

Table 2. Four phases of higher education institution (HEI) development from a worldviews' perspective.¹

| | Traditional HEI 1.0 | Modern HEI 2.0 | Postmodern HEI 3.0 | Integrative HEI 4.0 |
|---|---|--|---|--|
| general focus on | <ul style="list-style-type: none"> • input, authority and hierarchy | <ul style="list-style-type: none"> • output, efficiency and competition | <ul style="list-style-type: none"> • dialogue with stakeholders and learners | <ul style="list-style-type: none"> • systemic solutions, co-creativity and sustainability |
| education | <ul style="list-style-type: none"> • teacher-centric • the scientist reads his books • memorizing standardized knowledge • learning for recognition and academic titles | <ul style="list-style-type: none"> • test-centric • disseminating factual knowledge, analytic strategies and sound methods • modules and projects • learning for the test • learning as a competitive game for future success | <ul style="list-style-type: none"> • learner-centric • competencies-oriented transfer of self-reflective knowledge • focus on dialogical seminars and project-based learning • blended learning • learning as personal growth | <ul style="list-style-type: none"> • system-centric, holistic • whole-person approach • dynamic balance between subject matter, group, individual learners and context • research-based learning • co-creative and mindful learning |
| research | <ul style="list-style-type: none"> • search for absolute truths • self-concept: observing universal natural laws • focus on strong theories based on both deduction and induction • construction of disciplines | <ul style="list-style-type: none"> • standardization of research processes and peer-review • self-concept: testing and applying natural laws • competition for grants • measurement of success with rankings, impact factors etc. • focus on quantitative methods | <ul style="list-style-type: none"> • inter- and transdisciplinarity • action research • self-concept: understanding social dynamics • dialogical research processes dealing with societal issues • integration of qualitative research methods | <ul style="list-style-type: none"> • transdisciplinarity • co-creative research • self-concept: co-creating systemic transformation • global action university • living lab approach • focus on real-life solutions • idea of open science |
| governance, operations and culture | <ul style="list-style-type: none"> • focused on teaching, basic research and technological transfer • building palaces of knowledge: impressive buildings and extensive libraries • legitimacy by authority • compliant to regulation, e.g. waste management and safety • one-dimensional approach to sustainability | <ul style="list-style-type: none"> • focused on quantitative growth • rapid growth in functional buildings with little energy awareness • control of cash flows and process management • entrepreneurial activity • science parks • sustainable development as a management task | <ul style="list-style-type: none"> • HEI as a place for meeting diverse yet like-minded people • facilitating community and individual expression • diversity management • legitimacy by participation • goal of climate neutrality • sustainable development as a community task and third mission content | <ul style="list-style-type: none"> • HEI as a space for encounter, reflection and inspiration • physical and virtual integration of different societal and ecological systems • whole-institution approach to sustainability • additional fourth mission: co-creation for sustainability |

¹(Based on Giesenbauer & Tegeler, 2020; Müller-Christ, 2017; Niedlich et al., 2019; Scharmer, 2018b, 2019)