



## **To Cope with Present and Future Catastrophic Risks, Higher Education must Train Future Decision Makers to Think Critically, Ethically and in Systems**

**Lennart Levi**

Emeritus Professor of Psychosocial Medicine, Karolinska Institute;  
Fellow, World Academy of Art & Science

**Bo Rothstein**

August Röhss Chair in Political Science, University of Gothenburg, Sweden

### **1. Global Risks**

The World Economic Forum (2017, 2018) has issued reports on major “Global Risks” facing mankind. The Global Challenge Foundation (2017) has complemented this analysis with a considerable number of additional “Global Catastrophic Risks”, both high-risk and high-likelihood.

To counteract these risks (as well as the present mounting disaffection and disruption across the world, partly due to the short-term and silo thinking of the elite experienced so far), the 193 Member States of the United Nations (United Nations, 2015) have agreed on 17 Sustainable Development Goals (SDGs) and 169 targets.

### **2. The 17 UN Sustainable Developments Goals**

The SDGs include: no poverty; zero hunger; good health & well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice and strong institutions; and partnerships for the goals.

However, recent political change in Europe and elsewhere puts this hope at risk. To increase the likelihood of success for these 17 SDGs, Institutions of Higher Education world-wide must teach and train to-day’s students—to-morrow’s decision makers—to *think both critically and ethically, learn to cope with ethical dilemmas and apply systems thinking approaches* to serious and complex societal problems (Sternberg, 2016; Levi and Rothstein, 2018).

Students need to be aware of the local, regional and global contexts of their life and their decision making. Many of today’s students do not grasp their role in and responsibility to the world, and many don’t seem to care.

A single course in college will be only the beginning. The families, media, religions, primary and secondary schools, workplaces and institutions for higher education must also be educated and recruited to do their part (cf. Summers and Cutting, 2016).

### 3. Critical-ethical Analysis and Systems Thinking

Briefly, then, this 2030 Agenda for Sustainable Development aims at promoting *the entire cluster* of the 17 SDGs and 169 targets.

To achieve this, critical-ethical analysis, ability and willingness to handle ethical dilemmas and apply a systems approach are indispensable prerequisites. By “critical” we refer to application of careful, exact evaluation and judgement. By “ethical” we refer to a set of principles of right conduct. By “systems” we refer to a group of interacting, interrelated, or interdependent elements forming a complex whole. Accordingly, systems thinking is based on the recognition of interconnectedness and systems processes (cf. World Economic Forum, 2017, 2018).

*Critical thinking* can be developed in four steps. The first—and easiest—step is to try to show that you are right. The next step is to try to show that your opponent is wrong. At this stage many stakeholders stop. But we need to go further, to the third step—to look for the truth. And, eventually, in the fourth step, to try to prove yourself wrong, and accept your original standpoint only after having failed to do so (cf. Jarrick, 2017).

---

*“It is crucially important that leading institutions of higher education start leading by example to increase future decision makers’ motivation.”*

---

### 4. So, What needs to be done?

The Council for Higher Education Accreditation (CHEA)/International Quality Group (CIQG) and the International Institute for Educational Planning of the United Nations Educational, Scientific and Cultural Organization (IIEP-UNESCO) have issued an advisory statement on combatting “corruption” in higher education internationally (2016). The Statement, however, uses “corruption” as a general term to designate a *broad variety of malpractices* in institutions of higher education, such as appropriation, bribery, cheating, corruption, deceit, embezzlement, extortion, favoritism, fraud, graft, harassment, nepotism, etc.—an ABC of misconduct. Accordingly, ethical thinking is based on a set of principles of *right* conduct, e.g. based on the UN Universal Declaration of Human Rights (United Nations, 1948), and/or on the UN 17 Sustainable Development Goals (United Nations, 2015).

There is no doubt that humanity badly needs an effective *implementation* of Agenda 2030, its 17 Sustainable Development Goals and its 169 targets. To make this happen, we need trustworthy, ethical, honest and impartial government institutions that exercise public power and vary out their policies fairly. They are much more likely to promote trust and social capital which in turn improve population health and well-being.

However, all this requires critical-ethical analysis and systems thinking—abilities not particularly prevalent and accordingly in need to be taught and implemented throughout the entire life span, with higher education as a key contributor. It is crucially important

that leading institutions of higher education start leading by example to increase future decision makers' motivation and ability to act accordingly.

This would be in line with the Sustainable Development Target # 4.7, namely to “ensure that all participants acquire by 2030 the knowledge and skills needed to promote sustainable development and lifestyles, including *education in human rights, gender equality, peace, nonviolence, global citizenship, appreciation of diversity, and respect for the role of culture.*”

---

*“We ask universities and institutions of higher education to shoulder their role as key agents of change.”*

---

It should be obvious that this is far easier said than done. The 17 sustainable development goals and the 169 targets are rather elusive, due to their range, complexity and occasional incompatibility. They would be extremely difficult to implement—*unless* key stakeholders have been effectively trained in critical-ethical analysis and systems thinking.

## 5. Steps to Take

Recognizing the university sector's potential and responsibility to help shape the moral contours of society for the better, and given the societal benefits from increased social capital—we ask universities and institutions of higher education to shoulder their role as key agents of change (the Compostela Group of Universities' Poznan Declaration, 2014):

- ***Endorse a cross-faculty approach*** to broaden the curricula to include components of critical-ethical analysis and systems thinking.
- ***Appreciate the unique opportunity to shape professional identities.*** At universities, the norms and boundaries of acceptable behavior are to a large extent set for a number of professions. Universities have a possibility as well as a responsibility to help shape the normative contours of society for the better.
- ***Teach the teachers.*** Provide pedagogical resources and training to a wide range of faculty, in order to encourage the incorporation of issues of critical-ethical analysis and systems thinking within their classes.
- ***Develop a webpage*** for information dissemination of pedagogical material, discussion topics, case studies collection, eLearning-tools etc.
- ***Organize conferences*** to exchange good practices as regards implementation of the 17 SDGs and 169 targets of the UN Agenda 2030.
- ***Develop partnerships*** with other universities, networks, national authorities for higher education, civil society organizations championing the critical-ethical agenda.
- ***Commit for the long-run.*** Changing norms and their consequent behavior is an inherently slow process. While there may indeed be ripple-effects from promoting critical-ethical behavior and systems thinking, it is likely that the “exposed” generation will need to reach a critical mass and/or managerial positions before true and measurable change will occur.
- ***Coordinate with national education authorities and social partners*** on the fulfillment of the state's obligation under the UN Agenda 2030 SDGs.

- **Encourage voluntary associations** and participation in these.
- **Talk the talk and walk the walk.** In addition to educating critical-ethical behavior and promoting systems thinking, it is crucial that institutions for higher education—as agents providing public goods—themselves act accordingly, ensuring impartiality in teaching, student assessment and research, and that matters regarding awards of degrees, employment and promotions are based on legitimate, transparent and objective criteria.

## 6. Low Costs, High Gain

Considering the relative low costs of implementation and the possible societal gains, if implemented broadly, in the long term this initiative has the potential of being extremely cost efficient. More importantly, however, is that ethically, it is likely the right thing to do.

This is why we propose a high-level conference on such issues, with a focus on the implementation of Agenda 2030 (what should be taught, and how). Based on its outcome, recommendations should be made regarding the necessary redesign of all higher education and for its subsequent implementation.

### *Authors Contact Information*

**Lennart Levi** – Email: [lennart.levi@eurostress.se](mailto:lennart.levi@eurostress.se)

**Bo Rothstein** – Email: [bo.rothstein@pol.gu.se](mailto:bo.rothstein@pol.gu.se)

## References

1. CHEA and IIEP-UNESCO: Advisory Statement on Combatting Corruption in Higher Education. Paris: UNESCO, 2016.
2. Global University Network for Innovation (GUNi): Higher Education in the World 6, 2017 (<http://www.guninetwork.org/report/higher-education-world-6>).
3. Global Challenges Foundation: Global Catastrophic Risks 2017. (<http://api.globalchallenges.org/static/files/Global%20Catastrophic%202017%20BW.pdf>)
4. Jarrick, A.: Det finns inga häxor – en bok om kunskap. (There are no witches – A book on Knowledge). Stockholm: Weyler, 2017.
5. Levi, L. and Rothstein, B.: Educating Ethical Leaders and Critical Thinkers. University World News, Issue No. 488, 2018.
6. Poznan Declaration: Santiago de Compostela: USC, 2014 ([www2.usc.es/gcompostela/en/activities/PoznanDeclaration.html](http://www2.usc.es/gcompostela/en/activities/PoznanDeclaration.html))
7. Sternberg, R. J.: What Universities Can Be – A New Model for Preparing Students for Active Concerned Citizenship and Ethical Leadership. New York: Cornell University Press, 2016.
8. Summers, D. and Cutting, R. (eds.): Education for Sustainable Development in Further Education. London: Palgrave Macmillan, 2016.
9. United Nations: Universal Declaration of Human Rights. New York: United Nations, 1948. (<http://refworld.org/docid/3ae6b3712c.html>)
10. United Nations: Transforming Our World: the 2030 Agenda for Sustainable Development, 2015 (A/RES/70/1).
11. World Economic Forum: The Global Risks 2017, 12<sup>th</sup> Edition. Geneva: World Economic Forum, 2017. (<http://wef.ch/risks2017>)