On the Road IV.9
University appraisal for diversity, innovation and change towards sustainable development? Can it be done?

Zinaida Fadeeva, Laima Galkute, Heila Lotz-Sisitka, Dzulkifli Abdul Razak, Miguel Chacón, Masaru Yarime and Goolam Mohamedbhai

PREAMBLE

This paper builds on a panel discussion that took place during a parallel session hosted by the United Nations University Institute of Advanced Studies during the Global Universities Network for Innovation (GUNi) Conference held in November 2010 in Barcelona. It brought together panellists from Africa, Asia, Europe and Latin America who explored interplays between national and regional higher education (HE) appraisal strategies as well as practices at the organizational level, with specific reference to what such appraisal systems may mean for sustainable development (SD), and what education for sustainable development (ESD) means for appraisal systems. In particular, the discussion was focused on the role of ranking and quality appraisal systems of higher education institutions (HEIs) – both existing and emerging – in facilitating transformation of HE and, as through related processes, contributing to transformations in society.

The paper does not seek to provide a comprehensive analysis of the appraisal issues, but through five case studies from different regions of the world, and through some critical discussion and deliberation on issues raised by the panellists at the GUNi Conference, the paper provides a platform for further analysis of how SD principles and practices are to be considered in relation to HEI appraisal and assessment systems. At the heart of this lies a question of how such systems enable or constrain HEIs' contributions to a more sustainable society.

REDEFINING THE ROLE OF HIGHER EDUCATION IN THE FACE OF GLOBAL CHALLENGES

In a globalized world concerned with ever more complex economic, social and environmental challenges, many institutions, including HEIs, are rethinking their fundamental assumptions and goals in relation to meeting challenges of today and future-oriented transformation. At the same time, HE is seen as having the capacity and opportunity to facilitate change towards a more sustainable future.

In presenting different situations in HE academic quality incentives, where appraisal systems are increasingly having a greater influence in shaping what is valued in and as HE, we refer to a concept of patterns of HE reform as proposed by Hargreaves and Shirley (2009) using the terminology of 'four ways'.

The 'first way' involves state support with professional freedom, but also inconsistency and uneven performance and leadership. Educational improvements, they argue, are informed primarily by intuition and ideology, rather than by evidence.

The 'second way' involves competition and educational prescription, with a loss of professional autonomy. Innovation gives way to standardization, uniformity and inequity. Diverse forms and sources of motivation and internal capacity for different forms of leadership are lost.

The 'third way' seeks to balance professional autonomy with accountability. This, Hargreaves and Shirley (2009) explain, has become 'bogged down' with the gathering of endless achievement/performance data shaping short-term solutions and competitiveness, with failed capacity for engaging with stakeholders or steering innovation. The 'third way' is about loss of a 'different path' in HE. The emergence of ranking systems for universities falls primarily into this 'way' of shaping and managing educational reform.

In proposing a 'fourth way' for guiding educational reforms, Hargreaves and Shirley (2009) argue that educational reform should, in contemporary society with its more complex challenges, be based on 'educational change through deepened and demanding learning, professional quality and engagement, and invigorated community engagement and public democracy'. Such a 'fourth way' needs to disrupt and depart significantly from the 'second way' or 'third way' of educational transformation. The discourse proposed in this 'fourth way' is not unlike the discourse used within the UN Decade of ESD, which seeks to 're-orient' education systems towards sustainability through transformative learning and practices that are socially innovative and that contribute to societal transformation.

In order to meet the expectation of being a driving force in creating sustainable societies, there is increasing consensus that HEIs require change at the systemic level that will allow them to adopt more holistic approaches, and through this develop greater capability for tackling complexities and looking for a rational compromise in dealing with interrelated economic, social and environmental dilemmas to achieve a sustainable future for all life on the planet. It seems that HEIs are being asked to form a new 'social contract' with society that reflexively and critically engages with the now all too obvious failures of some forms of modern development (for example providing people's needs for a decent quality of life free from poverty, and preserving nature and the Earth's ecosystems) and that engages different interests and social groups. This is to be done through practising participative democracy in decision-making in all spheres of HE activities: teaching and learning, research and outreach.

PUBLIC INSTRUMENTS FOR ACADEMIC QUALITY: MARKET AND STATE REGULATION

The phenomenon of increasing forms of assessment, quality management, and international ranking is linked to rapid expansion, internationalization and globalization of HE coupled with diminishing resources from the state. Such assessment schemes are often defined as instruments determining the quality of HEIs. The majority of the assessment systems as practised in international university settings today are born out of the culture and practices of the 'second way' and 'third way' educational reform, as described briefly in the previous section.

There are different forms of regulation in HE and new public policy instruments for the assurance of academic quality (Dill and Beerkens, 2010):

- Professional (self)regulation, for example professional accreditation and licensure, external examining
- Market regulation by means of information provision (variety of rankings)
- State (direct) regulation as specification

of standards, programme assessment and accreditation, institutional accountability, and so on

Market regulation and state regulation are often presented as two different approaches in HEI appraisal. In reality, however, there are a variety of mixtures and interrelationships between these two apparently 'clear' modalities. The discussions of the pros and contras to various schemes, depending on the paradigm and assessment criteria used, deal with a vast set of questions ranging from methodology to impacts.

If HEIs are to assume new responsibilities, as SD challenges would purport to indicate, then assessment of their actions would also need to focus on different aspects of HE performance. The ways in which academic quality is currently defined (often narrowly) would need to be complemented by the characteristics that recognize the HE transformative role. Such an argument proposes that quality of HEIs should become a measure of their leadership in social transition. This understanding brings discussion of the quality criteria and quality assurance of HEIs to the forefront of debates on the future of HE per se.

The main question of such debates is: will participation in creating an 'alternative' appraisal system tailored to ESD perspectives enable this to happen, or will it perpetuate the current cultures of exclusion that are being created by present cultural logics of university rankings? What can we propose at the level of quality assurance to implement HE reforms that are oriented towards the 'fourth way'?

We will consider two particular examples of these approaches, that is, rankings and quality assurance systems (particularly of the European Higher Education Area), in order to explore to what extent they are supporting the development of HEIs in terms of innovation and transformative capacity.

CASE STUDIES OF RANKING SYSTEMS AND THEIR ROLE VIS-A-VIS HEI TRANSFORMATION IN A CONTEXT OF SUSTAINABLE DEVLOPMENT

Current global rankings have been seriously criticized for their methodological deficiencies related to, among other factors, selection of indicators, choice of weights assigned to criteria, reliability of data and replicability of results (Badat, 2010). We do not attempt to fully recap such criticisms, referring the reader to more complete analyses of ranking schemes (for example Stella and Woodhouse, 2006; Merisotis and Sadlak, 2005; EUA, 2009). Instead, we would like to explore some implications of the ranking characteristics for encouraging transformational qualities of HEIs as societal leaders in the context of sustainable development.

The five case studies below provide some examples of how ranking and assessment systems are currently structured, but also give insight into how these systems are evolving, and point to the 'gaps' in the system for some areas of innovation. The case studies also show that there are substantive process, contextual, ethical and other forms of problems that emerge from efforts to 'standardize', 'rank' and 'quality assess' HEIs across a diversity of institutions and contexts. From an SD perspective, which seeks transformation of society, further deficiencies and gaps emerge.

CASE 1: ACADEMIC QUALITY ASSESSMENT SYSTEMS IN MALAYSIA *(Dzulkifli Abdul Razak)*

SETARA is a rating system for Malaysian HEIs that is run by the Malaysia Qualification Framework (MQA) under the Ministry of Higher Education (MHE). The three-year cycle of assessment places HEIs into one of six tiers as a result of an independent exercise that involves site auditing, verification and validations. The focus of the assessment is on teaching and student-centred activities.

Another form of assessment, involving research and development performance of HEIs, is structured as a benchmarked system around eight main criteria. This on-site system for verification and validation is carried out under the auspices of the MHE by peer-group assessment teams. It is conducted once in three years with funding mechanisms attached to it.

More recently an Academic Performance Audit (APA) was instituted to look at the processes of quality assurance in all HEIs. As a part of the process, a panel appointed by the Ministry of Quality Assurance assesses the organizational processes including inputs, structures, personnel and operations. The panel's recommendations are focused on various quality aspects of HEI organization.

The APA is not a one-size-fits-all evaluation, although the panel seems to have standard criteria that are perceived as a minimum. With its relative flexibility, it might allow appraisal of any dimensions that the HEIs want to pursue including community engagement, sustainability, and so on. It could be considered more of an open-ended appraisal-like system with the potential to facilitate the transformative role of HEIs.

CASE 2: ACCREDITATION AND QUALITY ASSESSMENT IN LATIN AMERICAN COUNTRIES *(Miguel Chacón)*

Evaluation and accreditation processes are compulsory for some Latin American countries (for example Argentina, Brazil, Chile) and optional for others (for example universities in Central America). The current assessment systems focus mostly on scientific quality as shown by means of publications and patents. Arts and social sciences that cannot obtain patents often remain underfunded. The evaluation systems mostly review university activities related to developed urban areas since research shown by patent is related to industrial activities localized in cities.

As evaluation systems often consist of uniform standard categories, it makes it difficult to acknowledge HEIs that innovate in the areas of social research and transformative pedagogies. Innovations in education and research connected to SD in local contexts are also poorly reflected.

The appraisal systems appear to be fragmented, as there are two evaluation and accreditation systems in some Latin American countries: one for universities and the other for academic programmes with different criteria of assessment for each of these programmes. Addition-

ally, there are different accreditation agencies according to careers, especially in the case of master's programmes. As a result, a satisfactory performance assessment of a university may not be contingent on the satisfactory performance of programmes (or their components).

Recently, more local actors are expressing interest in the governance and strategic planning of HEIs regionally and locally. As a result, HEIs have started introducing new curriculum and social research, teaching the community practices, and campus operations that combine applied science and social research as well as problem-based approaches. These new forms of practice in HEIs will need to be considered in the development of assessment systems.

CASE 3: ACADEMIC QUALITY ASSESSMENT SYSTEMS IN JAPAN *(Masaru Yarime)*

In Japan, there are two major formal systems of university evaluation – the Certified Evaluation and Accreditation (CEA) and the National University Corporation Evaluation (NUCE) (Saito, 2010). CEA, which was introduced in 2003, is a mandatory evaluation system for universities as well as junior colleges, technical colleges, and professional schools on overall conditions of education and research conducted by independent quality assurance agencies, which are in turn certified by the national government. Universities are assessed once in seven years by one of the certified organizations they choose themselves.

Currently there are three certified organizations for universities, namely, Japan University Accreditation Association, National Institution for Academic Degrees and University Evaluation (NIAD-UE), and Japan Institution for Higher Education Evaluation. The NUCE, on the other hand, started being implemented in 2008 and is a performance-based evaluation system for 86 national university corporations and four inter-university research institute corporations with regard to the extent of achieving their mid-term objectives, mid-term plans and annual plans for education, research and management. The NUCE Committee under the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) is responsible for this evaluation, and NIAD-UE evaluates the extent of the achievement of mid-term objectives and the present situations on education and research.

In the formal systems of university evaluation, performance indicators are not decided by the evaluation agencies, but instead are set by the universities themselves based on their own missions and objectives. To some extent, that could promote diversity among universities. Difficulties in measuring outcomes of education, research and community outreach – as compared to the assessment of operational activities of universities – lead to their insufficient incorporation into the formal evaluation systems. That provides little incentive for HEIs to make significant contributions to SD, which requires comprehensive, long-term frameworks for evaluation. While no ranking-based evaluation systems are conducted by the public sector, there are many examples of making ranking-based evaluations in the private sector, particularly in the mass media. They tend to focus on performance indicators that are relatively easy to observe in short-term perspectives, such as employment of graduates in industry, without giving much attention to contributions to SD.

CASE 4: QUALITY ASSURANCE SYSTEMS IN AFRICA *(Goolam Mohamedbhai)*

While the overall application of Quality Assurance (QA) systems in HE at national or institutional level in sub-Saharan Africa is still weak, some notable developments are on the way. In 2009, an African Quality Assurance Network (ArfiQAN) was created to promote QA through awareness and capacity building, assist in establishing national QA agencies and encourage the setting up of institutional QA systems in African countries.

The global university rankings are now acknowledged to be inappropriate for Africa. They concentrate on research and research funding and give little importance to teaching and learning and community engagement, vital for Africa's development. A new approach being adopted by the African Union is the African Quality Rating Mechanism (ARQM). The ARQM covers broad criteria, taking into account all the activities of HEIs. Its objectives are to enable institutions, through their own assessment, to build their quality and to facilitate national and regional benchmarking. It will also assist in revitalization and harmonization of African higher education, both major thrusts of the African Union's strategy for African HE. The African Union also plans to use the rating mechanism to place students who have been awarded the Mwalimu Nyerere African Union scholarships. A preliminary assessment of some institutions has been carried out by the African Union Commission and the findings will help to improve on the ARQM survey instrument.

The major focus of quality assessment systems in Africa, as they are being put in place, is at present to improve quality and standards and to lead to some degree of harmonization across the continent. This will contribute to SD. In the first version of the AQRM questionnaire, institutions are asked about transdisciplinarity and community engagement, both of which will have an effect on SD.

CASE 5: EUROPEAN HIGHER EDUCATION AREA *(LAIMA GAIKUTE)*

A vision of the European Higher Education Area (EHEA) was set out by the Bologna Declaration in 1999 to fulfil HEIs' diverse missions in a knowledge society. The Bologna Process, supported by a series of ministerial meetings, has focused on the areas of curriculum reform, quality assurance, qualifications frameworks, recognition of qualifications, lifelong learning, mobility and social equity. The Bologna Process involves 47 signatory countries (within and outside Europe) which carried out important national higher education reforms and adopted new legislation to introduce and regulate, to varying degrees, elements of the Bologna Process.

From very beginning of the Bologna Process, quality assurance was recognized as one of the most important elements. European Standards and Guidelines for Quality Assurance in Higher Education (ESG) were developed in 2005 by the joint group involving the European Association for Quality Assurance in Higher Education (ENQA) and stakeholders from HEIs. ESG does not promote a one-size-fits-all system, but is based on shared values and common principles, particularly respecting diversity and subsidiarity. Primary responsibility for quality rests with HEIs' internal quality assurance, focusing on: policy and procedures for quality assurance; approval, monitoring and periodic review of programmes and awards; students assessment; quality assurance and teaching staff; learning resources and student support; information systems; and public information. Reflexive learning and engagement of various stakeholders is emphasized as significant for genuine quality cultures. External quality assurance has to take into account the results of the internal process. To ensure internationalization, external quality assurance processes often include international experts in review teams.

The Bologna Process brings a consensus on how quality assurance should be conducted and organized. At the same time it is open to innovation and change based on bottom-up initiatives of HEIs and national priorities of participating countries.

DISCUSSION OF RANKING SYSTEMS AND HEI'S TRANSFORMATION WITHIN AN SD CONTEXT

The five case studies show that different issues, cultures, policies and histories characterizing various regions call for different research and educational strategies, as well as diversity in appraisal and quality assurance systems. Diversity becomes not only a statement of HEIs' uniqueness but recognition of the HEIs' role in addressing diverse and complex societal problems. A single score assigned to an institution does not account for the variety of HEIs and their success in a broad range of methodologies for research, education and outreach activities. Such one-score positioning has triggered an avalanche of criticism that, eventually, has led to the emergence of several multi-dimensional ranking systems that seek to account for diversity in higher education. The Malaysian APA systems and the African Union's ARQM (Cases 1 and 4) are examples of such developments.

Research output, measured in quantitative or qualitative terms, is predominant in most of the rankings. While the measure of HEI research output by citation rates, especially in the 'high impact' journal publications, becomes more universally acceptable, many are beginning to question its relation to the quality of academic output, and in some cases the relevance of the emphasis on this kind of research output is also questioned (see Case 4). Moreover, assumption of the impact of such measures on real-life problems – present or emerging – is seen as highly problematic (see Cases 2 and 4). Thus the foundation of the measure needs to be put under erasure and should be open to critical assessment, especially from an SD point of view.

With variations in emphasis, the ranking systems appraise and, thus, reaffirm various functions (and roles) of the universities. With research and teaching remaining the main focus, some ranking systems offer broader recognition of HEIs' actions. Examples from Malaysia, Japan and Africa (Cases 1, 3 and 4) highlight the potential of appraisal systems to become reflexive instruments that accommodate any areas that HEIs consider important. Challenges of implementation aside, potential implications of such developments lie in possibilities that may exist for redefining the view of HEIs as scientific research and publishing institutions whose relationship to society is of less importance than their research or publications.

As it is reflected in the case studies, most of the ranking systems are focused on input and/or output of HEIs' activities, but leave processes untouched. Development of the strategic knowledge (ability to analyse past and present as well as creating visions and scenarios of the future), practical knowledge (bridging knowledge and action) or collaborative competences should be areas of central concern for HEIs interested in the reorientation of society towards sustainability; however, such criteria are rarely found in the assessment systems.

Finally, many of the rankings not only do not reflect quality of all areas of HEIs' work but also do not use indicators that highlight interrelations between these areas. As for indicators recognizing the position of HEIs within larger societal or academic systems, only a few institutional rankings attempt to reflect on this role of HEIs by emphasizing relationships with international organizations, business partners, NGOs and media groups. Few consider the role of HEIs as a provider of public goods within a broader social change/global change context. As shown in the cases (Cases 1, 3 and 4), decisions on such criteria are left to the individual HEIs if they are interested in, and capable of addressing them.

NATIONAL QUALITY ASSURANCE SYSTEMS

In the context of this paper, state regulation is interpreted as all state-driven instruments designed to influence academic quality in a way relevant to public interest. In general, national frameworks for quality assurance can vary from country to country adopting different approaches – specification of standards, assessment and accreditation of study

programmes, and institutional accountability as well as information provision (Dill and Beerkens, 2010).

Some countries, such as Australia or the United Kingdom, intend to define specific standards for study fields and/or for HE degrees as a guideline or benchmark for universities. Such focus on the subject level does not build the capacity of the overall university to design new programmes, nor does it improve the academic quality of all fields of study.

Assessment and accreditation of individual study programmes is the most common way of monitoring academic quality, with characteristic examples offered by Denmark, the Netherlands, and the United Kingdom, based on peer accountability for the quality of study programmes.

There also is an approach that aspires to assure academic quality by requesting better information on academic performance. One of the most ambitious examples of this strategy is the national examination policy adopted in Brazil, where all academic degree programmes are considered equivalent to professional certification. State examination is used for confirming qualification of the graduates and serves as a quality assurance of the study programmes. From the perspective of ESD, however, adoption of a unified exam in each field does not provide space for innovation and diversification.

The institutional accountability approach uses performance contracts (for example Catalonia, Spain) or an academic audit (for example Hong Kong). This approach gives responsibility for the quality assurance to a university, while the state only assures that the university meets selected targets, set individually and negotiated with the state. It is critical to note that performance contracts alone are not sufficient to ensure academic quality if there is no relevant initiative and commitment of the staff. In such conditions, performance contracts need to be supplemented by external quality assessments.

To conclude, a focus on particular elements of the study process (for example design of study programmes) or academic results does not tell us anything about the capacity and characteristics of a particular university as a whole and provides limited feedback for further necessary improvements. However, analysis carried out by Dill et al. (Dill and Beerkens, 2010) makes it clear that, despite the problems and weaknesses with the state regulatory instruments, they provide valuable guidelines for the design of quality assurance processes leading to evidence-based decision-making and continuous improvement of academic standards within universities. In order to serve these functions, the process will require active engagement of both the collegial leadership of an institution and academic staff in departments and programmes.

As shown in Case 5, external quality assurance plays an important role as a regulatory tool to ensure quality in the countries and regions characterized by deregulated and more market-oriented systems. There is also an argument which states that where HEIs have already established their own (internal) systems of quality assurance, external quality assurance could be expected to foster creativity and innovation – not by attempting to measure, but by stimulating the internal quality enhancement processes strengthening the identity of a particular HEI (Stensaker, 2009).

Often, internal quality assurance is focused mainly on the enhancement of quality in teaching and learning (Case 2). However, as appreciation of the broader role of higher education is growing, so is the width of the categories reflecting this role (Cases 2 and 5). This could provide an argument for including SD indicators in emerging national, international or regional systems.

However, there is more to it than simply including such criteria in assessment systems. Different components such as 'quality' of students on admission, teaching and technical staff, didactics of study process, level of research, infrastructure, values of the institution and society, and so on, are mutually interdependent and, thus, create a quality culture of the HEI. A holistic approach to study process is the main principle to be used both in management and assessment of academic quality, and this is not easy to capture in indicators that are most often abstracted from social contexts and reductionist in form and function.

Institutional missions and objectives must be diverse to respond to the HEIs' purposes and to accommodate diverse social groups and contexts and the diversity of SD challenges that span the globe. It is well known that SD challenges manifest differently in different parts of the world, and that they require different solutions. If the creativity of HEIs is to be fostered, the evaluation processes and associated rewards should be developed in an adequate way. In this case it is impossible to determine a quality of HEIs simply by using 'objective' external measures such as those provided by national quality assurance agencies or rankings. It is important that universities engage with internally relevant and reflexive developmental approaches to quality assurance and enhancement processes recognizing the individual, diverse goals of institutions. A permanent action-research, self-evaluation and correction approach should be an integral component of the internal quality management system, which includes close scrutiny of the university's role in society and in enabling the public good. To avoid narrowing of such processes to a local scale only, robust debate between universities should be encouraged in which such diversity of context and processes is discussed in relation to broader societal change goals, and SD challenges and goals.

WAYS AHEAD – FURTHER DEVELOPMENT OF UNIVERSITY APPRAISAL

The debate on the future of the quality appraisal systems for higher education from the perspective of ESD reveals two positions. Proponents of the first view believe in the need for and a possibility of changing the nature of the appraisal systems so that they facilitate transformation of the HEIs and, eventually, of the society. Such change is seen as an option only if assessment becomes a strategy for demonstrating HEIs' transparency and accountability rather than remaining a marketing tool. The second position critically questions the possible evolution of the assessment schemes that still have their roots in a culture of elitism and exclusion.

Analysing appraisal systems from the perspectives of the transformative role of HEIs, one can conclude that we can identify elements compatible to their sustain-

ability roles. However, these elements need to come – coherently – together to facilitate systemic change of the HEIs. In Particular, interrelationships and synergy of the learning, research and society outreach activities should be promoted in the strategy and practice of the HEI. As outlined in the case studies and discussion above, appraisal systems could be considered as a possible instrument to facilitate such systemic change of HE if they are designed in a relevant way to stimulate the diversity, creativity, future orientation and transformative capacity of the HEIs.

We can see that there are contradictory tendencies manifested in various appraisal systems. Many of them promote standards leading to uniformity of the HEIs. Diversity of organizations that caters for local and regional needs remains rather neglected. Unique HEIs might not receive deserved recognition and could run a risk of being assessed as less reputable within the dominance of current orientations to appraisals.

Most of the considered appraisal systems are oriented towards capturing outputs (for example research papers, awards, successful employment) and inputs (for example infrastructure, financing, number and/or qualification of staff, and so on). However, as argued in this paper, added value of the HEIs in developing innovative competences also depends on the organization of the learning process, the quality of which is not easily measurable.

In a globalized world characterized by increasing mobility (particularly for the elite), an argument can be made for relying on some shared understanding of quality criteria for HEIs, provided that assessment is done around dependable methodology and reliable data, and that such methodologies allow for internal reflexivity. Use of common quality criteria for HEIs' appraisal should, however, provide enough space for contextualization and unique qualities of HEIs, reflecting their specific missions and goals as well as characteristics of the local and national contexts. Such an argument would also need to critically evaluate exclusions that may result from the universalizing of norms of practice for universities.

As HEIs are also (increasingly) oriented towards engagement with local and national development strategies, appraisal systems should be able to recognize this role alongside contribution to the global and long-term developments by balancing indicators related to local and global priorities. Again, such appraisal systems need to be critically reviewed for tendencies to include and exclude.

Sustainable development is a dynamic concept that calls for continuous innovation as well as creating and testing of new knowledge. For HE to remain relevant to society, it has to develop systems that encourage critical analysis of the status quo, and creativity both of its staff and the students leading to innovation. Having a critically reflexive, innovative culture as a strategic goal in HE is particularly important for SD. Such a system should be based on holistic orientations to curriculum design, research, and outreach activities. This depends substantially on common values, shared interests and efficient cooperation of various stakeholders within and outside academia.

Therefore, the discussion above raises a more fundamental question as to whether ESD should 'join the ranks' and contribute to a 'better' set of assessment criteria (based on the notion of critical reflexive innovation) or whether we should seek new ways.

Therefore, the discussion above raises a more fundamental question: whether ESD is comparable with any external appraisal systems? Or would it be more appropriate to think about capacity of ESD principles to lead HEI towards quality culture and transformation for SD?

REFERENCES

Badat, S. (2010) Global rankings of universities: A perverse and present burden. In: Unterhalter, E. and Carpentier, V. (eds) *Universities into the 21st Century. Global Inequalities and Higher Education. Whose Interests are we serving?* Palgrave Macmillan.

Bologna Process (BP) (2009) *The Bologna Process 2020 – The European Higher Education Area in the new decade*. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28–29 April.

Dill, David D. and Beerkens, Maarja (eds) (2010) *Public Policy for Academic Quality*. Dordrecht, Heidelberg, London, New York: Springer.

European University Association (EUA) (2009) *Creativity and diversity: Challenges for Quality Assurance Beyond 2010*. Brussels: EUA.

Gough, S. and Scott, W. (2007) *Higher Education and Sustainable Development. Paradox and Possibility*. London: Routledge.

Hargreaves, A. and Shirley, D. (2009) *The Fourth Way. The Inspiring Future for Educational Change*. Thousand Oaks, California: Corwin; London: Sage.

Merisotis, J. and Sadlak, J. (2005) Higher education rankings: Evolution, acceptance and dialogue. *Higher Education in Europe*, **30**(2).

Saito, Takahiro (2010) University Evaluation Systems in Japan. Presentation at the Symposium on Perspectives on University Performance Evaluation, United Nations University, Tokyo, 15–16 March 2010.

Stella, A. and Woodhouse, D. (2006) *Ranking of Higher Education Institutions*, Australian University Quality Agency, August 2006.

Stensaker, Bjorn (2009) Innovation, learning and quality assurance: mission impossible? In: *Creativity and Diversity: Challenges for Quality Assurance Beyond 2010*. Brussels: EUA.

United Nations (UN) (1992) *Agenda 21: Programme of action for sustainable development*, UN Department of Public Information, New York.

AQ: These two refs not cited in text. OK to delete?