai Bo*) sketches an educational path that begins with *xing* ("stirring" or "evocation"). *Xing* is not external command or indoctrination but, through concrete and sensible imagery, evokes the learner's inner feeling and aspiration, thereby activating the spiritual motive for self-directed learning. The opening of the *Analects*—"To learn and at due times practice what one has learned, is it not a pleasure?"—reveals precisely this intrinsic joy of learning: not the relief of a task completed, but the life-fulfillment that the learning process itself brings. This educational view, grounded in *xing*, resonates deeply with Jaspers' thought: both refuse to reduce education to technical knowledge transmission, both insist that education must return to the human heart, to the inner awakening of life.

At the contemporary end is the "Life-Practice" school of education advocated by Professor Ye Lan^[7]. She holds that "education is a social practice activity that faces human life directly, proceeds through human life, and is undertaken for the improvement of the quality of human life," and identifies the greatest crisis of contemporary education as the "hollowing-out of the person-cultivating aim"—education increasingly attends to measurable, controllable surface indicators while forgetting the fundamental mission of promoting the healthy, active, and well-rounded development of every concrete life. Professor Shi Zhongying further argues, from the perspective of epistemology, that education should help students establish an inner connection with knowledge, so that learning becomes a means of enriching the spiritual world and elevating one's life horizon^[8]. From *xingfa* to "Life-Practice," the consistent core concern of Chinese educational thought is this: education is not an externally imposed technical operation but the inward unfolding of life. Bringing this intellectual resource into the discussion of vocational education yields a direct implication: if skill learning in vocational bachelor's education cannot touch the deeper layers of students' lives, then no matter how "efficient" it may be technically, it is educationally incomplete.

The *xingfa* tradition also plays a methodologically pivotal role in the argument of this paper. It offers an operable educational mechanism—evoking the learner's inner interest and passion through carefully designed situations—which provides the core conceptual tool for the path strategies proposed below. Between Jaspers' dimension of "existence" and Marx's dimension of "labor" to be discussed shortly, *xingfa* constitutes a bridging concept: it offers a distinctively Chinese educational response to the ontological question of "how the person achieves self-formation through meaningful activity."

2.3. Tacit Knowledge and the Phenomenology of the Body: Cognitive Characteristics of Skill Learning

If the previous two dimensions establish at the normative level the stance that "skill learning should serve the integrated development of the person," the next question is: what is skill learning in terms of its cognitive characteristics? Have we designed educational arrangements that deviate from its nature because we have misunderstood the cognitive nature of skill?

Michael Polanyi's theory of tacit knowledge provides the core analytical framework for answering this question^[9]. In *Personal Knowledge: Towards a Post-Critical Philosophy*, Polanyi distinguishes between two kinds of knowledge: "explicit knowledge," which can be articulated in language, and "tacit knowledge," which cannot be fully conveyed in language. His famous proposition—"we know more than we can tell"—reveals the core cognitive characteristic of skill learning: genuine mastery of craft never consists merely in memorizing and executing explicit rules but includes a substantial tacit dimension that can only be transmitted through prolonged personal practice and close interpersonal interaction—implicit rules, intuitive judgment, bodily perception, and operational wisdom. A direct implication follows: if the nature of skill is highly tacit, then

pedagogies centered on standardized classroom instruction stand in structural contradiction with the cognitive characteristics of skill learning. The reason traditional apprenticeship has historically proven more advantageous than modern schooling in the transmission of skill lies precisely in the apprentice's prolonged shared life with the master, through observation, imitation, and repeated trial-and-error, naturally internalizing in the body the tacit knowledge that cannot be encoded into textbooks.

Maurice Merleau-Ponty's phenomenological theory of the body pushes this discussion further to the ontological level ^[10]. He develops the concept of the "body-subject": the body is not a physiological machine that can be arbitrarily manipulated but the basic mode of the human being's being-in-the-world—the person perceives the world and engages with it through the body, and the body is the medium through which the subject "intervenes" in existence. For skill learning, every refinement of technical operation is not merely the strengthening of muscle memory but a simultaneous adjustment of the learner's mode of relating to the world; through craft refinement, individuals continually re-establish their existential position in the world through bodily action. Learning a skill is by no means a divisible process of "the body performing actions while the brain memorizes rules"—it is one mode through which the human being, as an integrated existent, achieves self-formation in the world.

Together, Polanyi and Merleau-Ponty reveal a structured problem: that skill teaching in vocational bachelor's education currently falls into mind-body dualism—hands performing prescribed operations while the mind wanders elsewhere—is not merely a problem of pedagogical organization but, at a deeper level, a violation of the cognitive ontology of skill learning. When skill is treated as explicit knowledge that can be "effectively transmitted" in detachment from bodily experience and interpersonal context, it has already been stripped from its ontological mode of being.

2.4. Marx's Labor Theory: The Social Roots of the Alienation of Skill Learning

The first three dimensions address the normative aim, cultural resources, and cognitive characteristics respectively, but one fundamental question remains: why does contemporary skill learning tend toward alienation? This is not a purely pedagogical question; it must be answered within a broader socio-historical context.

Marx's labor theory provides a powerful analytical tool for this ^[11]. In the *Economic and Philosophic Manuscripts of 1844*, Marx analyzed the alienation of labor under the capitalist mode of production: the laborer, in the production process, cannot affirm his essential powers but instead finds himself enslaved by the product; labor is no longer the free and conscious activity of the human being but a forced means of subsistence. At the same time, Marx positively articulates the ontological significance of labor—labor is the expression of the human "species-being", the objectifying activity through which the human being transforms the external world and simultaneously transforms itself. In its ideal state, the human being in labor intuitively affirms, and enjoys their own being; labor becomes the free domain in which the creative potential of the human being unfolds.

The implications of Marx's critique of alienation for vocational education are twofold. First, it reveals a sharp structural contradiction: vocational education exists precisely to enable persons to engage more fully in labor, yet when labor itself is alienated, education designed to adapt to alienated labor will inevitably become alienated in turn. Students come to see themselves as "labor-power commodities" priced according to market rates, and skills as means to exchange for wages—this is not merely a matter of ideas but the projection of the institutional logic of the labor market into the educational field. Second, Marx's ideal—"the free development of each is the condition for

the free development of all"—points toward a transcendent vision for vocational education: vocational education must not only cultivate professional competence for occupational posts but, through labor education, help students grasp the value and dignity of labor, moving toward the free and all-round development of the human being through the cultivation of craft ^[12].

The four dimensions are now in place. Their relation is not one of loose parallelism: Western philosophy of education and Chinese educational thought jointly establish at the normative level the stance that "skill learning should serve the integrated development of the person"; tacit knowledge theory and the phenomenology of the body reveal at the cognitive level the structural contradiction between skill learning and this normative aim—when skill is mistakenly treated as explicit knowledge, its tacit nature is systematically obscured; and Marx's labor theory explains at the socio-historical level the institutional roots of this obscuring—the total permeation of instrumental rationality that has caused education to slide from "cultivating persons" to "making instruments." These four dimensions together provide a complete theoretical framework for the analysis of real dilemmas and the exploration of paths forward in the following sections.

3. Examining the Reality: Three Forms of Alienation in Skill Learning and Their Mechanisms

The theoretical framework outlined above provides not only a normative standard but also a diagnostic tool. From Jaspers' distinction between "training" and "education" to Marx's critique of alienation, the four dimensions converge on the same judgment: skill learning should be the self-formation of the person, yet cognitive misrecognition and institutional logic are together driving it toward its opposite. This deviation has clear and varied manifestations in the classrooms of vocational bachelor's education. The following three sections examine it from the dimensions of aim, process, and relation.

3.1. Alienation of Aim: Value Rationality Yielding to Instrumental Rationality

The alienation of the aim of skill learning manifests as an inversion of the hierarchy of educational values. When the cultivation aim is anchored single-mindedly in quantitative indicators such as employment rate, placement rate, and starting salary, skill itself is demoted from end to means, while employment in turn becomes the ultimate end. Students study a particular skill not because of how it might enrich their life experience but simply because it "leads to jobs" or "pays well."

The sharpness of this alienation is especially pronounced in vocational education, because vocational education stands in a structural coupling with the labor market that other educational types do not share. Xu Guoqing notes that since reform and opening-up, China's vocational education has long been shaped by the "employment-orientation" guideline, tending to absolutize the instrumental value of education while relatively neglecting its educative function, leading to "short-sighted" and "utilitarian" tendencies in practice ^[13]. Shi Weiping has repeatedly called for vocational education to defend its educative vocation while serving economic development, so as to avoid being reduced to a human-resource processing workshop for enterprises ^[14].

Reading this phenomenon through the theoretical framework above reveals dual roots of aim alienation. From Jaspers' analysis, it is essentially a "replacement of the aim of education by the aim of training": when skill learning serves only employment and no longer the self-formation of the person, the learner falls into the trap of "training"—the awakening of the soul cannot occur, because the starting point of learning was never in the soul. From Marx's perspective, the price signals of the labor market become the guiding force of education, and students unconsciously position themselves as "labor-power commodities" in assessing the value of their learning—once this logic

of assessment governs learning motivation, alienation has already quietly taken root in the relation between learner and skill.

3.2. Alienation of Process: Body-Mind Dualism and the Loss of Tacit Knowledge

The alienation of the skill learning process centers on mind-body dualism. Current skill teaching in vocational bachelor's education generally adopts a three-stage structure of "theoretical instruction—segmented practicum—concentrated internship," in which theoretical knowledge and practical operation are scheduled in separated times and spaces, lacking meaningful connection. A more acute problem is that bodily activity in practicums is often divorced from students' inner lives—hands repeating prescribed operational flows while the mind wanders elsewhere.

This phenomenon can be explained through Polanyi's tacit knowledge theory. When skill is treated by curriculum developers as explicit knowledge "decomposable into measurable discrete competency units"—as the DACUM methodology presupposes—the substantial non-codable tacit dimension of skill (intuitive judgment, situational awareness, embodied operational wisdom) is systematically filtered out. What students acquire is in fact only the skeleton and shell of craft, not its flesh and soul. Jiang Dayuan's curriculum concept of "work-process systematization" is a response to this dilemma. He advocates organizing teaching content around complete work processes as the main thread, enabling students to achieve internalized integration of theoretical knowledge and practical skill in authentic vocational situations^[15]. Yet this concept still faces structural resistance in implementation, including equipment limitations, entrenched teacher conceptions, and path dependence in assessment systems.

From the perspective of Merleau-Ponty's phenomenology of the body, the essence of process alienation is this: the pedagogical organization treats the body as a programmable machine rather than as the basic mode of the human being's being-in-the-world. When students' bodily perception and embodied understanding of skill are excluded from pedagogical attention, skill learning loses its ontological ground as an "embodied cognitive activity." Donald Schön's concept of "reflection-in-action" in *The Reflective Practitioner*—the cyclic process by which professionals reflect in and through action—offers direction for how to recover the reflective and integrative character of learning while ensuring skill proficiency^[16].

3.3 Alienation of Relation: The Dissolution of Intersubjectivity and the Depersonalization of Craft Transmission

The alienation of the skill learning relation is the least perceptible of the three forms yet has the deepest consequences, because it touches the most subtle and precious interpersonal dimension of craft transmission.

In traditional craft culture and the guild system, the transmission of craft was never the one-way transfer of technique. What the master transmitted was not only operational essentials but also a felt understanding of material properties, tool use, work rhythm, and even professional ethics; what the apprentice acquired was not only the craft process but, through shared life, a professional identity and craft-aesthetic taste absorbed by osmosis. The effectiveness of this mode of transmission, anchored in deep intersubjective trust, lay precisely in this: impersonal technical content was wrapped within a personal relational network, and tacit knowledge was transmitted unconsciously.

Yet the scale expansion of modern vocational institutions and the universalization of class-based instruction have made this intimate intersubjective relation increasingly thin. Teachers shift from "masters" to conveyors of standardized knowledge and skill; students shift from "apprentices" to "educational products" manufactured to uniform specifications. Jürgen Habermas systematically critiqued the erosion of the "lifeworld" by instrumental rationality in *The Theory of Communicative*

Action. He argued that when instrumental-purposive rationality expands to all domains of human interaction, relations between persons become reified, and the space for the generation of meaning and value is squeezed to nothing ^[17]. This judgment accurately describes what is occurring in the vocational education field: the spiritual encounter between teacher and student is replaced by reified exchange relations, and the educational vision of "one soul awakening another" recedes within an increasingly institutionalized system.

Taken together, the three forms of alienation reveal a self-reinforcing vicious circle: the utilitarian framing of aims drives teaching processes toward efficiency and standardization; efficiency-oriented and standardized teaching depersonalizes teacher-student relations; and depersonalized teacher-student relations in turn reinforce the utilitarian framing of aims. These three are not isolated parallel phenomena but an interlocking, self-reinforcing cycle of alienation. This means that any piecemeal reform—such as merely adjusting curriculum structure or merely updating evaluation indicators—cannot break this cycle; simultaneous action is required at the four levels of aim, curriculum, teaching, and assessment.

4. Pathways for Reconstruction: An Ontological Strategy Guided by *Xingfa*

Based on the above analysis, the ontological reconstruction of skill learning in vocational bachelor's education must proceed in coordinated fashion across four interrelated levels: aim, curriculum, teaching, and assessment. The new strategy takes *xingfa* (awakening-and-inspiration) as its core organizing concept: it is both a core mechanism of Chinese educational thought and stands in deep logical resonance with Jaspers' "awakening of the soul," Dewey's "reflective experience," Polanyi's "tacit acquisition," and Marx's "objectifying" activity. To be *xingfa*-oriented means that every reform measure must take as its ultimate test whether it can evoke the learner's inner participation of life.

4.1. Reconstructing the Aim: From the "One-Dimensional Skilled Person" to the "Whole Person in Craft Cultivation"

Reconstructing the aim must first answer: what kind of person does vocational bachelor's education hope to cultivate? If the answer is "a technical operator competent for the post," then the cultivation aim remains at the level of what Jaspers called "training."

This paper proposes reformulating the cultivation aim as: cultivating whole persons who achieve self-development through the cultivation of craft. Specifically, this aim comprises four progressively intertwined levels—craft, cognition, aesthetics, and ethics. Craft is the learner's entry into the vocational world and the most direct tangible embodiment of skill learning; cognition is the understanding of the industry's overall picture and social function gradually constructed through craft practice; aesthetics is the perception and taste of the beauty of craft and the joy of labor that naturally emerge through craft refinement; ethics is the professional values and social responsibility formed through social understanding and the pursuit of beauty. Entry, horizon, motive, direction—these four are not a menu of parallel options but a progressively layered generative structure.

These four levels correspond clearly to the theoretical dimensions above. The craft level connects with Polanyi's tacit knowledge—the bodily and tacit character of skill acquisition must be acknowledged in the cultivation aim; the cognitive level responds to the "Life-Practice" school's critique of the "hollowing-out of the person-cultivating aim"; the aesthetic level connects to the *xingfa* tradition—the inner joy evoked by the beauty of craft is the intrinsic force driving the learner's sustained refinement; and the ethical level points to Marx's ideal of free labor—vocational practice is not only a means of livelihood but a mode by which individuals establish themselves as responsible actors in society.

4.2. Reconstructing the Curriculum: Authentic Situations as the Field of *Xingfa*

Curriculum embodies educational philosophy. The deep problem of the current curriculum system lies in this: a structural mismatch exists between the design logic of the curriculum and the cognitive ontology of skill learning—the curriculum is designed for the "effective transmission of explicit knowledge," but the nature of skill is highly tacit, situation-dependent, and demands integrated bodily-mental participation.

First, construct a curriculum system oriented around the work process. Drawing on the German "learning field" curriculum concept and Jiang Dayuan's "work-process systematization" curriculum development method, typical vocational work tasks are taken as the basic units for organizing teaching content, so that students naturally acquire the theoretical knowledge and practical skills needed in the process of completing real or simulated work projects. The ontological significance of this design lies in: a curriculum organized around the complete work process restores the holistic picture of the vocational world—when the learner faces a complete work task, cognition, body, emotion, and will are simultaneously mobilized, and skill learning again becomes an integrated activity of life.

Second, add "craft culture" general education courses. Courses or lectures such as "Introduction to the Spirit of Craftsmanship," "Technology and the Humanities," "History of Industry Development," "Selected Readings in Classic Technical Works," and "Philosophy of Labor" may be offered, guiding students to understand the spiritual connotation and social value of their specialty from cultural and philosophical perspectives. The ontological function of these courses is to provide learners with a "point of entry into meaning": when students understand the inner connection between soldering technology and the history of human civilization, or recognize the craft-aesthetic tradition embodied in the machining precision of precision parts, skill is no longer merely a livelihood tool but becomes a mode through which they understand the world and themselves.

Third, systematically embed the *xingfa* mechanism into the design of practicum teaching. The core mechanism of *xingfa* lies in evoking the learner's inner interest and passion through carefully designed, meaningful, open situations. Introducing this mechanism into the practicum teaching of vocational bachelor's education requires teachers to attend to the authenticity and challenge of situations when designing practicum projects, and during the practicum process not only to attend to the correctness of technical movements but to be adept at capturing the learner's perplexity, surprise, and insight—the affective-cognitive responses that arise in practice—and to use them as occasions for inspiring guidance. Every successful *xingfa* event is a learning event in the ontological sense: the learner not only makes progress in skill but undergoes a positive change in the dimension of "the relation between myself and the craft I learn."

4.3. Transforming Teaching: Reconstructing Intersubjectivity in Craft Transmission

The core task of teaching-level reconstruction is to repair the teacher-student relation damaged by instrumental rationality.

First, embed reflective practice within the cycle of skill learning. Both Dewey and Schön emphasize that genuine learning occurs in the alternating cycle of action and reflection. In current vocational education practice, "doing" is heavily emphasized while "thinking" is gravely neglected. Each practicum project must be designed as a complete cycle of "action—reflection—re-action": guiding students, after practice, to review their decision-making process, the difficulties encountered and how they broke through, and the significance of this experience for self-understanding. The introduction of reflective practice is not merely an improvement in teaching method but an ontological reconstruction—through reflection, the learner shifts from a passive

executor of operations to a meaning-maker of his own experience, and skill learning genuinely becomes "self-education."

Second, explore the ontological innovation of the modern apprenticeship. Traditional apprenticeship was effective not only because it provided authentic work situations but because deep trust and emotional connection formed in the shared life of master and apprentice—the relational network of craft transmission is itself an organic component of craft. In recent years, "modern apprenticeship" reform has made active explorations along the directions of "dual-mentor systems," "studio-style learning," and "master-apprentice pairing," but the focus has largely remained at the level of institutional form. The next key step is to deepen from institutional construction at the formal level to cultural transformation at the ontological level: enabling both teachers and students to realize that the intersubjective relation in craft transmission is not a functional matching of "teaching" and "learning" but a mutual evocation and mutual accomplishment between two subjects confronting the craft together.

Third, transform the teacher's role. The teacher's role in *xingfa*-oriented teaching is not only a transmitter of knowledge and skill but a spark for students' learning interest and a guide of their spiritual growth. This requires teachers not only to master their specialty's skills but also to possess acute educational intuition and humanistic cultivation, capable of recognizing in concrete pedagogical situations the subtle signals of students' inner learning motive being ignited or fading. The teacher's authority no longer derives from a monopoly on knowledge but from the personal charisma and professional wisdom exhibited as "a more experienced fellow traveler"—this is precisely the embodiment, in the vocational education field, of the educational relation grounded in spiritual exchange that Jaspers described.

4.4. Innovating Assessment: Beyond the Quantitative Myth of Instrumental Rationality

The assessment system is the institutional infrastructure that underpins the implementation of the foregoing reforms, and it is also the most difficult to execute. Marx's reminder here carries direct methodological implications: the kind of measure one has determines the kind of labor one gets. If the assessment system continues to take quantifiable, comparable efficiency indicators as its core, all the foregoing reforms aimed at "the integrated development of the person" will ultimately be pulled back into the track of instrumental rationality by this indicator system.

First, introduce a value-added assessment perspective. Value-added assessment attends not to the absolute level a student reaches at a given point but to the relative progress achieved under educational intervention. The ontological significance of this perspective is that it acknowledges that every learner's initial state differs, and the criterion for judging educational effectiveness is not to level everyone to the same preset finish line but to enable each person to achieve meaningful development on his or her own basis—this responds to Jaspers' core proposition that "education awakens inner possibility."

Second, develop performance-based assessment. The outcomes of skill learning cannot be fully tested by a one-shot closed-book exam or standardized operational scoring. Multiple forms such as portfolio assessment, project reports, on-site operational demonstrations, and oral defenses should be adopted to comprehensively examine students' ability to solve complex problems in authentic situations. The transformation of assessment modes can itself produce positive ontological effects: when students prepare carefully in order to present their work, and receive recognition and suggestions under the scrutiny of peers and industry experts, assessment is no longer a cold "quality inspection" episode but may become a learning event with *xingfa* force.

Third, establish a multi-stakeholder assessment mechanism. Institutions should incorporate student self-assessment, peer assessment, enterprise mentor assessment, and even user feedback, so

that assessment becomes a process of intersubjective dialogue rather than merely a tool of supervisory power. Multi-stakeholder assessment reshapes the nature of assessment ontologically—it shifts from one-way external judgment to multi-perspective internal dialogue, helping to cultivate students' self-awareness, spirit of cooperation, and civic consciousness.

5. Conclusion

Jaspers once wrote that education is an exchange between persons at the level of spirit, involving the transmission of knowledge, the grasp of life, and the regulation of will, through which cultural transmission enables the younger generation to come into being freely and to have its nature illuminated ^[6]. This passage points to the ultimate concern of education: education is not the standardized replication of persons within a preset mold but the free unfolding of every unique life through encounters and dialogues between person and person, person and culture, person and world.

Vocational bachelor's education stands at a moment charged with tensions: on one side, the high-level strategic attention and sustained fiscal-policy resource investment of the state; on the other, the deep-rooted institutional inertia and mindset of instrumental rationality; on one side, the urgent demand of industrial transformation and upgrading for highly skilled personnel with "both refined craft and integrated personhood"; on the other, the crisis of meaning increasingly evident in the learning and work of the younger generation. How to open a new path within this tension?

This paper's answer is: return to the origin of education, return to "the human being" itself—return to the ontological relation between person and skill. Skill learning is not a narrowing of human nature but an occasion for its enrichment and unfolding. To learn a craft to its depths should yield not only a means of livelihood but also the affirmation of one's own essential powers and the profound joy of creative labor; to commit oneself to the sustained cultivation of a craft should bring not only dreary mechanical repetition but also spiritual dialogue with the tradition of human wisdom, direct contact with the material world, and the encounter with fellow travelers.

The ideal envisioned by Marx and Engels in the *Communist Manifesto*—"the free development of each is the condition for the free development of all" ^[12]—should not remain forever at the level of philosophical speculation but should gradually become reality through the concrete social-practice field of vocational education. "Craft as self-becoming" is not only a theoretical project but an unfinished cause that summons vocational education researchers, administrators, and practitioners to joint commitment. Whether vocational bachelor's education can become such a site—where every young person who enters finds his or her own direction and walks toward a more expansive life with refined craft and a full heart—is the ultimate measure of all reform.

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