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The Academic Curriculum in Higher Education. Transformative Competencies' Relevance for the Labour Market

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Abstract: *The paper presents a theoretical analysis of the academic curriculum's relevance for the labour market and life, especially about the recognition of learning outcomes. The purpose of this approach is to discover if there is strong consent and a common interest both at the national and international levels related to the relevance of transformative competencies developed through the academic curriculum. Concerns about the key competencies have led to reflection on the importance of being aware of knowledge created by Higher Education (HE) institutions. The research questions related to the theoretical approach are as follows: What are the national and international trends regarding the academic curricula in higher education? What are the transformative competencies and what do they entail? What are the ways in which transformative competencies can be included in the national university curriculum? The results of our theoretical approach underline that the set of competences developed in HE institutions must constantly transform into learning outcomes by the trends and needs of the labour market. This type of academic curriculum development anticipates the future dynamics of a society. We conclude that the mission of the HE institutions has to be strongly related to the specifics of globalized economies. Also, it is to develop an academic curriculum orienting itself towards innovation and a competency-based approach. This holistic approach provides policymakers, researchers, administrators and teachers a theoretical framework for practical interventions in HE institutions.*

Keywords: *academic curriculum relevance; transformative competencies; competency-based curriculum; learning outcomes; higher education.*

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Introduction

In the current context, the academic curriculum related to the achievement of competencies consistent with the labour market is a priority, since understanding curricular changes implies the existence of expertise on this issue.

The training of students from the perspective of transformative competencies would determine, at the educational system level, the possibility of integrating new approaches to teaching, learning, and evaluation. Teaching, by reference to competencies to be achieved, can respond to challenges in other areas of life provided that the strategies are adapted to the specifics of the formal curriculum as well as the non-formal one. That is why it is very important to identify: what competencies are relevant for the labour market and how they can be best taught; how we can leverage changes in the academic curricula to generate learning outcomes consistent with what the student can harness in personal or professional life; what teaching strategies should be used to motivate students to learn.

Familiarizing with new curricular changes and existing trends in curriculum design should leverage the contents of relevant curriculum models. Therefore, any curricular change is necessary to be achieved through the advantages of experimenting with it at the institutional level.

Using different terms to value change makes educational decision-makers very responsible. That is precisely why we consider it necessary to create semantic differentiations that force the practitioner, the actor involved, to rally to new positions of analysis of the applied academic curriculum: not only that of the actor present in the implementation stage but also the one of the designers, the one that develops or the one who evaluates the curricula. The association of educational policymakers with new positions places them at another level of professional qualification, allowing them to adapt to curriculum innovation contexts. The resources they need are diversified, their creative imagination enables them to propose new curriculum experiences. At the same time, a constant concern will be developing useful skills for this course of curriculum change by existing trends at the European level in the labour market.

National and international trends regarding the academic curriculum in higher education. Premises for the conceptual framework

Among the existing international trends regarding the definition of the curriculum, we are interested in approaching it as objectives to be achieved or as learning outcomes. Various authors have supported this perspective (Tyler, 1949; Marzano, 2010; Popham, 2011). For example, R. Tyler (1949) proposed a comprehensive model for curriculum development that prioritises selecting objectives. Therefore, it becomes important for curriculum designers to formulate general objectives based on relevant data collected from various sources: the student beneficiaries and their needs, society and the world outside the school, and the subjects of study, along with their evolution. The general objectives are refined by referencing "the educational and social philosophy of the school and aspects of learning psychology, thus becoming specific instructional objectives" (Duru, 2011). Authors R.J. Marzano (2010) and W.J. Popham (2011) view the entire educational process through the "lens" of objectives as standards to be achieved with students. From a contemporary perspective, curriculum design starts from competencies, considered the most important components that allow for the reinvention and improvement of educational practices following real and professional life.

The competencies as academic curriculum components

The problem of designing the academic curriculum by reference to competencies becomes a priority in the current context. Achieving a balance between the skills demanded in the labour market and the cross-cutting skills associated with the curriculum and related disciplines highlights the higher education institution's responsibility to respond to society's needs regarding the labour market.

Competences are increasingly analyzed both "as a set of knowledge, skills and attitudes" (UNESCO-IBE, 2013, 13), and as reporting standards at the national and international levels (Deißinger & Hellwig, 2011). The reference to competences leads us to update their definition and structure: competences refer to a set of (a) "Knowledge" includes concepts and theoretical ideas that facilitate practical understanding about "interdisciplinary, epistemic and procedural knowledge"; (b) "Skills" refers to the ability to use knowledge responsibly; (c) "Attitudes and values" are the principles and beliefs

which determine the choices and actions of a person towards individual, social and environmental well-being. "Values" are classified into "four categories: personal, social, social and human" (OECD, 2015; OECD, 2016).

Regarding the academic curriculum, competencies indicate the skills to adequately apply learning results in defined contexts (education, the labour market, professional or personal development) (UNESCO-IBE, 2013, 12). Therefore, they aren't reduced to what cognitive elements mean (which allow the student to use theory, concepts and knowledge in general), but they aim at functional, interpersonal and ethical values.

The competencies as learning outcomes valued from the labour market

Relating competencies to learning outcomes aims to extend their meaning from what it means to relate them to competencies in specific disciplinary areas to relating to cross-cutting competencies (relevant for all areas and especially for the labour market).

It is also important to refer to ESCO (European Skills, Competences, Qualifications and Occupations), which represents a multilingual European classification of skills, competencies, qualifications, and occupations. However, this classification type predominantly targets occupations and professional skills relevant to the labour market. What interests us is the relevance of ESCO for the field of education and training in the EU, especially from the perspective of its alignment with the four sub-classifications: Knowledge; Language skills and knowledge; Skills, and respectively, Transversal skills. Although it represents a relevant informational resource designed to help employers with useful information about the skills/knowledge they expect from their employees, at the same time ESCO helps individuals better understand the skills employers are looking for to develop their careers (Chiarello et al., 2021). The academic curriculum should be aligned with ESCO to better prepare students for the future job market.

It is also important to consider the European Qualifications Framework (EQF) "to make national qualifications easier to understand and more comparable internationally. EQF aims to support the cross-border mobility of students and workers and promote lifelong learning, and professional development across Europe" (The Council of the European Union, EQF, 2017). At the same time, the trend of

harmonizing the academic curriculum at the level of European countries is highlighted, to ensure the transition to the labour market, which is in a constant state of flux.

Although there is no universally accepted definition of "skill" the use of the term is significantly more dispersed than that of occupation (Altamirano & Amiral, 2020). Skill is a term that is used interchangeably with other terms such as competence, or as a general term used to describe a range of concepts that include those that are learned or acquired—either in the workplace or through training and education.

The academic curriculum requires a focus on skills, especially as it considers adapting to existing social needs. From this perspective, we consider learning outcomes correlated with cognitive elements (including the ability to use theory, concepts and knowledge), but also affective, and interpersonal elements (referring to social or organizational skills) (CEDEFOP, 2011). The key competence-based university curriculum aims at the cross-curricular approach that refers to that set of transferable skills in the labour market. These competencies are correlated with transformative competencies. Reducing competencies only to learning results (knowledge, skills, attitudes) diminishes the procedural character and causes inconsistent interventions in the analysis of behaviour development by reference to performance levels and learning curriculum standards.

Developing a competence-centred academic curriculum involves rethinking how to carry out the evaluation, but at the same time also how to communicate its results.In the current context, competencies are correlated with the profile of the graduate of higher education and require an innovative educational context that responds to a changing society. Education for innovation is a priority since understanding curriculum changes requires expertise on this issue. The training of innovators would determine, at the level of the educational process and educational system, the possibility of integrating new approaches to teaching–learning–evaluation. Innovative teaching can respond to challenges in other areas of life by adapting strategies to the specifics of both formal and non-formal curricula.

Familiarizing with new curricular changes and existing trends in curriculum design should leverage the contents of relevant curriculum models. Therefore, any curricular change is necessary to be achieved through the advantages of experimenting with it at the institutional level.

Using different terms to value change makes educational decision-makers very responsible. That is precisely why we consider it necessary to create semantic differentiations that force the practitioner, the actor involved to rally to new positions of analysis of the applied academic curriculum: not only that of the actor present in the implementation stage but also the one of the designer, the one that develops or the one who evaluates curriculum.

The association of educational policymakers and teachers in higher education with new positions puts them to another level of professional qualification, allowing them to adapt to curriculum innovation contexts. The resources they need are diversified, their creative imagination enabling them to propose new curricular experiences about skills valued at the social level and in the labour market. At the same time, a constant concern will be the development of useful skills for this course of curricular change.

Premises for the introduction of transformative competencies in the national university curriculum

Considering the change-curricular reform report, we identify some related terms:

- *Curriculum development* - involves designing the academic curriculum based on new trends in terms of competencies and continuous innovation;

- *Curriculum innovation* - involves generating curricular changes by training creative thinking skills, professional expertise and commitment to implementation and evaluation;

- *Curriculum design* based on key competencies and transformative competencies - involves designing the academic curriculum based on the areas of key competencies (which integrate knowledge, skills and attitudes) and transformational competencies (valued in a changing society) (Creţu, 2000; UNESCO-IBE, 2013).

These terms define a framework for analysing the importance of curriculum design expertise. In this context, design can be considered as "the process of meaningful construction and interconnection of the components of a curriculum so that fundamental questions such as what is needed to be learned, how and why, what are the resources needed and what is how learning will be evaluated" (UNESCO, IBE, 2013, 17). Any curricular design process resembles the values of curriculum development that involves planning and systematisation, but also the

creation of interdisciplinary teams that aim "to appreciate the input of stakeholders and also to meet the conditions of sustainability and long-term impact" (UNESCO - IBE, 2013, 17).

At the institutional level, certain areas are influenced by the evolution and content of curricular changes (university management, teacher training, student results evaluation, curriculum documentation - curricula, course and seminar supports, practical/laboratory activities, etc. - and other learning resources, management of extracurricular and extra-curricular activities, funding, etc.). The convergence of strategies in these functional areas determines a coherent strategic plan on the part of educational policymakers.

In current educational practice, the innovation of the academic curriculum by reference to the new areas of key competencies (The Council of the European Union, 2018) and transformative competencies (OCDE, 2019) involves taking into account the existing relationship between development - evaluation - revision, update and adapt to the criterion of relevance. Therefore, consideration of some benchmarks on the academic curriculum design becomes necessary for design. Among them, we recall:

a) student focus with emphasis on learning and learning outcomes, with profound implications at the design curriculum level, implementation and evaluation, imposing the promotion of flexible curricula. This curriculum involves the diversification and adaptation of learning situations for students, by the level of study, performance level, interests and skills, with respect for diversity (ethnocultural, linguistic, religious, etc.);

b) the construction of differentiated learning paths, and the implementation of explicit initiatives to personalize education, as a guarantee of equal opportunities in education. These steps will take into account the adaptation to the style and pace of learning, the amount of knowledge accumulated, the skills developed, the depth of understanding and the level of expression from an attitude point of view;

c) focusing on competencies as the central organizing element of the curriculum foundation documents, framework plans and curricula specific to the different study disciplines/modules. The focus on competence is claimed not only in the reporting to teaching but also in the evaluation. Therefore, it would be necessary to promote competence assessment as part of the process of achieving the training profile of the higher education graduate (by reference to the level of studies, specialization, etc.).

The reporting to the legislative framework, allows us to understand that the design of the academic curriculum puts the teacher in a different position, and the decision maker will refer to the results obtained in terms of how the teaching hours have been utilized either for the creation of remedial learning contexts, or for the extension of acquisitions and their development to talented students.

The changes to the design of the academic curriculum will have effects on the training of teachers and will be reflected in the types and levels of development of students' results. We therefore consider the following objectives related to the training of teachers to be relevant:

Teaching training objective no. 1. Training teachers in experimenting with curriculum design by reference to key and transformative competencies, by selecting appropriate content areas;

Teacher training objective no. 2. Realization of co-creative projects, both by teachers and students, whose products can lead to social innovation;

Teacher training objective no. 3. Use of co-creative projects and products in teaching-learning-evaluation;

Teacher training objective no. 4. Analysis of the relationship between the transdisciplinary, digitized and integrated approach at the academic curriculum level;

Teacher training objective no. 5. Valorizing the teaching results in everyday life, causing transfers in different fields and in solving the problems faced by students.

In this regard, we highlight the optional curriculum importance for the development of key and transformative competence areas. Considered an elective curriculum, this type of curriculum determines choices on the part of students, on their interests and needs (UNESCO, IBE, 2013, 25). The learning outcomes of the optional academic curriculum can be easily transferred not only to the formal but also to the non-formal and informal levels. Approaching and valorizing these results would facilitate the adaptation of students to the specifics of transdisciplinary evaluations that are introduced at the legislative and methodological levels. Extra-school and extracurricular activities are a favourable framework for achieving the competencies related to the training profile of the graduate of higher education. By reference to their innovative nature, we can say that these activities are innovative curriculum products, all the more so as they create non-formal and informal learning contexts.

This perspective invites us to ask ourselves the question: What are the essential factors for determining and assuming the courage to be innovative by reference to this category of activities? To respond, we consider several determinants such as:

(a) Creating an evaluation context characterized by innovation and diversity;

(b) Creation of a physical and psychological environment favourable to innovation;

(c) Realization of an appropriate, efficient teaching process (with the activation of necessary time resources, financial, infrastructure, and materials);

(d) Selection of transdisciplinary content – cross-curricular themes.

These determinants allow adapting to contextual aspects of academic results by reference to semantic differences on the problem of extracurricular (co-curricular) and extra-school activities in the context of formal and non-formal education. Therefore, extracurricular and extra-curricular activities are considered transformative experiences, with long-term impact and allow an adaptation to existing needs in the labour market (because they are focused on abilities valuing). These aspects place us differently about the types of activities, but also to how they are organized. Therefore, extracurricular activities can include cultural, technical-scientific, sports and educational activities for democratic citizenship and for the promotion of humanitarian values (including volunteering, charity, active engagement in society, social responsibility and communication). The above themes invite reflection on the transdisciplinary nature of the content addressed.

The way of organization presupposes an innovative context that trains the resources of creative thinking, expertise in the field of non-formal education, but also the area of evaluation of learning results. The activities can be carried out in different forms: "workshops of theatre, dance, music, fine arts, media and film education, competitions organized at the level of the university, university consortia, locality or county, round tables, debates, activities of voluntary or community interest, anti-tobacco/anti-alcohol /anti-pollution/prevention of juvenile delinquency/prevention of trafficking in persons, community projects, social responsibility, peer-education, exchanges of experience, study visits, camps/schools of creative or research, educational and thematic partnerships at the levels of educational units, domestically and

internationally, for the development of skills for teamwork and in projects" (Măntăluţă et al., 2013, 11).

The topic under discussion makes learning visible at the university level, but also at the community level. This allows the evaluation to be valued in terms of the competencies developed and causes a reflective approach from students, teachers, the community, researchers in the field of education, educators from non-formal environments, but also decision-makers of educational policies.

Transformative competencies - a potential response to the labour market and society's needs

Based on the "OECD Key Competences" identified through the "Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo)" project, the authors report with the title "OECD Learning Compass 2030" defines "transformative competencies as the types of knowledge, skills, attitudes and values that students need to transform society and shape the future for a better life" (OECD, 2019). These competencies types have been identified as: "creating new values, reconciling tensions and dilemmas, and taking responsibility" (OECD, 2019).

The "transformative competencies" can be used in a wide range of contexts, being considered "higher-level competencies that help students experience a range of different situations and experiences" (Grayling, 2017). In this respect, they can be used in different life contexts.

It is also known that "the globalizing world is shaped by a dynamic change that is visible in several areas: in trade, digitalization, the production of goods, or in the labour market" (Boix Mansilla & Jackson, 2013; Coatsworth, 2004; Sälzer & Roczen, 2018).

That is why we need to analyse how we can prepare students for future jobs, how to address society's challenges, and how to use better technologies. The academic curricula need to prepare them to adapt to an interconnected world where they have to understand different perspectives about knowledge express respect for others, and take responsible action for sustainability and collective well-being. To identify solutions to achieve such objectives which the HR institutions can assume, the need arose to open a global discussion about education and how the academic curricula should pursue a particular profile of the graduates.

International organisations such as the OECD launched solutions for this challenge type. In the report with the title "Future of Education and Skills 2030" OECD aim to set goals and develop a common vision for teaching and learning, answering two relevant questions: (a) What "knowledge, skills, attitudes and values" will today's students need to thrive and shape a changing world? (b) How can training systems develop this set of "knowledge, skills, attitudes and values" effectively? (OECD, 2015). In response to these questions, the OECD has developed the "Learning Compass 2030" as a learning framework that sets a relevant and actual vision of education with a 2030 horizon. At the same time, this document is a framework for academic learning that takes into account future results valued in the labour market.

Taking this framework into account in setting up the academic curriculum can guide students into a complex world and can help them navigate towards the future that we want. It would be necessary to involve a transdisciplinary team to develop an academic curriculum focused on transformative skills. This process involves interactions between specialists for co-creation and can be achieved with the involvement of decision-makers, researchers, school leaders, teachers, students and social partners from all over the world. The results of this process are a common language and an understanding of the general educational goals, not only at the HE institutions but also at the level of the other factors involved (labour market or employment representatives, society representatives,) who become co-interested in the relevant academic results for producing changes in society and creating new meaningful values for social innovation.

Developing transformative competencies helps students to adapt to complexity and uncertainty, defining aspects of the dynamic nature of the labour market. To contribute to shaping a better future, each student (future professional in a field) has to be equipped with three "transformative competencies": "1. creating new values, 2. reconciling tensions and dilemmas, and 3. taking responsibility" (OECD, 2019, 15).

From the perspective of the first competence, students need to have an awareness of purpose, to be curious and to be open-minded towards new solutions, perspectives and experiences (Grayling, 2017). Creating new values requires new skills such as critical thinking and creativity. The academic curricula need to be revised by a transdisciplinary approach to help students adapt and change their

approaches based on new insights and findings (OECD, 2019, 63). For example, addressing transdisciplinary topics such as: how to achieve food and water security, how to reduce youth unemployment, or how to adapt to urbanization, within university teaching activities, could lead to the identification of new solutions as well as the development of creative thinking skills. Creating new values is associated with the need for innovation identified in different environments and is reflected in the emergence of new jobs, products or services. Therefore, "outside the box" thinking leads to the identification of relevant solutions to the new challenges existing in professional environments.

Regarding the second competence, students need to develop cognitive flexibility and be open to different points of view. This type of understanding helps them to solve tensions and dilemmas, and also to express both empathy and respect towards others. They may also need creative and problem-solving skills for making complex and sometimes difficult decisions. The academic curricula need to help students develop "a sense of resilience, tolerance for complexity, and a sense of responsibility towards others and their actions" (OECD, 2019, 64). Therefore, addressing transdisciplinary topics such as real-life examples, like the water-energy-food nexus or the circular economy, the ability to recognize multiple solutions, and to successfully work with complexity represents a priority for developing the competence to reconcile tensions and dilemmas.

Changing society brings new challenges that require interventions based on reconciliation and resilience. Interventions of this type are aimed at managing diversity and reducing dissonance. To this end, students have "to recognise multiple solutions and work successfully with ambiguity" (Senge, 2012). One of the global trends and challenges that determine curricular change is the diversity that involves the recognition and valuing in learning of the identity and cultural heritage of each student, social integration and the labour market, preparing the student for an inclusive society (Education Science Institute, 2020, 9). This competence aimed at reconciling tensions and dilemmas facilitates appropriate responses to the specifics of today's society and implies respect for diversity, and acceptance of the other.

The third competence - *Taking responsibility* - requires having a strong values system, and a sense of integrity. "Compassion and respect for others are also important for this competency" (OECD, 2019, 65). Critical thinking skills help students to reflect on their actions and those of others. The academic curriculum becomes relevant if it creates a "sense of self-

awareness, self-regulation and reflective thinking" (OECD, 2019). The students need to take responsibility for their actions. Thus, the assignment of transdisciplinary topics such as norms, values, meanings, and limits, such as: What should I do? Was I right to do this? Where are the limits? Knowing the consequences of what I did, should I have done it? the competence of taking responsibility is developed. Through critical analysis and evaluation of alternatives through an ethical lens, students become morally and intellectually mature (Nussbaum, 1997).

In an ever-changing world, taking responsibility for oneself, others, or society in general, involves decision-making skills by being aware of their long-term consequences. Therefore, the academic curriculum should be configured to meet such situations and facilitate students learning contexts in which complex reflective processes take place. From this point of view, the curriculum promoted by universities is developed based on a consistent and relevant axiological framework, within which there are no value hierarchies, but value prioritizations would be required: responsibility, active citizenship and respect (Ministerul Educaţiei Naţionale, 2019, 14).

These competencies are needed more in actual societies and facilitate human understanding (OECD, 2019). Jobs that "require creative skills are less likely to be automated in the next couple of decades" (Berger & Frey, 2015). Reconciling tensions and dilemmas "requires reading and understanding complex contexts" (OECD, 2019).

Students will need to be able to use their competencies and to give ethical implications for their actions. These competencies are associated with "transformative competencies" since they are aimed at results which can help adapt to the real world. It would be important to take into account the procedural dimension of competence that involves training-exercise-development and takes into account different levels of performance, expressed by curriculum learning standards.

Higher education institutions that have a vision and pursue the development of these types of skills consider an Anticipation-Action-Reflection approach (AAR). "The anticipation-action-reflection (AAR) cycle is an iterative learning process whereby learners continuously improve their thinking and act intentionally and responsibly. In the anticipation phase, learners become informed by considering how actions taken today might have consequences for the future. In the action phase, learners have the will and capacity to take action towards well-being. In the reflection phase, learners improve their thinking,

which leads to better actions towards individual, societal and environmental well-being" (OECD, 2019, 17).

Among the skills needed for this initiative, analysed by renowned authors in the field of innovation from a pedagogical perspective, we recall the following:

(a) "Critical thinking and the ability to solve problems;
(b) Networking and dominance through influence;
(c) Flexibility and adaptability;
(d) Initiative and entrepreneurship;
(e) Access and analysis of information;
(f) Effective oral and written communication;
(g) Curiosity and imagination" (Wagner, 2014, 35).

These skills, activated in the context of changes in higher education, determine the involvement in a process of updating existing requirements in the labour market. In the international space, these changes are always questioned, in the sense of the constant questioning of the effects they produce at the national, regional/local or institutional levels. Therefore, "it is even talking about a continuity of reforms, against the background of the rapidity of social, economic and, above all, technological changes" (Ministerul Educaţiei şi Cercetării, 2020, 5).

However, not every curriculum change is a curricular reform. Therefore, we define curricular change as "the restructuring of the curriculum within the framework of different educational policies, projected at the national, local and institutional levels" (Creţu, 2000, 32).

Conclusions. Limits of study and future research directions

Although there is extensive literature on competencies and ways to develop and address this phenomenon, a gap remains in understanding which skills should be emphasized and developed to help students adapt to the labour market and society's needs. In this paper, we focused on the analysis of the most recent skills of the 21st century, whose contributions to teaching and learning are relatively well established, but whose potential effects on students adapting to the needs of society require further research. Given the potential impact of transformative competencies on the adaptation process, educators and researchers are encouraged to integrate teaching and learning strategies when developing curriculum projects in universities and to assess their effectiveness. Taking into account the reviewed literature, the most

effective ways to relate to transformative competencies through changes at the academic curriculum level would be: achieving coherence at the curriculum level between transversal competencies and professional competencies, by referencing the existing requirements in the labour market; including transdisciplinary themes at the discipline level that allow for the development of transformative competencies; diversifying the teaching-learning-assessment methodology (through the integration of case studies, problematizations, algorithmization, debates with opponents, methods for developing creativity and critical thinking). Reporting on transformative competencies would lead to initiatives for developing the academic curriculum in transdisciplinary teams and would allow the initiation of new research projects that engage mixed teams of researchers from different fields.

Additionally, over the past two decades, the competencies field concerning academic curriculum has seen promising developments, marked by an increase in empirical studies and systematic literature reviews.

The study has potential limitations. One of these is the lack of a systematic review approach due to the insufficient practical application of transformative competencies (a theoretical limit which no conduct to the applicability of a study).

Also, we can discuss an analytical limitation regarding the completeness, or significance of the findings. This type of construct – "transformative competencies" is currently addressed only at a theoretical level in the international reports of organizations like the OECD (OECD, 2023).

This paper presents a useful analysis for higher education institutions on the importance of developing transformative competencies relevant to the labour market at the level of study programmes. At the same time, we aim to provide teachers, students and policymakers with theoretical and practical information on the relevance of competencies both as learning outcomes and as components of the academic curriculum. To determine a consensus at the academic level and the level of representatives of existing employers in the labour market, it is necessary to develop relevant networking for the analysis of the changes determining the act of learning-action, necessary to meet the complex contemporary problems. This review offers theoretical insights for teachers, administrators, and policymakers while suggesting new research directions for a more integrated approach to fostering transformative competencies and incorporating curriculum projects for developing them.

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