**INNOVATION AND KNOWLEDGE TRANSFER OF THE RESEARCH. FINAL REMARKS**

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The PRIN2012LATR9N project began more than 5 years ago, when we found ourselves drafting the research map in a cultural and pedagogical context rather far-removed from the themes we wished to address.

In fact, to speak of Work-Related Learning, widespread apprenticeship programmes, callings, the relationship between education and work, and employability, could have seemed to be steering the project’s reflection away from the pedagogical-educational contexts in question. What we can say is that the development of the project began as a challenge: starting to deal with matters seldom investigated and uncommon in the university community of Italian pedagogy meant stubbornly tackling content that belonged to other disciplines – according to the academic and cultural traditions.

Therefore, in terms of innovation, this could be considered the first step: dealing with themes partially adhering to pedagogical disciplines with the intention of expressing full membership of the paths on skills and employability in the contexts of educational and training knowledge.

The project title already contained the fundamental points of the research design: «To design innovative programmes for higher education, to promote personalized learning, to build on job competences, to valorize talents to create new work opportunities. Positive strategies in higher education to support young adults during their employment emergency, as a response to the socioeconomic crisis and as a citizenship action». We broke it down into five consecutive lines. We dealt with higher education, indeed, with learning in higher education, and we tied together themes and reflections in a much-frequented international context. In recent years, these themes have become familiar, the problem of the transformation of the university and of its role in and for civil society has
become crucial. The debate is ongoing, inspired especially by numerous micro-changes that have occurred through MIUR Directives and ANVUR Assessments. We could say that the change has become manifest in the details of the Decrees, in the assessment regulations of the study courses, or in the indicators that monitor PhD courses. In this context, year after year, cultural change has taken shape and has become part of a debate which is increasingly acknowledged. In the light of the epochal changes in which we are immersed, Work, Job Placements, Professions, and Professionalism become the fulcrum to reflect on higher education’s role today. From here, Didactics, Guidance, Calling, Traineeship, and Employability become focal points for the development of education, but above all to define a matrix of innovation and renewal for the university system.

Accordingly, we could say that this chain of reflection represents the second passage for process innovation that even basic research can produce.

The research that we put together aims to present the results along three main lines:

- the study of developments and changes in university students’ subjectivity in relation to their personal formation (non-formal and informal contexts) and university education and training (formal);
- the impact that the teachings at university – meaning a structure providing knowledge, practice, reflection, and experience – have in accompanying and developing the necessary skills for people to enter professional and life contexts and self-orient their formative process;
- the organizational dimensions and the university practices of placement, in the conviction that altering the system context is one of the engines for change that can respond to the new requirements that the world of professions and work demands from young graduates.

The research project was split into six phases. The research addressed the main moments in the students’ academic life: career guidance upon entry, personalized teaching, formation of the professional vocation, profession-building activities such as internships and work experiences, and lastly job placement. Within the areas shown hereafter, each unit developed and investigated each of these topics in parallel.

The research also dealt with the micro, macro, and mega dimensions, and this takes us to the third point of reflection on the outcome of the innovation achieved. Along with reflection on the subjects, students, graduates, and young adults, we elaborated reflection on the educational structures – where normally only traineeship is recalled, and in addition, we explored the potential of educational transformation which the university can and must look to through reflection on competences and employability.

As three distinguished colleagues pointed out at the closing conference on our work, the prospects from which to depart are many. We
shall summarize these by using these reflections which can also take us into an international scenario.

In the first instance, John Dirx, of Michigan State University, on the line of *Teaching* and *Learning* has emphasized the centrality of a change in perspective and focal point in the contexts of Education: students ought to be put at the centre of the learning process, but above all, of the teaching processes. The role of university teaching is key if we really wish to propose a future for this institution which is supposed to be the engine of a country’s knowledge:

Over the last half-century, teachers in higher education have gradually begun to incorporate active and engaged forms of learning in their practices. They have found that shifting from passive learning and a reliance on recitation and lecturing to more student- and learning-centred approaches actively involves students in the learning process, enhances their motivation to learn, fosters higher-order thinking skills, and creates more meaningful learning experiences for them. Changing from a long tradition of passive learning, however, to more student- and learning-centred approaches takes time, knowledge, skill, and commitment. It will be necessary to highlight research-based principles to actively engage students in the learning process and to explore strategies for promoting change in teaching practice at individual and organizational levels in higher education (Emp&Co. Conference 2017).

Instead, if we observe the exponential change arriving from the worlds of scientific research and industry, might we ask ourselves how to promote such a change in the global university? What can be done to give all the universities in Italy the same possibility to better prepare their students. According to Soong Hee Han of the University of Seoul:

Higher education, different from others, develops and delivers cutting-edge innovations in setting new societal visions, restructuring, technologies, and professional skills development to implement and maintain them. It includes not only high-tech industries but also fundamental and structural changes in society and economy, as we would expect from the Fourth Industrial Revolution. I argue that the macro changes in industry and the labour market will further rely on the active role of higher education in both long-term academic competences, and ‘re-skilling’ continuing education for current employees. Also, as recently basic income, robot tax, or jobless growth gain keener attention, the issue of employability and transition should be actively combined with new social platforms like the shared economy, and the new way of combining work and life, which will also dramatically change the role of higher education in weaving new social textures of the issues of employability and social inclusion, as well as personal development. I will deliver three key changes to consider, from the international perspectives, that
(1) the ecosystem of higher education, both in Europe and Asia is being quickly reshaped; (2) Key competences in the workplace, facing the emergence of Super-Intelligence and Super-connection, are increasingly seeking the values of liberal arts and pure sciences, cultivated in higher education, which are being fused and interconnected to meet the complex world; (3) The emergence of artificial intelligence will diminish job opportunities, and ‘employability’ and ‘social inclusion’ will not be separate from one another, creating a new social and economic platform where the concept of ‘employment’ will be dramatically re-conceptualized (Emp&Co. Conference 2017).

Future perspectives on this issue tell us that Eastern Asia, unlike Italy and Europe, is building new higher education models precisely to anticipate the complex social changes that we shall shortly have to face. The question has to do with the development of individual skills through new curricula to initiate the creation and development of new higher education ecosystems.

From a political perspective, Maria Slowey of Dublin City University has asked us to reflect on the role of the university for the development of a country in the light of the last ten years of economic-financial crises and social, civil, and political austerities, which have fuelled the debate on the guidelines to be given and on the value of higher education:

Higher education (comprising not only universities but also a diverse range of other tertiary institutions such as specialist colleges, polytechnics, and professional institutions) is increasingly expected to fulfil a wide variety of roles for society and, more narrowly, for the economy – such as widening access, meeting labour market needs, technology transfer, contributing to regional development and civic engagement. It is possible to explore a central paradox – or, as Collini (2012) interprets it, a ‘Faustian pact’. To the extent that universities succeed in offering a ‘service provider’ role to important stakeholders (in particular, the state and employers) is this at the cost of effectively abandoning its transformative mission? This mission has traditionally involved generating new knowledge and reflecting critical analytic, independent perspectives back to the society of which universities are a part. As Collini put it: One begins to wonder whether societies do not make a kind of Faustian pact when they set up universities: they ask them to serve various purposes, but if they are to be given the intellectual freedom necessary to serve these purposes, they will always tend to exceed or subvert those purposes. (Collini 2012: 7). There are fundamental questions about the role of higher education in contemporary society: in particular, the balance between private and public good. The global expansion of higher education coupled with the development of the ‘knowledge economy’ or ‘knowledge society’ has led to higher education being increasingly at the centre of policy interest at both international levels (through bodies such as the EU, OECD, World Bank, and UNESCO) and national lev-
els. The paradox is thus that while Higher Education is seen as increasingly important for the successful development of society, its core values and purposes are, arguably, facing unprecedented threats (Emp&Co. Conference 2017).

In conclusion, we could say that we need to think about the research results precisely to interpret tomorrow, and what will happen in and for university contexts.

The educational and pedagogical sense of our work lies in the fact of having conducted our disciplines in unexplored territories to try to combine the speed of change and stay within the innovation and prospects for a future that is already ‘today’. If the research has taught us anything, it is that a large dose of courage is necessary to remain dissatisfied. In fact, in the face of so many changes, we need to be able to transform our way of being. While some styles of thinking, language, and professions are disappearing, others are appearing. We must be able to understand and model the transformations, to avoid producing ‘injustices and creating new marginalization’.

This is the task of the research and this is the task of the transfer of knowledge and learning.

References