THE EMPLOYER’S PERSPECTIVE OF “PRACTICE DOCTORATES”: A PARADIGM CHANGE

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A COMPLEX ISSUE: FROM WHERE TO START?

WHO?
• Which specific contribution (and which point of view) can I bring to this international conference?

WHAT?
• What are we talking about? How to avoid terminological and conceptual misunderstandings? Is it appropriate to use the term “practical doctorates”?

WHEN?
• Since when have the academy community and even the business system started to take an interest in practical doctorates?

WHY?
• Why has the business world - and not just a small circle of academic visionaries and scientists - recently become interested in professional doctorates and industrial doctorate programs?

HOW?
• How can we contribute to promoting and enhancing practical doctorates?
AN INTERPRETIVE KEY TO GRASP THE “SOUL” AND THE “HEART” OF MY PRESENTATION

To demonstrate, not only from a pedagogical and / or sociological point of view, but also from the perspective of the enabling factors of the IV Industrial Revolution, the importance and relevance of the following statement by Professor Tim Blackman (Middlesex University’s Vice-Chancellor) in connection to the (new) great transformation of work we are experiencing:

“FAR FROM BEING THE POOR COUSIN OF THE PHD, THE PROFESSIONAL DOCTORATE / PRACTICE DOCTORATES EPITOMISES A MODEL OF HIGHER EDUCATION THAT IS FOR THE 21ST CENTURY, BASED ON PROFESSIONAL FORMATION AND DESIGN THINKING”

WHICH CONTRIBUTION / POINT OF VIEW CAN I BRING TO THIS INTERNATIONAL CONFERENCE?

☞ SOME WARNINGS

• I'm a lawyer, not a pedagogist. I think as a lawyer: the culture of civil and administrative law from which I come has a decisive weight in the focus of the so-called practical doctorates, their structural elements and their practical and operational aspects.

• I'm not an entrepreneur. I am not even a legal consultant for companies that use this channel to recruit and employ researchers. What I can bring here today and share with you is, rather, an experience and, also, some curious and fortunate coincidences.

• The experience that I bring here is the one of Italy’s doctorate in "Training of the person and labour market" promoted by the Ministry of Education, University and Research. This program was established with the precise aim of experimenting also in Italy, in a cultural and regulatory context still strongly influenced by the tradition of academic doctorates only intended for the university career, innovative forms of doctorate in collaboration with companies.
ADAPT Brain Hub

256 PhD who have obtained their doctoral degree
315 three-year PhD scholarships
118 apprenticeship contracts for higher education
103 doctoral students

Over €10 million collected to fund our Doctoral School
301 partnerships with companies
61 partnerships with international institutions

Building the Future of work together
The breakthrough of this experience took place with the transition from Modena to Bergamo in a cultural context and design more favourable because some teachers of the Faculty of Educational Sciences of this University involved in our PhD program were an active part on the study, experimentation and enhancement of connections and forms of integration between school, university and labour market through the methodology of so called alternation (a sort of reinterpretation of the German dual system in higher education)

The coincidence of making converge, in a unitary project of innovation of the doctoral pathways, a research group of pedagogists and labour lawyers and expert in Industrial Relations has thus facilitated the understanding of the needs and modalities of selection and training of non-academic researchers and the most appropriate technical solutions for their legal and contractual framework in productive contexts
WHAT ARE WE TALKING ABOUT? HOW TO AVOID TERMINOLOGICAL AND CONCEPTUAL MISUNDERSTANDINGS?

☞ A WARNING

• The term practical doctorates is certainly illustrative, as a first approximation, of the phenomenon we intend to analyse. However, a closer analysis says that this term is misleading both from the conceptual and the normative point of view and, above all, it might give rise to serious interpretative and reconstructive misunderstandings of the phenomenon for a series of epistemological reasons, which concern both the juridical and the pedagogical disciplines, and also for cultural and planning reasons.

☞ A PROPOSAL

• I think it is appropriate to distinguish, within the wide and indistinct category of so-called practical doctorates, the industrial doctorates from the professional doctorates. The distinction between the two types of doctorate seems to me profound and not to be limited simply to the cultural and geographical context of reference on the assumption that professional doctorates are historically implemented in Anglo-Saxon countries (USA, UK, Ireland, Australia), while the industrial doctorates have been widespread, for over forty years, in Northern Europe (Denmark, Norway, Sweden) and, more recently, also in Italy.
SOMETHING IN COMMON ...

• Both paths intend to develop skills and research trajectories for purposes that are not strictly or directly academic.
• Both paths represent a challenge to the traditional paradigm of the academic selection/training of researchers.

BUT DIFFERENT ON A CONCEPTUAL / FUNCTIONAL LEVEL

• Professional doctorates should refer to professional practice i.e. to be designed for professionals (people who already work and wish to deepen their knowledge and advance their professional career).
• The industrial doctorates should instead refer to research paths developed in the company or in collaboration with one or more companies, thus developing not a one-to-one relationship (tutor and doctoral student) but a triangular relationship between university, company, and the doctoral student.
• In this perspective, it would be a matter of distinguishing between training and research paths for liberal professions and professional self-employment from non-academic research work carried out for companies and for the achievement of goals not so much of the single PhD student involved as for the employer who promotes and / or financially supports the research path.
WHY DIFFERENTIATE BETWEEN PROFESSIONAL AND INDUSTRIAL DOCTORATES?

• The first are simply individual paths that start with the participation in the call for applications issued by a university or a PhD School by students (as a rule without scholarship) who engage in research on topics directly or indirectly related to their professional experience

• Industrial doctorate is a triangular path whereby a company agrees with a Doctoral School a scientific research path of a non-academic type to take charge of a PhD student, as an employee who provides funding or with a close link between PhD student and sponsor

☞ PUT IN THESE TERMS, THE DIFFERENCE, FROM THE POINT OF VIEW OF COMPANIES, IS NOT TRIVIAL:

- THE PROFESSIONAL DOCTORATE IS USUALLY DEVELOPED IN THE INTEREST OF THE SINGLE DOCTORAL CANDIDATE

- CONVERSELY, THE INDUSTRIAL DOCTORATE IS A PATH OF GREATER INTEREST FOR THE COMPANIES WITH WHICH AN AGREEMENT IS REACHED TO CARRY OUT ITS OWN RESEARCH PROJECT FOR INDUSTRIAL AND / OR PRODUCTIVE PURPOSES
Practice doctorates? I consider this definition not only misleading but also dangerous and negative, on the cultural level, for the promotion and full recognition of professional and industrial doctorates.

If we really believe that “far from being the poor cousin of the PhD, the professional doctorate epitomises a model of higher education that is for the 21st century” (Blackman T., 2016), consequently we cannot be the first to feed the idea that professional doctorates and industrial doctorates differ from traditional doctorates only in terms of practical aspects.

we cannot be the first to erroneously think of the world of practical knowledge, as a parallel path and consequently secondary to that of theoretical knowledge and scientific research for academic purposes.
Professional doctorates and industrial doctorates can differentiate themselves from traditional doctorate paths for the (private) nature of funding, for the contexts of learning experience and the modes research is carried out and also for the concrete objectives of the research project, but they remain perfectly identical to traditional ones in their goal to provide an original contribution to the advancement of knowledge on a given subject or in a specific subject area.

The development of professional and industrial doctorates can represent a valuable opportunity to modernize all PhD programs, coming to terms with the pedagogical and professional development of researchers centered around a regulatory and organizational standard still strongly anchored to economic models and social networks in place in the twentieth century (i.e. the Industrial society).
SINCE WHEN HAS THE ACADEMY COMMUNITY BEGUN TO TAKE AN INTEREST IN PRACTICE DOCTORATES?

To understand what professional / industrial doctorates really are and, consequently, to comprehend which practical functions they carry out, it seems useful to understand since when scientific reasoning and even the business system have begun to take an interest in professional doctorates and industrial doctorates.

☞ A COMMON AND DEFINITELY DEFENSIVE VIEW IN THE ACADEMIC CIRCLES ON PRACTICE DOCTORATES

- In the literature, the answer is linked to the employment prospects of the PhDs students, at the end of their formative path after defending the doctoral thesis. More than in terms of a real and convinced connection between the academic world and the business system, the interest of the academic world in professional and industrial doctorates seems, in effect, to be a defensive reaction with respect to the evident shrinking of public research funding.

- A secondary option relates to the academic career, with the aim of preserving, at the end of the doctoral path, that wealth of knowledge and skills that these young researchers have developed in any case.
WHY HAS THE BUSINESS WORLD RECENTLY BECOME INTERESTED IN PROFESSIONAL / INDUSTRIAL DOCTORATE PROGRAMS?

• The growing interest in true innovative forms of doctorate lies in the profound changes in the ways of doing business and producing that over time have given rise to a real market for non-academic research work that now claims to be recognized and properly nurtured.

• From this point of view, professional doctorates and doctoral candidates, far from being a mere stopgap, represent the first fundamental step to organize and structure the so-called “intermediate labor markets”, i.e. brain hubs / competence centers (intermediate areas aimed at enabling and promoting collaboration between universities, research centers, companies, …). 

☞ “The number and strength of a nation’s hubs of innovation will determine whether that nation prospers or declines. Areas in which physical products are being made will continue to lose importance, while cities populated by creative, interconnected workers will become the factories of the future” (Enrico Moretti, The New Geography of Jobs, 2012)
COMPANIES AS LEARNING / RESEARCH ORGANISATIONS

• From vertical and closed economic organizations, managed according to legal logic of command and control according to the mere production and/or exchange of goods and services, to a real “learning organization”, a sort of “open cooperation platforms” that operate in network logic giving rise to the development of partnerships and districts of innovation and knowledge of uncertain legal qualification.

• In such productive contexts, animated by hybrid professional figures, halfway between scientific research and the management of change in productive and organizational processes, even the actual work activity is carried out in a manner close to those of a circular process of training and research aimed at "learning to learn" (Novak – Gowin, 1984) according to a sequence of productive work made up of study, research, learning, innovation, design and development.

Of this transformation of the ways of doing business, research work is an essential and in any case decisive step because it aims at presiding, in structured and organized forms, the "intermediate labor markets".

As the construction of roads, bridges, railways, airports has accompanied the previous Industrial Revolutions, so, in the Fourth Industrial Revolution, the research work becomes, regardless of the nature (public or private), one of the pillars of that intangible infrastructure that, well beyond broadband and new technologies, should characterize a modern economy: the infrastructure of knowledge and brains.
HOW CAN WE CONTRIBUTE TO PROMOTE AND ENHANCE PROFESSIONAL / INDUSTRIAL DOCTORATES?

☞ How to respond to this need for innovation in economic and social processes?
☞ How to build modern research doctorates that can respond to these challenges?
☞ How can we approach the university and the business while respecting the needs of the labour market but also the quality standards that have so far characterized the research doctorate programs?
☞ How to avoid that the experiences of professional doctorate and industrial doctorate are understood as a poor relation of the academic doctorates?
To overcome these cultural barriers, it is therefore essential to avoid the functionalization and typification of professional and industrial doctorates which then risks becoming a sort of more or less “golden ghetto”, depending on the public incentive measures that accompany them in the various countries, as though they were something different and distinct from the actual PhD programmes.

It is necessary to overcome, in the high doctoral training, the standardization of the processes, the paths and the rules that, inevitably, end up reflecting, in the planning of the training offer and in the verification of the quality of the research work, the “golden rule” of the academic doctorate. I am familiar with the Italian reality, but on this front, I believe that the delay of all countries is evident.
A second answer could consist in the creation of real doctoral schools that are characterized by homogeneous and interdisciplinary research lines on specific issues in order to create the right critical mass, attract private funding and develop useful forms of collaboration among the various PhD students that are involved both in more abstract and theoretical research paths and in research paths more oriented to the needs of a single company or a group of lenders.

This is the distinctive and successful factor, compared to the needs expressed by the production system, of the doctoral school promoted by ADAPT because it has a sufficient critical mass for the search and selection of candidates for business and professional paths and for their training, so as sufficient resources to equip themselves with a real "professional" organization and a tutor able to manage these paths and the inevitable critical issues, while offering the business system know-how and planning skills on specific topics around which develop positive fundraising dynamics.

This system should be focused on schools participated and composed of figures from different worlds (academy, business, non-profit, professions) tending on an equal basis creating a real hybrid community of peers.
A third answer must finally be sought in the evolution of the legal and contractual status of PhD students in the sense of recognition of their professionalism that goes beyond the student dimension according to a concept still dominant today but certainly not in the countries where doctorates have taken hold industrial (above all Denmark).

An important point in this direction is the Commission's Recommendation of 11 March 2005 on the “European Charter for Researchers” and “A code of conduct for the recruitment of researchers” (under the heading “General Principles and Requirements for Employers and Funders”), in the sense that “Member States should endeavour to offer researchers sustainable career development systems at all career stages, regardless of their contractual situation and of the chosen R&D career path, and they should endeavour to ensure that researchers are treated as professionals and as an integral part of the institutions in which they work”.

Of particular interest, in this perspective, it is certainly the Italian case that from 2008 foresees, at least on the paper, the possibility to carry out PhD programs in “apprenticeships of research and higher education”.

A THIRD ANSWER
The decisive step for the development of innovative doctorates and the modernization of traditional doctorates is the full recognition and the emergence of an open and transparent market of research work, indifferently public or private and in any case far beyond the always weaker "monopoly" ensured by the university system and by the professional outlet in the academic career.

This is also the objective desired by the Community institutions, starting with the approval of the “European Charter for Researchers” and the related “Code of Conduct for the recruitment of researchers”, from the perspective already discussed at the beginning of the millennium of an “European area of research”
This is the main contribution that can bring the point of view of companies to the debate on the evolution of research doctorates, of any type of doctorate: that of a clear recognition of the role and the related professional profile and career of doctoral student / research doctor both in terms of status as well as remuneration and professional skills overcoming the fence, no longer adequate to the evolution of the economy and society, which still separates the public / academic research from the private / corporate research.

Today the point on which to pay attention is not only that of pedagogical protocols, the construction of the related curricular paths and the monitoring of their quality (certainly not a secondary issue, but on which there is now a sufficient literature and attention: see Costley C. 2013) but, firstly, that of focusing on outcomes, that is, on the contents and professional profiles (knowledge, skills, abilities) that a researcher must develop in the early stages of his career.
The research work market has changed and with it also changes the role and function of doctoral programs

As already highlighted a few years ago in the *Final report for the European Commission Directorate General for Research and Innovation*, "The complexity of research careers today demands a new type of researcher, which we would like to describe as an entrepreneurial researcher. This implies that a researcher should be innovative, risk-oriented, prepared to take leadership and respond to different tasks in parallel" (Expert Group on Research Profession, 2012, p. 29)

This epochal challenge, which is easy to perceive, regards all the doctorate programs and not only the industrial and professional ones which, on the contrary, have much to say in the modernization and development of all the known doctoral forms.