Developing students' SDG competences

Hogeschool Van Hall Larenstein

It is the mission of Van Hall Larenstein University of Applied Sciences (VHL) to train high-quality, committed, and entrepreneurial professionals who contribute to a more sustainable world. Graduates need competences to address complex problems like climate change, rapid urbanization, environmental degradation, and conflict over scarce natural resources. These challenges are complex in nature, and can no longer be addressed by routine practices. To respond adequately, the knowledge and engagement of different stakeholders are required: not just scientists, also policy makers, professionals, citizens, and the private sector combined can bring about meaningful change. This implies that future graduates require the competence to work together with others outside one own's discipline, institute, culture or context.

But how to develop SDG competences, and what do they consist of? These questions are part of the ongoing hbo postdoc research – funded by Nationaal Regieorgaan SIA – I conduct together with lecturers and researchers of VHL from International Development Management (BSc), Land & Water Management (BSc), Forestry and Nature Management (BSc) and River Delta Development (MSc).

Point of departure is the complex working context where graduates will work on wicked problems. Secondly, the existing competences and VHL's assessment policy to assess these competences at three levels in the BSc programme and at MSc level. Third, a review of 'complexity literature', 'SDG and education literature', 'transdisciplinary research' literature, and 'social learning literature', which led to a matrix describing quality criteria of the SDG competence at four levels (page 63).

In reality, the seven elements of the SDG competence are interlinked and should not be 'trained' separately. We are not sure yet whether above elements are complete; it requires discussion and exchange with other higher education institutions to validate them. We further question whether we can reach level 3 within the BSc study programme and level 4 in the MSc..

The matrix is food for thought and a first attempt to bring some substance to the table on 'what entails being SDG competent'. What we do agree on, is that real-time assignments by commissioners, and particularly VHL's Living Labs, offer conducive learning environments to develop the above competences, both in the Netherlands and abroad. A stronger connection between education, workplace and applied research is therefore desirable.

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SDG content

Elements	SDG competence level 1	SDG competence level 2	SDG Competence level 3	SDG Competence MSc level
1. SDG content expertise	• Become aware of the SDG framework as moral compass • Theories and concepts on sustainable development (SE)	• Apply SDG framework for innovation within International Development sector (technological, green and inclusive economy) • Theories and concepts related to specialization	• Strategize for 'strong sustainability' – includes questioning dominant economic and political structures exploiting nature and humans • Linking major-specific theories and concepts with those from other disciplines (systems-thinking)	• SDGs as guiding principle – positioning /dealing with the democratic paradox: engage with and confront different perspectives on sustainable development • Search for relevant knowledge and new insights with other stakeholders and citizens, practitioners, etc.
2. Acknowledging and dealing with diversity	Understand multiple normative perspectives within sector, and empathic listening	Able to acknowledge and integrate multiple perspectives in innovations and solutions	Boundary-crossing: able to position oneself in arena to discuss and address wicked problems related to social and environmental domains	Complexity thinking: able to identify possible futures that can be contested and discussed (future literacy)
3. **Facilitation of multi-stakeholder processes**	Working in a team (reflection-based learning)	Engage with commissioner in real-time assignment (task-based learning)	Multi-stakeholder process facilitation (action-based learning)	Cross-sectoral partnerships facilitation (action-sensemaking-learning)
4. Communication in cross-cultural setting	Understand own assumptions and values in cross-cultural communication	Able to foresee and explain how people from the host culture would react in certain situations;	Aware of cultural differences and where convictions/ideas could clash. Know approaches how to discuss differences in order to overcome them.	Able to deal with 'democratic paradox' where values are in dispute, stakes high and decisions urgent
5. Managing a project/responses	Project management and Logical framework	Programme management using Theories of Change	Scenario development, Outcome Mapping, Social Learning	Complexity-sensitive Theories of Change, Strategic Management
6. Production of knowledge/ applied research	Use credible sources and referencing for secondary and primary data collection through triangulation	Use mixed research methods to judge values and distinguish credible sources from fake news to arrive at sound findings	Verifying knowledge by engaging with different actors through sense-making process and arrive at plausible findings while knowing trade-offs and spill-overs	Socially robust knowledge creation (quadruple helix processes)
7. Personal leadership (inter-personal relations)	Able to critically reflect on own abilities and performance	Able to provide constructive feedback to others while knowing own needs and limitations	Demonstrate courage, choice and commitment, and defends choices based on reflection on oneself and society	Transformative leadership – creates vision and inspires others to make envisioned change possible, and enhance performance

Figuur 1 *SDG competences matrix*