

“Passion for Learning: The Shift towards Learning for Development in Higher Education“



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“Learning changes not just one thing, it changes the entire system” (J.A. Scott Kelso)

1. Introduction: University learning can make a difference

Learning is the decisive tool for us as human beings to develop potential: knowledge and wisdom, competence and courage, joy and humility. Sustainable development, hence, will not be possible without sustainable learning, at the individual as well at the institutional, and even cultural level.

Correspondingly, a PhD program like the “Doctorado en Ciencias Sociales con Orientación en Gestión del Desarrollo”, of the Autonomous University of Honduras (UNAH), is a privileged place to promote innovations not only for other situations and contexts, but also for its own teaching and learning activities.

In my recent work I had the great opportunity to learn more about what I may call the “Central Asian Culture of Learning”: This tends to be a very cautious way of learning which looks for security rather than for innovation; focussing on structure or consistency more than on creativity or intuition. Of course, this approach to learning is strongly influenced by the political and economic tradition of these countries. It is however a very valuable way to develop intellectual and emotional potential in order to thrive in fragile transition phases of countries or societies.

In Central America, on the other hand, I had so many experiences where colleagues committed themselves to learn strategies or mental tools for change and further growth. They rather searched to deepen their competences to proactively accept risks or to open up for professional adventures, trying to be

prepared for the dynamic challenges their countries are confronted with.

“Perspectivas del desarrollo” certainly are different from context to context. There are different goals and strategies, different milestones for progress and different means to assure quality. In my observation there are however also common challenges: In the field of learning – especially in higher education – there seems to be an underlying pattern which keeps the focus of attention on teaching, on curriculum development or evaluation – and neglects the rich processes of learning and their essential results. Students often enough appear as empty vessels to be filled with information, and we as teachers understand our role mainly as transferring our knowledge and understandings to our students. This is a dark shadow over our academic work: The lack of recognition of our students’ potentials.

Obviously, development needs knowledge. And much of this knowledge can be transferred. Recent research of the effectiveness of teaching (John Hattie, 2012) however proves that empirical data is telling us a different message: What matters most is not teaching, but the impact of teaching. What matters most is LEARNING: “The key is what are we learning, and for what” (Angel Gurria, Secretary General OECD, 2011).

Learning here is understood as the crucial human process not only of accumulating knowledge, but especially of developing competences. Learning means developing cognitive, emotional and spiritual potential for further development. What is true for individual learning, as Hattie shows, seems to be true also of collective learning, for learning communities or learning organizations (Peter Senge, 1994) and even for learning universities (Christensen/Eyring, 2011). If we want to strengthen our universities’ potential for development, we need a deep shift of our attention from teaching towards learning.

2. The shift from teaching to learning

The shift from teaching to learning in higher education is a “paradigm shift”: It is difficult and often accompanied by multiple obstacles and tensions. It is however a necessary shift towards an advanced quality and towards tangible relevance of university teaching and learning for development. Some research has shown that the least effective lecture formats are still the most often used ones (Goel 2006, 5). Furthermore, expanding from traditional teacher-centric content delivery towards student focused content exploration is a promising shift towards creating new potentials for students, for faculty, for curricula and for the whole institution, – urgently needed for the sustainable development of our societies.

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To promote the shift toward learning there are three main areas of commitment and further development: (1) the individual capacity, performance and delivery of university teachers, (2) the structure and organization of the curricula, and – not at least – (3) a change in the academic culture of the university. A close alignment of these three areas is a necessary condition for a sustainable move towards a more attractive quality and relevance of learning in higher education.

This paper will focus just on the first – and for most university teachers most important – issue, that is the competence, attitude and performance of individual university teaching.

Why is the shift from teaching to learning so urgently needed? What do we really mean if we talk about “teaching” and what does “learning” mean?

The last guiding question of this paper then concentrates on the essential “How?” How can university teaching support relevant learning for development more effectively? Empirical evidence has shown that university teachers do make a decisive difference (Hattie, 2012). How can we move from teaching as transfer of scientific knowledge towards supporting the development of scientific, professional and personal competences of their students.

3. Why shift from teaching to learning?

The international debate on quality in higher education shows a significant move from focussing on input and process towards increasing attention to results and outcomes. Several years ago, the University of California, Berkeley, developed an interesting model of “Excellency in Higher Education”. Based on the Malcolm Baldrige (MBNQA) quality approach, the UC Berkeley (Ruben 2004) combined the following dimensions:

Category	Issues
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1. Leadership (120) - Mission /vision; leader-performance; focus on stakeholders
2. Strategic Planning (85) -goals,actionsteps;formalplanning;involvementofstaff
3. External Focus (85)- for whom? Needs / expectations; assess satisfaction
4. Measurement / Knowledge utilization (90) -selectionofdata;internaldisseminationofinformation; peers / competitors
5. Faculty / Staff (85) - support faculty/staff; personnel development; climate / culture
6. Process (85)- effectiveness/efficiency; monitoring, review; Comparisons for improvement
7. Outcomes = results (450) - achieving mission; satisfaction of stakeholders;

satisfaction of faculty and students

Categories of quality with scores added according to their relevance (UC Berkeley; Ruben 2004)

The most interesting point here is possibly the differentiated weighing of a total of 1000 scores, according to the significance of the items. It reflects the current tendency in many sectors which approaches quality primarily through results. What matters today also in higher education is the result. University teachers should not so much be concerned only about the contents of their subject matter, their methods, their inner logic of presenting them to the students etc., important as they are and - will remain. But the decisive focus should be shifted on how students can best absorb the core issues of their classes and how students can best be supported in developing their own learning competences. The final criterion, hence, for the quality of teaching – is the quality of learning. Quality of teaching today - with all those endeavours of evaluation and accreditation (Matthias Wessler, 2011) - is measured by the quality of its tangible results, i.e. the quality of “learned” knowledge and skills, and ultimately of learned behavioural change and competence for sustainable development.

Basically there are three main factors, which impel that shift from teaching to learning.

(1) The international debate, in many countries, shows a decreasing reputation of the traditional university. Many governments on the one hand express their doubts about the effectiveness of institutions of higher learning through cutting their budgets. On the other hand, societies need a much more tangible impact from sciences and humanities to strengthen their sustainable development.

Knowledge is becoming the strategic resource on the way towards the “knowledge societies” (Bindé, UNESCO 2005). Scientific and professional competences are the decisive basis of competitive advantages for the individual as well as for enterprises and for whole societies in the process of globalization. Evidence however shows that university graduates – very often - are not ready to meet the professional challenges they were trained for. At best they are strong in certain scientific theories, but weak in skills and relevant attitudes. Graduates are lacking so called “key competences” to be used to open the doors to successful professional careers, to advanced citizenship to build their societies, - and to live a satisfying and meaningful personal life. Traditional university teaching did not tap the multi-fold treasure of the meta-cognitive potential of their students.

There is so much more to be learned than what academic teaching could offer with its

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focus on the logics of separated disciplines, trying to be hammered into the students' heads within 45 minutes' lectures. In Knowledge Management (KM), for example, the most valuable potential is sought not in what we know, but rather in what we do not know (“tacit knowledge”, according to Nonaka / Takeuchi, 1995). In summary, traditional academic teaching very often tends to even limit human potential instead of developing it. The mass demonstrations in many Arab countries during the so called “Arab spring” (2012) have often been promoted by university graduates who earned excellent diploma and certificates but did not learn those competences their societies and labour markets expected; so they could not find any employment to live a meaningful life.

(2) The second factor, closely related to the first, is change. Traditional university teaching was focussing on contents and cognitive knowledge as if they were valid for all the times and everywhere. Much of the scientific knowledge has indeed been valid for centuries and decades; some of it still is, of course. However, today the development of our technologies, of our societies with their institutions and visions, even their values, are changing dramatically.

Many teachers still see knowledge as absolute and not as constructed. They perceive their disciplinary contents as fixed to be put into the “containers” of the students' brains.

Correspondingly, students still learn primarily to reproduce these contents during examinations. But it becomes clear, with increasing evidence that scientific contents are constructed through research and learning, and are also suffering from a “half time value”: What is true today, in many disciplines, will have lost great part of its value within a few years (Samuel Arbesman, 2012). The taught knowledge becomes soon obsolete. Furthermore, contexts matter. What is valid in the Sahara desert may not be valid in the Alps or in the rain forests of Central America. The challenge for universities goes far ahead of cognitive knowledge to be imparted through traditional teaching. The matter is no longer to teach students to memorize content, but rather to help them to be able to discover and to implement knowledge and competences by themselves. Again, in summary, traditional academic teaching is often losing its relevance dramatically.

(3) Finally, recent research in the cognitive sciences or brain sciences opened a door into the neuronal networks and their almost infinite potential (Antonio Damasio, 2010). Very often, traditional teaching contributed to block the creativity of these networks through conveying implicitly fear and submission. What students were basically learning was to comply to their teachers in order to pass examinations, sacrificing their own creative power to solve problems, to invent new technologies or to take initiatives and responsibility. The brain can easily adapt to reduce its own creative functioning. Some scholars speak even of “learned inabilities”, and there is evidence that many university graduates are strong in

repeating packages of information but weak in solving real problems at hand. Brain research demands quite a different approach to teaching: An approach which allows room for the cognitive and meta-cognitive development of those core competences like taking responsibility, working in teams, knowing how to communicate efficiently and – even – growing one’s own self- confidence. Where do our students learn these abilities, so urgently needed for further development of our economies and societies?

However, even if we agree with these tendencies towards relevant results and outcomes of learning – and we definitely should agree, the challenge of productive and creative teaching and learning remains, it even becomes more urgent. There is an emerging new “scholarship of teaching and learning (SOTL)” (Goel 2006).

4. Discovering the innovative potential of a learning oriented teaching

There are different dimensions of teaching which - often unconsciously – lead to quite different results in learning:

Teachers perform	Students (may) learn to
(1) imparting information	accumulate and memorize bits of information
(2) transferring knowledge	connect information, build relations, memorize connections and theories
(3) developing understanding	integrating information and theories into own mental systems, creating meaning, relating to contexts
(4) supporting students’ learning	develop effective learning competences, going beyond the cognitive domain, including emotions, attitudes, values
(5) inspiring and encouraging students’ competences to learn how to learn	construct multiple systems of mental processing, including deeper cognitive or emotional patterns, critical thinking and adapting to changing needs

Evidently, these dimensions of teaching and learning are closely connected.

Students need information to build knowledge. They need knowledge to develop understandings and to create their own competences of learning, which are able to adapt to changing needs. Thus, academic teaching as efficient transfer of knowledge is and will remain a necessary part of quality in teaching and learning; however in a world of accelerated change this is no longer sufficient: Students need also to acquire and to build higher learning competences which then are able to adapt to the changes of their professional fields, or to the inevitable changes of their societies and individual lives. This sometimes is called “deep learning”, that is a competence, which leads students beyond processes of efficient adaptation and towards a pro-active competence to create and to design

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change for sustainable development.

For teachers, these research-based insights consequently carry along crucial changes of their roles: they develop a far richer repertoire of roles, from being “directors of knowledge transfer activities” toward “designers of conducive learning environments”. As a matter of fact, there is a similar challenge for students: They need to take their own learning into their own hands. They need to raise their awareness on their own responsibility for their mental development. This sometimes is not an easy endeavour and also students can become an obstacle to change, but teachers are able to help them to accept their inbuilt power of learning. And learning, again, basically is the evolutionary potential to develop knowledge, skills and competences in order to survive and to thrive in a changing world.

Learning as the expansion of the ability to produce the results one truly wants in work and life, depends on activity and experience, including – may be – taking real risks. As neuro-cognitive research proves, the starting point – over and over again – will be the experience of the students: “The most important single factor influencing learning is what the learner already knows” (Shulman 1999). Methods may therefore include project-work, group work, experiments, reflection and sharing, coaching (virtual), excursions, evaluations, and – of course – corresponding cognitive input and lectures (some of them possibly on-line). So students will be able to continuously add new experiences to their old ones. They blend (“blended learning”) the old and the new. In concrete learning situations as contexts for “situated learning” they may create totally new mental networks: Students construct new understandings combining established neuronal networks, thus recognising the biological origins of the brain in evolution: “Teaching is the art of changing the brain, creating conditions that lead to change in the learner’s brain, conditions for rewiring the neurons, and creating an environment that nurtures it” (Zull 2002).

5. How to support learning effectively: The expansion of teachers’ attention and action

There are so many conditions, which determine the quality of teaching and learning and its potential to move towards more relevant activities. Teaching, for example, depends on how we believe the mind works. “Good” teaching starts with recognizing the existing networks of neurons in a learner’s brain, i.e. the physical form of prior knowledge. So the quality of teaching also depends on the quality of our students (Lyke et al. 2006), their mental interactions of emotional structures with cognition and memory. In most cases, emotion seems to be the mortar that holds things together.

Of course, most students know, and most of us teachers would agree, that in good teaching knowledge is not enough. There are obviously more factors that influence the quality of teaching, such as for example resources, facilities, social climate and the value system of our institutions. There may also be conditions of specific institutional contexts, which do allow only for a modest shift towards innovation.

Even teachers' salaries, as an indicator of the social recognition of their work, may influence commitment and quality in certain situations.

Some more general principles seem to be valid beyond contexts, such as the famous mental sequence of deep learning:

- Experience (“Always begin with what the student brings: Rather than giving the new information, put more effort into finding the old”).
- Reflection (“Integrate previous experiences of your students into the system of your scientific discipline and the context of social needs, which may be totally new for them”).
- Abstraction (“Draw conclusions valuable and relevant beyond the limits of specific bits of information and situations – sharing theories”).
- Active testing (“Experiment with these conclusions and facilitate new experiences of trial and error as starting point for the next loop of learning: Rather than directing and instructing, give learners incentives and support new experiences”).

Learning originates in concrete experience, in concrete contexts. So its quality also depends on historic situations, the need of a community, the demand – and the opportunities - of a given “market”, the visions of a society etc.

In very general terms, the shift from teaching toward learning is basically an expansion of our attention and corresponding action from a very narrowly focused point of view toward a broader repertoire of competences and issues.

From Towards

The shift from teaching to learning as expansion of attention and action (selected issues)
This picture shows potential expansions of attention and action on the way from the traditional teaching paradigm toward an innovative learning paradigm. It is however important to know, that the traditional approach will not at all become totally obsolete; the challenge is rather to respect its values but to go beyond its limitations in order to promote a higher quality and relevance of university learning.

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Like ascending a ladder, you need the lower steps to reach the higher ones. All these issues, relevant for students’ learning for development, are also valid for the learning of ourselves as teachers. Also for us, what matters most, will not be just new knowledge on how to improve our teaching, but rather the recognition of our previous experiences, the development of new competencies (like coaching or systemic constellations) and their application to support relevant learning for our students. Also we ourselves are “independent learners” looking for new experiences, which may lead to a significant expansion of the quality of our professional university life.

Finally, in my experience, the challenging exchange with the ‘students’ of the Doctorado – most of them are already professionals with significant expertise – has supported my own learning and my own development of further competences, which later became an important part of the basis of my recent work in countries like Kyrgyzstan, Tajikistan or Uzbekistan: In summary, ‘gestión del desarrollo’, socially as well as economically, will be much more effective and relevant if we succeeded to learn also the competence of managing our own learning for development – with professional competence, with courage and humility – and with passion.

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