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## **Education and the Labour Market: Future Scenarios and the Need for Counselling**

This paper depicts future scenarios for the labour market (e.g. *Jobs are for Robots; Hollywood Work Mode; Always under Control; Social Workers for the Planet and Nature; Unending Employee*) and education (*Hyper-personalised Education; Technologised Humanism; Reactive Adaptation; Inclusive Innovation*) developed by the Infuture Institute founded by Natalia Hatalska in collaboration with the Da Vinci College, Poznań. The scenarios envisage change tendencies that are likely to emerge over the coming twenty-five years. Regardless of their predictive effectiveness, the scenarios may become a starting point for reflection on future challenges for individuals and the planet. Individual challenges involve an array of difficult/crisis situations that people experience as they construct and pursue their educational and work careers. The paper addresses some of these obstacles and argues that the demand for various helping and counselling interventions is likely to grow as a result of the acceleration and unpredictability of social changes.

**Keywords:** labour market, education of the future, educational and work careers, counselling

### **Predicting the Unpredictable**

The dynamics and unpredictability of multidirectional changes in today's world preclude any accurate predictions of the future course or directions of the transformations we are witnessing, with most forecasts doomed to failure in advance as our social reality is so fluid that phenomena and developments stop being relevant, valid or meaningful before they even become entrenched (Bauman, 2006, 2007a, 2007b). Nevertheless, when examining the change tendencies on the labour market and in education, one cannot but ponder possible future scenarios for these key areas of social life. While such reflection does not entail any naive belief that these scenarios will come to pass accurately as envisaged, it may and does facilitate gradual preparations for the future social trends, both immediate and more distant ones.

## Predictions for the Labour Market: For What Market Realities Is Education Supposed to Prepare Us?

Transformations of the labour market and their implications for education, including vocational education, are by no means a novel focus in research on human work and the labour market. Various facets of these transformations have been explored by a range of Polish education researchers, such as Waldemar Furmanek (2020a, 2020b), Ryszard Gerlach (2014, 2020), Stefan Kwiatkowski (2018), Magdalena Piorunek (2015), Renata Tomaszewska (2018, 2020) and Zdzisław Wołk (2020). For its part, in 2016, the Infuture Institute, a forecasting agency founded by Natalia Hatalaska and dedicated to the comprehensive study of these issues, analysed the available data to outline five expected scenarios of the development of the labour market and the situation of workers over the following two or three decades.<sup>1</sup> Each of these scenarios revolved around one specific – social, technological, economic, political or environmental – development factor. Four years later, the Infuture Institute slightly re-phrased its forecasts (without revising the central ideas behind them, though) and carried out additional examinations to correlate them with anticipations concerning education. The trends captured in these scenarios are mutually complementary and add up to a multifarious collage of market challenges that are likely to determine people's future educational and work careers. In this updated version of the forecast, the major scenarios refer to the previously identified ones but rely on new keywords, which have only recently gained traction in Poland (*Future of Work*). Below, I recount these scenarios, indicating what I believe to be a parallel between the current and the previous coinages.

The *Jobs Are for Robots* scenario (corresponding to *The Useless Class*) foregrounds the increasing robotisation and automation of labour, as a result of which a sizeable group of workers are going to be ousted from the labour market. The quality of work is expected to be affected by massive automation, robotisation and the widespread use of Artificial Intelligence.<sup>2</sup> This produces challenges for people whose competencies do not match the progressively automated nature of the labour market. The sense of failing to meet the demands and thus being useless can

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<sup>1</sup> A concise overview of them was used in "Postmodern Market Scenarios and Career Patterns: Challenges for Education" (Piorunek et al., 2020).

<sup>2</sup> The notion of the industry of fourth generation (Industry 4.0) has already gained currency in public space. While having the properties of a market scenario, the concept is more comprehensive and 'combines technology and the organisation of the value-added chain. (...) It presupposes intelligent systems that are networked, that is, vertically connected to other processes within companies and horizontally linked to value-producing networks, which can be managed in real time, starting from order placement and ending with the coordination of sales logistics. Industry 4.0 is an intelligent merger of several IT technologies applied in companies (...) It is a complex solution developed at the intersection of engineering, IT and management studies. It envisions a thorough computerisation of the traditional branches of production industries and incrementally blurs the lines between individual factories' (Götz & Gracel, 2017, p. 221)

influence workers' sense of identity, undercut their self-assessment, make them passive in coping with work crises and trigger entitlement-driven behaviour vis-à-vis employers and the state. Besides IT skills, the most sought-for competencies on the dynamically changing labour market will include complex problem-solving, critical thinking, inventiveness, the management of people, collaboration skills, emotional intelligence, inference- and decision-making aptitude, service orientation, negotiation and cognitive flexibility. This will call for implementing short-term vocational skill development formats and hybrid forms of vocational training.

The *Hollywood Work Mode* scenario (previously *People per Hour*) centres around the idea of the global village without any geographical or language boundaries, where most people work as freelancers and independent employees on the basis of separate projects (as exemplified in the production of a film), and the STEM competencies (Science, Technology, Engineering and Mathematics) combined with social skills prove the most useful ones. This scenario is embedded in the so-called freelancer economy, where the workplace, working hours and labour legislation undergo de-standardisation. The younger generation highly value flexibility and mobility in work, put a premium on the work-life balance, tend to work as freelancers, embrace remote work opportunities and are more inclined to start their own businesses. This produces challenges to potential workers, who appreciate flexibility and entrepreneurial skills, and to future employers, who will have to reorganise operations of their organisations to adapt them to remote working modes 'in the cloud.' To manage the cooperation of independent actors working online will be a major problem to be handled.

The *Always under Control* scenario (formerly *Through the Glass Door*) envisages workers whose personal and work lives are constantly controlled by algorithms, which monitor and optimise staff selection for jobs and employees' work performance, with a considerable portion of tasks delegated to robots and Artificial Intelligence. This scenario spotlights political implications and is associated with the idea of transparency. Companies, organisations and employees must come to terms with working in settings where all actions and behaviour can be made public. In education, this sparks ethical challenges and calls for the skills of responsible information selection, such as telling facts from fake news.

The *Social Workers for the Planet and Nature* scenario (a counterpart of the earlier *There Are No Jobs on a Dead Planet* scenario) depicts a world in which the climate catastrophe and the depletion of resources force workers and companies to revise their priorities, to implement the zero-waste idea in businesses and at homes and to commit to solving environmental problems in the face of a looming ecological disaster. Underscoring environmental factors related to climate change, this scenario sensitises us to the challenges posed by the effect of climate change on the lives of individuals and the economy in conjunction, for example, with decarbonisation and transition to low-emission economic models. It anticipates an increase in the demand for jobs in the sector of renewable energy sources and the

social services workforce, including paramedics, firefighters, physicians, police officers and psychologists.

The *Unending Employee* scenario (parallel to the prior *Working Forever* scenario) highlights people's increasing life expectancy and work longevity, which only enhances the relevance of lifelong learning and compels employers to tackle issues inherent in the organisation of work in settings where different generations must cooperate. The future generations will enjoy increasing longevity and better health, resulting in deferred retirements. As a consequence, working lives will be extended. Dubbed the 'silver tsunami,' these developments breed several challenges, such as securing pensions for the oldest members of society as they withdraw from the labour market while the number of people who work relatively decreases. Other pertinent questions are: How can the different expectations and motivations of young employees and seniors be reconciled on the labour market, and how can multigenerational worker teams be effectively established? How can work environments be arranged to meet the needs of the oldest worker group? What should continuing education for them look like? As another challenge to the future labour market, the demand will go up for medical, care and physiotherapy professionals.

### Predictions for Education

The labour market considerably influences education since one of the responsibilities of the latter is to train future workers and promote smooth transitions from school to the labour market (and the other way round), which tend to recur in the course of individuals' lives.

*Przyszłość edukacji. Scenariusze 2046* [The Future of Education: Scenarios for 2046] (2021), published by Hatałska's Infuture Institute in collaboration with the Da Vinci College, a Poznań-based non-public HEL, presents predictions concerning education as related to the main change tendencies in the work sector. The scenarios are underpinned by desk research, bringing together an analysis of the symptoms of change, a quantitative analysis of key future labour-market competencies and expert interviews. They are also informed by conceptual explorations in interdisciplinary workshops and the interactive development of future visions of education by various education stakeholders and experts. Surveys with school and university students have also been used. These efforts have yielded four scenarios.

*Hyper-personalised Education* is a scenario propelled by:

- ◆ 'nanosecond culture' (expectations of immediate access to knowledge, products, services and information);
- ◆ the algorithmisation of life (IT systems used by people morph into sources of knowledge about individuals' needs, capacities and behaviour);

- ◆ empathic tech (empathic technology, where the development of Artificial Intelligence extends and refines its capacity to recognise the emotional states of humans);
- ◆ the domination of the corporatised labour market; and
- ◆ the power of No (escalating protests and revolts against the entrenched order of things and the dominant value systems) (*Przyszłość edukacji*, 2021, p. 109).

This scenario portrays a world in which advanced technologies are ubiquitous in everyday lives of people, who expect immediate and direct access to everything. The intelligent systems possess a vast knowledge about every individual. In this world, ‘universities and schools resemble e-commerce service platforms. They become research and information hubs that afford opportunities for the constant updating of one’s knowledge, which is certified by diplomas and other credentials’ (*Przyszłość edukacji*, 2021, p. 112). Knowledge, in particular its technological variety, quickly becomes obsolete, which is an important argument for the implementation of the idea of permanent education, while learning often takes place while performing concrete tasks ordered by labour market organisations. Education is individualised, focused on practice and determined by specific activities involved in the execution of projects. Individuals’ personal data and information about their competencies are broadly available in virtual reality, which facilitates finding workers online. Social inequality exacerbates as people who are unable to meet the demands of technology and progressively digitised education face exclusion. These developments fuel protests against the domination of corporations and against the continual redrawing of privacy limits.

Risks and threats foregrounded in this scenario concern individuals’ loss of privacy in the algorithmised reality, growing social inequality, the social rebellion of the digitally excluded, aggravated emotional deficits and tensions resulting from disturbed interpersonal relationships and from people’s insufficient social competencies.

*Technologised Humanism* is a scenario spawned by the following factors:

- ◆ the brain-computer interface (technological solutions that enable computers to respond to people’s thoughts and aim, in the long run, to create virtual copies of human consciousness);
- ◆ innovation and flexibility in business and organisations, triggering environmental and social change;
- ◆ the robotised and automated economy in which many people are left jobless and various forms of basic income must be put in place;
- ◆ inclusiveness of societies which are becoming increasingly diverse, making it imperative to learn how to get by in the world of differences and Otherness; and

- ◆ space as an alternative for human survival, given that the Earth is devastated and lacks water, food and energy (*Przyszłość edukacji*, 2021, p. 121).

In this scenario, social reality is marked by digitisation, robotisation and automation. Society is becoming cyborgised, and the vision of a human being as plugged into the totality of knowledge on the Internet is incrementally becoming a reality, though only for the wealthiest ones at the beginning. This scenario envisages education where ‘two paths’ prevail: one of them comprises ‘narrow technological specialisations,’ and the other represents ‘a combo of the human and social sciences that prioritises self-development and self-knowledge’ (*Przyszłość edukacji*, 2021, p. 124). Learning takes place in mixed-age groups in which education is adjusted to an individual’s skills and current needs. The master-student relation gains prominence. The demand is growing for professionals in the sector of the human and social sciences, who focus on identifying and instilling social competencies and soft skills, such as, for example, leisure time management. In this scenario, education is framed as an intelligent entertainment. Teachers function as guides, tutors and mentors, fostering people’s cognitive curiosity, helping them solve problems that cannot be handled by the smart software and assisting them as they look for individual development paths.

The risks integral to this version of social reality include teachers’ and mentors’ inadequate or lacking competencies for supporting individuals who construct their careers and design their self-development plans. Another group of hazards stem from sharpening social inequality and polarisation driven by the cyborgisation of society.

*Reactive Adaptation* is a scenario constructed around:

- ◆ the technological tsunami powered by the blurring of the line between the real and the virtual worlds and shifts in everyday life patterns of people who inhabit smart cities, use digitised products and services, are forced to constantly adapt to new tools and lose their privacy in the process;
- ◆ climate-centrism, which urges an immediate, radical revision of our individual and systemic ways of life in order to counteract further climate degradation;
- ◆ the culture of individualism, which hampers collaboration and the constructive sharing of ideas and solutions;
- ◆ struggle for influence and domination in the digital world, in which information is no longer equally available to all and access to the worldwide web is limited regionally and locally and restricted by laws safeguarding privacy and the transparency of action;
- ◆ increasing social inequality and stratification caused by inequitable access to digital tools and attractive positions on the labour market, which are more and more often premised on mastering digital skills (*Przyszłość edukacji*, 2022, p. 133).

The reactive adaptation scenario pictures a world that does not inspire optimism. The authors argue that over the coming twenty-five years, the world will be overshadowed by an impending climate disaster, which is in fact already underway in several regions of the world today. The catastrophe is bound to force us to grapple more and more arduously with a plethora of crises on a daily basis. The Internet will no longer be a global web, the struggle for influence on the Internet will become more fierce, and social polarisation will soar as a result of thwarted access to information and inundation with misinformation and conspiracy theories. The map of geopolitical influences will be recharted, and social stratification will increase. In this world, work career patterns will unavoidably mutate. Specifically, the threefold division into the stages of education, work and retirement following exit from the labour market will become obliterated, a process that we have in fact been witnessing for a long time now. As life expectancy will continue to grow, periods of intense work, education and joblessness will alternate throughout the biographies of individuals, who will have to change jobs and workplaces time and again in their lifetimes. With the number of schoolchildren and students dropping, education will tend to be stationary because of hampered access to the Internet and faltering energy supplies. The scenario anticipates that ‘teaching [will be] (...) performed by educators, social activists, practitioners with extensive experience, bottom-up educational groups and managers’ (*Przyszłość edukacji*, 2021, p. 137). Value will primarily be put on the competencies acquired by people to effectively respond to labour-market developments and to cope with frequent job changes.

The threats and obstacles bound up with this future scenario are primarily related to an upsurge of education-impeding fake news and conspiracy theories, to an instrumental approach to education as a factor facilitating job change stripped of its autotelic role and to demographic processes that alter the structure of the learner population (more and more adult learners).

*Inclusive Innovation* is the last of the future scenarios for education drawn up by the Infuture Institute and the Da Vinci College. In this scenario, the shape of the social reality is predominantly determined by:

- ◆ holistic coherence understood as a call for building broad interdisciplinary teams capable of developing solutions to complicated problems;
- ◆ collaborative culture ensuing from the belief that it is only through cooperation that individuals and institutions can anticipate the needs of the labour market, generate change and develop practical solutions;
- ◆ the Hollywood Work Model, in which project-based work is appreciated, start-ups, freelancers and micro-companies proliferate, and remote work is increasingly popular and relevant;
- ◆ the immersive digital world, in which individuals are steeped and in which they educate, work and feel as much as they do in the real world;

- ♦ togetherness (communality) linked to the growing need for establishing social relations, which serves as a preventive factor against civilisation diseases and promotes ingenuity; and
- ♦ new business models associated with the dissemination of the sharing economy, the empathy economy and the economy of experience and the devising of business strategies for pursuits that are beneficial to society, individuals and the climate (*Przyszłość edukacji*, 2021, p. 145).

In this scenario, the world is a place where multiple areas have been redefined. Changes have taken place in the role of organisations, which promote proactive attitudes in individuals and society, commit to climate protection and practise a reasonable management of the still available resources. Project-based work and digital nomadism spread. Families travel widely to explore the world and various cultures together, which implies incorporating world-schooling into education modules, while the expanding role of parents in educating their children contributes to the development of home schooling. Universities and schools cooperate within global knowledge hubs, which is made possible by the development of immersive tools. Education is democratised, being 'boundaryless and available to all, whatever their age and background. Its aim is to enhance capacities with a view to achieving the full potential of creativity and innovation' (*Przyszłość edukacji*, 2021, p. 149). Education is practical; it promotes creative thinking, cognitive flexibility and the capacity to consider individual challenges in holistic terms. Teachers and lecturers support the effective implementation of projects and students' psychophysical wellbeing, whereby they combine the skills of entrepreneurs and managers. Parents' role increases in education.

If the trends outlined above are highly probable, it is impossible to establish whether and in how far they will actually become a reality. In fact, they encompass contradictory tendencies, which are by no means mutually exclusive in the mosaic-like social reality. Nevertheless, such predictions are primarily relevant in that they draw attention to the multiplicity and complexity of challenges that pertain to the market, education and the organisation of social support and counselling, in this way compelling us to incessantly identify and search for ways of coping with the difficulties at hand.

Challenges abounding in social reality, both those recognised by people for several decades now and those that take almost everybody by surprise (except a handful of experts and analysts in given disciplines) determine the shape of the liquid present and the unpredictable future. Global climate and health crises (the pandemic), regional war crises and adversities across the areas of the socio-economic (dis)order have made us acutely aware that it is urgent to found a new economy, one based on dialogue, solidarity, social justice and sustainable development, and to devise and implement concepts of education and counselling that promote decent



work and decent lives, without losing sight of the distinctive macro-social and national challenges (Guichard, 2016a, 2016b; Drabik-Podgórna & Podgórnny, 2022).

### **Selected Difficult/Crisis Situations in the Design and Course of Work Careers: The Demand for Help**

The turbulent labour and education markets (the macrosocial scale) directly affect the course of people's individual work careers (the microscopic scale). The patterns of individuals' education-and-work careers are also often channelled by local, regional, national and global events, situations and processes, which can either offer developmental opportunities or imperil or disrupt standard career sequences.

The process of designing educational and work paths and then executing career plans may occasion an array of stressful and difficult situations to individuals and even generate or catalyse life crises, which may be challenging to them and prove a hazardous encumbrance. The likelihood of such developments increases as the external—macrosocial—context of education and labour market becomes complicated. Biographical turning points in individuals' lives can be sparked by a range of situations including, though certainly not limited to, the following circumstances:

- ◆ the loss of job or impossibility to find work because of the rapid deterioration of the economy, coupled with the risk of the worsened living standard or poverty. Joblessness, in particular long-term unemployment, brings about the deprivation of basic needs (such as the need for security), a decrease in self-esteem and identity revisions; it also produces risks to other individuals connected by mutual bonds, such as family members, not infrequently generating family crises;
- ◆ a decline of the working conditions, necessity to accept short-term contracts without social benefits or retirement provisions, pressure to accept changes in working hours, in the quality of the workplace and in job description, which can result in lower pay, the loss or suspension of work-related benefits and disturbed job satisfaction;
- ◆ the necessity to reskill and retrain several times (often in situations without prospects for development), repeated adaptations to new working environments, the incompatibility of one's vocational training and competencies with employers' expectations;
- ◆ challenges of mobile work based on IT and communication technologies related to the fact that occupational duties are increasingly, if not exclusively, performed online. Individuals are expected to improve their IT competencies and forced to work in relative isolation without being in direct touch with their co-workers. All these convenient, but also constraining, solutions very tangibly influence education and work involving cooperation with others;

- ◆ economically fuelled migrations (particularly mass migrations) that have socio-political implications (on the macro-level) and can trigger family crises and cause social orphanhood (on the individual level);
- ◆ direct work-related pathologies and risks, including addiction to working (workaholism), mobbing, accelerated professional burnout, the loss of the meaning of life and negative psychosomatic outcomes in everyday life;
- ◆ difficulties in human relationships in work settings (including multicultural work environments as a mental and organisational challenge), low organisational culture in the workplace, poor work organisation;
- ◆ the lack of synergy between work life and personal life (e.g. family and leisure); impossibility to order the sequence of educational and work engagement; deterritorialisation of careers; flexible employment forms; increasing competition bound up with the requirement of being permanently available for work. All these factors reduce people's capability to plan and consistently implement career stages, which destabilises the course of their non-work biographies and precludes the consolidation of their other social roles, which individuals fashion in and through interactions with other participants in social life;
- ◆ time deficit in non-work spheres: a lack of time to cultivate quality relations with children and other family members; difficulties resulting from inability to communicate or strengthen mental bonds (Piorunek, 2020, pp. 135–6).

In social terms, these situations in individuals' work lives deserve particular attention since they pose challenges and/or are a source of risks, difficulties and anxieties; also, they directly or indirectly regulate value systems, influence opportunities for and ways of meeting people's needs and determine their everyday behaviour. Many of these circumstances also require social support, the launching of measures that prevent and minimise the ramifications of the difficulties experienced, counselling, crisis interventions, social work, therapeutic interventions and/or other forms of help-provision.

### **Conclusion**

In order to get by amidst labour market and educational scenarios that defy precise predictions, individuals must rely on experiential learning, situational knowledge and flexible action (Dominicé, 2006). They must develop a self-awareness of their biographical needs and resources that enable them to understand and navigate the world and to treat various dimensions of this personal pursuit as meaningful and worth such a commitment. They must master biographical thinking and learn to reflect on their actions from the temporal perspective in order to grasp their lives

holistically, establish where they find themselves on their developmental paths and deliberately co-construct their biographies (Tokarska, 2011).

Counselling, including vocational counselling (career counselling/career design counselling/biographical counselling), faces a range of questions concerning the meaning of its practices, its effectiveness and its preferred forms and methods of intervention (Drabik-Podgórna, 2012). Given that the social context is opaque, that work processes and biographical development are utterly individualised, and that they must be holistically approached, it appears that helpful support forms can primarily be provided by broadly conceived career design counselling informed by the life-design concept (Savickacomms, 2011, 2012; Guichard, 2018). This paradigm is founded on the moderating approach, where counsellors assist individuals as those develop self-knowledge and dedicate themselves to constructing their subjectively conceived and individualised life scripts across the stages of experiencing work realities. In this counselling model, 'help entails permanent assistance in mental transformation, which results in the individual's increased capacity to be employed' (Bańka & Trzeciak, 2017, p. 297).

Coaching, including life coaching and other coaching varieties for various worker groups, can also have an important part in this process (Piasecka, 2011; Surzykiewicz, 2013<sup>3</sup>). As unique training in life skills and in the effective use of individual resources in people's biographical development, therein in designing and implementing consecutive stages of their work biographies that tap into their personalised career capitals, coaching can prove useful in various situations in which traditional (in particular, incidentally delivered) counselling is ineffective. Support in career implementation (involving the individual, group and communal challenges and problems addressed above) also comprises an array of other helping practices, such as social work, comprehensive primary prevention and crisis interventions, which can be regarded as a secondary prevention form forestalling the escalation of the negative effects of the crises revealed. A major challenge that arises here is that all these forms of help-provision are extended in time and demand activity and engagement on the part of help-recipients, whose expectations are all too often entirely different. Specifically, help-seekers tend to want immediate, instrumental guidance that brings easily perceivable and instantaneous effects. This raises the open-ended question of whether and how helpers can (or, indeed, should) meet such expectations.

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<sup>3</sup> In *Coaching społeczny. W poszukiwaniu efektywnych form wsparcia osób w trudnych sytuacjach życiowych* [Social Coaching: In Search of Effective Support Interventions for People in Challenging Life Situations] (2013), a volume co-edited with Marek Kulesza, Janusz Surzykiewicz draws on concepts proposed by other authors to capture differences among multiple forms of helping interventions focused on private and work contexts. In doing so, he takes into account the their foci—on the conflict (problem) vs. on its resolution—along with time perspectives (past, present and future). Besides counselling, Surzykiewicz lists coaching, therapy, mediation and mentoring.

No matter how this question is answered, if at all, the future scenarios for the labour market and education, as recounted above, all indisputably indicate that the demand for helping and counselling interventions is bound to increase. Unpredictability, more and more complex reality and the ever more dynamically transforming labour market and education prompt more and more people to seek support. The same factors prompt the organisers and providers of support to try and answer the question of how we can face up to the constantly changing expectations of help-seekers.

*Translated by Patrycja Poniatowska*

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