



WESTERN EDUCATIONAL CONCEPTS IN AFRICA AGAIN? FUTURE SKILLS CONCEPT IN CAMEROONIAN HIGHER EDUCATION. AN ANALYSIS OF OPPORTUNITIES AND IMPLEMENTATION CONDITIONS

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Abstract:

This article introduces the educational concept of future skills to the Cameroonian higher education landscape. It examines the added value of this concept for higher education in general and Cameroonian higher education in particular, as well as the conditions for its implementation. The analysis shows that this concept can contribute to the development of personality and quality and to the promotion of sustainable student learning. In addition, it enriches competency-based teaching while facilitating the professionalisation and employability of graduates. In this sense, it could implicitly be considered as a means of combating youth unemployment in Cameroon. Its application in the Cameroonian context would require the creation of cross-disciplinary competency-based departments and a good digital and technological infrastructure.

Keywords: future skills, higher education, Cameroon, added value, implementation

Zusammenfassung:

Dieser Artikel führt das Bildungskonzept Future Skills in die kamerunische Hochschullandschaft ein. Er untersucht den Mehrwert dieses Konzepts für die Hochschulbildung im Allgemeinen und für die kamerunische Hochschulbildung im Besonderen sowie die Bedingungen für seine Umsetzung. Die Analyse zeigt, dass das Konzept zur Persönlichkeits- und Qualitätsentwicklung sowie zur Förderung eines nachhaltigen Lernens beitragen kann. Darüber hinaus bereichert es die kompetenzorientierte Lehre und erleichtert die Professionalisierung und Beschäftigungsfähigkeit der Absolvent*innen. In diesem Sinne kann es implizit als ein Mittel zur Bekämpfung der Jugendarbeitslosigkeit in Kamerun betrachtet werden. Seine Anwendung im kamerunischen Kontext würde die Schaffung von interdisziplinären, kompetenzbasierten Abteilungen und eine gute digitale und technologische Infrastruktur erfordern.

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Schlüsselwörter: Future Skills, Hochschulbildung, Kamerun, Mehrwert, Umsetzung

1. Introduction

Universities are seen as preparing young people for the world of tomorrow. However, there is a growing mismatch between education and the labour market, which challenges the role of universities. This mismatch is exacerbated by increasing digitalisation, which will lead to the disappearance of many jobs in the future (Ehlers, 2020a, 2020b, 2022, Hochschul-Bildungs-Report, 2020). This is forcing universities to reorient themselves by equipping students with new skills, the skills of the future.

In Cameroon, the gap between education and the labour market is enormous. This has led to massive unemployment among university graduates (see Biadou, 2017), leading many to question the role of education and higher education. The debate on the development of higher education in the country has been dynamic and intense for decades. It has been driven by two main trends: The first trend focuses on the professionalisation of teaching and the employability of graduates (Bomda *et al.*, 2022, Tchigankong, 2022). It focuses on the fit between learning and the labour market and criticises the dominance of theory in Cameroonian higher education. The second strand is more development-oriented. It emphasises that universities should contribute to the (local) development of the country by promoting research and innovation and by adapting curricula to local realities and key sectors such as agriculture (Kamdem & Eike, 2014).

In Cameroon, the concept of Future Skills has received too little attention from the education community and education researchers. This article is one of the first academic studies on Future Skills in relation to the case of Cameroon. It analyses the potential of this concept and the conditions for its implementation in Cameroonian higher education. In doing so, we hope to contribute to enriching the debate on Future Skills with an African perspective.

2. Future Skills – Future Skills Turn

The educational concept of future skills has crystallised the debate on the direction and development of higher education in the USA, Germany and other European countries for decades. This educational concept is increasingly gaining traction, with the result that a variety of future skills models have been developed, each with its own understanding (see Henssen, 2023). Ehlers (2021) calls this the 'future skills turn' - referring to the shift in higher education concepts that emphasises the role of future skills. According to him, future-focused universities aim to equip people with skills that will enable them to be fit, competent and efficient in the increasingly digitalised, uncertain and ambiguous world of tomorrow. In his Triple Helix model, which is a comprehensive competency model or set of 17 competencies, Ehlers (2020) divides competencies into a developmental dimension, which relates to individual development, a subject matter dimension, which

relates to task and content, and an organisational dimension, which relates to the organisation and the environment. All three dimensions interact and complement each other, as shown in Figure 1.

Ehlers defines future skills as “*competencies that enable individuals to solve complex problems in highly dynamic contexts of action in a self-organised way and to act (successfully)*” (Ehlers 2020b, p.57). These competences are based on cognitive, motivational, volitional and social resources, are value-oriented and can be acquired in a learning process. They enable personal, professional and social development. Ehlers' model is strongly oriented towards higher education and calls on universities to rethink and reorient learning content, learning locations and the organisation of study programmes in order to meet current trends and conditions in the labour market and society.

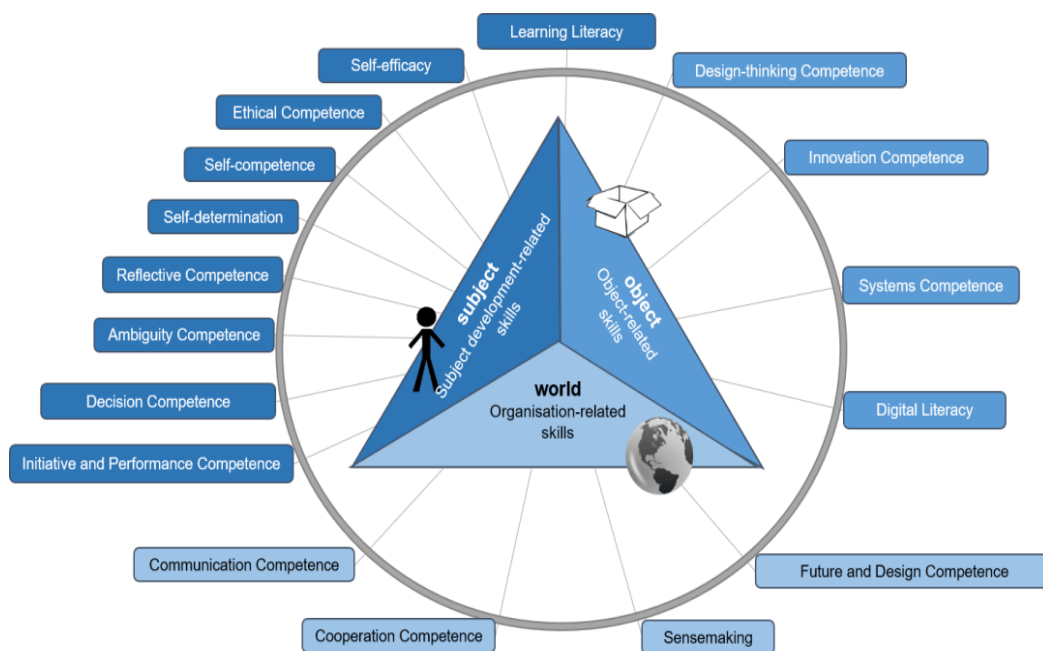


Figure 1: Overview of future skills and their dimensions (Ehlers, 2020b, p.46).

Pechstein and Schwemmler (2023) complement Ehlers' suggestions in their Future Skills Navigator with a holistic perspective, building 16 Future Skills classes on four system levels - from the personal level (I) to the relationship level (You), the team level (We) and the macro level (All), which also includes planetary systems:

- I-level: Intrapersonal future skills relate to each individual;
- You level: interpersonal future skills relate to the connection between people;
- We level: Organisational Future Skills relate to networks of people and their relationships;
- All level: Planetary Future Skills go beyond the human and the human-centred and see the human as part of nature and the planet.

It takes into account human potential - the four levels of being human: rational, emotional, spiritual and transformational. The model is based on a participatory, value- and impact-oriented approach. This framework can be applied in society, education,

policy and business. It understands Future Skills as indispensable social and life skills that are of fundamental importance for positive personal, social and planetary development in the 21st century (Pechstein & Schwemmler, 2023, p.10). The Stifterverband and McKinsey (2021) consider future skills in a person- and institution-centred dimension and make recommendations for action for universities, companies and administrations with regard to qualification, recruitment and reorientation (Stifterverband and McKinsey, 2021). The focus is on traditional skills, key digital skills, technological skills and transformative skills. Future skills are understood as overarching abilities, skills and attributes that will become increasingly important in all areas of working life and beyond over the next five years (Stifterverband and McKinsey, 2021, p.3). The five-year period, i.e. until 2026, is long enough to realistically take into account the effects of developments that are already foreseeable today. In its Learning Compass 2030, the OECD attaches great importance to the learning foundations of knowledge, skills, attitudes and values, and to transformative competences, where *“individual and collective well-being are at the forefront”* (Learning Compass 2018, p.30). Social and emotional competences are seen as a prerequisite for developing a sense of civic responsibility. The model focuses on (school) education. It states that schools must *“prepare students to take responsibility for their present and future, their own lives and their communities”* (Learning Compass 2018, p.7). It should also enable them to shape a world that enables prosperity and sustainability - for themselves, for others and for their environment.

3. Future Skills principles relating to education

In his study of future skills in enterprises, Ehrler (2020a, p.159) distinguishes a number of basic principles of future skills. Only the three most important are presented here. The first principle is the individualisation and personalisation of learning and development. The pedagogical concept of future skills promotes the adaptation of teaching and learning to the individual and personal dispositions and characteristics of learners and their learning context. According to Ehlers, *“what, when, where and how is learnt is determined by individual learning needs resulting from individual pressure to act”* (Ehlers 2020a, p.161-162). Only when individual parameters are taken into account can learning and teaching be successful and contribute to the learner's development. The second principle is the management of ambiguity and uncertainty. Today we live in a world characterised by multiple crises: climate change, the migration crisis, the peace crisis and increasing digitalisation, to name but a few. Through Future Skills, the education community aims not only to prepare learners for this uncertain world of tomorrow, but also to show them how they should act, work and operate in such a context and what skills they need. The third principle is the promotion and use of new and active forms of learning. The Future Skills approach to education emphasises practical relevance and consideration of the professional and social context of the learner. Active support for learners is also important. For this reason, new, active forms of learning are promoted, such as

mentoring, coaching, reflection support or thinking workshops and networking, which place learners in concrete, realistic scenarios and encourage them to develop their own strategies for action and reflect on solutions (ibid.).

4. The potential of future skills for the higher education sector

It is clear that any educational approach introduces a new culture of learning and teaching. However, this is often accompanied by controversy. The concept of future skills is controversial in the academic literature. Marco Kalz of the Heidelberg University of Education vehemently discredits it. On the one hand, he finds it very regrettable that such a concept is adopted by policymakers without evidence-based analysis and critical discussion (cf. Kalz, 2023). In his view, the impact of these competences on adult outcomes should be clearly demonstrated beforehand. Secondly, he criticises the lack of prioritisation of skills, which leads to an unclear empirical research base (ibid.). Just as there are two sides to a coin, there is potential in this educational approach that should not be underestimated and from which universities can benefit.

4.1 Humanisation of education

With increasing digitalisation, artificial intelligence and robotics, people are gradually losing their sense of human relationships and values in favour of individualism. Future Skills make people more human by helping us become better people and nurturing what makes us different from machines. With learning formats such as coaching or mentoring, education acts as awareness-raising, as a process that helps learners to recognise and develop their own potential. This is done with an eye to the future and labour market trends. By combining competences, this approach to education helps learners to explore, navigate and shape the world in a holistic and critical way. It also enables learners to be future-proof, regardless of technological trends (cf. Ehlers, 2020b, 2022). At a societal level, future skills (re)connect us to ourselves, to each other and to our planet by promoting values such as solidarity, cooperation through communication and collaboration skills, human rights and the protection of human rights through ethical competence. They also help us to manage our social relationships well outside the digital world (cf. Pechstein & Schwemmler, 2023, p.10).

4.2 Promotion of sustainable and self-directed learning

One thing is clear: with the introduction of Future Skills, the role of education is now to equip people with the skills and abilities they need to survive in the uncertain and increasingly digital world of tomorrow. With its holistic view of the human being, Future Skills not only defines the way we teach and learn, but also addresses the brain, heart, soul and mind of the learner. This is achieved through mentoring, coaching, reflection workshops, etc. This holistic approach to teaching is contextualised and practical, enabling a friendly learning experience for all learners. The fact that learners are seen as experts enables not only a self-active and self-directed learning process, but also the

development of their creativity and innovation (cf. Ehlers, 2020a). Such an approach to education engages people at all levels, from the personal to the global, while improving their cognitive abilities, strengthening them emotionally, increasing their connection to themselves and others, and enabling them to act effectively (cf. Pechstein & Schwemmler, 2023, p.115).

4.3 Development of personality and skills

A good personality includes good character traits, values and attitudes such as initiative, openness and a willingness to learn. Future Skills helps to develop and enhance these characteristics through its active learning formats such as mentoring, coaching and skills workshops. It also enables systemic thinking and action in an uncertain and turbulent world (see Pechstein & Schwemmler, 2023, p.10, Ehlers 2020, 2022). In addition to traditional skills such as communication and problem-solving, Future Skills also teaches new skills such as sense-making and systems skills.

5. Overview of Cameroon's higher education system

After independence in 1960, the young state of Cameroon quickly recognised the need to develop an elite to run the country. Education at all levels became a priority for the state. To facilitate the training of secondary school teachers, the *École Normale Supérieure* and the *"Institut National d'Etudes Universitaires"*, the forerunner of the *"Université Fédérale du Cameroun"* founded in 1962, were created in 1961. This single federal university, renamed the *Université de Yaoundé* in 1967, incorporated the faculties and the *Grandes Écoles* that were associated with it at the time of its creation. The creation of this university was the result of French technical assistance from the *"Fondation Française"*. It faithfully copied the architecture of the French higher education system before 1968, in particular the distinction between universities and *Grandes Écoles* (cf. Folefack, 1993). The first feature of the French higher education system was and is the creation of the *"Grandes Écoles"*, which function in parallel with the universities, with the university functioning as an autonomous unit with several faculties (ibid.).

The current architecture of higher education in Cameroon is dynamic and complex, both horizontally and vertically (ibid.): At the horizontal level, the higher education landscape is characterised by competition between private and public actors, both to occupy the space of knowledge and to attract large numbers of students. Among the public actors in this competition are the state universities. Here, faculties, *"Grandes Écoles"*, and the *"Institut Universitaire des Technologies"* (IUT) coexist, the latter two having a vocational mission as opposed to the other structures, which focus on general education. Today, this division of labour is being blurred by a real enthusiasm for vocational training in general education schools. This has led to the introduction of fee-paying so-called 'vocational programmes'. In addition, there are a large number of private educational institutions, all of which focus on vocational education and training (cf. Kamdem & Eike, 2014, Bomda *et al.*, 2022).

At a vertical level, the higher education system in Cameroon is characterised by the state dirigisme of the Ministry of Higher Education, which has introduced and enforced the LMD system since 2007. This system is intended to ensure the comparability of the systems and the possibility of transfer. The Cameroonian higher education model is characterised by official bilingualism. English and French are used as teaching and working languages in universities in both the francophone and anglophone parts of the country. As in all African countries, the higher education system suffers from a lack of resources. Universities are severely underfunded and under demographic pressure. As a result, the infrastructure is inadequate in relation to the number of students (DAAD Cameroon, 2017).

5.1 Current orientations of the higher education system in Cameroon

The orientation of higher education in Cameroon has changed over time. They are linked to the political discourse on the objectives of education. The following descriptions focus on the two most important and current orientations.

5.1.1 Competence-orientated teaching

The introduction of the competency-based approach in the Cameroonian education system is the result of a long process. The competency-based approach, also known as integration pedagogy, is a pedagogy that promotes the development of competencies in learners. It is based on the „*principle of integration of learning outcomes, in particular through the regular use of integration situations and learning to solve complex tasks*“ (Fouda, 2019). In fact, it is about developing learning through complex problems and everyday situations. The focus is on continuing the learning activity at a practical level. This allows learners to use real-life situations to develop their competences. This approach, like many others, is a tool in the service of professionalisation. Its introduction in the Cameroonian education system is justified by the need to position learners in the world of work (cf. Feuzeu & Mvoum, 2023, p.6514).

In general, the competence-based approach is based on a number of methodologies, the best known of which is the mobilisation of resources for the acquisition of knowledge, skills and behaviours necessary for the development of real competences. In this approach, the learner is the main actor in his or her own learning. Teaching methods, tools and learning activities are chosen around them and according to their characteristics. In higher education, mobilisation only began in 2007 with the LMD system (Licence, Master, Doctorate). The aim of this reform was to overcome the dialectical opposition between theory, manifested in basic research, and the professional world, dedicated to applied research. The competence-based approach thus represents a transition from the isolated acquisition of knowledge to integrated learning linked to the development of transversal competences (ibid.).

5.1.2 Professionalisation of teaching and employability

The state's difficulties in eliminating youth unemployment and finding a reliable solution to the problem of the mismatch between education and employment are, among other things, the origin of the idea of professionalising the education system in Cameroon and adapting it to the social, economic and cultural realities of the world of production (cf. Maigari 1997, p.97). This is intended to establish a link between education and employment, while contributing to the holistic education of individuals and the employability of young people (Abdouramane 2018, p.135). With regard to the education sector, the Strategy Paper for Growth and Employment (2013-2020) states that the Republic of Cameroon intends to establish a partnership with the private sector to “*professionalise higher education and develop vocational training in economically important sectors*” (MINEPAT 2013, p.45).

In the higher education sector, state universities have been asked - also with the aim of adapting education to the labour market - to abandon the exclusively humanistic orientation of their courses and to include professionalisation modules in their curricula, e.g. modules in communication, education or translation. As a result, young students have “*practical skills*” at the end of their studies, which can be an advantage when looking for or creating a job (cf. Abdouramane 2018, p.141). To promote the employability of young graduates and the professionalisation of teaching in the country, some projects are supported by the Ministry of Higher Education. For example, the Pro-Actp project (Programme d'Appui à la composante technologique et professionnelle) provides universities with funds to improve their technical equipment according to their specific characteristics and needs (cf. Cameroun Tribune, 2023).

However, the Achilles heel of the professionalisation of teaching in Cameroon is the rarity of internships, the low use of research data and the low level of cooperation between universities and companies (cf. Maigari, 1997, p.109, DAAD Cameroon, 2017). Biadou (2017) argues that professionalisation, as it is currently practised in Cameroonian universities and colleges, results in all graduates facing the same difficulties in the transition from university to the labour market. Her analysis shows that the new pedagogy, professional projects and academic internships are effective predictors of the effectiveness of professionalisation and the improvement of graduates' employability. In addition, the success of professionalisation depends on teaching methods, the supervision and guidance of students in different subject areas and the practical application of theoretical knowledge.

5.2 Future skills' added value for competence-based teaching, professionalisation and employability in Cameroon

Both Future Skills pedagogy and the competence-based approach place great emphasis on the acquisition of competences. Future Skills reinforces and enriches the competence-based approach by promoting autonomy and the self-active, self-directed learning process. Learners act as intrapreneurs or experts (Ehlers, 2020). They develop ideas as a team, test them for feasibility and implement them. It is a kind of learning by doing, but

in realistic scenarios. This also promotes a change of perspective, creativity and innovation, as they exchange ideas within the team and organise and make decisions themselves. This increases their sense of responsibility and self-confidence. In this way, learners are consciously or unconsciously prepared for the realities of the world of work and for the skills and abilities they will need in the teamworking, decision-making and self-organisation jobs of tomorrow.

The concept of Future Skills extends the competence-based approach to new competences and future skills. In addition to the traditional skills that this approach promotes, Future Skills adds new skills that will become more important in the future. This means that Future Skills makes teaching even more professional and practical, especially as it focuses on the acquisition of specific skills. Learners trained according to this model are fit, competent and ready for the tasks they will be given in the workplace.

5.3 Conditions for the implementation of the Future Skills concept in the Cameroonian higher education context

As mentioned above, the text corpus was analysed inductively, using the categories we had developed beforehand. The categories were: Characteristics of the Future Skills concept, Possibilities of the concept in the Cameroonian context, Conditions for its implementation in the Cameroonian context, Cameroonian higher education system. After an intensive examination of the category 'Conditions for its implementation in the Cameroonian context', a number of cornerstones were identified, basic elements that are necessary for a smooth implementation and good progress of the Future Skills concept in the Cameroonian context. These are summarised below.

5.3.1 Cooperation between universities and with companies and organisations

Cooperation between the country's universities is important to facilitate student mobility and thus promote the transfer and dissemination of knowledge. This could be achieved by initiating innovation-based research projects. The Cameroonian higher education system is characterised by the dominance of theory. Students are increasingly taught book-based knowledge (see DAAD Cameroon, 2017, Bomda *et al.*, 2022, Ngoei, 2024). They do not put this knowledge into practice enough. The reason for this is the lack of internship opportunities due to a lack of cooperation between universities and companies. Given that the concept of future skills is highly practical and can largely be acquired through practice, cooperation with companies and organisations seems to be a *sine qua non* for implementation in Cameroon. By collaborating with local companies and public and private organisations, Cameroonian universities would contribute to linking practice and theory, with the theoretical or academic part taking place in the university and the practical part in the company in the form of internships or traineeships.

5.3.2 Orientation towards labour market and social trends

The concept of Future Skills was not created *ex nihilo nihilo*. It exists in society and for society. As the name suggests, it is forward-looking. It focuses on future trends or developments in companies, the labour market or society (Ehlers, 2020). Its implementation in Cameroonian universities therefore requires regular updating of the learning content and curricula of the study programmes with regard to trends in the professions and the labour market. Furthermore, the learning content must not be divorced from Cameroonian society, but must take its problems into account. This is also achieved through cooperation with companies and civil society, political or economic organisations.

5.3.3 Creating skills-based and collaborative transdisciplinary degree programmes

Study programmes play a key role in the implementation of future competences in Cameroonian universities. In line with Erpenbeck, they should consider subject-specific and non-subject-specific competences as congruent (cf. Erpenbeck 2020, p.80). As the concept of Future Skills is synonymous with the teaching of future skills, the teaching, examination arrangements and performance records within programmes should be strongly competence-based. In the context of Future Skills, programmes offer transdisciplinary courses and are designed to be flexible so that modules are optional and not compulsory. This allows students to take modules from other programmes and gain credits that are relevant to their future career or personal development.

5.3.4 Use of new active learning methods

As already mentioned, the Future Skills approach emphasises the use of new, active learning formats that engage the body, mind, soul and spirit of learners (cf. Pechleich & Schwemmle, 2023, p.124). These are methods that create space for learning, such as coaching and mentoring, or methods that promote personal development and especially the creativity of learners, such as the reflection workshop (Ehlers, 2020). In the context of future skills, methods are used that enable learners to acquire or practise a variety of skills. Here learning takes place in the mode of learning by doing, where learners are placed in realistic scenarios and independently solve a concrete social problem by applying a variety of competences. Examples are case studies or practical studies. The implementation of these new learning formats in Cameroonian universities requires the establishment of a university didactics unit at each university to train university lecturers in these new active learning methods.

It should not go unmentioned that this is only possible in technically and digitally well-equipped seminar rooms and, above all, with a relatively small number of students. However, Cameroonian universities suffer from a considerable lack of technological, digital and dedicated infrastructure on the one hand and massive overcrowding on the other (see DAAD Cameroon, 2017; Abdourhaman, 2018). Against this backdrop, the Cameroonian Ministry of Higher Education needs to improve the infrastructural situation and reduce the number of students in degree programmes.

5.4 What steps are being taken to implement the Future Skills approach in Cameroon?

Taking into account the Cameroonian context and the specificities of the higher education system, the Future Skills concept can be implemented in Cameroonian universities in a four-step approach. The first step is the participatory development of a Future Skills concept appropriate for higher education institutions. The aim is to build a shared understanding or consensus between university management, teaching staff and students about future skills and related competences. This can take the form of a university project or a series of interactive lectures, lunches or workshops in which university management, teaching staff, and students work together to identify, define, explain, discuss, categorise, agree on and then graphically visualise the future skills that are relevant to them, depending on the learning objective and context. The second step is to anchor the future skills in the module database. Once the relevant future skills have been agreed upon and visualised by the university management, teaching staff and students, they are gradually integrated into the curricula, the module database and the qualification objectives. This step may take more or less time, depending on the design of the programmes. It requires active collaboration between the dean of studies, programme directors and teaching staff. The third step is the development of a Future Skills teaching concept. Depending on the specific characteristics of the university, a future skills teaching concept is developed for each faculty by the University Didactics Office in collaboration with the deans of studies, programme directors and teaching staff. The content of the courses, the modules and the didactic methods are geared to the teaching of the previously defined future skills. The fourth step is the transformation of study programmes into Future Skills Profiles. In this step, the programmes are fundamentally redesigned. From now on, the guiding principle is 'teaching future skills'. This means that study programmes, examinations, examination regulations and infrastructure will be skills-oriented. For this step to be successful, the university must be equipped with the necessary digital, spatial and material infrastructure. The university must also facilitate cooperation between programmes and with companies in the state.

6. Conclusion

The stated aim of this article was to analyse the added value of the Future Skills educational concept and the conditions for its implementation in Cameroonian universities. From the above, it is clear that this concept can contribute to the humanisation of higher education, to personal and quality development and to the promotion of sustainable learning among students. In the context of Cameroonian higher education, it enriches competency-based teaching while facilitating the employability and employability of graduates. Based on these findings, the educational concept appears interesting and a development factor for universities. We therefore advocate a stronger orientation and the use of its potential in Cameroonian universities.

Conflict of Interest Statement

The author declares no conflicts of interest.

About the Author

Hamadou Ngoei works at the University of Music Karlsruhe, in particular in the department in charge of evaluation of studies and teaching. He completed his Master's degree in German and Global Studies at the Université de Yaoundé 1 (Cameroon) and in Leipzig in 2019. Since February 2022, the former Erasmus and ASA scholarship holder has also completed a Master's degree in Evaluation at the Saarland University, where he is already involved in the academic process of the English-language Master's programme in Evaluation with teaching assignments. His current dissertation project at the Saarland University focuses on future skills at cameroonian universities.

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