## JOURNAL OF MODERN SCIENCE

4/64/2025



www.jomswsge.com

DOI: 10.13166/jms/215643

ADAM SOLAK

The Maria Grzegorzewska University in Warsaw, Poland

ORCID iD: 0000-0001-9472-4795

## THE HUMAN BEING AND THEIR VALUE IN THE CONTEXT OF PROFESSIONAL WORK IN THE AGE OF ARTIFICIAL INTELLIGENCE



#### ABSTRACT

The article analyzes the significance and value of the human being in the context of dynamic labor market transformations triggered by the development of artificial intelligence. Reflection is undertaken regarding the anthropological-pedagogical function of work and the role of the human being as a moral, creative subject responsible for shaping relationships with technology. Key competencies of the future, the development of which becomes indispensable in a professional environment dominated by algorithmic solutions, are discussed. The tasks of contemporary education and the pedagogy of work in preparing individuals for responsible coexistence with AI are also indicated. The conclusion emphasizes that, despite increasing automation, the human being remains the essential creator of meaning, value, and social order in the world of work.

**KEYWORDS:** artificial intelligence, human value, pedagogy of work, future competencies, subjectivity, automation

#### Introduction

The contemporary world of work is in a phase of profound, multidimensional transformation, one of the key factors of which is the rapid development of artificial intelligence (AI) and accompanying digital technologies. The automation of processes, algorithmization of decisions, robotization of production, and increasingly sophisticated generative systems affect all sectors of professional life, from industry and services, through education, to public administration. These changes are not only technical in nature but also social, cultural, economic, and axiological, which requires deepened scientific reflection on the place and role of the human being in the new reality (Szlosek, F., 2015).

The development of AI brings both hopes and fears. On the one hand, it enables increased efficiency, the creation of innovative solutions, the optimization of activities, and the relief of humans from routine tasks. On the other hand, it gives rise to discussions regarding the future of employment, competencies, professional autonomy, and the durability of traditional work models and social relationships. The literature emphasizes that this transformation does not merely consist of replacing humans with machines, but redefines

the way work is organized, what skills it requires, and what values it should support (Schwab, K., 2020). At the center of this debate stands the human being, their dignity, agency, competencies, creativity, and role as a moral subject capable of consciously and responsibly shaping the technological world. In the age of AI, the need to rethink the anthropological foundations of work becomes particularly evident: what work is for the human being, what formative functions it performs, how it influences identity, and what mechanisms protect the subjectivity of the individual in an environment dominated by automation.

The pedagogy of work, as a discipline examining the relationships between education, work, and human development, faces new challenges. It must answer the question of how to prepare the individual to function in a work environment supported by intelligent technologies, how to develop competencies that cannot be automated, how to shape ethical, reflective, and pro-social attitudes, and how to protect the humanistic dimension of work in a world where the role of algorithms and decision-making systems is growing.

This article attempts to demonstrate that despite intense technological changes, the value of the human being in work is not reduced but transformed. The human being remains a key element of the work environment, not as a competitor to technology, but as its creative, responsible, and ethical partner. The analysis focuses in particular on: the changing meaning of work in an anthropological-pedagogical perspective, selected aspects of human subjectivity irreplaceable by AI, future competencies, and the tasks of education in shaping a reflective employee of the technological era.

# 1. THE ANTHROPOLOGICAL-PEDAGOGICAL SIGNIFICANCE OF WORK

Work constitutes one of the fundamental existential experiences of the human being and, for this reason, occupies a central place in both anthropological and pedagogical reflection (Solak, A., 2005). In the anthropological approach, it is not merely a set of activities aimed at producing a material good or service, but primarily a form of human activity through which the individual enters into relationships with the world, other people,

and themselves. Work is a space for the realization of subjectivity and agency; the human being as *homo faber* shapes the environment, but simultaneously shapes themselves, their identity, value system, and the way of experiencing their own biography. From an anthropological perspective, work performs a mediative function between nature and culture. Acting in the world, the human being transforms natural resources into cultural artifacts, imbues them with symbolic meanings, and incorporates them into broader configurations of sense. In this way, work becomes a culture-forming process, as it perpetuates specific patterns of social life, norms, roles, and hierarchies, while simultaneously enabling their reinterpretation. It is also a significant source of the experience of time, as it organizes the rhythm of the day, year, and entire life, introducing structure into individual and collective biography. Work also has an axiological dimension; it is connected with categories of dignity, responsibility, and meaning.

Participation in work, regardless of its form, can be a source of a sense of social utility and belonging for the individual, but it can also lead to experiences of alienation, exclusion, and dehumanization if reduced to purely instrumental functions. In this sense, the anthropological analysis of work reveals the ambivalent nature of this phenomenon: work can foster the development of the person, but under certain socio-economic conditions, it can also limit this development.

Against this background, the pedagogical significance of work is clearly revealed (Solak, A., 2005). In the pedagogical tradition, work is understood as an important educational environment and a tool for shaping personality. Education through work assumes that in the course of performing tasks, the individual acquires not only technical skills but also social competencies (cooperation, communication, responsibility for others), moral competencies (reliability, honesty, perseverance), and cognitive competencies (planning, problem-solving, reflection on the consequences of one's own actions). Work thus becomes a process of learning-by-doing, in which theoretical knowledge is combined with practice, and abstract values are anchored in concrete activity (Wołk, Z., 2000).

The pedagogical dimension of work also encompasses the process of socialization and internalization of social norms. Through participation in organized forms of work, whether in the family, school, or professional environment,

the individual assimilates prevailing role patterns, quality standards, communication styles, and methods of conflict resolution. The workplace functions as an educational environment in which not only formal regulations and procedures operate, but also the informal *organizational culture*, creating the so-called hidden curriculum. How work is organized, how responsibility is distributed, and how the weakest members of the group are treated has a direct impact on shaping the attitudes and beliefs of participants.

Contemporary pedagogy, particularly within the currents of labor pedagogy and social pedagogy, draws attention to the necessity of critical reflection on the conditions in which work is realized. Phenomena such as the precarization of employment, the intensification of competence requirements, the instability of professional biographies, or the digitalization of the work environment influence the sense of security, identity, and well-being of individuals. As AI evolves into a benevolent tool for humanity, whose primary directive is to serve as an instrument that improves the quality of life, it may lead to the emergence of a more refined human race—one in which greater integrity exists in governance, politics, and science, and where compassion and empathy are key (Bukowski, Klonowska, 2024, 165).

In this context, the task of pedagogy becomes not only preparation for fulfilling professional roles but also developing the capacity for self-reflection, self-education, and engaging in critical dialogue with existing work structures. The category of work in pedagogy is therefore not limited to a narrowly understood professional career, but encompasses the totality of activities through which the human being co-creates the social world and themselves.

The anthropological-pedagogical approach thus allows work to be perceived as a multidimensional phenomenon: biological (related to physical effort and health), psychological (influencing the sense of meaning, identity, and motivation), social (embedded in a network of relationships, institutions, and roles), and spiritual/axiological (saturated with values and meanings). Such a perspective opens the field for deepened reflection on how to shape education and educational practice so that work is a space for the authentic development of the person, and not merely a tool for economic efficiency (Kukla, D., 2010, 71-91).

# 2. THE VALUE OF THE HUMAN BEING IN THE WORK ENVIRONMENT OF THE AI ERA

The dynamic development of artificial intelligence technology leads to a profound reconstruction of the work environment, simultaneously forcing a redefinition of the value of the human being as a subject of professional activity. In conditions of progressive automation and the algorithmization of decision-making processes, traditional criteria for evaluating an employee, such as operational efficiency, speed of performing routine tasks, or the ability to reproduce procedures, are gradually being marginalized, as AI systems are increasingly taking them over. In this situation, those dimensions of subjectivity that are difficult or impossible to fully replicate by technology – such as reflexivity, moral responsibility, the capacity for empathy, creativity, and the ability to imbue one's own activity with meaning – acquire particular significance (Legieć, J., 2012, 320-335).

The value of the human being in the work environment of the AI era cannot be reduced to a *complementary* function to technology, understood merely as the execution of tasks that the machine is not yet able to perform. Such an instrumental model would lead to further dehumanization of work and the treatment of the individual as a reserve component of the technical-organizational system. Anthropologically and pedagogically justified, however, is an approach in which the human being is perceived as the main carrier of meaning, values, and responsibility for the consequences of actions taken within complex human-technology-institution systems. AI systems do not possess their own axiological consciousness nor the capacity for moral self-correction; therefore, the human person remains the ultimate *regulator* and interpreter of decisions made with the participation of technology.

In this context, transversal competencies, such as critical thinking, the ability to recognize the social consequences of decisions, the skill of negotiating meanings in a team, and creating relationships based on trust, acquire particular significance. The human being becomes a key resource of the organization not so much due to a stock of factual knowledge (easy to replicate in databases), but due to the ability to integrate specialized knowledge with social, cultural, and ethical contexts (Wodecki, A., 2018). This value is revealed

particularly in situations of uncertainty, conflict of norms, ambiguity of data, and the necessity to make decisions whose consequences extend beyond the dimension of purely economic efficiency (Tomaszewska, R., 2021, 197-227).

The work environment of the AI era also shapes new configurations of power relations and responsibility. Algorithms that organize the rhythm of work, evaluate effectiveness, and support recruitment processes may reinforce existing inequalities or generate new forms of exclusion. In this perspective, the value of the human being as an employee and citizen lies, among other things, in the capacity for critical reflection on the structures in which they participate, and for the articulation of claims regarding transparency, justice, and participation in the design of technological solutions. The human being in the workplace is not exclusively a recipient of technology, but a potential co-creator of the norms regulating its application.

A significant dimension of human value is also their role in sustaining and co-constructing organizational culture. AI systems can optimize information flows and processes, but they are not capable of authentically building a community of meanings, loyalty, identification with the institution's mission, or solidarity in the face of a crisis. It is employees, through daily interactions, informal practices, and shared narratives, who create the psychosocial work environment that can support or inhibit the development of individuals. In this sense, the value of the human being manifests itself in the ability to create the *social fabric* of the organization, and not only in measurable productivity indicators (Trelak, J. F., 2011).

From a pedagogical perspective, the concept of human value in the work environment of the AI era raises concrete implications for the education system and lifelong learning. It becomes necessary to move away from an education model focused on the reproduction of knowledge and simple action schemas in favor of education developing the capacity for self-education, adaptation, interdisciplinary cooperation, and ethical responsibility for the use of technology. Preparation for work in conditions of ubiquitous AI essentially means preparation for fulfilling the role of a subject who co-creates the frameworks for technology use in a manner respecting the dignity of the human person and the common good.

In summary, in the work environment of the AI era, the value of the human being does not decrease but undergoes transformation: from value measured mainly by operational efficiency to value rooted in reflective, relational, and axiological competencies. While routine tasks can be largely automated, the capacity for the meaning-making, responsible, and communal shaping of the reality of work remains the domain of the human being. It is precisely this dimension combining subjectivity, morality, and creativity that should be the central point of reference in designing both labor market policies and educational strategies in the age of artificial intelligence (Przybycień, K., 2013, 89-126).

# 3. FUTURE COMPETENCIES AS A DETERMINANT OF HUMAN VALUE

In conditions of accelerated civilizational, technological, and cultural transformations, the importance of categories collectively referred to as *future competencies* is growing. This term is understood as a set of integrated cognitive, emotional, social, and axiological dispositions that enable an individual to function adequately in an environment characterized by a high level of complexity, unpredictability, and permanent change. Future competencies go beyond the traditional understanding of professional qualifications, because they do not boil down to a set of specialized technical skills, but appeal to deep structures of human subjectivity: ways of thinking, valuing, establishing relationships, and learning (Majewska, M., Matuszewska – Birkowska, M., Orczykowski T., 2024).

In this context, the value of the human being is not understood exclusively in economic or productivity categories, but as the capacity for meaning-making participation in social, cultural, and professional life. Future competencies become an indicator of this value insofar as they enable the individual to creatively co-shape reality, and not just adapt to existing structures. These include, among others: the capacity for critical and systemic thinking, creativity, the ability to collaborate in diverse teams, digital and media competencies, the ability to learn throughout life, psychological resilience (Hanson, 2022), as well as ethical and civic competencies. It is these that determine the degree

to which a human being is able to integrate the demands of the world of work with their own developmental needs and the common good.

A significant feature of future competencies is their transversal character, as they are not assigned to a single field of knowledge or concrete profession, but constitute meta-competencies that enable the transfer of skills between different contexts of action. From an anthropological perspective, this means that the value of the human being ceases to be linked to a one-time acquired *package* of qualifications, and increasingly to the potential for continuous self-transformation: redefining one's own professional identity, updating knowledge resources, and reconfiguring social roles. A valuable human being in the perspective of the future is not one who possesses specific resources, but one who is able to constantly create, transform, and negotiate them in relation to others (Majewska, M., Matuszewska – Birkowska, M., Orczykowski T., 2024).

From a pedagogical point of view, future competencies constitute the key goal of educational processes, rather than their side effect. This means the necessity of transitioning from a transmission model of education, focused on knowledge reproduction, to a model in which learning is a problem-based, reflective, and participatory process. The value of the human being as a subject of learning is then measured not only by *what they know*, but primarily by *what they can do with their knowledge* in new, complex situations – how they can recognize a problem, interpret it in the light of different perspectives, make a responsible decision, and cooperate with others. Future competencies become here a measure of subjective maturity, understood as the capacity for autonomous, yet responsible action.

The axiological dimension of future competencies is not without significance. In a world dominated by information technologies and artificial intelligence, the importance of those competencies associated with moral reflection, sensitivity to the social consequences of actions, and the ability to protect one's own dignity and that of others is growing. The value of the human being manifests itself in the skill of combining innovation with responsibility, and efficiency with care for relationships and the common good. Future competencies thus have not only an instrumental but also a normative character – they indicate what types of behaviors and attitudes are considered desirable from the point of view of the development of the individual and society.

In conclusion, future competencies can be treated as a contemporary determinant of human value, because they concentrate on the capacity for creative, reflective, and ethical co-participation in a dynamically changing world. Without negating the indisputable importance of specialized knowledge, they shift the emphasis to those aspects of subjectivity that determine the individual's long-term capacity for self-development, cooperation, and responsible influence on social reality. In this sense, the discussion on future competencies is simultaneously a discussion on a new paradigm of upbringing and on ways of understanding human value in the realities of the 21st century.

### 4. THE TEACHER AND PEDAGOGUE IN THE AGE OF AI

The development of technologies based on artificial intelligence causes deep transformations in the work of teachers, pedagogues, and educators. Not only is the scope of their duties changing, but also the essence of educational relationships, the character of the education process, and social expectations towards representatives of these professions. The contemporary pedagogue is not merely a transmission source of knowledge, but becomes a guide in an environment of information overload, a creator of learning culture, and a moderator of cooperation between the student and technology. Analyzing current subject literature, containing both theoretical analysis of the present situation as well as empirical analysis, the following systematized description of the significance of the role of the teacher and pedagogue in the age of AI can be made (Maczuga, P., 2025).

Firstly, the teacher in the age of AI acts as a facilitator of learning, supporting the student in interpreting content generated by algorithmic systems. Knowledge today becomes easily accessible, yet simultaneously requires critical filtering, credibility assessment, and contextual interpretation. The pedagogue, thanks to their reflexivity and experience, enables the student to understand complex dependencies and develop metacognitive skills. Their task is therefore not to replace technology, but to prepare the student for its responsible, autonomous, and ethical use.

Secondly, the teacher plays the role of a guardian of values and subjectivity in the education process. In the face of the growing influence of algorithms on decision-making processes, it becomes necessary to care for the protection of the student's dignity, their right to privacy, the individualization of the education process, and the possibility of personal development. The pedagogue as an ethical subject has an obligation not only to know technologies but also to be able to assess their social and moral consequences. It is they who stand guard to ensure that education is not dominated by automatic mechanisms at the expense of the master–student relationship or the educational presence of an adult.

Thirdly, the teacher is an organizer of the educational environment, which combines digital technologies with the social and emotional experiences of the student. The literature emphasizes that school should be a space for multidimensional development, and not merely a place for data transmission. AI can support the individualization of teaching, educational diagnosis, or the analysis of student progress; however, it will not replace the human capacity to build an atmosphere of trust, inspire thinking, and create conditions conducive to experiencing cooperation and empathy. The pedagogue thus performs the function of an integrator – combining the potential of technology with educational and relational values.

Fourthly, the teacher becomes an animator of future competencies, such as creativity, cooperation, entrepreneurship, reflexivity, or responsibility for the community. These skills are difficult to automate and yet key in the professional environment of the AI era. The pedagogue is tasked with creating educational situations conducive to the development of critical thinking and the skill of solving problems in a creative and multi-faceted way. This role requires the teacher to constantly improve their own competencies and the capacity for lifelong learning.

Fifthly, the teacher performs the function of a mediator between the world of technology and humanism, ensuring a balance between the efficiency offered by AI systems and the emotional and social needs of students. As researchers indicate, the school of the future should be a place where technology supports human development but does not determine it. The pedagogue, acting at the intersection of two realities, humanistic and technological, can create conditions conducive to the harmonious coexistence of both dimensions.

The above analyses allow for the unequivocal conclusion that the role of the teacher in the age of AI becomes not only more complex but also more significant. The educator of the 21st century not only conveys knowledge but participates in shaping future citizens capable of critically using technology, consciously making decisions, and responsibly building a society based on values. Their work is thus of fundamental importance for the shape of the future social order and work culture in an automated world.

# 5. THE HUMAN BEING AS A CO-CREATOR OF THE FUTURE OF WORK

The contemporary labor market, subject to intensive automation and digitalization, increasingly clearly reveals that the human being is not merely a recipient of technological changes, but their active co-creator. This means that the future of work is not predetermined by the development of algorithms, but shaped by the conscious decisions, values, competencies, and actions of people. The human being as a creative and reflective subject plays a key role in designing technology, determining the directions of its use, and creating new organizational and social models that redefine the way institutions and professional relationships function.

Firstly, the human being performs the function of an initiator of change. It is their needs, aspirations, and social problems that become the starting point for creating technological solutions. In this sense, AI is not an autonomous entity developing independently of the human being, but a tool constructed in response to human challenges. The design of artificial intelligence thus requires an understanding of the social, ethical, and cultural context in which it is to be applied, which makes the human being the main architect of its meaning and function.

Secondly, the human being is a creator of new forms of work that result from the integration of technology with professional activity. Professions and roles are emerging that did not exist a decade ago, such as algorithm trainers, specialists in technology ethics, designers of dialogues with generative systems, social data analysts, or architects of human-AI work environments. In this view,

technology does not so much reduce the number of jobs as it shifts competence accents, stimulates innovation, and fosters the emergence of professions requiring a high level of abstract and social thinking. The human being as a source of ideas, emotions, intuition, and values – remains an indispensable element of the creative process.

Thirdly, the human being becomes a moderator of relations between technology and society. At a time when algorithms exert an increasing influence on personnel, health, educational, or economic decisions, human oversight is essential to guarantee respect for rights, dignity, and equality. The human being as a guardian of ethics and responsibility plays a key role in designing regulatory frameworks, monitoring the operation of AI systems, and correcting their errors and biases. In this sense, their value acquires a socio-moral dimension, and not just a functional one.

Fourthly, the human being is a participant in the transformation process, which requires continuous learning, adaptation, and the development of future competencies. Labor pedagogy emphasizes that lifelong learning becomes the central dimension of the professional existence of the contemporary human being. The capacity to redesign one's own roles, openness to change, cognitive autonomy, and flexibility become key in the process of co-creating the future of the labor market. The human being who actively develops their competencies not only adapts to changes but also generates them, initiating new ways of using AI, redefining processes, and creating innovative methods of action.

Finally, the human being remains the creator of the meaning of work, which distinguishes them from artificial intelligence systems. Machines can perform tasks, but they do not give them meaning. It is the human being who decides what the purpose of work is, what values are to be associated with it, and how it is to serve the development of the individual and society. This axiological and reflective capacity means that the human being not only participates in the world of work but also sets its direction, builds organizational culture, shapes social relationships, and gives an ethical dimension to technological progress.

In light of the above analyses, it can be stated that the human being in the age of artificial intelligence does not lose their role, but becomes a more central link in the transformation process. It is they who define the goals of technology, co-create its meanings, answer for its social consequences, and design the work environment of the future. In this sense, the human being remains not only a user but a co-author of the professional reality of the digital era, and their value is based on competencies that cannot be automated: creativity, empathy, responsibility, and reflexivity.

#### Conclusion

The transformations taking place in the professional space under the influence of the development of artificial intelligence prompt a redefinition of the role of the human being in work and deepened reflection on its axiological and formative significance. In the age of advanced automation, work ceases to be merely a way of performing tasks of a technical nature; it becomes, instead, a space in which specifically human traits such as empathy, responsibility, creative capacity, reflexivity, and the skill of moral assessment of a situation acquire particular significance. These elements of subjectivity become the foundation of human value in the contemporary world of work.

The analyses presented in the article clearly indicate that artificial intelligence, although it constitutes a tool with enormous transformational potential, does not eliminate the role of the human being, but reconfigures it. Technology takes over repetitive, analytical, or operational tasks, freeing up human resources towards creative, decision-making, relational, and ethical activity. This means that the value of the employee of the future will be determined not so much by reproductive competencies, but by capacities for critical thinking, cooperation, innovation, and responsible action in a human – machine environment.

From the perspective of labor pedagogy, the task of preparing individuals to function in a complex technological reality acquires particular significance. Education must go beyond the model of transmitting instrumental and technical knowledge, concentrating on developing metacognitive, axiological, and social competencies. It is also necessary to build ethical awareness and sensitivity to the consequences of decisions made in a highly automated world. Only then will it be possible to maintain harmony between the development of technology and care for the good of the human being and the community. It is worth emphasizing that the future of work is not

technologically determined. It is the human being – through their decisions, value systems, capacity for cooperation, and reflective thinking – who shapes the directions of AI development and the ways of its use. The protection of human dignity and subjectivity should therefore constitute the overriding goal of designing technology, educational systems, and social policies. The task of labor pedagogy becomes building a model of development in which technologies support the human being, and do not replace them.

In conclusion, it should be stated that in the age of artificial intelligence, the value of the human being in the professional environment does not decrease but, on the contrary, is strengthened, because its unique, unforgeable character is revealed. The human being remains the creator of meanings, the responsible designer of reality, and the guardian of the moral order, which gives sense to both professional actions and broader social processes. The future of work will therefore depend not on the power of technology, but on the wisdom, sensitivity, and responsibility of the people who create, develop, and use it.

#### REFERENCES

- Bukowski, M., Klonowska, I. (2024). Boskie AI. Sztuczna inteligencja i edukacja. Poszukiwanie nowych horyzontów w kontekście edukacyjnym, teologicznym i technologicznym szanse i zagrożenia. Kościół i Prawo. DOI: 10.18290/kip2024.24
- Kukla, D. (2010). Preorientacja i orientacja zawodowa w edukacji. Warszawa: Wydawnictwo Labor.
- Legieć, J. (2012). *Człowiek w filozofii pracy Józefa Tischnera*, Kraków: Wydawnictwo Księży Sercanów.
- Maczuga, P. (2025). AI w pigułce. Narzędnik nauczyciela. Poznań: Wydawnictwo EDICON.
- Majewska, M., Matuszewska-Birkowska, M., Orczykowski, T. (red.) (2024). Kompetencje przyszłości. T. II, Radom: Wydawnictwo Akademii Nauk Stosowanych w Radomiu,
- Przybycień, K. (2013). *Praca w epoce informacji. Cz. 1.* Stalowa Wola: Wydawnictwo Diecezjalne w Sandomierzu.
- Schwab, K. (2020). The future of jobs report. World Economic Forum
- Solak, A. (2005). *Wychowanie chrześcijańskiej i praca ludzka*. Warszawa: Wydawnictwo UKSW.
- Szlosek, F. (2015). Tożsamość pedagogiki pracy w kontekście przemian systemowych. Warszawa: Wydawnictwo APS.
- Tomaszewska, R. (2021). *Człowiek i praca. Perspektywa transhumanizmu*. Bydgoszcz: Wydawnictwo UKW.
- Trelak, J. F. (2011). *Człowiek w sytuacji pracy w okresie ponowoczesności*. Warszawa: Wydawnictwo UKSW
- Wołk, Z. (2000). *Kultura pracy*. Suchelów: Wydawnictwo Wyższej Szkoły Administracji Publicznej.