





# Postmodern market scenarios and career patterns: Challenges for education



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**Background:** This article grows out from the realisation that global crises caused by the depletion of natural resources, pollution, climate change, migrations, conflicts, unbridled consumption and increasing poverty have made current socio-economic concepts inadequate in the world that is enmeshed in multi-layered and interconnected relationships and interdependencies.

**Objectives:** In an age that is governed by the demands of the economy based on sustainable development, it is expedient and exigent to examine future anticipations concerning scenarios of market transformations, career patterns for individuals in these changeable market realities and the challenges which these processes produce for education. This article aims to provide such urgently needed insights.

**Method:** To achieve this objective, we rely on research explorations using the method of document analysis. The studied documents included future scenarios developed by the Infuture Institute and *The Future of the Work*, a report that contains a range of futurist depictions of what may happen with our world, with a special focus on work. The visions outlined in these documents are metaphorically described as Working Forever, The Useless Class, People per Hour, Through the Glass Door and There Are No Jobs on a Dead Planet, or are portrayed as the blue world, the orange world and the green world. The study of these reports triggered our reflection on related challenges in education.

**Results:** The findings yielded by this study include a set of developmental shifts in education which we outline in the article, showing the passage from traditional education based on the teacher–student knowledge transfer to personalised, community-oriented education; from directive education to life design education; from institutional education to education at workplace and in the community; and from education for competition to education for collaboration, sustainable development and decent work.

**Conclusion:** In conclusion, the article spells out implications for competencies, directions of development and learning, the forms of career and counselling or guidance interventions as resulting from the futurist vision of the world pictured in the discussed scenarios for the labour market.

**Keywords:** market scenarios; biographical scenarios; sustainable development; education; counselling.

## Introduction

### Materials and methods

In an age that is governed by the demands of the economy based on sustainable development, it is urgent to examine future anticipations concerning scenarios of market transformations, career patterns for individuals in these changeable market realities and the challenges which these processes produce for education. At the moment, the entire world is grappling with the pandemic caused by coronavirus, and it is difficult to predict what our lives will be like in months and years to come. What is certain, however, is that the labour market has already been heavily affected. Multiple studies looking into the economic consequences of the pandemic say that the economy is sinking even lower than in the great depression and that, as far as work is concerned, the impact of the pandemic is most acutely felt by vulnerable individuals and groups, such as young people and the low-educated and ethnic minorities (Bell & Blanchflower, 2020). Scholars also conclude that working conditions are radically transforming, with about 37% of work tasks performed remotely from homes (Dingel & Neiman, 2020). Such profound changes in the forms of work generate new risk groups, for example, those who are less adapted to online working, for example,

because of inadequate education (Mongey & Weinberg, 2020). As more or less distressing post-pandemic visions (Coibion, Gorodnichenko, & Weber, 2020) are proliferating, we would be particularly well advised to scrutinise some of them and reflect on the responsibilities of education and lifelong guidance and counselling in this emergent context.

This article aims to identify changes in and offer recommendations for the world of work and education in terms of indispensable knowledge and key competencies in today's postmodern world, possible directions of development and learning, the forms of career and counselling or guidance interventions. Exploring a range of probable futurist vision of the labour market, this conceptual project relies on the method of document analysis, which makes it possible to offer a scholarly interpretation of the data they provide to illustrate change tendencies in the world of work (Apanowicz, 2002). As the study is based on formal documents, the conclusions pertain to the social context as perceived from the macro-perspective (Łuczewski & Bednarz-Łuczewska, 2012).

Specifically, our argument in this article is based on two reports: *Praca: Scenariusze przyszłości [Work: Future Scenarios]*, developed by the Infuture Institute, and *The Future of Work: A Journey to 2022*, developed by Pricewaterhouse Coopers (PwC). The former provides five scenarios for the future of work based on the findings of a research study using the computer-assisted web interview (CAWI) method (i.e. responsive electronic surveys posted on websites and sent via email). The study was carried out between 09 and 14 September 2016 and collected questionnaires completed by 1022 Internet users. An analytical weight was employed to correct the structure of the user sample to match the structure of Polish Internet users aged 15 years old and older in terms of gender, age and the size of the place of residence. Solely, the complete surveys were included in the analysis. Additionally, the analysis for the *People per Hour* scenario used in-depth interviews with people who define themselves as 'digital nomads'. Change factors were analysed within the sociological – technological – economic – environmental – political (STEEP) model.

*The Future of Work: A Journey to 2022*, the other report we rely on in our study, is based on a questionnaire-based survey involving 10 000 respondents from China, India, Germany, the United Kingdom and the United States. The respondents were asked to say how the labour market was going to evolve and how this would affect employment perspectives and people's future work lives. Additionally, questionnaires were administered to 500 Human Resources (HR) specialists worldwide who offered their insights into their preparations for the coming changes.

As the reports represent neither determinist nor static models, they serve us as a starting point and an inspiration for inquiries. We have singled out, explored and interpreted their constituent components to outline possible educational

scenarios. Research including more reports of this kind would certainly help in the further planning of long-term educational strategies in terms of possible future opportunities and risks.

## Results

### Change scenarios for the labour market: From early signs to predictions

At the moment, we are beset by multiple crises of a global magnitude. As a result of the depletion of natural resources, environmental pollution, climate change, migrations, conflicts and, additionally, the coronavirus outbreak, we are now facing challenges that compel us to urgently redefine our thinking and revise our actions (Guichard, 2018). Whilst unbridled consumerism has been abruptly halted by the worldwide freezing of economies, unemployment rates have increased, which is bound to contribute to the expansion and exacerbation of poverty. With human lives at stake, the dramatic attempts to curb the spread of the virus have involved restrictive lockdown measures, as a result of which production and supply chains have been disrupted, and crucially, networks of relationships have been ruptured and massively 'digitalised' as a consequence of isolation and social distancing. Prior socio-economic frameworks have proven inadequate in the world entangled in multi-layered and intersecting relationships and interdependencies (Barua, 2020).

In an age that has come to be called the Anthropocene (Crutzen & Stoermer, 2000), we need a new economy that promotes the implementation of ideas such as dialogue, solidarity, social justice and sustainable development. The present conjuncture calls for new economic, political and social concepts to increase people's prospects of and access to decent work and decent life, especially in the most disadvantaged regions of the world (Guichard, 2016a, 2016b). The notion of decent work as defined by the International Labour Organisation (ILO, 2001, 2008) envisages long-term work that prevents the marginalisation of employees and helps societies alleviate poverty in a sustainable way (Maree, 2018).

When envisioning and designing the future of education, it is worthwhile to examine how changes on the labour market affect human biographies, requirements for new knowledge and expectations of new competencies that could promote the common good in the world that requires re-modelling. Early signs of necessary transformations have already surfaced in social and economic processes, enabling us to predict possible directions of changes. For quite a while now, people have observably tended to relinquish traditional employment preferences and opt for careers understood to be individualistic, boundaryless and devoid both of clear divisions into jobs and working as well as of distinctions between family and public areas or specialist and non-specialist activities (Arthur, Inkson, & Pringle, 1999). Traditional human skill-based capital has been replaced by a

new kind of capital based on competences (Drzeżdżon, 2011; Kang & Snell, 2009).

The authors of *The Future of Work: A Journey to 2022* have identified three possible scenarios of transformations within the world of work and metaphorically referred to them as a blue world, an orange world and a green world. In the *blue world*, big companies have turned into mini-states and taken the leading role in societies, whilst still strongly competing with one another. The employees, lured with a promise of high salaries, need to demonstrate considerable efficiency to ensure profits for their companies. The *orange world* means that companies have fallen apart and transformed into networks of specialist collaborators. Central jobs remain in place, peripheral jobs are outsourced and work performed on the project or contract basis is performed online (virtual collaboration). The *green world* comes closest to implementing actions for sustainable development on the global scale. As social and environmental concerns are prioritised, business strategies become thoroughly revised to foster a new organisational culture, which serves as the foundation of social responsibility (Podgórný, 2018).

In *Praca: Scenariusze Przyszłości*, Hatalaska (2016) outlines five futurist scenarios of the labour market, including the position of employees, with each of her scripts responding to a specific change factor. Besides the technological aspect, her forecast takes into consideration social, economic, political and environmental factors, which entail a series of challenges and dilemmas at the macro-societal and the individual levels (Hatalaska, 2016).

The *Working Forever* scenario describes changes driven by the social factor, involving an ageing society and the increasing life expectancy. On the one hand, birth rates tend to sink, and on the other hand, the generations born after 2007 may get to live longer than 100 years of age. Consequently, they are not likely to (be able to) retire aged around 60 (as is the tendency now) but will (have to) continue in one or another form of employment far longer. Even with this not being a full-fledged development yet, the 'grey-haired revolution' is already underway. This stirs a number of questions, for example: How can the well-being of the oldest members of society be secured past their period of vocational activity in the times of sub-replacement fertility? How can the expectations of the strikingly different 'end-of-the-alphabet' (X, Y and Z) generations and of the seniors be reconciled on the labour market (multigenerational work teams)? How can their diverse motivations for and expectations of work-life be squared? How should work environments be organised to meet the needs of the oldest participants? How can lifelong learning and vocational training programmes for the elderly be designed to sustain their employability?

Based on the technological factor, *The Useless Class* scenario assumes that the accelerating pace at which the use of

automation, robotics and artificial intelligence (AI) spreads will cause human labour to acquire a completely different quality. This vision of the future begs a question about what will happen to the 'useless' ones who do not fit in with the automated competences of the labour market?

The situation may trigger identity crises, lowered self-esteem, excessive demands or passivity when facing personal difficulties. Even now, the most desired skills for the year 2020 have been identified as complex problem-solving, critical thinking, creativity, human resources management, collaboration, emotional intelligence, decision-making, service-oriented attitude, negotiation and cognitive flexibility (according to the Future of Jobs Report, World Economic Forum, 2016). Such skills are expected to help people survive in precarious socio-economic conditions.

The economic factor (known as the freelancer economy) is reflected in the *People per Hour* scenario (interestingly, it was, as a matter of fact, quite a long time ago that Beck addressed the de-standardising of the place and time of work and work-related regulations [Beck, 1992]). In the context of work, the younger generations (the millennials and generation Z) opt for flexibility, mobility and work-life balance. Often working as freelancers, remotely and/or from home, they are inclined to set up their own businesses. Such a scenario poses challenges both to potential employees, for whom flexibility and entrepreneurship have become particularly important, and to future employers, who will have to figure out how to re-organise work 'in the cloud' and how to co-ordinate and manage the collaboration of independent, autonomous entities.

Related to the notion of transparency, the political factor underpins the *Through the Glass Door* scenario. Companies and employees must learn to operate in an environment in which whatever they do or say will potentially take place in the public domain. In terms of education, this stirs reflection on ethical issues and necessitates learning how to distinguish real from fake news.

Finally, the environmental factor contributes to changes in social thinking and action. Climate changes call for adopting the low-emission economy. The growing public environmental awareness requires implementing the *There Are No Jobs on a Dead Planet* scenario, which ties in with the notions of sustainable development, solidarity and justice, all of them remodelling the labour market, employment forms and in-company communication.

While the *Working Forever* and *Through the Glass Door* scenarios represent the possible realities of the blue world, and *People per Hour* and *the Useless Class* are more aligned with the orange world, *There Are No Jobs on a Dead Planet* is quite an imaginable scenario for *the green world*. Actually, all these scripts (or at least their parts) can be expected to simultaneously shape the future labour market, life trajectories and patterns and education models devised to prepare people for life and for work.

## The individual *vis-à-vis* changes: Identity dilemmas and biographical scenarios

Observably, to incorporate work careers into linear life narratives is becoming more and more challenging. The mutating cultural and economic contexts generate new conditions in which individual identities are forged and scripts of work biographies are constructed. The pandemic in which we are all mired at the moment (not knowing whether it is only beginning, peaking or perhaps winding down) has already put many careers on hold (and, sadly, shattered some of them). For multiple individuals, the course of work-life has become de-standardised, their work activities have been transferred online and the procedures of job seeking, job performance and job quitting or loss have changed. Several careers have plateaued, career planning has been severely thwarted and career development is a major unknown in many cases. As shown by qualitative studies (Piorunek, 2009, 2016), which do not offer sufficient grounds for statistical analyses, individuals' activities are becoming increasingly dispersed, distributed across several spaces at the same time and multidirectional. They do not feature a clear division of roles, their particular episodes of educational and vocational engagement are not enclosed within any defined timeframes and the mosaic-like career scenarios are enacted by multiple groups of labour-market participants with an increasing frequency.

As a range of traditional competences and resources have been invalidated, getting by on the dynamically transforming labour market forces individuals to engage in repeated re-evaluations. This certainly does not promote the sense of coherence (Antonovsky, 1995), understood as an individual's overall significant and lasting, though dynamic, confidence that the world is understandable (comprehensibility as a cognitive component), that it makes sense (meaningfulness as an emotional and motivational component) and that he or she has access to resources for facing up to the demands produced by stimuli coming from the world (manageability as a cognitive-cum-instrumental component) (Antonovsky, 1995).

Noticeably, all the dimensions of coherence take shape in confrontation with permanent discontinuity (Drucker, 2008), which is characterised by a disjointedness of social structures and processes, making the labour market incomprehensible, inconsistent and meaningless to many of its participants. This engenders people's belief that they have no agency and are unable to influence both the external reality and their own lives. Such feelings are only made more palpable by the unpredictability of the pandemic crisis, which is fundamentally altering everyday life patterns and work routines, aggravating stress, reducing the sense of agency and undermining people's belief in their coping capacities and resourcefulness. Consequently, the experience of the pandemic is yet another factor that enhances the complexity of the postmodern conjuncture by fashioning novel conditions for individual identity formation, where individuals are expected to celebrate change and exhibit maximum flexibility

across spheres of life. Given this, biographical scenarios cannot presuppose vocational maturity as the ultimate outcome achieved once and for all by answering the question 'Who am I and what will I be in the future?' – a query typical of identity construction in adolescence. Rather, such scenarios should 'frame maturity as a process that recurs several times over a lifetime, along with the wearing off and renewal of career capital' (Bańka, 2006, p. 31).

In the context of individuals' existential problems and emotional responses, macro-scale market scenarios may help construct successful biographical scenarios that use the opportunities afforded by the developments in the world of work, but they may also catalyse:

- a *moratory identity*, involving independence, anxiety and rebellion against work commitments or
- a *dispersed identity*, characterised by alienation, the lack of purpose in life, a tendency to withdraw from activities on the labour market or
- they may prompt an unreflective *adoption of a pre-ordained identity*, which is associated with the denial of conflict, an extensive reliance on defensive strategies and the performance of enforced, often random work commitments (Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993).

Even people who possess work skills may lack work identities (Standing, 2011), especially if they have no moral or behavioural commitments, do not enjoy an elementary income stability and cannot construct predictable day-to-day lives. Such a permanent uncertainty about the present and insecurity about the immediate future have fuelled the emergence of the precariat. Not all members of this new class are exactly victims, because freedom from commitments is a life-changing opportunity and a conscious choice of some of them. Nevertheless, the majority tend to find such an insecurity and the impossibility to achieve coherence uncomfortable at best, resulting in chronic indecision and reluctance to take responsibility for their lives.

To be able to get on despite unpredictable market scenarios, individuals must engage in lifelong experiential learning and situational cognition (Dominice, 2006), develop a thorough awareness of their biographical needs and recognise the resources that enable them to understand and navigate in the world, acknowledging particular aspects of such a personal investment as meaningful and warranting the effort. This requires the following skills: biographical thinking, objectively taking stock of one's own behaviour (taking into account the past, the present and the future), assessing one's life as a totality and putting it into perspective, identifying one's position on the developmental trajectory and co-creating one's own biography in a deliberate way (Tokarska, 2011).

Biographical thinking helps people *understand* themselves, the world and the world-individual relationships, as well as encouraging them to *engage* in such relationships (sense of resourcefulness) and to make them *meaningful*. As such,

biographical thinking also fosters the sense of coherence, whilst at the same time, it is conditioned by it. All this is predicated on the skill of defining strategic biographical goals, on flexibility in decision-making and on active engagement in searching for varied, individual ways of working (rather than just a job). To be able to do this, people must understand external constraints and re-assess their notions of the quality of life not only in the context of the economic pressure of incessant growth.

Bańka (2016) notices the exigency of 'abandoning the algorithmic design of career paths and embracing the design of work identity based on heuristics developed in the experience the reality' (Bańka, 2016, p. 26). For their part, Savickas, Guichard, Duarte et al. focus on developing and refining the life design concept (Savickas, 2005, 2009, 2011, 2012, 2013; Savickas et al., 2009), in which designing a career is based on reflexivity and involves combining multiple life episodes and activity streams into an integrated, prospectively oriented biographical structure. Besides skills such as transdisciplinarity, command of new technologies and virtual collaboration, key competencies for the labour market of the future also include: critical reflection on reality, making sense of and attributing meanings to things, unconventional and adaptive thinking and social intelligence (Future Work Skills, 2020).

Transdisciplinary reflection on possible market and biographical scenarios can and should be undertaken across disciplines (including the social, economic and medical sciences), as they work towards the common goal of facilitating optimum behaviours amongst the (future) participants of the labour market and preparing individuals for living in the Anthropocene as agents furnished with the sense of coherence and capable of constructing their lives in conformity with their personal values, of actively setting their goals and of achieving a synergy of their personal and work lives.

## Discussion

### The future of work *vis-à-vis* the future of education

The study of reports listing futurist visions of the labour market yields a range of conclusions concerning the desirable development directions in education, requisite knowledge and competencies and the concepts of helping individuals in the realisation of their work careers. By bringing together the future scenarios, the biographical scenarios and the identity dilemmas discussed above, we can more effectively reflect on the meaningfulness and relevance of education, learning, knowledge, competence acquisition, career models and concepts of helping that correspond and are pertinent to these future anticipations.

As quantifiable technological knowledge reigns supreme in *the blue world*, education retains its traditional character and

is provided within dedicated institutions, preserving the dominant position of the teacher in the transfer of knowledge. The goal of education is to promote people's adjustment to the world as it is and to develop competitive and winning skills. Careers associated with this pattern involve climbing up organisational hierarchy ladders for as long as employers need them to last. Support in vocational decision-making is provided in the form of classic directive vocational or employability guidance, whereby the factors resulting from economic statistics and labour market needs are given precedence.

In *the orange world*, education is emancipatory and more individualised because its goal is to educate 'freelancers', who will exhibit entrepreneurial skills, be able to run their own businesses and, at the same time, readily co-operate within projects collaboratively implemented by networks of equally autonomous individuals. Pivotal in this arrangement, expert knowledge and negotiation skills are acquired via people's independent pursuits and online, rather than in institutional settings, and only confirmed and certified by external validating bodies. In this context, careers resemble a mosaic or a patchwork, are boundaryless and, depending on circumstances, tend to be haphazard and changeable (Domecka & Mrozowicki, 2008). Securing work-life balance is one of the central priorities. As career development professionals presuppose that individuals are self-reliant, their chief responsibility lies in assisting people in this process, and thus, their interventions are aligned with liberal counselling.

Finally, in *the green world*, personal, highly individualised knowledge matters most. Given this, education should be lifelong, holistic, global and responsive to the needs of the surrounding world and the social environment (Podgórný, 2018). Its goals include helping people develop a sound understanding of the self and the surrounding world, enhancing the empowerment of individuals and nurturing their awareness of initiatives dedicated to transforming the world towards sustainable development and dignified, decent work (Guichard, 2018). Careers of the green world are reflective projects, consciously constructed in response to global crises (Podgórný, 2018), and work-life integration is one of the values they are designed to pursue. Thus-conceived careers are best supported by the life design paradigm (Savickas et al., 2009), a holistic, dynamic and non-linear helping model that recognises a multiplicity of perspectives and action patterns.

The insights outlined above are synthetically presented in Table 1.

At the moment, it is difficult to assess which of these scenarios is most likely to happen. It looks that educational systems worldwide would be most eager to implement the blue scenario because it is consistent with the current, commonly shared educational and counselling practices. It preserves

**TABLE 1:** Future scenarios and education.

| Variable                     | <i>Blue world: Through the Glass Door. Working Forever</i>  | <i>Orange world: People Per Hour. The Useless Class</i>   | <i>Green world: There Are No Jobs on a Dead Planet</i>  |
|------------------------------|---|---|---|
| Work                         | <ul style="list-style-type: none"> <li>• Big companies compete with one another</li> <li>• Transparent rules</li> <li>• Employees are dependent on the employer</li> </ul>  | <ul style="list-style-type: none"> <li>• Specialist networks (freelancers) collaborating within projects</li> <li>• Remote work</li> <li>• Reliance on cutting-edge communication technologies</li> </ul>   | <ul style="list-style-type: none"> <li>• Companies dedicated to sustainable development</li> <li>• Minimising the organisation's impact on the natural environment</li> <li>• Corporate social responsibility</li> </ul>  |
| Knowledge                    | <ul style="list-style-type: none"> <li>• Technological knowledge, serving to analyse, measure and optimise business processes</li> </ul>  | <ul style="list-style-type: none"> <li>• Expert, context-based knowledge, serving to attract contractors and negotiate contracts</li> </ul>   | <ul style="list-style-type: none"> <li>• personal and highly individualised knowledge, contributing to special effectiveness</li> </ul>   |
| Education and its objectives | <ul style="list-style-type: none"> <li>• Traditional, standardised education based on the transfer of generally accepted knowledge from the teacher to the student</li> <li>• Directive education</li> <li>• Institution-based learning</li> <li>• Objectives: adaptation, competitiveness, selection</li> <li>• Education for rivalry</li> </ul> | <ul style="list-style-type: none"> <li>• Individualised education</li> <li>• Liberal education</li> <li>• Learning within the institutional framework and online</li> <li>• Objectives: individualisation, self-reliance, entrepreneurship</li> <li>• Education for specialist collaboration</li> </ul>       | <ul style="list-style-type: none"> <li>• Sensitive, holistic, community-oriented personalised education</li> <li>• Life design education</li> <li>• Community-based learning</li> <li>• Objectives: empowerment and understanding of the self and the surrounding world</li> <li>• Sustainable education for the environment and decent work</li> </ul> |
| Skill acquisition            | <ul style="list-style-type: none"> <li>• Adjustment, control and task execution</li> <li>• Memorising information</li> <li>-</li> </ul>   | <ul style="list-style-type: none"> <li>• Negotiating or bargaining</li> <li>• Flexibility</li> <li>• Retrieval of information</li> </ul>  | <ul style="list-style-type: none"> <li>• Dialogue or partnership</li> <li>• Responsibility</li> <li>• Retrieval, selection and processing of information</li> </ul>   |
| Development and learning     | <ul style="list-style-type: none"> <li>• Adaptive learning</li> <li>• Individuals develop skills and experience to meet efficiency requirements;</li> <li>• Development is correlated with objectives and means to achieve business results</li> <li>• Defined and exacted by the company</li> </ul>  | <ul style="list-style-type: none"> <li>• Emancipatory learning</li> <li>• Individuals develop their skills independently</li> <li>• Development solely depends on the activity of individuals</li> <li>• Professional external bodies validate skills by comparing them within efficiency rankings</li> </ul> | <ul style="list-style-type: none"> <li>• Transformative learning</li> <li>• integrated (holistic) personal and vocational development</li> <li>• Lifelong education</li> <li>• Voluntary work as a development path</li> </ul>  |
| Career                       | <ul style="list-style-type: none"> <li>• Traditional</li> <li>• Linear</li> <li>• Climbing the organisational hierarchy ladder</li> <li>-</li> <li>-</li> </ul>   | <ul style="list-style-type: none"> <li>• Patchwork or mosaic or boundaryless</li> <li>• Depends on circumstances and tasks or projects at hand</li> <li>• Work-life balance</li> <li>-</li> <li>-</li> </ul>  | <ul style="list-style-type: none"> <li>• Construction</li> <li>• Built intentionally</li> <li>• Based on multiple possible selves</li> <li>• Coherence</li> <li>• Work-life integration</li> </ul>  |
| Counselling interventions    | <ul style="list-style-type: none"> <li>• Directive counselling</li> <li>• Vocational or employability guidance</li> </ul>   | <ul style="list-style-type: none"> <li>• Liberal counselling</li> <li>-</li> </ul>  | <ul style="list-style-type: none"> <li>• Life design</li> <li>• Life coaching</li> </ul>  |

Source: Based on *The future of work: A journey to 2022*. <http://www.pwc.ie/publications/2014/the-future-of-work-a-journey-to-2022.pdf>, pp. 8, 23.

the dominant position of the teacher or counsellor or lecturer and educational institutions as experts and sole owners of knowledge. In the other two worlds, education requires radical changes not only in the structures of schooling and the fashions of knowledge transmission, but, above all, in the actors involved in the organisation, management and provision of education as well. It requires changes in thinking and in attitudes, alongside reassessing and recasting teacher-student relationships. Thus, it is expedient to shift away from traditional education based on the transfer of knowledge from the teacher to the student to personalised education oriented on interpersonal relations; from directive education to partnership-based education; from institutional education to education at the workplace and in the community; from education for competition to education for collaboration; and from education for profit to education for sustainable development and decent work.

When pondering education of the future, one should examine it through the lens of divergent prognoses and heightened anxieties fuelled by the coronavirus pandemic. Pessimistic appraisals of the post-pandemic developments envision a severe *collapse of the world economy (the future is worse than I expect)* and a global crisis of the magnitude exceeding the debacle of 2008–2009. Should this indeed be the case, we may

have to add a *black world* to the three potential worlds described above. The hallmarks of the black world would include a drastic decrease in jobs, a financial meltdown and education reduced not just to the transfer of knowledge but also to testing, all of them precluding any prospects of career development. At the same time, other, more or less optimistic anticipations proliferate. Some of them envisage the curbing of humankind's destructive impact on the natural environment (*the future is just what I expect*). This would demand both adopting and enforcing the observance of careful and comprehensive legal regulations to forbid the use of technologies and products harmful to our planet (e.g. limiting, if not banning, plastic and combustion engines). Yet, another option is future *growth (the future is better than what I expect)*, but that would require a (currently unavailable) technology of clean energy production. Such an innovation would boost further economic development, enhance consumption and perhaps even help solve several problems that are haunting the humanity now. The last version involves a *transformation* of our attitude to social development (*the future is different than what I expect*) and hinges on acknowledging that the quality of our world can no longer be gauged exclusively by the economic indices. An unlimited growth on a limited planet with limited resources is simply impossible. More and more emphasis is being put on the urgency to found evaluations of

well-being and prosperity on non-economic factors, such as security, health, satisfaction from life, social engagement, education and so on. Such re-assessments will only be viable if mindsets are re-modelled, attitudes are changed and a new approach to living in the world is disseminated (Hatalaska, 2020). The latter option seems feasible in the green world, where context-sensitive education furnishes future generations with new perspectives on reality.

## Conclusion

In our postmodern chaotic, mosaic-like, unpredictable, precarious, pluralist and opportunity-rich world, individuals are often left to fend for themselves. As the notion of a whole is disappearing, communities are formed by individualised atoms and relationships are exclusively formal. Efforts for sustainable development must comprehensively combine multiple dimensions (environmental, cultural, social, spatial, economic, etc.), and at the same time, they demand a degree of social integration. Given this, new education should be grounded on interaction and the implementation of collaborative projects. It should not so much facilitate students' adaptation to the existing world as rather teach them how to flexibly adjust to constant changes. By fostering reflection on reality as it is and as it could be, education should trigger critical thinking, instil in students an awareness of responsibility for the world around them (Drabik-Podgórná, 2018), make them responsive to the needs of others (especially of the marginalised and the underprivileged), promote inventiveness and prepare young people for living active lives and implementing reflectively designed careers in the *green world*. For such education to be at all possible, people's attitudes must be change. This will improve the chances of making decent work, decent life and fair and humanitarian development a reality (Guichard, 2018).

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### Authors' contributions

All authors contributed equally to this work.

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### Data availability statement

The authors confirm that the data supporting the findings of this study are available within the article.

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