Reinventing learning and research?

by Redazione FGB [1], 21 May 2007

Comments: 12 [2]

(In italiano)

Within the framework of the co-operation between Profs. Elias Carayannis [3] and Piero Formica [4] (respectively from the School of Business at George Washington University, and the International Entrepreneurship Academy at Jönköping University) the following manifesto ensued, published as Guest Editorial in Industry and Higher Education (April 2007). We hereby re-launch it to submit it for comment and feedback from our readers.

The argument is topical and is in fact also being debated in the Italian media: how to re-invent, in order to better it, university-level teaching and research? How to approach the double issue of the concentration of resources and that of the evaluation of academic performance?

The thesis of the manifesto is that we should not follow the model of concentrating resources (public but also private) into few, elite centres of reasearch or teaching institutions. We should instead create a 'co-operative' environment (of competition plus cooperation) amongst diverse knowledge-clusters and innovation networks, involving both firms and universities.

This alternative model is based on a number of premises: firstly the different type of knowledge diffusion in Europe in comparison to elsewhere (particularly the US, home of the "elitist model"), secondly the proliferation in Europe of several small universities, thirdly the fact that in the era of communication technology, the interaction between researchers (as well as between researchers and sponsors) need not be localised, finally the need to invest on an "entrepreneurial academy" and on an "academic firm" in order to build a knowledge-based society and economy.

The objective is "to promote excellence in different ways", and the suggested criterion is that "the 'best' should be judged in terms of their capability to master the entire knowledge chain: from its creation to the diffusion, conversion and entrepreneurial exploitation of scientific and
technological knowledge". Amongst the proposed reforms there are some that will no doubt raise some criticisms: firstly the liberalization of tuition fees and systems of student recruitment and secondly the abolition of lifelong tenures in order to "trigger a healthy process of horizontal and vertical mobility for scientists, researchers and teachers".

We reproduce the call here, to submit it to the opinions and feedback of our readers, counting on their balanced and experienced judgement. While we hope for a wide spectrum of responses, we simply suggest some of the areas that could be topic of further clarification and debate:
- which role freedom of research would play within this model, which we could call "liberism of knowledge"
- whether it is in fact fruitful to distinguish between research and teaching
- which tools should steer knowledge towards responsible tasks and application within this model, or in other words the issue of accountability within the relationship between university-territory-society
- whether this model is in fact applicable to different disciplinary realms than those of immediate relevance to entrepreneurial interests.

This Call for Comments will be open for three weeks.

Cristina Grasseni

The concentration of resources and academic performance: reinventing learning and research in the 21st century
by Profs. Elias Carayannis and Piero Formica

The more money governments put into elite universities, the better those institutions will perform, with the associated benefits for the national R&D system, and the more likely it is that their academics' work will be published in highly reputed journals. This is a cherished tenet of most European public educational and research policies, which are currently under attack. Yet, the strategy of concentrating public money on the 'citadel' of a few select academic institutions for the dual purpose of education and research (as is done, for example, in Germany, Sweden and the UK) is highly questionable. What matters far more is the creation of a free and 'co-operative' environment which, through the interrelated forces of competition and cooperation, will spur all universities - not just the most prestigious - to innovative excellence across all aspects of their activities. In Europe, this is the much-needed environment - not one that complies with the standards of the US-style elite universities.

There are various reasons for this proposition. Size is not always an advantage: this is now clearly understood in the private sector. Nimble and more flexible structures, less subject to the pressures of well-established incumbent interests, carry great advantages. Moreover, in the 'gloCalizing'
(globalizing and localizing) knowledge economy and society, the ideas and knowledge marketplace is not divided into towns and regions but into affinity groups that derive from a high propensity to sociability and are structured by knowledge creation, diffusion and use modalities (in other words, 'knowledge-ducts' along which flow 'knowledge nuggets' such as innovation networks and knowledge clusters - see Carayannis and Gonzalez, 2003).

From this perspective, as Kim et al (2006) point out, the prestige and authority of the traditional mainstay of academic institutions will be eroded by the reduced importance of physical access to productive research colleagues now that the decline in communication costs has changed the formerly localized nature of research interaction. In Europe, on the other hand, the proliferation of second-rate research universities has raised the lid on the quality of education and the fragmentation of research.

We therefore propose that universities, university-related institutions and firms should join together in innovation networks and knowledge clusters (see Formica, 2003; Carayannis and Campbell, 2006). Even if the division of labour and the functional specialization of organizations persist with regard to the type of R&D activity, universities, university-related institutions and firms can nevertheless carry out basic and applied research and experimental development. The concept of the 'entrepreneurial university' captures the need to link university research more closely with the R&D market activities of the firm. Just as important as the entrepreneurial university, however, is the concept of the 'academic firm', which represents the complementary business organization and strategy vis-à-vis the entrepreneurial university.

The complementary and mutually reinforcing roles of academic firms and entrepreneurial universities are crucial for advanced knowledge-based economies and societies - and they should be at the heart of any strategy to reinvent learning and research in the 21st century. Despite the significant functional differences between universities and firms, there is the potential for productive overlap between entrepreneurial universities and academic firms, thanks to the fact that such organizations can engage more easily in university-business research networks.

We must ensure that the crisis in both US and European higher education institutions is turned into an opportunity. From the European perspective, proper incentives and reward mechanisms conducive to pluralism - an environment that allows for excellence in different ways - are critically needed. Such a policy will liberate universities from their traditional relationships and restrictions and make them more competitive. National governments should deploy public resources in accordance with three key strategies: increasing the independence of universities, introducing more competition between universities, and channelling funds to departments that excel in multiple ways. As for the last criterion, the 'best' should be judged in terms of their capability to master the entire knowledge chain: from creation to the diffusion, conversion and
entrepreneurial exploitation of scientific and technological knowledge (Formica, 2006). The knowledge chain has profound implications for higher education institutions and business schools. Much is lacking with regard to their capabilities to cooperate with companies in creating knowledge and becoming part of knowledge streams, and this is especially the case for the old incumbents. In the knowledge space in which we are embedded, universities that master the knowledge chain will be the cradles of knowledge-intensive entrepreneurship.

To stimulate competition between universities, national governments should liberate them from the rigid regime of tuition fees and student recruitment. Each university should have the right to specialize as it chooses, fix its own fees for tuition and select its own students. Quality control and measurement are needed, but not in ways that stifle differentiation, innovation and renewal. To achieve a state of successful competition, the lifelong tenure of professors must also be ended. This would trigger a healthy process of horizontal and vertical mobility for scientists, researchers and teachers.

No less important is the mobility of scholars and highly educated and talented young students and graduates. 'Brain circulation' (mobility in a physical sense that stimulates face-to-face communication) and 'brain waves' (mobility in a virtual sense that takes advantage of new open space technologies) are the basic ingredients for combining competition with cooperation. Universities should embrace the creation of a co-opeitive transcultural and transdisciplinary context of mobility and integration, as opposed to a competitive multicultural context of emigration and separation.

Responsibility for all this rests on the shoulders of those responsible for changing the academic foundations on which human capital was built in the age of the machine. New foundations are needed for an innovative learning environment that will epitomize the knowledge city of the 21st century renaissance. Here, academics will indeed become entrepreneurs of the mind, in the business of 'growing' people intellectually, culturally and spiritually.

Knowledge and skills will be encouraged, the love of learning and an inquiring mind will be fostered, and creativity and imagination will be emphasized. And a digitally-connected collective intelligence will maximize the creative collaboration of 'knowledge nomads', who will come together in dense groups of scientists, researchers, graduates, students and entrepreneurs to address issues that concern them and compel them.


References
Nell'ambito della cooperazione tra due istituti di ricerca sulla imprenditorialità (la George Washington University, USA e la Jonkoping University, Svezia) è nato il seguente manifesto a firma di Elias Carayannis [7] e Piero Formica [8], che, dopo essere stato pubblicato da Guest Editorial in Industry and Higher Education (Aprile 2007), rilanciamo per sottoporlo ai commenti dei nostri lettori.

Il tema come si vede è di grande attualità e viene dibattuto proprio in questi giorni anche sui media italiani: come si può re-inventare, per favorirla, la didattica e la ricerca universitaria, come affrontare la questione della concentrazione delle risorse e quella della valutazione della performance accademica?

La tesi dei due co-firmatari è che, lungi dal seguire il modello "elitario" della concentrazione delle risorse (pubbliche, ma anche degli investimenti privati) su pochi centri di eccellenza della didattica e della ricerca, si dovrebbe investire sulla creazione di un ambiente diffuso di "co-opetizione" (competizione più cooperazione) tra molti e diversi knowledge-clusters e reti di innovazione, che vedano quali protagonisti università e aziende.

Il punto di partenza di questo modello è la constatazione di un diverso grado di diffusione della conoscenza sul territorio europeo, con la proliferazione in particolare di molte piccole università, del superamento della localizzazione dell'interazione tra ricercatori (come tra ricercatori e sponsors) nell'età della comunicazione, e la necessità, ai fini della costruzione di una società e una economia della conoscenza, di una "università imprenditoriale" così come
della sua controparte, un'"azienda accademica".

Se l'obiettivo dichiarato è quello di promuovere l'eccellenza nella diversità, il criterio suggerito per misurare tale eccellenza è "la capacità di gestire l'intera catena della conoscenza dalla creazione alla diffusione, conversione e sfruttamento imprenditoriale della conoscenza scientifica e tecnologica".

Tra gli strumenti proposti ce ne sono alcuni che sicuramente faranno discutere, come quello della liberalizzazione delle rette e dei criteri di reclutamento degli studenti, o quello della abolizione degli ingaggi a tempo indeterminato a favore "di un salutare processo di mobilità verticale e orizzontale di scienziati, ricercatori e docenti".

Ci rimettiamo alle opinioni e ai giudizi dei lettori per dare un feedback ragionato ed equilibrato rispetto a questa proposta, suggerendo solo alcune aree di possibile ulteriore chiarimento e approfondimento:
- il ruolo della libertà della ricerca all'interno di questo modello che potremmo chiamare di "liberismo della conoscenza"
- l'opportunità o meno di tenere distinte le aree della ricerca da quella della didattica
- gli strumenti con cui, all'interno di questo modello, sarebbe possibile o meno indirizzare il sapere verso compiti e applicazioni responsabili, cioè in altre parole la questione della accountability nell'auspicato rapporto università - territorio - società
- la possibilità o meno di applicare questo modello, tout-court, anche ad ambiti disciplinari disparati della didattica e della ricerca, oltre a quelli di immediata rilevanza per gli interessi imprenditoriali.

Questo Call for Comments rimarrà aperto per tre settimane dalla data del lancio.

Cristina Grasseni

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La concentrazione delle risorse e le prestazioni accademiche: reinventare l'apprendimento e la ricerca nel ventunesimo secolo
by Profs. Elias Carayannis and Piero Formica

Per quanto denaro i governi investano nelle università di eccellenza, il miglior risultato che queste produrranno, con i relativi investimenti per il sistema nazionale di R&S, sarà la pubblicazione del lavoro degli studiosi in importanti riviste. Questo è un obiettivo ricercato dalla maggior parte delle politiche educative e di ricerca in Europa, le quali sono oggi messe in discussione. Tuttavia, la strategia di concentrazione del denaro pubblico sulle "cittadelle" di alcune, selezionate, istituzioni accademiche con il doppio scopo dell'educazione e della ricerca (come avviene, ad esempio, in
Germania, in Svezia e nel Regno Unito) è molto discutibile. Ciò che è più importante è la creazione di un ambiente libero e "co-operativo" che, attraverso le forze collegate della competizione e della cooperazione, stimolerà tutte le università - non solo le più prestigiose - all'eccellenza innovativa attraverso tutti gli aspetti delle loro attività. In Europa, questo è l'ambiente più necessario, non quello che aderisce agli standard delle università d'élite di stile americano. Ci sono vari motivi per questa proposta. La dimensione non è sempre un vantaggio: questo ora è capitato chiaramente nel settore privato. Le strutture agili e più flessibili, meno soggette alle pressioni degli interessi, portano molti vantaggi.

Inoltre, nell'economia e nella società della conoscenza "glocalizzanti" (globalizzanti e localizzanti), le idee e il mercato del sapere non sono divisi in città e regioni, bensì in gruppi di affinità che derivano da un'altra propensione alla sociabilità e sono strutturati dalle modalità di creazione, diffusione e uso del sapere (in altre parole, "condutture del sapere" nelle quali scorrono perle di conoscenza, come reti di innovazione e meccanismi di conoscenza; vedi Carayannis e Gonzalez, 2003). Da questa prospettiva, come Kim et alii (2006) hanno sottolineato, il prestigio e l'autorità del tradizionale sostegno delle istituzioni accademiche sarà eroso dalla riduzione dell'importanza dell'incontro in presenza coi colleghi di ricerca, ora che la riduzione dei costi delle comunicazioni ha cambiato il precedente modo localizzato di interagire durante la ricerca. In Europa, d'altra parte, la proliferazione di università di ricerca di serie B ha sollevato il problema della qualità dell'educazione e della frammentazione della ricerca.

Noi proponiamo quindi che le università, le istituzioni universitarie e le aziende si uniscano in reti di innovazione e di conoscenza (vedi Formica, 2003; Carayannis e Campbell, 2006). Anche se la divisione del lavoro e la specializzazione funzionale delle organizzazioni persistono, in rapporto al tipo di attività di R&S, le università, le istituzioni universitarie e le aziende possono comunque portare avanti la ricerca di base e applicata, e lo sviluppo sperimentale. Il concetto di "università imprenditoriale" impone di collegare più strettamente la ricerca universitaria con le attività di ricerca e sviluppo dell'azienda.

Tuttavia, tanto importante quanto l'università imprenditoriale, è il concetto di "azienda accademica" che costituisce la strategia e l'organizzazione commerciale complementare rispetto all'università imprenditoriale. I ruoli complementari e reciprocamente rinforzanti delle aziende accademiche e delle università imprenditoriali sono cruciali per le economie e le società avanzate e basate sulla conoscenza; essi devono stare al centro di qualsiasi strategia mirante a reinventare l'apprendimento e la ricerca nel XXI secolo. Malgrado differenze funzionali significative esistenti fra università e aziende, esiste il potenziale per una sovrapposizione produttiva fra università imprenditoriali e aziende accademiche, grazie al fatto che tali organizzazioni possono agganciarsi più facilmente alle reti di ricerca di
università e impresa.
Dobbiamo assicurarci che la crisi delle istituzioni di alta formazione sia negli Stati Uniti sia in Europa sia trasformata in un'occasione. Dalla prospettiva europea, incentivi adeguati e meccanismi di ricompensa tendenti al pluralismo - un ambiente che permetta l'eccellenza in vie diverse - sono assolutamente necessari.
Una politica di questo tipo libererà le università dalle loro relazioni tradizionali e dalle tradizionali restrizioni e le renderà più competitive. I governi nazionali devono elargire risorse pubbliche in conformità con tre strategie chiave: incrementando l'indipendenza delle università, introducendo più concorrenza fra le università e incanalando fondi ai dipartimenti che eccellono in diversi modi. Per quanto riguarda l'ultimo punto, il migliore deve essere giudicato in termini della sua capacità di possedere l'intera catena de sapere: dalla creazione alla diffusione, conversione e sfruttamento imprenditoriale del sapere scientifico e tecnologico (Formica, 2006). La catena del sapere ha profonde implicazioni per le istituzioni di alta formazione e le scuole di business.
Manca molto alla loro possibilità da cooperare con le aziende per creare sapere e per diventare parte dei flussi di sapere e questo è specialmente il caso dei titolari anziani. Nello spazio del sapere nel quale siamo collocati, le università che acquistano padronanza della catena del sapere saranno la culla dell'imprenditoria ad alto tasso di conoscenza. Per stimolare la competizione fra le università, i governi nazionali dovrebbero liberarle dal rigido regime delle tasse e dal reclutamento dell'allievo attraverso le tasse scolastiche. Ogni università dovrebbe avere il diritto di specializzarsi mentre sceglie, di fissare le proprie tasse e di selezionare i propri allievi. Il controllo delle qualità e la misurazione sono necessari, ma non nel senso di soffocare la differenziazione, l'innovazione e il rinnovamento.
Per raggiungere uno stato di competizione e successo, il posto a vita dei professori deve terminare. Ciò innescherebbe un sano processo di mobilità orizzontale e verticale per gli scienziati, i ricercatori e gli insegnanti. Non meno importante è la mobilità degli studiosi, degli studenti e dei giovani laureati di talento e specializzati. La "circolazione dei cervelli" (mobilità in un senso fisico che stimola la comunicazione faccia a faccia) e le "onde di cervello" (mobilità in un senso virtuale che trae vantaggio dalle nuove tecnologie open-space) sono gli ingredienti fondamentali per combinare la competizione con la cooperazione. Le università dovrebbero abbracciare la creazione di contesti di mobilità e di creazione co-operitivi, transculturali e transdisciplinari, in opposizione a un contesto competitivo multiculturale di emigrazione e di separazione.
La responsabilità di tutto questo poggia sulle spalle di coloro che sono responsabili del cambiamento delle basi dell'accademia su cui il capitale umano è stato costruito nell'età delle macchine. Nuove fondamenta sono necessarie per un ambiente di apprendimento innovativo che rappresenterà la città del sapere della rinascita del XXI secolo. Qui, gli accademici diventeranno effettivamente imprenditori della mente, nella questione di far
crescere la gente intellettualmente, culturalmente e spiritualmente. La conoscenza e le abilità saranno incoraggiate, l'amore per l'apprendimento e una mente curiosa saranno promosse, e sarà dato risalto a creatività e immaginazione. E un'intelligenza collettiva connessa digitalmente incouragherà la collaborazione creativa di "nomadi della conoscenza" che si raggrupperanno in insiemi densi di scienziati, ricercatori, laureati, studenti e imprenditori per affrontare i problemi che li riguardano e si impongono loro.

Traduzione dall'inglese.

Riferimenti bibliografici


Links in this document:

1] /schedabiografica/Redazione FGB
2] https://www.fondazionebassetti.org/en/focus/2007/05/reinventing_learning_and_resea_2.html#commenti
Having read the Jonkeping manifesto, which I found very interesting, I would like to pose a question that I think is essential to the document's theme, i.e. what is the purpose of this operation. When we talk about "concentration of resources" who is addressed and who benefits from such concentration? When we talk about research on the "productivity" of resources, which value-parameters should we use?

When we speak of the concentration of resources, we could be referring to many things. One is avoiding deficits and concentrating on a few good areas. Another is to choose among possible alternatives for placing resources, i.e. we are no longer talking about "few but good" but only about few. The third solution, which seems to be underlying the theory of the manifesto, is the encouragement of a greater circularity in dealings between regions and universities, along the lines of development dear to the business mentality, which assume that development is primarily economic and therefore 'resources' refers to economic resources.

With regard to this debate, as chairman of the Bassetti Foundation I would like to state here that if we must speak of concentration of resources, we must focus on a responsible use of them as defined by the plans for innovation that the relevant society has in mind. As I have stated elsewhere (in "Nuova scienza e nuova Politica") science makes politics, resources allocated to science make politics, and the rationale of such choices should be guided by politics: not in the sense of the rear-guard problem of how to allocate resources to those who are already doing what they are doing, but...
rather of allocating resources as ammunition for those who wish to guide societal knowledge towards responsible tasks. This is a highly innovative theory but also a very centralist, control-based one. Such a line raises doubts even for myself - doubts that are shared by those who believe that restraints should not be placed on science and research.

 Granted that these kinds of problems, which inspire the Foundation's philosophy, do not go into detail of "how" to achieve this objective in light of the issues that the document touches on, we believe nevertheless that responsibility is an essential preliminary question for the debate in order to gain direction, i.e. to specify a responsible direction for it.

I do hope that those who will participate in the call for comments will help us to discuss and clarify this issue.

Piero Bassetti

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Ho letto il manifesto di Jonkeping, che ho trovato molto interessante. In qualità di Presidente della Fondazione Bassetti però vorrei porre una questione che sicuramente è pregiudiziale alla tematica del documento, cioè qual è il senso dell'operazione. Una concentrazione di risorse ad quem? Una ricerca della produttività delle risorse con che parametri di valore?

Quando si parla di concentrazione delle risorse, se ne può parlare in tanti modi. Uno è il modo di evitare degli spareggi e concentrarsi su pochi ma buoni. L'altro è quello di scegliere fra le possibili alternative sulle quali mettere le risorse, cioè non si fa più il discorso dei "pochi ma buoni" ma solamente su alcuni. La terza soluzione, che sembra essere giacente dietro la tesi degli estensori del documento, è di favorire una maggiore circolarità di rapporti fra territorio e università, in un certo senso di sviluppo caro alla business mentality che presuppone che lo sviluppo sia prevalentemente economico e quindi le risorse sono intese come risorse economiche.

Rispetto a questo discorso la Fondazione Bassetti qui direbbe che se di concentrazione di risorse bisognerebbe parlare, bisognerebbe concentrarle su un impiego responsabile rispetto agli schemi di innovazione che la società in questione ha in testa. Come ho già detto altrove (in "Nuova scienza e nuova Politica") la scienza fa politica, le risorse date alla scienza fanno politica, la logica di scelta dovrebbe essere quella politica, ma intesa non nella problematica di retroguardia di come dare le risorse a quelli che fanno quello che già fanno quanto invece dando le risorse come munizioni per chi volesse indirizzare il sapere della società verso compiti responsabili. E' una tesi molto innovativa ma anche molto dirigista. Una linea come questa suscita comunque anche in me dei dubbi che sono gli stessi dubbi di quelli che ritengono che alla scienza non bisogna mettere collari.
Only a few words are needed to convince everybody that, in the environmental condition in which we operate, the key resource is Knowledge and that the quality of the available human capital will decide the role of every country in the global game, or, more bluntly, who will be the winners and the loosers.

From this perspective, this issue has to rank within the first positions in the agenda of our policy makers. The dynamic (competition?) is so intense and tough that any possible contribution to knowledge creation and development must be taken in careful consideration, while the old mechanistic models for knowledge creation are to be abandoned.

The traditional division of roles that sees companies as knowledge "consumers" and Universities and Research Centres as "knowledge creators" is an oversimplification that produces inefficiencies in the use of the scarce resources available. One of the most important issues highlighted in the editorial is the suggestion to create a competitive environment for knowledge creation, i.e. an open market place in which experimental knowledge is created through internal and external dialectics.

In this context, the traditional idea of the public Institutions to drive the knowledge creation processes identifying precise mechanisms for resource allocations based on the reduction of failure risk (few selected Institutions) doesn't allow to exploit the real potential available. Following the approach adopted by the most successful companies, also government policy makers must apply a "meta-management" approach.

In other words the challenge relies on designing an effective mechanisms that fosters market efficiency by focusing on the innovation potential of the institutions involved (companies, Universities and research centres), and on the real results produced. In order to achieve this result, a deep change is
required: from a centralized "push" approach to a diffuse "pull" logic. New competencies and a new culture of the civil servants is required. Effective mechanisms for measuring the results are required. The Weberian burocratic perfection principle must be abandoned, while accepting an experimental approach.

In Italy, in addition to a consistent set of "pulling" mechanisms, another important condition must be created: we need a wise reform of the governance structure of our Universities and public research centres. Every new rule of the game will be bypassed if the governance system is not reformed. The clearest example of this problem is given by the recent experience of the University reform. The governance structure of state or "public" Universities is, in general, plethoric and too dependent on the academic corporative bodies, the relatively new (public or private) Universities' governance structures are dependent on local political or economic interests.


Piero Formica

FGB Question:
In which context has the idea for this manifesto developed? Has it at all included a reflection on innovation, and on its responsibility?

Formica Answer:
There is a need for a breakthrough in the organisation of universities. Organisational innovation is imperative, as the knowledge process from idea generation to innovation creation has dramatically changed. This is a consequence of a chain of innovations affecting social sciences, to which university organisations make reference.

University responsibility pertains not only for ways and means to generate new ideas, but also to how new ideas are embedded in the marketplace. An increasing number of new graduates are creating new ventures through research conducted in science centres and then experimented in business labs. How universities contribute to the profile of these new intellectual capitalists who promote entrepreneurial capitalism is essential.

Question:
How would you intend to create a 'co-opetitive' environment for research and education? In other words, which are the key reforms that in your opinion should be implemented in order to establish a similar environment?
Answer:
The formation of a co-opetitive environment includes two principal reforms:

a) Related to education in the field of behavioural economics. There is a need for experimental labs where students and new graduates can exercise mental gymnastics as a method of learning to collaborate and compete on innovation.

b) Concerns the decrease of barriers among faculties in order to create an area of convergence allowing one to belong to different areas of sciences.

Both reforms give birth to hybrid teams where convergence occurs between researchers, technologists, business strategists, marketing experts, business lawyers and other personalities who contribute to the creation, dissemination and commercialisation of knowledge.

Question:
Your manifesto suggests radical innovation. Who should bear responsibility for them, and who should in your opinion carry them out?

Answer:
The universities themselves should bear the responsibility. This implies the liberalisation of tertiary educational markets. In not so few countries universities are part of the government, and thus the bureaucracy. By universities organising themselves, they can become more liberal while releasing the government of its responsibility.

The ambitious mission is that of achieving a brand identity by bringing together the best content specialists: i.e., outstanding practice-oriented scholars and theory-oriented practitioners. The brand-owning university operates in close co-operation with an external network of alliance partners worldwide (academic institutions, business firms, e-technology enablers, tailored groups of students, et cetera) with which it forms a value-added community - VAC. The VAC experiments with forms of education which entice a new generation of students - the clerici vagantes (wandering students) of modern times, who leave their own countries with the intention of being away for a couple of years or more. Then, usually they return home, often having already implemented their projects with the VAC's educational institutions and companies abroad where they have been harboured.

Along the route the clerici vagantes are pollinators of new ideas and projects that made the university cities wealthy. Nowadays a circuit of native missionaires like those in the Middle Age is a fertile ground for 'glocal' communities where the local dimension turns into a local and global dimension. One of the most striking examples of the formation of glocal communities is the circuit of students that links Mumbai and Bangalore with London, Boston and California. Twinning projects cultivated at the university
sites within the circuit open up the door to successful entrepreneurial-friendly environments that, in turn, foster new and emerging high-growth research and business communities. Students must become more involved in the transformation. When reminded of the origin of the university, demand for education was a student-driven process. In the Medieval University, students were the main protagonists in their own knowledge development process. Contracts between students and professors were based on the criteria of outcome measurement rather than on attendance. Learning was not separated from learners by artificial borders. The university community and the handicraft economy were interwoven, each having much to learn from the other. A transnational and collaborative context favoured entrepreneurship, and innovative businesses were created that replaced traditional forms of arts and crafts.

Not less relevant is a radical reform in fee mechanisms. Tertiary education is an investment in human capital that must be supported by personal disposable income. This can occur through decreased taxation. Donors, foundations, sponsors, scholarships and honorary loans must act as enablers of investment in human capital.

Submitted by Piero Formica on May 23, 2007 9:52 AM

Sheridan Tatsuno [15]

The traditional university is a Middle Age institution which, like the Catholic Church, operates in a top-down fashion, but eliminating or limiting tenure and opening universities to global forces will present huge political challenges from the entire hierarchy.

Unlike U.S. universities, most national universities (not only Italian) are closed systems that do not hire or promote foreign researchers and professors. To attract talent, Italian universities should recruit top talent worldwide and encourage these researchers to bring research dollars with them. A "free agent" model is more suitable for the 21st century, although it will lead to less stable university employment. However, "floating researchers" can also work part-time for business or government.

Besides focusing on strengths and raising tuition, Italian/European universities should establish alumni association networks, which are useful in the U.S. for raising endowments. Alumni groups, such as the Stanford-MIT Vlab (www.vlab.org) and India's IIT (www.iit.org) and TIE (www.tie.org), are powerful vehicles for promoting innovation and stronger university-industry ties.

In sum, a new global university model is required for a global era. The era of
closed national universities is coming to a close.

Sheridan Tatsuno

Submitted by Sheridan Tatsuno on May 24, 2007 1:25 AM

Elias G. Carayannis

FGB question
In your manifesto you are critical of the American elite university model. Can you explain to a wider public why the universities of the American elite should not be an example to be followed in Europe?

Reply:
The "elite" universities in the US are historically research subcontractors from the US government and industry and lately government and industry sponsors from Europe and Asia. They in some regard were "made" to be "elite" by the research contract allocation decisions made by the US government and especially the defense establishment some 60 years ago or more (starting with the Manhattan Project - the making of the atom bomb). This concentration of resources has trade-offs: on the one hand it almost guarantees breakthroughs in a race for defense or other settings of competitive struggle but it also creates knowledge divides and limits the opportunities for creativity and innovation to the "select" few. This is not fitting for a Europe of empowered and equal citizens and of regions of creative endeavor and knowledge generation where diversity and heterogeneity are meant to act as invention triggers, creativity liberators, and innovation drivers. An alternative approach would be the co-opetitive research and education settings as discusse in my article with Prof. Formica.

Question:
Would you /would you not distinguish between research and teaching institutions, and why?

Reply:
I would rather see a neo-renaissance model of education emerge in Europe where teaching, research and consultancy form the three legs of the same stool complemeting and reinforcing each other and in that manner I would like to see teaching, research and outreach/consultancy competences emerge (with proper differentiation and focus nuancing) across most institutions of higher learning. Cross-disciplinary programs and cross-cutting, public-private partnerships for learning and innovation are the way to go and not re-inventing the verticals or stovepipes of knowledge from the past.
Question: In your manifesto you suggest a model for an "entrepreneurial university"? Which would be the advantages and which the disadvantages of such model?

Reply: In my research and writings (for instance, Carayannis and Juneau, Idea Makers and Idea Brokers, Praeger, 2003), I identify entrepreneurs as obsessed maniacs and clairvoyant oracles in terms of their tenacity of focus and capacity to evangelize their vision to others. I also have written about academics ideally being entrepreneurs of the mind so in that sense knowledge-driven, obsessed maniacs and clairvoyant oracles. This breed of knowledge architects is what needs to be the heart and soul of an entrepreneurial university and through their living example enact the philosophy and principles of the entrepreneurial university that is a flexible, open-minded, merit-driven, opportunity-obsessed and creativity-shaped approach to knowledge creation, sharing and use as well as a mind-set that thrives on self-reliance as much as possible and that means that people in such universities do not ask what the state or government can do for them but rather what they can do to render themselves as independent from public sector funding as possible. The advantages of such a model are clearly a higher quality, relevance, and currency knowledge and sustained excellence in all domains. The disadvantages (depending on broader social, political, and economic conditions) may be a short-term focus crowding out longer-term considerations and a different form (merit-based) elitism forming. But all in all, the market, knowledge and network spillover benefits accruing from truly entrepreneurial universities would far outweigh in my opinion, any disadvantages.

Question: Are they already examples of "entrepreneurial university" that you would quote?

Reply: Universities that come close to this model are in the US, places like MIT, Stanford, Harvard, and Rensselaer Polytechnic Institute in Troy, NY.

Question: Or of an "academic firm"?

Reply: "Academic firms" are those that balance their short term earning focus with more strategic investments in research and technology development competences - firms like IBM, Novartis, BMW, Airbus, Boeing and Nokia.

Question: How would you respond to the criticism that such a concept would go
against the idea of freedom of research and of teaching?

Reply:
Per my comments above, such an approach and a model would actually enhance and secure freedom of research and teaching over time through the formation of self-reliant institutions that can depend on their private endowments to determining their present and future choices and actions as opposed to the current situation of state-dependent and politics-driven institutions of higher learning.

Submitted by Elias G. Carayannis on May 24, 2007 12:02 PM

Thomas Andersson

FGB question:
In your manifesto you are critical of the American elite university model. Nevertheless, one could argue that the networks you advocate would once again constitute several "centers of excellence"...
On which criteria should we ask for more interaction between universities and their entrepreneurial entourage? Do this criteria include that of responsible innovation?

Reply:
The manifesto is critical of the one-sided, one-dimensional approach to excellence. In today's world of rapidly expanding opportunities for different kinds of knowledge, innovativeness and creativity to enrich and complement each other in multiple evolutionary processes, it is important that systems of evaluation and resource provision allow for pluralism. Such an arena is greatly important for genuine competition and renewal of ideas. The strive for quality, networking, clustering, etc. thus remains important, but the modalities for such exchanges should not be excessively restricted.

Question:
How would you implement a merit-based system for staff and students, in an "entrepreneurial model" of university such as the one you advocate? How would "merit" be measured if not in purely economic terms?

Reply:
In most academic institutions, staff and students are normally evaluated based on traditional and rather sterile criteria for excellence which tend to favor repetition and routinized learning rather than critical and creative learning and reflection. There is also a tendency for unidimensional forms of appreciation, publishing in certain scientific journal, siding with the prevailing view, etc. In order to improve the situation it is important to open up multiple forms of remuneration and appreciation. It needs to be possible
to excel in multiple ways. Traditional research remains important but the ability to perform outstanding lectures, contribute to entrepreneurial ventures, strengthen the development of the institution in other ways (build relationships that make it easier to undertake research in collaboration with industry, strengthen the employment record of students, etc.), must also be recognized in various ways.

Submitted by Thomas Andersson on May 24, 2007 12:16 PM

Libor Friedel

I strongly agree with the proposal and call for "knowledge clusters" and networks created within the Triple Helix system. As a gay from consulting, just "knocking on the door" of academia by doing research on the topic of intellectual capital within industrial clusters in regions (Region as a Knowledge Cluster) I can see the situation partly from business view and partly from academic view. During last few months even in the Czech Republic I had an opportunity to be part of discussions concerning entrepreneurial university, creation networks of professors etc. Professor Milan Zeleny (Fordham Univeristy, New York) leads the discussion here also as a part of staff in Tomas Bata University in Zlin. It is a fresh wind in our country and I am very glad to see the synergy, which I could touch during recent short visit in Jönköping.

From my personal point of view, I am a little afraid concerning "cooperativeness", it means whether we (or university teachers) are ready and willing to cooperate on knowledge, here in the Czech Republic. Professor Zeleny argues that information aren't knowledge. Knowledge is action! And we need to take action. However policy makers play still big "power role", which is sometimes (or mostly?) contentless in our country. Almost there is only a Double Helix and I found many good such examples. To achieve Triple Helix networking and knowledge clustering is difficult job. As for a salvation many policy makers and people from universities are looking forward to "EU money". That is my second doubt. Will this "EU money" paradigm destroy or support entreperneurship? Mainly on universities. One should find many examples of reinvented wheels and spended multiple money becuase lack of cooperation and synergy among univeristies with their projects. And the worst situation (as metaphor) is if there is not market demand for such twice reinvented wheel or if the demand is only within limited niche. Unfortunately I know many examples in our country where the "reinvention of the wheel" is paid by EU money. It is not entrepreneurial. It is only (as our Minister of industry says) "soup for free". What is the reason? Lack of secondary research, lack of "cooperativeness" and sometimes "untouchable" elite foreign univeristy as a holder of excellent knowledge. Therefore presented manifesto should have
a special "taste" for (not only) universities in our country. I believe that it is relevant for both universities and entrepreneurs. The last doubt and question at the end: "How to achieve the critical mass?"

Submitted by Libor Friedel on June 5, 2007 9:53 PM

Jeff Ubois [17]

Grounding this discussion in specific examples and working models would be a helpful next step. Such examples may show that there is more value from investments in regional (or what might be viewed as second tier) institutions. Deducing some guidelines for successful projects from these examples would provide some assurance for sympathetic funders and policymakers.

Regarding public/private partnerships, my colleague Peter Kaufman has written an interesting study on this topic, Marketing Culture in the Digital Age, which describes how such partnerships can and should operate in the world of publishing, libraries and information science. By extension, these approaches can be applied in other fields.

Getting away from the elite model will be difficult because program officers never get fired for funding projects at elite schools, while the risks of working with second tier institutions are perceived to be high.

Remember the line about technology purchases -- "no one ever got fired for buying IBM"? Until funding new, innovative, or risky endeavors at less famous schools proves to be a path to career advancement, it will be hard to change the way money is allocated.

Submitted by Jeff Ubois [18] on June 6, 2007 1:32 AM

Chiara Brambilla

Having read the manifesto, it leads me to think about what I find to be a crucial relation in our contemporary time, that one between knowledge and economy.

To this regard, I wonder whether it is a "right" choice to insist on the need to develop a special link between these two domains, in which the language of economy is applied to knowledge ("entrepreneurial academy", "academic firm", "liberalism of knowledge", "knowledge chain", à€¡). Is this what we actually need to reinvent learning and research in order to cope with the challenges of our global world? This is just a question that I would like to share with others moving towards possible answers. I mean, answers that
could help us to get over the shared fear of living in a world monopolized by economy. An economy that I'm not sure - following the suggestion of Edgar Morin in his preface to the book titled "Educazione e Globalizzazione" (Education and Globalisation) written by the two Italian philosophers of science Gianluca Bocchi and Mauro Ceruti - is actually able to manage that big part of human experience that "can not be counted" (passions, emotions, joy, happiness/unhappiness, faith and hope), even though it plays a crucial role in the construction of our knowledge.

I think that as researchers, academics, teachers we should take the responsibility to reform learning and research, considering not only the power of economy but also its limits. As the Italian philosopher, Giorgio Agamben, wonderfully explains in his last book "Il Regno e la Gloria" (on this see the talk by Agamben "The Power and the Glory": http://formoflife.blogspot.com/2007/03/power-and-glory-here-is-video-of.html [19] ) the greek word oikonomia (economy) means indeed the administration/management of oikos (house), that is a sort of managerial devise which Aristotele gives only the value of practice to, putting into question its epistemic value. In this perspective, Aristotele thinks politics can not be reduced to an economy and, following this, I find a issue that should be at the stake nowadays is the legitimacy to "tell the pluri-versality" of present global knowledge, thinking, learning and research (that is auspicated from many sides) through its oikonomia while this pluri-versality of knowledge is only rarely considered by the rules moving present economy.

Submitted by Chiara Brambilla on June 9, 2007 12:23 PM

Hiba Mhamedi

Intentac, creating effective learning through an Entrepreneurial Educational Network

In my quest for knowledge and education, from a user perspective, I have always been oriented toward real and true learning, a learning method that goes in parallel with the business world. However, I couldn't find an offering that would respond directly to these precise needs. Therefore, I engaged in building up this close relationship between what was learned in the university arena, and apply it in real context for me to acquire a "true" learning, rather than limiting myself only to the theoretical picture that is acquired at the university arena.

Today's students and knowledge seekers are in the quest for an entrepreneurial type of learning that uses theory and research; not as the essence of education, rather view it as a tool in order to better understand the business functionalities and its application in the ever evolving market
place. Today's students are looking for a ready to use learning, one that uses the raw material of research and theory, and offers them a finalized product reflecting correct action to be taken while operating in the business arena. In this way, universities will provide effective ways of action, hence building up an effective learning system.

If we view the current offering, as described in the manifesto, it suffers from long lasting illness, for which the only remedy is a dramatic change that suggests reinvention of the whole concept. The main sources of the illness is a focus of learning at the local level with present yet insufficient globalizing efforts, a clear separation between the business world and the academic world, and a concentration and rigidity of financial as well as non financial resources that affects the academic performance.

In other words, today's market place is qualified as an ever changing and evolving dynamic environment, affected by the globalization factor and the technological advancement. In this sense, for an education system to be effective, or so to say healthy, it needs to reflect the globalization of its environment and following technological advancement for the creation of new learning and business opportunities. For this to be, universities need not only to stay limited in the arena of occasional co-operations and exchange of both students and professors, rather through the creation of a network university, one with a flexible structure, that allows the free movement of students and professors for higher levels of knowledge transfer, creation of a global perspective and a global network of participants.

Through this new concept of the entrepreneurship academy, learning will become innovative and responding to today's needs. Such learning will not only be focused on the theoretical arena and will provide a hand-on experience on internationalization. In fact, the connection of global talents will permit to exploit opportunities that are fragmentated throughout the globe. Such an educational system will not only deliver knowledge but participate in the creation of the so called network enterprise, described as a network of entrepreneurs exploiting all together their local access to opportunities in order to serve the needs of the global world in a competitive manner.

In addition to the global aspect of learning, the real picture is also missing in today's education. For such reason, multinational companies' today have bypassed the academic learning system, and have created the notion of the academic firm, providing an internal learning, based on tomorrow's needs to respond to future trends reflected by the market place. What is suggested to be in the manifesto, and which I agree with, is to create collaboration between the new entrepreneurial university and the academic firm in order to deliver not a purely theoretical knowledge, but a relevant and appropriate
learning.

In other words, today's universities deliver a learning that offers a 2 dimensional picture under the "ceteris paribus" assumption. What is needed by the business practitioners is to pay for a service that will offer a 3 dimensional vision, that uses proficiency and advancement of scientific research, take into consideration the market trends for the pursuit of new opportunities and test their feasibility on the business lab level under different assumption that takes into consideration the myriad of intervening global factors in the field of new venture creation, entrepreneurial orientation and business renewal.

The rigidity of financial resources and their concentration in the European system, as described in the manifesto, and the reward system that is not based on performance decreases the motivation toward innovation for higher competitiveness, and the entrepreneurship orientation of institutions in relation to the collection and growth of these resources. To realize the previously discussed objective of effective learning, the educational system should be freed from the rigidity of financial as well as human resources that represent the other sources of the system illness.

For this to be, I truly believe that universities need to be free to set their own standards in terms of talents recruitment and tuition fees. I view this from a marketer perspective: price and positioning are two major elements to create a sustainable competitive advantage. In the case of the International Entrepreneurship Academy to succeed, tuition fee systems along with a selective recruitment system are musts for it to sustain and foster the innovativeness, quality and competitiveness of its offering.

To demonstrate this must, I will simply take the example of the Swedish educational system which I have taken part of. From my experience and my observation during my last year of master studies, I noticed that the free system of education offers highly respectable and adequate standard of education and one that is open to everyone. Yet, what it fails to create is a competitive spirit in its products: the students. In this sense, students are rather seeking to be standard not different. Does price interfere with it? In today's elite sphere, what is needed is distinction, differentiation and excellence. A pay for system of education repositions the offering very high, reflects quality. A selective system in relation to the tuition fee also imposes implicit, yet high demands from the knowledge seekers, and creates a spirit of competition that allows students to flow the way of the quest for differentiation and excellence. However, tuitions need to be set in regard to the target perception of quality and price relationship. Thus, we must ensure that they are to be reasonable, and affordable in relationship to our target.

Moving to the International entrepreneurship academy the next step is to
define the different offerings in regards to the various targets that the Intentac my serve. First target is future entrepreneurs. For this target Intentac will provide assistance, supervision and understanding of the market trends and needs, in order to strengthen their skills for new venture creation. Second, SMEs might also benefit from the offering of the academy to strengthen their learning in a specific area. Third, large companies could also be a target of the Academy and will therefore benefit from professional training programs for the ongoing knowledge recycling of its employees.

Relating Intentac specific offerings to each and very target will therefore permit to develop a sales plan that focuses on the added value of the academy that would be attractive for the businesses. Doing this, provides a way toward the attraction of funds, and the creation and start up of the core of the Intentac in Jönköping on the short term, using the current local and rich business network of the university in order to be members and participants in the development of their community. Having well established units in Jönköping and in the other venues of the Intentac will permit building the basis for the medium term expansion at the global level.

In my opinion, creating the Intentac network reflecting global learning network, involvement and cooperation with business world, and a free and flexible structure independent in terms of resource generation will be the pioneer in reinventing the learning system and creating and effective and quality education.

Hiba Mhamedi, Master in Entrepreneurial Management, Jonkoping

Submitted by Hiba Mhamedi on June 11, 2007 4:16 PM

Hicham Guennoun

Communicating Effectively to Entre/Intrapreneurs

The need to link university research to practice is today a necessity and a challenge. The need is to turn creatively the research that the university studies into practice. The challenge for university institutions is to motivate firms, start ups, and entrepreneurs to get inspired from the theory to apply it in real practice. However, managers and entrepreneurs do not have the time to read theories and try to adopt them to their situation; they need quick answers and feasible solutions which can be directly applicable in their companies or business ideas.

The communication channels are today revolutionizing the ways to project information. The digital world, the multimedia, and the World Wide Web (WWW) create an opportunity to transfer ideas quickly and effectively to
entrepreneurs. The digital world helps easily create a global network that can foster internationalization and competitiveness of young firms. The multimedia can transfer ideas, theories or solutions in a more attractive way to the practitioners thus a more convenient learning process. And, the WWW is fostering the speed of this internationalization and learning mechanisms. It is therefore, a must to use these mediums in the most creative ways to transfer knowledge and information in a less time consuming and effective ways to attract the entrepreneurs and respond to their needs.

This change in the role of the university to transfer the theory in a nontraditional way will attract entrepreneurs, managers and graduates as the offering will be tailored to their wants and responds to today’s market need. A co-opeitive environment between universities will motivate them to be more creative and innovative in using these existing channels of communication and to play the role of bridge between research and practice.

Here comes the most important question to answer. What are the needs of the entre/intrapreneurs of today? Answering this question is going to enhance their innovative spirit as they are motivated to learn exactly what they want to learn, this motivation will create innovations. The experimental development and the learning by doing philosophy are attracting this target. They want to fill their gaps by networking and by interchanging knowledge with the different fields of specialization. An engineer, a marketer and an accountant will be more creative and will generate more feasible project in a team than three engineers, the same is applicable for getting different nationalities together. Matching these resources and transferring the right information and training through the most effective mediums of communication will motivate entrepreneurship and will revolutionize university's way of teaching.

For this to succeed, there is a need for sustained resources to motivate these universities to excel. Be it from governmental institutions, private investors, business world, or the beneficiaries them selves, there is a need for these resources so that these institution will provide an increasingly competitive offering. The resources will help exchange professors, students, business practitioners inside this international network, to live the internationalization and foster international cooperation between students and university institutions. This will inspire students today to be the entrepreneurs of tomorrow, and the entrepreneurs of today to be the professionals of tomorrow. Internationalization and practical transfer of knowledge are the essence of today's entrepreneurs needs and the role of the university must be to respond to these needs.

Hicham Guennoun, Master in Entrepreneurial Management, Jonkoping

Submitted by Hicham Guennoun on June 11, 2007 4:20 PM
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Submitted by "Go to the next post" on June 15, 2007 6:41 PM