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Peculiarities of the Implementation of the Principles of the Education of the Future Analysis of the Main Dilemmas

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Abstract: Recent trends in the development of education demonstrate the need for gradual changes in this area in Uzbekistan. The direction of transformation, which is needed in the sphere of educational organization, determines the need to borrow foreign, especially European experience. The established problems have been on the margins of attention of researchers, which further emphasizes the relevance for further interpretations and discussion. The article aims to analyze the main dilemmas (in the example of Uzbekistan) related to the chosen path and the peculiarities of implementing the principles of education of the future. It should be noted that consideration of the main objectives also implies addressing the issues of important practices of the educational process organization, in particular in the sphere of school and university education and education for sustainable development. The main methods used in the work were: comparativistic, method of abstraction, deductive-axiomatic method, concretization. The results state that today for Uzbekistan the convergence of the national education system with the European models is relevant. Important elements are the introduction of a

credit-module system of training, and the beginning of the application of continuous education for sustainable development with new paradigms aimed not only at memorizing the material but also - on the development of critical thinking. New benchmarks for the educational system should become STEM, a change of curricula, and training systems for pedagogical professionals. In conclusion, it is noted that the key principle for the development of future Uzbek education is Eurocentricity. The latter is aimed at the formation of a modern specialist with creative, leadership skills and developed critical thinking.

Keywords: education of the future, Uzbekistan, Eurocentricity, development paradigms.

Introduction

Reforming the educational sphere in the Republic of Uzbekistan and bringing it in line with the best European analogues are important tasks of today. Outdated development paradigms associated with the legacy of the Soviet system of educational training are losing their effectiveness in an active digitalization of society, globalization, and related structural changes. Therefore, the change in the guidelines of the field of education in secondary and higher educational institutions in Uzbekistan is an urgent problem for the study, because the government of the country has only relatively recently embarked on the path of reform, so the use of foreign experience is a little studied episode from the point of view of professional researchers. We believe that the obtained arguments and vectors of the direction of reform efforts can have a practical, recommendatory direction and be used in practice in direct decision-making. At the same time, the points of contention and difficulties of the transformation process also need to be voiced, because the conditions under which education has developed in Uzbekistan may be different from those prevailing in European countries. Such a difference has not yet been argued in research. The literary basis for this study consists of the works of contemporary educators. In particular, Siddikov (2021) characterized the main paradigms of the development of modern education in Uzbekistan. Ehlers (2019) devoted his work to the analysis of the formation of the basic principles of education of the future. Abdullakhanova and Alimatova (2020) investigated the development of modern digitalization in educational processes and the prospect of using modern technologies and trends in education.

The dynamism of contemporary societal development demands transformations in the education sector, realized through reform. During the reform process, dilemmas arise between adhering to traditional standards and the risk of introducing innovative formats (Cohen et al., 2018). Modern education essentially has no choice but to shape a new agenda in the organizational, educational, and scientific dimensions of its development. The reform process is always accompanied by the active integration of alternative elements into the educational system at various educational qualification levels: school education (Welsh & Little, 2018), vocational education (Novianti, 2017), higher education (Ali & Abdel-Haq, 2021), and expert councils (Head, 2020).

Key contradictions in education have institutional and functional characteristics:

- The balance between a conservative and progressive vector of educational development (Brevik et al., 2019).
- The dichotomy of theoretical-methodological and practical-oriented education clusters (Walsh et al., 2019).
- Issues of educational quality (Reid et al., 2018).
- Conquering the educational space with technological-digital resources (Agostino et al., 2021).

- Adjusting the moral microclimate in educational collectives (Kohlberg, 2010).
- Ethical conflicts during the educational process (Ngozwana, 2018).
- Achieving social justice in the educational environment (Francis et al., 2017).

A crucial aspect of contemporary education development is the reorientation from dialectical to synergistic principles in addressing complex and contentious issues. The development of universal, unified standards in decision-making indicates the actualization of synergistic interaction, gradually assuming the role of the dominant conceptual principle in the educational paradigm (Clarà et al., 2019).

Such methodological approaches contribute to stabilizing the situation in the education sector after an active period of reform and align with the principles of education for sustainable development as a priority task of the international community in the global educational paradigm (Kopnina, 2018).

Research Problem

The study of benchmarks for the transformation of the educational sphere is an important problem to comprehend because different ways of solving one case (improvement of the state of education) have their own specifics in the implementation in practice. Separate markers and features of the implementation are quite unevenly investigated in the scientific literature so that the possibility of their use on the example of Uzbekistan is an understudied phenomenon.

Research Focus

The study aims to identify modern paradigms of educational sector development. It is important to review the Uzbek experience of development and development of this sphere, and how it coincides or differs from similar principles of European countries. A review of peculiar landmarks, which the Uzbek environment would be worthwhile to look up to - to demonstrate the main current trends of education of the future, the likely paths for transformation in other countries (primarily post-Soviet).

Research Aim and Research Questions

The main purpose of the study is to analyze the main dilemmas (using the example of Uzbekistan) related to the chosen path and the peculiarities of the implementation of the principles of education of the future. The study of this main issue is also related to the solution of other problems. In particular, in order to highlight the global transformations recommended to the Uzbek authorities, several separate aspects are analyzed: the current European practice of organizing the educational process in the field of school and university education. This will make it possible to identify possible directions for reform, crystallization of the main methods and features of this process.

Research Methodology

This study is built on the application of pedagogical theoretical research methods. In particular, based on the comparativistic method comparative features of functioning of modern European and Uzbek model of education. Based on abstraction it was possible to move from generally accepted concepts to own judgments and conclusions. The work also used the deductive-axiomatic method, which divided the main subject of research into smaller parts (the problem of the functioning of modern education in Uzbekistan, Europeanization of education in Uzbekistan, analysis of modern trends, methods, forms in the educational sector, etc.). Based on the method of concretization, it was possible to study features of the introduction of the European model of credit-modular training in Uzbekistan,

the problem of the functioning of STEM-education. Also in this work, empirical methods of research are used: observation, monitoring, and comparison.

The main sources of this research are the official documents of the European Union, and the charters of the Council of Europe, which are of applied importance for the reform of the educational sector. Besides, other empirical materials are the decrees of the President of the Republic of Uzbekistan and resolutions of the Government of Uzbekistan.

Research Results

The Europeanization of Higher Education of the Future in the Republic of Uzbekistan

In the Decree of the President of the Republic of Uzbekistan “On the state program for the implementation of the strategy of action in the five priority areas of the Republic of Uzbekistan in 2017-2021” a special role is assigned to the organization of measures to improve and enhance the quality of education, the effectiveness of educational institutions through the introduction of international standards of learning and assessment of the quality of teaching (Karabaevna et al., 2019). Nevertheless, we believe that the modernization of the education system of Uzbekistan can be as successful as possible only when all educational settings of the state try to attract the European experience in the field of education.

Note that at present in Uzbekistan there is a systematic effort to bring the national education system closer to European models. In particular, this is evidenced by the Resolution of the Government “On Measures for Fundamental Reforming and Improving the Efficiency of the Personnel Training System at the Tashkent University of Information Technologies”. Taking into account this decree in the mentioned higher education institution and its branches during 2019 the credit system of education is introduced (Ismoilovna & Oripovna, 2020). In addition, at the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers in the 2018–2019 academic year, the principles of the credit system of education were also introduced in the master's specialties. Note that in European universities the credit-module system of education helps to ensure the integration of the study of both theoretical and practical material based on the personal and professional development of students (Karabaevna et al., 2019). At the same time, the professional development of students is a systemic phenomenon, which corresponds to the personal characteristics of an individual and is provided by educational modules that streamline the content of educational programs.

In general, according to the researchers, the modular organization of education is a content base of credit-accumulative order, which solves the problem of combining the personal needs of students and obtaining a professional education according to international (European) standards (Ismoilovna & Oripovna, 2020).

However, some European methods are still used and actively implemented in the educational system of Uzbekistan. In particular, the innovative approaches used in the education system of Uzbekistan have manifested in the variability of content and teaching methods. They are implemented based on the analysis of individual abilities and skills of students, their personal capabilities, etc.

The principles of public policy in the field of European education are defined as humanization, democratization, fundamentalization, training and education, continuity and succession of education, identification of talented young people, the use of the latest educational technologies and principles of self-education, mobility of the educational program, academic mobility of pupils and students,

multilevel quality control, etc. (Karabaevna et al., 2019). These principles should be used extensively in the education system of Uzbekistan. Separate attention in the European education system is paid to innovative technologies, which are a system psychological and pedagogical complex. Note that this complex includes a special selection and combination of didactic methods, forms, ways, and conditions necessary for learning. As a result of the use of this complex, urgent transformations in the educational system are carried out, improving the mental skills of students (Ehlers, 2019). In general, innovative technology is a dense didactic system, the implementation of which affects the achievement of certain learning objectives. We believe that the main function of innovative technology is to fulfill the basic learning objectives and the comprehensive development of the individual. At the same time, the widespread and systematic implementation of innovative teaching methods contributes to the transformation of the basic paradigms of education.

In the practice of European higher education has long been used various directions of innovative technologies. We are talking about methods and technologies built on the principles of humanization, and democratization of pedagogical relations, they are aimed at the formation of an individual educational trajectory, which allows applicants for education to focus their attention on the really necessary disciplines (Herțanu, 2020). Another aspect of the modern development of educational technologies is the orientation of the acquired skills towards practical use, so the mastery of theoretical knowledge is accompanied by a mandatory practical component (Ismoilovna & Oripovna, 2020). This element should also be borrowed for the development of the educational sector in Uzbekistan.

An important part of the modern Eurocentric Uzbek education should be the introduction and implementation of STEM-education ideas. The concept of STEM is used to define the actual pedagogical direction, which combines several key aspects: natural sciences, technological education, technical creativity, and mathematics (Herțanu, 2020).

Table 1

Fundamental Aspects of STEM Education

Integral fundamental aspects of STEM education
Science (natural sciences)
Technology (technological education)
Engineering (technical creativity)
Mathematics (mathematics)

A key aspect of the application of this direction in the pedagogical process is the integration of the natural history component and comprehension of innovative technologies. We believe that innovative methods of STEM education should be disseminated in Uzbekistan. The practice of implementation of the educational system in Ukraine serves as a valuable experience. In particular, for the first time employers have become important initiators of the transformation. Back in September 2015, a Memorandum on the establishment of the Coalition of STEM-education was signed. It is known that powerful giants, including Ukrainian companies and global brands (Kyivstar, United Minerals Group, SE NAEK Energoatom, Samsung, Microsoft Ukraine, etc.) joined the reform of education as partners. Separately, it should be noted that the leading Ukrainian universities, in particular in the field of polytechnics, have also come up with similar initiatives. Thus, the innovative potential of STEM is

developing in Ukrainian education, given the level of interest in its implementation. However, we note that the financial difficulties associated with military destruction and Russian aggression may become an obstacle to such optimistic plans. We are talking about considerable material losses, for example, in Kharkiv, one of the most powerful scientific and production centers in Ukraine. The continuation of military operations may lead to a brain drain, a withdrawal of investments in technological production, etc. However, the desire to invest in and support education in Ukraine testifies to the optimism present in society. Consequently, we believe that STEM-education technology should be widely implemented in higher education in Uzbekistan.

Principles of Future Schooling: A Generalized Description

The current world is characterized by a gradual change in the paradigms of schooling. The actual tasks at this stage of training are not only to acquire and assimilate a certain amount of knowledge in a well-regulated list of disciplines. We are talking about the possibility of laying the foundation for a future successful career, for which it is necessary from a young age to master the solution of complex problems, to be able to manage their emotional background, resolve conflicts, cope with stressful situations, etc. (Protsyk, 2020). Accordingly, one of the main directions of this sector's reform is considered to be the problem of updating the content of education, focusing on the development of necessary and useful competencies and "soft skills" (it is said not only about the paramount importance of knowledge acquisition, but also the formation of skills for their application) (Herțanu, 2020).

In today's world, digital technology has become extremely important. Accordingly, almost any information can be retrieved from the Internet, for which the student does not even need to leave his own home. At the same time, the use of unverified information is harmful, because it can lead to the formation of misconceptions about certain objects (Ehlers, 2019). In such circumstances become critical thinking skills, are the ability to quickly and qualitatively look for and find cause and effect relationships between phenomena, events, and people's reactions. We can add to this list the importance for students to be able to propose their own hypotheses, defend them against criticism, prove their own rightness, work on possible alternatives, and generally think independently, relying on evidence rather than emotion.

At the same time, the ability to use one's knowledge in practice also requires mastery of certain social-emotional skills:

- empathy or the ability to empathize cognitively;
- teamwork with clearly defined roles;
- planning, development of discipline;
- communication;
- emotional resilience; is the ability to clearly understand one's state of mind.

The decentralization of the market for educational resources will also help in the implementation of changes in teaching strategies. It is proposed to create conditions for teachers in which they are given much more freedom in the choice of textbooks, manuals, and other didactic materials. The usual diktat of the relevant ministries should become a historical phenomenon, which will affect reality. Government agencies must provide financial support for the formation of full-fledged educational and methodical sets, the content of which should include not only textbooks but also teaching materials for teachers, and a set of digital resources. The latter requirement is dictated by the realities of the time - and not only

the development of technology but also possible quarantine measures associated with the COVID-19 pandemic.

One of the important points being emphasized in European countries and the United States is the qualification of school teachers. One possible way for teachers to adapt to the new conditions is to develop updated training standards for the profession. The implementation of this point implies a radical renewal of the training programs for educators. In particular, taking into account the competencies necessary for the current state of the profession (Ehlers, 2019). These measures, however, must be combined with the introduction of incentives. For example, in Ukraine, as a post-Soviet country, it has been proposed to increase the pay of school teachers. The ultimate goal of such a step is to be able to attract the best young professionals to work in the industry. Regular professional development is also needed to improve the situation. At the same time, such a decision provokes a problem - will professional development take place at the expense of educators, or will it be financed by educational institutions (ultimately, the national budget)? The mechanism used is not clearly defined. In France, for example, the costs are covered by the state budget, in Germany, the main burden is borne by the individual states, while in the United States teachers improve their qualifications often at their own expense - with the possibility of later reimbursement. In formulating recommendations, the specifics of the local educational environment must certainly be taken into account.

Education for Sustainable Development - the latest learning concept

For some time, education for sustainable development has had the character of a separate strand of learning that was a property of education itself, defining its objectives and the means of realizing inclusive, equitable, and high-quality access to learning opportunities. Education for sustainable development was becoming a powerful transformational force because it needed a new focus for the development of the whole keystone (Laufer et al., 2021). This required a new framework for teaching and learning, a process that could not be considered a mere addition to an already functioning system of educational organization. In this way, education for sustainable development became a new educational idea that looked to the future.

Probably, its main feature was an anticipatory character, focusing on the formation of critical and systemic thinking of higher education applicants, as well as the analysis of local features of society development (Herțanu, 2020). Researchers believe that, as of today, there is no single universal global model of learning in the framework of sustainable development. At the same time, even given clear and defined goals, each country and each region has its educational approaches, taking into account economic, religious, and cultural specificities.

The most integrated education for sustainable development in the learning systems and pedagogical practices of a small number of countries in Northern and Western Europe and North America. For example, a short list can be summarized as follows: Finland, Canada, Netherlands, Sweden, Norway, etc. Overall, only one in three EU member states can boast of such an achievement. Educational activities here are characterized by the availability of national strategies, plans for education for sustainable development, a fairly extensive network of educational institutions, etc. Thanks to this direction, young people receive the formation of systemic values and the necessary transversal skills - the identification of their sustainable development and behavior in society is performed by applicants for higher education without the imposition of certain systematic knowledge and norms of behavior by teachers. In addition, educational and methodological support, which is carried out in the national

language at all levels of education in a comprehensive and subject-oriented manner, is generally available.

In most post-Soviet countries, in particular, Uzbekistan, education on sustainable development is recognized at the state level, but the financing of its development is rather insignificant. First of all, the sources of funding are international organizations, non-profit charitable institutions, etc. The countries of the post-Soviet camp do not use common institutional and interdisciplinary approaches to the implementation of this sphere in educational institutions, often resorting to manipulation. In addition, the norms of this progressive methodology of organizing an entire educational sector are not supported by special training of teachers, heads of educational institutions. A low number of educational and methodological materials, there is too little research related to the implementation of progressive technologies at the state level.

Distance Learning – a Key Element of the Education of the Future in Uzbekistan?

This is the question the authors of this article ask themselves when exploring the phenomenon of future educational development. The Covid-19 pandemic has shown that digitalization of the educational process will be an indispensable companion to the transformation of the educational field. The experience of introducing distance learning during the Covid-19 pandemic is valuable, given the possibilities of improving the future of online education in Uzbekistan. Note that televised classes were conducted for schoolchildren throughout the republic (Abdullakhanova & Alimatova, 2020). Such lessons were conducted in Uzbek, Russian, in Karakalpakstan, also in Karakalpak languages. They were broadcast on state channels, particularly Nat Geo Wild and Eurosport. To reach as many students as possible, Uztelecom provided access to educational channels for all students. At the same time, video lessons also became available on other platforms, in a particular mover.uz, youtube.com, Uzedu online maktab.

Universities during the Covid-19 pandemic have completely switched to distance education. In particular, the dist.edu.uz portal was specially developed to bring together all useful resources. On the other hand, higher education institutions also worked on their own online education platforms. At present, online lectures, seminars, and practical classes were actively conducted through video conferencing in such resources as Big BlueButton or Zoom (Siddikov, 2021).

However, distance education in Uzbekistan has demonstrated certain shortcomings. In particular, the key disadvantage of distance learning is unequal access to modern technology among students. First of all, we are talking about those who live in remote areas of the republic. For this reason, such students will lag behind their peers (Abdullakhanova & Alimatova, 2020). Another characteristic disadvantage of this educational system is its social isolation. Educational institutions have always been a place of social interaction, and distance learning makes them very closed, which in the end can have a bad effect on the mental health of students.

Consequently, we believe that the concept of distance as a key element of the education of the future requires a weighty improvement, based primarily on the formation of special conditions for its development (Laufer et al., 2021). competence of teachers, improving their skills.

Discussion

As we have been able to establish, the development of modern educational technologies and methods in Uzbekistan is proceeding at a rapid pace. At the same time, “catching up” modernization

leaves many problematic issues open since not all aspects of such a movement forward can be calculated at once. We are talking about individual legislative initiatives, reactions to their implementation, and the traditional conservatism of the teaching community. Therefore, the problems on the way to qualitative changes can be the fact that in today's world the rate of transformation of public life (including education) is extremely high. The COVID-19 pandemic has demonstrated the latest direction of its shifts: the dominance of distance education, the digitalization of the learning process, the demands of new teaching work criteria. Not all of these problems can be solved by the Uzbek experience - for example, providing educational institutions with all the necessary means of technical communication is a problem that is difficult to solve in general.

At the same time, we believe that the concept of distance learning as a key element of the education of the future requires significant improvement, based primarily on the formation of special conditions for its development. First of all, we are talking about the formation of pedagogical conditions, improvement of methodological principles of digitalization of education, development of information and technological competencies of teachers, and improvement of their qualifications.

However, distance education has its own advantages. It equalizes the opportunities of applicants for education from different parts of the country in access to sources of information - lectures and practical classes. At the same time, it provides the formation of independent work skills, which are extremely valued today not only by teachers but also by potential employers. Formation of individual educational trajectories, the introduction of education for sustainable development, emphasis on creativity and the ability to dispose of knowledge, not just to have it - all this creates the preconditions for the following transformations.

We believe that in the future it is necessary to develop the concept of Europeanization of Uzbek education, to introduce modern methods, forms, and techniques that are used in European educational institutions. It is especially important to further develop methods that are based on the principles of humanization, the democratization of the educational process, and the formation of an individual educational trajectory. Another aspect of the modern development of educational technology should be the orientation of the acquired skills for practical use. For this reason, STEM education, the principles, and methods of which are actively used in Europe, seems relevant. In Uzbekistan, we propose to spread innovative methods of STEM-education in a comprehensive way, to combine the capabilities of all participants of the educational process (including employers) to form the necessary modern, relevant competencies in students, which may be useful to them in the future.

Conclusions and Implications

So, the main New Year principle of the development of Uzbek education is the Eurocentric branch of education and science. Of particular importance in the practice of European education is the use of innovative technologies. They are formed based on personality-centered learning, humanization, democratization of pedagogical relations. In addition, some methods are aimed at the formation of an individual educational trajectory, which in turn allows students to focus on practical work. Of particular importance in the European system of education are self-education, mobility of educational programs, academic mobility of students. We believe that the above principles should be widely applied in the education of Uzbekistan. To this end, noticeable attention should be paid to updating the content of education, focusing on the development of necessary and relevant competencies and the so-called "soft skills".

A new aspect of education development is the leading principle, as well as the emphasis on the formation of critical and systemic thinking. We believe that this can be realized through education for sustainable development. As we have found out, the digitalization of education is another principle for the development of education of the future. At the same time, distance education in Uzbekistan requires significant improvement based on the formation of special conditions for its development. The key recommendations for the implementation of digitalization of education in Uzbekistan are the formation of a system of relevant pedagogical conditions, improvement of methodological foundations, the introduction of modern technological solutions, continuous professional development of teachers, and improvement of the system of lifelong learning.

References

- Abdullakhanova, G., & Alimatova, N. (2020). Digitalization of the education system in Uzbekistan. *The American Journal of Social Science and Education Innovations*, 2(12), 331–334. <https://doi.org/10.37547/tajssei/volume02issue12-56>
- Agostino, D., Arnaboldi, M., & Lema, M. D. (2021). New development: COVID-19 as an accelerator of digital transformation in public service delivery. *Public Money & Management*, 41(1), 69–72. <https://doi.org/10.1080/09540962.2020.1764206>
- Ali, M., & Abdel-Haq, M. K. (2021). Bibliographical analysis of artificial intelligence learning in higher education: Is the role of the human educator and educated a thing of the past?. In M. Ali & T. Wood-Harper (Eds.), *Fostering communication and learning with underutilized technologies in higher education* (pp. 36–52). IGI Global. <https://doi.org/10.4018/978-1-7998-4846-2.ch003>
- Brevik, L. M., Gudmundsdottir, G. B., Lund, A., & Strømme, T. A. (2019). Transformative agency in teacher education: Fostering professional digital competence. *Teaching and Teacher Education*, 86, Article 102875. <https://doi.org/10.1016/j.tate.2019.07.005>
- Clarà, M., Mauri, T., Colomina, R., & Onrubia, J. (2019). Supporting collaborative reflection in teacher education: A case study. *European Journal of Teacher Education*, 42(2), 175–191. <https://doi.org/10.1080/02619768.2019.1576626>
- Cohen, D. K., Spillane, J. P., & Peurach, D. J. (2018). The dilemmas of educational reform. *Educational Researcher*, 47(3), 204–212. <https://doi.org/10.3102/0013189X17743488>
- Ehlers, U.-D. (2019). Future skills and higher education “future skill readiness”. In *Connecting through educational technology: Proceedings of the European distance and e-Learning network 2019 annual conference* (pp. 85–96). EDEN. <https://doi.org/10.38069/edenconf-2019-ac-0011>
- Francis, B., Mills, M., & Lupton, R. (2017). Towards social justice in education: contradictions and dilemmas. *Journal of Education Policy*, 32(4), 414–431. <https://doi.org/10.1080/02680939.2016.1276218>
- Head, G. (2020). Ethics in educational research: Review boards, ethical issues and researcher development. *European Educational Research Journal*, 19(1), 72–83. <https://doi.org/10.1177/1474904118796315>
- Ismoilovna, O. F., & Oripovna, E. U. (2020). Education in Uzbekistan: Credit-module system, new approaches, and views. *The American Journal of Social Science and Education Innovations*, 02(12), 287–293. <https://doi.org/10.37547/tajssei/volume02issue12-50>

- Herțanu, C.-L. (2020). Future education within disruptive technologies developments. *International conference Knowledge-based organization*, 26(2), 288–293. <https://doi.org/10.2478/kbo-2020-0092>
- Karabaevna, Z., Musurmanova, A., & Xamroevich, R. (2019). Improving the competence of future vocational education teachers based on modular-rating education. *International Journal of Engineering and Advanced Technology*, 9(1), 6903–6906. <https://doi.org/10.35940/ijeat.a2997.109119>
- Kohlberg, L. (2010). Resolving moral conflicts within the just community 1. In C. Harding (Ed.), *Moral dilemmas and ethical reasoning* (pp. 71–98). Routledge. <https://doi.org/10.4324/9781315124704>
- Kopnina, H. (2018). Education for sustainable development (ESD): The turn away from ‘environment’ in environmental education?. In K. Van Poeck, J. A. Lysgaard, & A. Reid (Eds.), *Environmental and sustainability education policy: International trends, priorities and challenges* (pp. 135–153). Routledge. <https://doi.org/10.4324/9780203732359>
- Laufer, M., Leiser, A., Deacon, B., Perrin de Brichambaut, P., Fecher, B., Kobsda, C., & Hesse, F. (2021). Digital higher education: a divider or bridge builder? Leadership perspectives on edtech in a COVID-19 reality. *International Journal of Educational Technology in Higher Education*, 18(1), Article 51. <https://doi.org/10.1186/s41239-021-00287-6>
- Ngozwana, N. (2018). Ethical dilemmas in qualitative research methodology: Researcher’s reflections. *International Journal of Educational Methodology*, 4(1), 19–28. <https://doi.org/10.12973/ijem.4.1.19>
- Novianti, N. (2017). Teaching character education to college students using bildungsromans. *International Journal of Instruction*, 10(4), 255–272. <https://doi.org/10.12973/iji.2017.10415a>
- Protsyk, H. M. (2020). Project method: Past and future. *Medical education*, (1), 67–71. <https://doi.org/10.11603/me.2414-5998.2020.1.10996>
- Reid, A. M., Brown, J. M., Smith, J. M., Cope, A., & Jamieson, S. (2018). Ethical dilemmas and reflexivity in qualitative research. *Perspectives on Medical Education*, 7, 69–75. <https://doi.org/10.1007/s40037-018-0412-2>
- Siddikov, R. (2021). Higher education and training in Uzbekistan on the eve of independence. *The American Journal of Social Science and Education Innovations*, 03(02), 88–92. <https://doi.org/10.37547/tajssei/volume03issue02-14>
- Walsh, G., McGuinness, C., & Sproule, L. (2019). It’s teaching ... but not as we know it: Using participatory learning theories to resolve the dilemma of teaching in play-based practice. *Early Child Development and Care*, 189(7), 1162–1173. <https://doi.org/10.1080/03004430.2017.1369977>
- Welsh, R. O., & Little, S. (2018). The school discipline dilemma: A comprehensive review of disparities and alternative approaches. *Review of Educational Research*, 88(5), 752–794. <https://doi.org/10.3102/0034654318791582>