

SEAMEO RETRAC 2015 International Conference

**“Quality in Higher Education: Global Perspectives and Best Practices”.**

**University Business Collaboration to enhance graduate employability**

**FULL**

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## **Graduate quality perspectives in society**

Employers around the world (Sharma, 2013), in Europe (McKinsey, 2014) and not less in the Asian region are vocal and united, sharing their inability to find suitable candidates for all kinds of jobs, including the professions. Their view on those graduating from universities is that they lack the skills needed to succeed at the job. The Worldbank (WorldBank, 2008) concludes in their extensive reporting on ‘Higher Education in East Asia – Skills’ that “Skills that employers require are communication, critical and creative thinking skills, teamwork abilities, command of foreign languages, and ICT skills”. The report then continues by stating that “Higher education has a critical function in supplying employees who have higher-level academic and technical skills, as well behavioral ones. Its inability to supply graduates with these skills may, therefore, have dramatic consequences on economic growth.”. The Vietnam Development Report 2014 (WorldBank, 2013) stresses strongly the same skills gap that employers experience. Real companies in Vietnam experience difficulties on the labour market as Ngoc Chau Anh (Anh, 2015) reports, illustrating that the labour market challenge, the skills gap challenge, is quite present in Vietnam.

Quality of students is therefore judged more and more by the performance of graduates on the labour market. The purpose of education is shifting from instilling knowledge in students towards the training of graduate competencies. Student quality therefore needs to be increasingly seen through the eyes of (future) employers. Institutions of Higher Education have to take up the challenge to deliver the right kind of graduates to the labor market.

## **Performance of graduates on the labour market**

### **Required competences as measure of quality**

In the European Qualification Framework, knowledge is described as theoretical and/or factual. Indeed, higher education institutes have a long history of teaching students all kinds of theories. Skills on the other hand, described as cognitive (involving the use of logical, intuitive and creative thinking), and practical (involving manual dexterity and the use of methods, materials,

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tools and instruments) are often neglected in higher education. In the context of European Qualifications Framework, competence as a word then is described in terms of responsibility and autonomy in the application of knowledge. This translates well to the ability to consciously and methodically apply knowledge in a concrete context, such as in a place of employment or in the implementation of a professional work.

One avenue to deliver more employable graduates is to (re-)develop the curriculum, in such a way that graduates acquire skills, knowledge and attitudes that employers are looking for. The emerging question then for stakeholders, rectors and deans, both in EU and in Vietnam, is what to do to increase employability? What are the decisions to take and what policies and strategies to pursue, aiming for the positive effects on graduate quality and graduate performance on the labour market.

### Monitoring employability, The Netherlands

Understanding graduate quality and graduate performance is key to the success of higher education. The desired learning outcomes, such as defined by the EQF or by employers, are measured most accurately by the performance of graduates on the labour market. In other words: do graduates find jobs for which they are educated?

Monitoring periodically the university performance in delivering employable graduates provides strategic and operational feedback to the university leadership. Graduate labour market performance monitoring for UAS graduates, as outsourced to the ROA research institute, has been conducted since the 1991. Semi-annual monitoring in the Netherlands is nationally coordinated by the Dutch Association of Universities of Applied Sciences for its members, at the level of degree programme. Other education sectors have comparable monitoring since 1998. The two most important indicators are the time to first job and the fit of the job to the competencies of the graduate (substantive and level). Many detailed indicators add insights and background to the understanding.

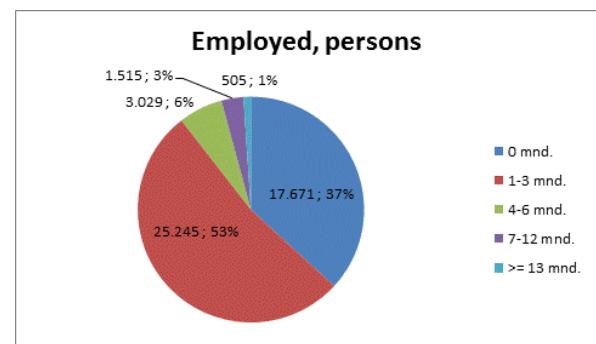


Figure 1 Graduates Employed NL, per timeblock after graduation

Table Key employability indicators Netherlands (Vereniging Hogescholen, 2015)

University	Employed within 18 months*	Match education to job (high/good)	
Saxion UAS	92%	78%	
All Netherlands UAS	94%	74%	

\*Not including graduates that continue studies

The journey to employment takes time, so categories for the search period used gives more details. In figure X the national average searchtime after graduation is displayed. Within 3 months after graduation, a cumulative 80% has found a first job. The remainder of students takes longer to find a job, while 1% needs even more time.

### Monitoring employability, Vietnam

According to MOET (Thùy, 2015), employability reported by 100 universities in Vietnam as ‘a job within 3 months after graduation’ is approximately 50%, although some universities reported 80-90%. Unfortunately, no comparable country-wide data exist to compare to a Vietnamese graduate performance average, though mass media articles suggest that graduate employability in Vietnam scores rather less. Yet more statistical data are required to represent national data or to suggest cause and effect.

Mirroring the Dutch monitoring systems, the POHE project<sup>2</sup> has measured employability through a tracer study in 2014, receiving data from 1360 out of 1922 alumni, graduated between 2010 and 2013 of 10 revised (POHE) programmes in the eight pilot universities. The statistical indicators describing graduate employment and the match of Education to job from Vietnamese POHE programmes are comparable to the Dutch HBO employability monitor 2012.

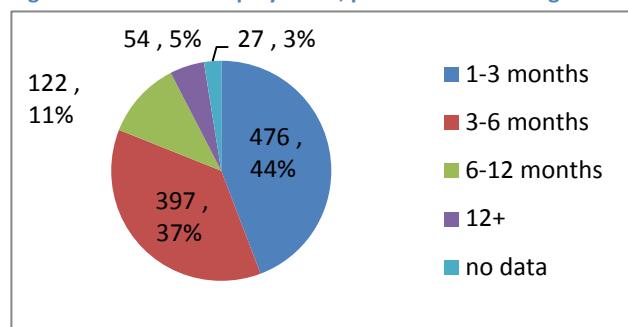
Table Key employability indicators Vietnamese, POHE programmes (POHE2 project, 2014)

8 POHE pilot Universities	Employed within 18 months	<i>Searching for employment</i>	<i>Unknown</i>	Match education to job (high/good)
All programmes	79,2%	15,4%	5,4%	74%

Detailing the graduate performance down to the time to first job for those students with employment, the graph below illustrates that 44% of students have found a job within 3 months. 81% of graduates has found employment within 6 months after leaving university.

The consensus among POHE pilot universities is that universities where curriculum development is done in collaboration with business and professions, graduate employability shows a jump. While very good verbal reporting is received, the MOET figures over 100

Figure 2 Graduates Employed VN, per timeblock after graduation



<sup>2</sup> Project title “Strengthening Profession Oriented Higher Education (POHE) in Vietnam” supported by NUFFIC (Netherlands) <http://pohevn.grou.ps>

universities suggest that a positive conclusion about POHE programmes in Vietnam is premature.

Performance comparison with Dutch data indicates especially a higher overall employment ratio in the Netherlands, with especially a shorter search period towards the first job. The perceived match of education to job in the Netherlands is slightly better.

## Tailoring Profession Oriented Higher Education to societal demands

The challenge of employability is not only experienced globally, the solutions are sought after everywhere as well. A comprehensive University Business Collaboration (UBC) model that brings the relation between all required actors together is the UBC model pioneered in the European “State of European UBC Report” ( Science-to-Business Marketing Research Centre, 2011). The study developed a model to explain the complex issues, actors and factors that have impact on the UBC. The model implies, still being validated through further research, causal relations. That enables stakeholders to look upon the model as an inspiring source for measures and policies.

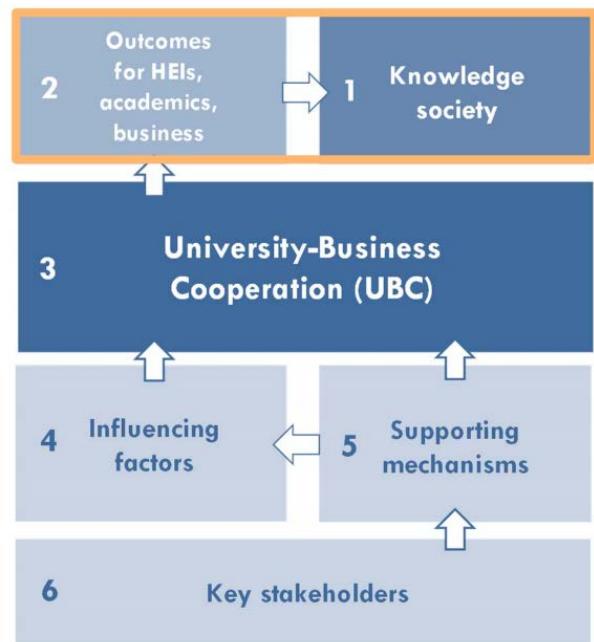
Integrating measures aiming towards a high employability requires policy decisions at system, university and programme level. Actors at these different level need to work coherently towards the same goal, a process that in the Netherlands has emerged over the last decades.

## Modelling University Business Collaboration (UBC)

Centre point attention is the actual UBC (3), which the model labels as Results. Aggregating from and beyond traditional knowledge transfer through patents and beyond the recruitment of graduates, the model features eight types of Results. Each Result focuses on a different way in which a university and a business cooperate:

1. Collaboration in research and development (R&D),
2. Mobility of academics between business and university,
3. Mobility of students between business and university,
4. Commercialisation of R&D Findings,
5. Curriculum development and delivery,
6. Lifelong learning (LLL),

**Figure 3 University Business Collaboration policy model**



7. Entrepreneurship,
8. Governance

### The UBC model applied as managerial tool

The UBC model has useful applications, among that a descriptive reporting or analytical study, for example of a comprehensive overview of any university collaboration with business. Any university could be analyzed through the lens of the model. Caution is necessary as, the model appears more simple than it really is, the number of the built-in sub-variables is large, which require considerable effort to collect. The UBC model claims a integral approach of policy instrumentation, all within the system of higher education. The UBC model also coincides with the Triple helix model of analysis of innovation systems, going full circle towards the benefits of UBC for society. While also competing descriptive models abound e.g. MultiRank, that have less policy related instrumentation.

The UBC model is quite useful as a policy making tool, as an heuristic thought model, which has inspired Saxion to support Vietnamese universities in building curricula more responsive to business and professional requirements. The POHE project in Vietnam contributed to the development of curricula that respond to labour market demands. The project tailors its interventions especially on Results nr 3 and 5 acting from the perspective of the state/government. Influencing factors (4) are context variables that have impact on the UBC results, as they are captured largely in the university financial regulations. The inspiration for policies and measures by stakeholders emerges from the (5) Mechanisms that enable UBC, which are subject of the POHE policy studies. The how and where and when of measures can be debated at each level of stakeholder. Key stakeholders (6) in UBC are of course the University and the Business involved in UBC at micro level, but especially at an intermediate and national level, where interest groupings takes place. The Government is a stakeholder of considerable importance, by setting the overall framework. Stakeholders at meso and micro level can perform comparison or benchmark with the 8 different collaboration Results. Desired performance on Result nr 3 and 5 can be arrived at by tweaking a select set of Mechanisms, as captured in both national and university level regulations.

### Saxion UAS collaboration with business: pursuing co-creation

The Saxion UAS mission and vision takes the local economy as a guide to the development of its education, both in terms of types of degrees as well as the quality of the education programmes. Saxion has policies that affect the distributing of students over degrees programmes, favouring STEM subjects. Saxion has a history as a sensitive and responsive university, delivering graduates for industry. Graduate employability is therefore taken to be a key indicator of success, which leads to a considerable investment in its educational approaches so students acquire the required competencies.

Student learning and competence acquisition is realized through intensive exposure to real life context in business and the professional work environment. Co-creation of graduate

competences, in which both university and industry take responsibility, has taken the form a set of educational formats beyond classroom teaching. A wide array of educational approaches exemplifies the partnerships with an equally wide array of industries and business. The emerging co-creation strategy is a highly relevant example of UBC in general and the UBC model in particular.

Programmes were and are developed to answer needs expressed through extensive consultation with employers. The classic collaboration style is that of (higher) education institute relating to (categories of) employers. Government policies have come into force to regulate and formalize structures to societal relevance and labour market needs, to institutionalize employer voice in curriculum development, alumni and employer voice in accreditation, etc. Collaboration has taken the shape of structured, extensive and in-depth arrangements. The classic perspective pays due to and strictly respects the primacy of each of the parties over respectively the graduate quality (through the education programme) and the labour market requirements (job openings). Joining to generate a more forceful voice from the side of employers and professions, more strategic level collaboration and higher level policy makers have become involved to generate longer term ‘Human Capital Agenda’s. These Human Capital Agenda’s have taken shape along economic sectors, associations of professions and regional geographies.

Increasingly, Saxion UAS and representatives from society, industry and the professions have come up with more sophisticated and fine grained collaboration modalities. The university-industry collaboration (UBC) that Saxion engages in is shifting along two interacting perspectives. This two perspectives are jointly incorporated in the Saxion premise of ‘co-creation’. The shift to more sophisticated forms of co-creation confirms well to the expectations in the national and European policy environment that UBC can yield a larger degree of business innovation and economic growth.

The first perspective stands for the moment in the curriculum that student competencies are developed with and judged by industry. In which industry here stands for actual work-based learning, the industrial place where skills can be acquired. Developing away from the classical student competency assessment at the moment graduation, the industry interaction is moved to much earlier stages in the curriculum, with different moments, each fitting different learning goals.

The second perspective is that business wants to reap more benefits from UBC. Moving away from a general social responsibility to train young people, more and better contributions to business performance are expected from the interaction with students. A large part of business expectations has become that students can assist with product or service innovations. Access to students, with students as direct conveyor of new knowledge and skills, has become the ‘new normal’. The balance of benefits to either the student or Saxion as the education provider, versus the business actor, is an important factor contemplated in designing new educational formats.

Co-creation between partners involves many input decisions but also output expectations, giving a degree of benefit or gain. The different input-output benefits over the different educational format accumulate at different partners in the co-creation process. Aiming for an optimal balance of benefits between partners may be called the “win-win” situation. The inputs into co-creation from Saxion starts with teaching and research, yet increasingly demands inputs into format development, maintaining relations with business, coordination, grant searching, etc. The outputs are graduate learning and knowledge accumulation in staff and scientific/professional body of knowledge. The inputs from business are the articulation of specific innovation needs suitable to be addressed by students, the maintenance of relations with students and university staff, and the translation of student outputs into their business process. The business outputs are most easily translated as continued profitability.

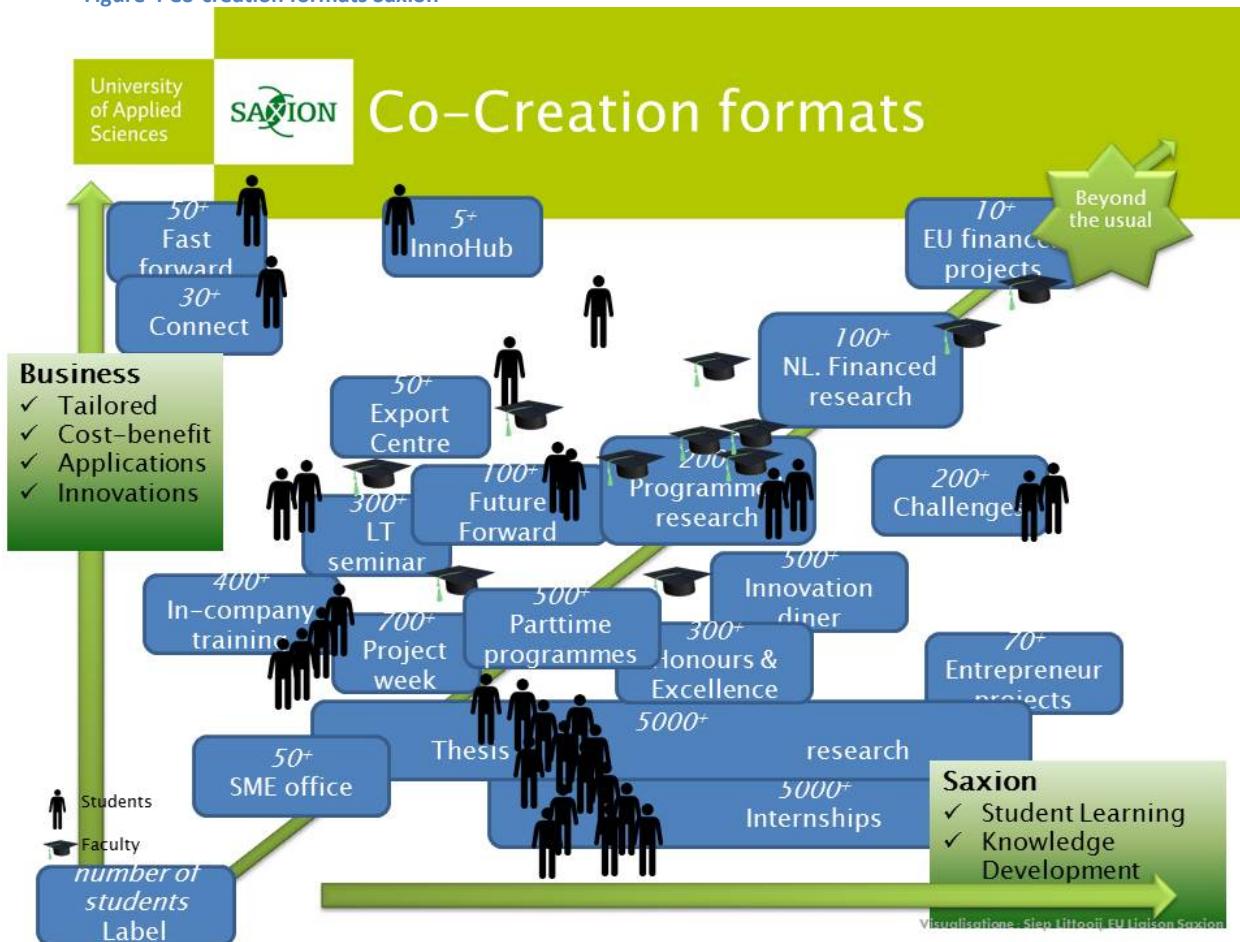
### Saxion education formats for co-creation

Educational formats are developed over the years to establish co-creation as an educational experience for students. Different schools, teams and degree programs have developed a host of different formats to match their program content, curricula structure and the possibilities and requirements of the professional or business partners.

The educational formats have a multitude of design variables, e.g. duration, location, costs, professors/lecturers involvement, teaching process/ style, group composition/size, student maturity, disciplines/multidisciplinarity, assignment output, reality level, staff engagement, etc, etc. Above all of importance is the amount and type of engagement and control of the involved company over the assignment and outputs.

Without claiming to cover all formats practices within Saxion UAS, the most visible formats as operating in real practice are displayed in the diagram below. The two axes display in a very simplified and abstract way the amount of benefit for either Saxion as education provider to its students versus business. The dimensions along the axes aims to show the amount of benefit, from small, distributed or fragmented to large, concentrated or coherent. On the bottom left, the total benefit is supposedly less, the upper left generates a more considerable benefit.

Figure 4 Co-creation formats Saxion



## Stakeholder views on employability in Vietnam

Concluding from the employability statistics above and taking note of the positive qualitative evidence gathered, POHE programmes hold promise for graduate employability in Vietnam. POHE assumes that students need to develop competences required by employers during the regular education programme. Integral part of curriculum development therefor is obtaining the employers views and needs on competences, followed by the translation of these competences into educational provision through new formats. Enhancing universities capacity to deliver more employable graduates to the labour market may then be expected from more, deeper and

strengthened university business collaboration. Given future adoption of more intensive UBC, employability statistics may be expected to improve.

The POHE2 project contributes to building the capacity in Vietnam to teach labour market relevant programmes, with adequately trained faculty facilitated by a suitable regulatory framework at institutional and national level education system.

Realizing the potential of UBC for the development of fitting human capital in Vietnam, it is essential to understand the mechanisms of delivery and the perspectives of stakeholders.

Between 2012 and 2015 three separate studies were therefore conducted at a national scale, covering viewpoint of three main stakeholder, namely the perspective of business, of universities/academics and of the state/government (beyond MOET)

A study (T&C, 2013) on Business preparedness to collaborate with universities concluded that collaboration is a rather narrow concept. However, collaboration is certainly there. Out of 169 business interviewed, almost two/thirds reported mobility of students and almost half reported to have involvement in some form of curriculum development or delivery. However, given the frequently reported benefit pursued by business only as ‘recruiting’, the study concluded that business are currently “collecting” rather than “cultivating” talents, rather than collaboration.

Type of UBC result reported by business (T&C, 2013)

Type of UBC Result	Number of enterprises reporting to participate	% of total companies
1. Collaboration in research and development (R&D)	5	3%
2. Mobility of academics between business and university	13	8%
3. Mobility of students between business and university	107	63%
4. Commercialisation of R&D Findings	3	2%
5. Curriculum development and delivery	80	47%
8. Governance	4	2%

Relevant to the requirement of the POHE programmes to collaborate with business to develop curriculum, to arrive at co-created education formats leading to desirable competencies, business shows willingness and even some experience. The extrapolation of the experience reported in the study in relation to total required graduate level exposure to business in Vietnam however is still very modest.

The role of the state, beyond MOET, as stakeholder in UBC is considered mostly through policy making and the creation of a regulatory framework, while a supportive role in the generation of UBC is also recognized (Tran Thi Ha, 2015). UBC related issues are occasionally mentioned in high level legal documents in the field of higher education, science and technology and enterprise management but are missing at implementation level. In terms of implementing legal

regulations, dissemination activities are not effective; attention is not paid to supervision, monitoring or management of UBC. Statistics and information on labor market is in short supply. The state role, it may be concluded, is rather invisible or not fully deployed. Business and universities are left largely to themselves.

A study (forthcoming July 2015) on Vietnamese University and academics perspectives on UBC, with over 350 respondents, aims to identify collaboration results, with the influencing factors and mechanisms. Findings will be presented later.

All studies agree that the skills gap is really experienced, and collaboration between supply-side universities and demand-side business is absent, but for modest efforts. All stakeholders in the UBC policy model are at one hand noting the challenge, on the other hand waiting for other parties to solve the challenge.

As (preliminary) conclusion across the three studies, UBC is perceived to contribute strongly to graduate competences and to be very beneficial to employability. This constitutes a considerable driver, that needs to be strengthened. The barriers to deliver UBC as results however, as educational formats that fit within the educational system at institutional and national system level, are reportedly large. The findings do support that the UBC as model can be a useful instrument to develop and tailor different policies at national and institutional level, to empower leadership and academics in pursuing UBC Results

A heartening learned lesson in the three studies is that, when University Business Collaboration is found, UBC generates spin-off effects to both the University and to Business. There is great opportunity to further adopt educational formats in style with the POHE project. This is a promising finding that, given expansion of POHE principles throughout Vietnamese higher education landscape, bodes hope for future graduate employability in Vietnam.

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