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Book Review

Forging Tomorrow's University – Future Skills for a Changing World

Creating the University of the Future: A Global View on Future Skills and Future Higher Education

Ulf-Daniel Ehlers & Laura Eigbrecht (Eds.), 2024
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Introduction

The edited volume titled "Creating the University of the Future" presents a comprehensive account of the new learning and next-mode of higher education in an increasingly changing world where noteworthy changes are being experienced involving advancement in technology, globalization, and demographic shifts. The editors, Ehlers and Eigbrecht (2024), argue that skills that were considered important in the past are becoming redundant, requiring the development of new skills known as Future Skills which will play critical roles in ensuring that people succeed. The general context of the volume is explained by the necessity to cope with the issue of popularizing these Future Skills in the global world and by the interest in providing a Future Skills Turn in the system of education.

The book is a collection of more than 50 author representatives of more than 15 countries. With dedicated 30 distinct chapter, the edited volume intends to raise the

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study of innovative teaching and learning, educate educational leaders on the new strategies in Future Skills, and motivate all stakeholders to higher education in the quest to be future-ready.

The Concept and Framework of Future Skills

The authors contributing to several chapters underline a conceptual foundation of Future Skills by remarking that research as well as practice in this field is developing so well. Future Skills or 21st Century Skills have developed since the 2000s. Although they are commonly associated with employability, a rather controversial phenomenon in the world of education, Future Skills rely on a rather general assumption of competences.

In response to this, the editors cite NextSkills study (Ehlers, 2020; Ehlers & Kellermann, 2019) that offers a set of 17 Future Skills profiles as a starting point. The 17 profiles are been divided into three dimensions: a) personal growth (learning oriented); b) coming up with certain solutions (object-related); and c) co-creation, individual organization-related joint creation in the social systems. Future Skills is the interaction between knowledge, skills, and values/motives/habits (disposition to act) and how the three are needed when a person is in a situation in which they have to act without any previous experience in an ever-changing world. Some of these profiles are Reflective Competence that fits in the critical thinking and self-reflection to make constructive progress and Digital Literacy which entails the skill to utilize, design, and critically think through the effects of digital media. The other is Future and Design Competence that emphasizes the capacity to creatively orient oneself through visions of the unknown future.

Assessment of Future Skills

In the book, the evaluation of the Future Skills is given a lot of attention. It touches on the problem of transferring Future Skills to the core of the learning process in higher education even though there are some dilemmas with the old methods of assessment. The publication supports the paradigm shift of the so-called assessment of learning (AoL) toward the assessment as learning (AaL). Usually, AoL is knowledge-based, summative, and the least that can impact the motivation or life-long learning whereas AaL involves students actively carrying out learning and the development of

competences through the participation in the assessment task; metacognition and self-control will be encouraged.

Among the effective practices of AaL, student self-assessment (SSA) is emphasized to be one of the methods of their efficient realization. SSA is not a learning process but rather a formative process where students think and analyze their work in relation to clear purpose, distinguish the strong/weak points, and change them. The advantages of SSA are improved performance in academics, self guidance, critical analysis and learning throughout life.

Significance of feedback in AaL is emphasized as feedback directs the students on their progress and towards their next steps. Minerva Project provides a feasible example of integrated assessment through learning taxonomy which is based on practical knowledge (Learning Outcomes - LOs) and evaluated with direct and formative feedback in the form of rubrics. These LOs will be directly reinforced and supported throughout the curriculum in order to foster knowledge transfer among courses and contexts.

The world of micro-credentials is also proposed as a vital concept of validating and acknowledging Future Skills. They have been described as documentation of learning outcomes of brief learning events, frequently digital with metadata. They are flexible, competent and can be taken as a strategy to facilitate upskilling and lifelong learning that can reduce structural education and job inequalities. Notable considerations on their implementation are clarity of standards, sound data systems and proper quality assurance (Ehlers & Eigbrecht, 2024).

The fact that the book focuses on transforming an approach toward assessment by gradually changing the traditional idea of assessment of learning (AoL) to a more student-based and metacognitive assessment as learning (AaL) is crucial pedagogical innovation. The emphasis put on student self-assessment as one of the central mechanisms of AaL is especially progressive, since the machinery of assessment is reduced in this way to the case of life-long learning and critical thinking. The described models, however, including those applied to German higher education and the Minerva Project, are ambitious and require institutional backing which implies the preparation of both the faculty and cultural change.

The obvious question then is how to transfer these worthwhile, scaled-down, reflective assessment techniques to the level of polity especially in circumstances that are either resource-constrained or / and already generally do not need to have a culture of summative certification. On the same note, although micro-credentials provide the flexibility of validation process of Future Skills resulting in the prospective democratization of lifelong learning, there exists worry over standardisation, quality checks, and acceptance within in the current academic, labor market. Therefore, the opportunity of these assessment innovations is high but subjected to overlying systemic, logistical, cultural obstacles to practice and acceptance (Ehlers & Eigbrecht, 2024, pp. 421 460).

Innovative Teaching and Learning Approaches

The book features several instances of how industry-level innovations in teaching and learning can be pursued including the following:

- Active Learning: Taking the reference of the Minerva project, Gahl et al., 2024 discuss a "radically-flipped" pedagogy in which the assignments are done outside of the classroom, leaving detailed class time to be used to improve active learning: solving problems, teaching each other and analyzing issues. This will be in a bid to ensure to retain the students at least 75% of the class time (Gahl et al., 2024, p. 442).
- Project-Based Learning (PBL) and Community Service Learning: Wolfgang Stark presents his vision of project-based learning and Community Service learning, or, in other words, Future Universities as Activating Resonance Spaces, in which the concept of transformative learning and teaching turns into a collective procedure that can be performed by staff, students, and civil society. This is in addition to the Community service learning which is an empowerment and participative Elective of Project-Based Learning (Stark, 2024, pp. 139–159).
- Solving real-world problems: A Brazilian university's Computer Engineering undergraduate program outlined a methodology of delivering real-life problem solving through innovation projects in which students define, prototype and validate solutions to real life problems with users using an adapted double diamond design process and Startup Garage Innovation Process. Through this process, the following skills can be learned: active learning; creativity; critical

thinking; teamwork and problem-solving (Santana & de Deus Lopes, 2024, pp. 393–413).

- Self-Directed Learning: Design-Your-Own-Module (DYOM) at National University of Singapore (NUS) promotes self-directed learning through the opportunity of undergraduates to design their own courses, which can be taken to earn credit. Likewise, in Bremerhaven, Germany, the Team Academy model (in Germany called team academy, i.e., triggering entrepreneurial and Future Skills by action learning, self-directed reading and real team companies as learning spaces). Students forge individual learning contracts to explore their development and experience goal orientation (Vogel, 2024, pp. 215–239; Green et al., 2024, pp. 529–539).
- Transdisciplinarity: Countries in Southern Africa, such as Mauritius and Eswatini, prepared a Transdisciplinary Skills and Competencies module to address skills mismatch issues as well strengthen resilience self-efficacy and entrepreneurial attitudes & mentalities. The correlations addressed in this module, such as collaborative networking, communication, growth mindsets and professional/ethical practices. There is also priority outlined for green skill and ethical relationship in this ever-changing environment.
- World Citizen School Model: The model has put much focus on collective and group-based learning, offering 6C skill sets (Communication, Collaboration, Creativity, Critical Thinking, Civic Literacy, and Character & Collective Reflection). It considers student projects and social start-ups as communities of practice with students developing their ethical leadership and designing competences in real undertakings and work across different disciplines by working interdisciplinarily.

Although the book provides an abundant range of new teaching and learning models, the majority of the case studies have resource-advantaged or reform-geared settings. Such leads to the question of scalability and feasibility of such innovations on the less-resourced or traditionally organized institutions. Moreover, despite the basis in best practices and empirical studies, the process of transforming the theory into long-term, institutional-level change is usually complicated in these models. It seems that success rests upon institutional culture, faculty capacity and flexibility of governance

and quality assurance systems. It goes on in the DYOM (Digital Young Literacy in Offenders Objectives), the Green Skills and Data Literacy (NUS Continuing Education programs) (Green et al., 2024).

Globality and Strategies

The book contains a broader concept about Future Skills strategies of different nations. Some of the major highlights include the following:

Singapore: SkillsFuture Movement

This has been crystallised into mapping of job roles and skills requirements through sectoral interaction, which culminates into Singapore Skills Frameworks. It observes adoptions and development of skills through surveys and labour market analytics, and proactively tackles them to the barriers such as affordability, and information asymmetry (Gog et al., 2024).

Japan: Society 5.0

Japan is working hard to train the Future Skills in Society 5.0 through Educational DX (digital transformation). This means it is working towards promoting the "internationalization

of universities (known as Internationalization at Home) with the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" (Ikeda, 2024, pp. 549-550). Japan recognizes the value of continuous learning, as well as the growing importance of micro-degrees in comparison to traditional university degrees responsiveness to job readiness.

New Zealand: Universal Learning Community

Chapter 30 situates New Zealand's education system within the pressing challenge of expanding cost-effective skills-development mechanisms while ensuring adaptability to rapidly evolving societal and economic demands. Marshall (2024) sketches out a community-based approach to future skills as the reason behind this suggested "Universal learning community with future skills," which takes inspiration in the Māori

notion of an Ako (mutual learning), recommending microlearning as a fundamental method and approach to use, especially in controlling professions.

The Future Skills Debate Showcase

Development of new demands that should be met by the institutions of higher learning seems to be a major theme. Future Skills debate has two elements of discussion associated with it. One reflects a discourse of employability (ensuring a citizen to have jobs), and another, sometimes in higher learning, is more emancipatory in its sense (developing the skills of co-living, co-creation, and co-shaping the just and sustainable world). However, the discourse posits several challenges:

- The fact that Future Skills lacks definite and uniform definitions in various settings.
- Incorporating the Future Skills development into the current curriculum without overburdening it.
- The reality of the traditional compulsory education having a tendency to give few chances to develop sustainable soft skills.

The authors have suggested a few strategic approaches to addressing those challenges:

- Facilitating students to create their self-individual Future Skills learning needs and pathways.
- Integration of Future Skills development process as a change process at a holistic institutional level.
- Designing an ecosystem of deliberate serendipity in which all the moments are the possible learning experience stimulated by ardent curiosity.

Moreover, the volume gives a detailed picture that higher education needs to evolve along with changing the world by embracing Future Skills. It informs about different theoretical thinking, research-based, and practicable experiences all over the world and accentuates the transition to learner-oriented, dynamic, and flexible education models sponsored by new assessment and continuous communication to learning.

Although the global snapshots in the book outline creative and contextually based solutions to stimulate Future Skills, there are issues that are evident and show that they

still exist. It is remarkable that new promising models, such as the SkillsFuture introduced in Singapore or Educational DX in Japan, can be applied to a wide range of higher education settings only with a keen approximation to the infrastructure, cultural specifics, and policy frame. Also, even the vision of a universal learning community projected by the New Zealand proposal has to come to terms with matters of scale and inclusivity in a heterogeneous population of learners. Developing Future Skills cannot be reduced to a merely curricular project and requires both policy and pedagogical reformation as well as assessment to be inclusive and truly effective.

Conclusion

Edited by Ehlers and Eigbrecht (2024), Creating the University of the Future has a powerful and pressing appeal: the systematic change in higher education is necessary because of the mindset that is connected with the belief the current universities have to be under radical reconsideration to oppose the challenges of the future. The ultimate stance of the book is quite visionary yet tangible: universities are not only learning organizations but the driving engines of the society in terms of providing the learners with the set of competences diverse in vision, that are referred to as the Future Skills, and are cultivated in innovative ecosystems of learning and provide the ability of acting in the uncertain and emergent environments.

The idea voiced by more than 50 different countries, intergovernmental organizations (OECD, UNESCO) and leading universities throughout the volume is that there is no longer any business-as-usual is no longer arguable. Older degree-based programs, strict disciplinary structures, and knowledge delivery schemes are not well suited to educate students to cope with reality characterized by complexity, digital enhancements, demographic change, environmental challenges, and globalization. To answer this, the book envisages what it calls a ‘Future Skills Turn’ – a pedagogical, institutional, and philosophical turn that puts a focus on developing reflexive, ethical, and systems-oriented learners.

The volume emphasises the fact that universities should transform themselves no longer into guardians of knowledge but into facilitators of learning. It suggests burying once and for all the myth of fixed curricula and courses and outcomes--and embracing learning journeys that remain nimble and learner-centered, with faculty-as-coaches, responsive assessment (e.g., assessment-as-learning), and genuine, interdisciplinary

projects. There is also more concern with micro-credentials, digital badges and modular learning as creative ways of making learning adaptive and equitable in credentialing learning. Ehlers and Eigbrecht emphasize that the cultivation of Future Skills must extend beyond a narrow alignment with labor-market demands, instead fostering capacities that enable individuals to participate democratically, act sustainably, and flourish as human beings. Accordingly, universities are tasked not merely with preparing students for specific occupational roles, but with equipping them to navigate a world characterized by instability and pluralism—one that requires critical thinking, creative problem-solving, and the development of informed, responsible citizens.

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