

# The present and future of PhD supervisory training: outputs of the TTT meeting

*All participants of the TTT meeting*

## **Abstract**

We present here the outputs of the closing discussion session of the Tarragona Think Tank on PhD supervisory training (TTT), where the participants reflected about the present and future of PhD supervisory training. The session focussed on three topics: future challenges to the development of professionalization of doctoral supervision; what the optimal situation of doctoral supervision would look like; and how the impact of professionalization practices can be assessed.

## Introduction

The preceding pages of this book have served several purposes: They have introduced the *Tarragona Think Tank on PhD supervisory training: challenges and good practices* initiative, presented an overview of the situation of doctoral education in Europe, and described the provision of PhD supervisory training at different European universities to professionalize the role of doctoral supervisors. In this final chapter, we present the outputs of the closing discussion session of the *Tarragona Think Tank on PhD supervisory training* (TTT) meeting, which allowed the participants to share reflections about the present and future of PhD supervisory training.

In order to coordinate and enrich the exchanges between the participant experts on PhD supervision training, the session focused on three topics:

- a) Future *challenges* to the development of professionalization of doctoral supervision.
- b) The '*dream*': what the optimal situation of doctoral supervision would look like.
- c) How the *impact* of professionalization practices can be assessed.

## Challenges

Undoubtedly, the examples of good practices that we have seen throughout this book have not succeeded without challenges along the way. Beyond the specific challenges that each institution has overcome, the group of TTT participants identified the most common challenges that universities may face when developing or consolidating their PhD professionalization efforts. These were grouped into three main themes: first, a series of challenges related to the changing reality that doctoral education represents and the need to rapidly adapt to this dynamic evolution, which we have clustered under the theme of 'transformation'; second, the challenges related to maintaining the momentum gathered by initial efforts, within the theme of 'sustainability'; and third, and coinciding with one of the questions that we proposed *ex-ante* for this last part of the TTT, related to the challenge of demonstrating the value of PhD professionalization initiatives, under the theme 'impact'.

## Transformation

Higher education in general has undergone a profound transformation in the last two decades. This has been structured through the Bologna Process and manifested in the Salzburg Principles for doctoral education, which is now itself involved in a process of evolution. This transformation affects doctoral education as it has been known up to now in terms of its methodology and purposes, both educational and social.

- ✦ *Educational purpose.* The award of a doctoral degree has become a much more complex matter in today's world. Although the research process remains at the core of doctoral education, it is no longer the sole focus of a PhD, rather the research project has been supplemented with a number of additional demands, activities, responsibilities, duties and opportunities for doctoral candidates. This implies shifting the outcome from a thesis-only perspective towards a person perspective, inter alia involving the development of transferable skills, including abstract aspects like emotional intelligence.
- ✦ *Social purpose.* Universities must produce doctors with a range of different profiles in order to satisfy eventual professional and academic demands. This implies that supervisors must develop a wider view of what the doctorate is for, and prepare their candidates for different career possibilities. One of the handicaps of this view is that most often supervisors do not have professional experience outside academia. Thus, the institution needs to develop suitable tools to ensure that supervisors and candidates have enough knowledge of employment opportunities both inside and outside of academia. While this also places the onus on doctoral candidates to be aware of the need to plan their professional careers in order to become more employable, supervisors and the institution must also build strong university-business collaborations and ensure that doctoral candidates have the time to engage with them.
- ✦ *Collegiate responsibility.* The previous point indicates that the doctorate must be understood as a collective effort, with responsibilities distributed among different bodies, including the institution from its main policy-making ranks, doctoral schools, departments, research groups and supervisors, in order to develop a positive supervisory culture across the institution. Thus, there are numerous stakeholders in the production of PhDs, and they all need to understand this broader view of the doctoral process and its inherent responsibilities.

## Sustainability

To enable supervisors to excel in this new context, universities must provide PhD supervisory training and all its accompanying measures. Once established, a key challenge will be securing resources, institutional support and cooperation among all the stakeholders involved in order to consolidate and sustain a system that can ultimately be beneficial for everyone involved. The main aspects of the challenge of sustainability involve:

- ✦ *Institutionalization.* At some institutions, postgraduate schools lead the efforts to implement a culture of professionalized doctoral supervision among potential supervisors. This, in fact, might be considered a practical situation towards which all universities should gravitate in the near future. Depending on the degree of development of the training culture and on the role assigned to the postgraduate school, this transition might be smooth and easy, or it might constitute a great challenge.
- ✦ *Budget.* The creation of PhD supervision professionalization programs can be, in many cases, based on the goodwill of a group of interested members at the institution. Nevertheless, to ensure the continuity and development of actions, an institutional budget must be established. A small budget would be enough to develop one-off courses for doctoral researchers and supervisors, but more funding would be required to create a comprehensive and sustainable program.
- ✦ *Running the program.* As in the first point of this section (institutionalization), different realities have been identified regarding the profile of the people in charge of the development of the program: the head of a doctoral school, who manages the resources necessary to run the program and organize its development; the staff of the institution who are assigned the task of developing the training programs internally; external consultants who run tailor-made programs for different institutions; or a combination of these depending on the resources and expertise available as well as the size of each doctoral cohort. Each institution should consider which model is more suitable and sustainable for it, to ensure continuity and to be able to assess the quality of the training program.
- ✦ *Resistance.* In some cases, it is necessary to break the inertia restricting the changes introduced by the professionalization of PhD supervision. Some professors are used to working in a more traditional way, and they would prefer to keep working in the same way. Others may only have their own supervisors as role models whose outdated practice they emulate, knowing no other way. Another point that contributes to this resistance is the lack of recognition of the utility and value of daily supervisory duties for the successful completion of the doctorate.
- ✦ *Satisfaction.* To ensure the sustainability of the program, it is necessary to reach a critical mass of satisfied trained supervisors who will act as advocates for the program, spreading the word among peers and becoming allies in support of the continuity and further development of the program.

- *Quality assurance.* A further challenge is to devise ways in which the training program can be evaluated in several respects: its value to individual supervisors, for instance how interesting and illuminating they find the sessions and how well they implement the lessons learned; its value to the students, for instance in what ways they feel better supported to complete their studies; and its value to the institution, for instance in the ability to attract good candidates and support them both in the successful completion of their degrees and in finding suitable employment thereafter.

A third and last group of challenges has to do with the need to show the impact of supervisor development initiatives. Because this coincides with our last thematic block, we will deal with this important challenge separately in section 4.

## The ‘dream’: The ideal doctoral supervision organization

In this activity, the members of the TTT were asked to reflect upon, generate and design a scenario of what the optimal situation for doctoral supervision might look like. This scenario would represent a gold standard for which universities should aim. The characteristics of this ideal benchmark include the aspects that follow.

### Moving beyond institutional support

As highlighted earlier in this chapter and illustrated by some of the case studies included in this book, the support of the institution is a key element for both the initiation and the sustainability of PhD supervision initiatives. In order to reach an ideal situation, we should aim for fully-fledged institutional integration, that is, the professionalization of doctoral supervision should be fully integrated into the strategy of the university.

- *Institutional integration.* This would bring about two key aspects:
  - Normative integration, that is, doctoral supervision in all its facets should be integrated into university regulations, such as in their training policies, detailing provisions such as its voluntary/obligatory status, HR permissions and recognition of hours invested and incentives for the work, links between the level of PhD supervision training and experience required or recommended and the stages of the supervisory career, etc.
  - A substantial regular budget for this specific purpose, integrated into the university’s permanent cost structure.

- *Comprehensive professionalization of all stakeholders involved in the doctoral process.* The doctoral experience is made up of the actions of many agents in an endeavor that should be cooperative and collegiate. Thus, a positive doctoral experience requires 360° training that involves all the key actors who contribute to doctoral education, including supervisors, the staff ascribed to doctoral schools, internationalization and careers centers, and other services that interact with PhD candidates and supervisors. The profile of doctoral researchers, their supervisors and those who provide their support and training should be accorded due recognition as significant contributors to the university's primary purpose, its key reason for existing: the creation and dissemination of new knowledge.

### **Agreeing on international standards**

In today's globalized world, and given the high level of mobility inherent within the higher education sector, convergence is necessary in order to create an international community that works to establish common criteria for the assurance of excellent standards that can act as benchmarks for PhD education. To reach this level of development, efforts must be directed towards a broad range of aspects, as follows.

- *International community for the professionalization of doctoral supervision.* Based on the already existing associations that bring higher education institutions together, it would be desirable to consolidate and enlarge the communities interested in the professionalization of doctoral education supervision. Ideally, this would consist of the creation of a community of colleagues that work together to identify and improve good practices, develop new policies and, when necessary, organize strategic lobbying of key budget holders and policy-makers, both nationally and internationally.
- *Transferable accreditation of PhD supervision training.* This is needed for two reasons. First, the high degree of mobility among academic personnel, both nationally and transnationally, means that individual professors may work at several universities during the course of their academic careers. Second, the initiatives for doctoral supervisor training differ greatly among institutions, both in terms of content and quantity and quality. In this context, we envisage the need for an accreditation scheme that determines not only the number of hours of training received, but also the areas and topics covered, as well as level of competency acquired. Such international accreditation would facilitate the transferability of supervisory skills and ensure that certain standards are met. These transferable accreditations would be easier to establish if a strong international community already existed.

- *Transferable evaluation standards of PhD theses.* At present, many supervisors do not have a clear understanding of what examiners ask for during the evaluation of a PhD thesis due to a lack of explicit common standards and criteria. Although the fact that each doctoral project and each doctoral candidate is unique is widely recognized, each discipline has different paradigms and requirements for successful completion. Nevertheless, there are universal qualities that determine the 'doctorateness' of a thesis and of a candidate, which are overlaid with the specific disciplinary requirements that each candidate should demonstrate on completion, whatever their starting point and circumstances. Thus, it is clear that, for the future, the development of a common, explicit, transparent and detailed corpus of criteria for examinations should be developed so that supervisors can work towards them with their supervisees. As in the previous point, this common corpus would be most easily implemented by working together in an international community.

### **Broader scope of PhD supervisory training**

The TTT participants considered it important to move beyond the specific idea of training towards the broader concept of professionalization. This change in concept involves thinking about PhD supervisory training not as a single-stop learning activity, but as a continuous process of professional development. This process of professionalization must be built on the basis of trans-disciplinarity and continuous learning experiences.

- *Life-long learning experience.* The professionalization of doctoral supervision should not be thought as a specific, isolated training action, but understood as a continuous process of progression towards improvement by means of periodic support and monitoring of the quality of supervisory activity. Basic training is an absolute requirement, but extended training in self-reflective practices for seasoned supervisors is also when the real magic starts to happen. This development in learning must be both an individual and a collective effort to help supervisors improve their practice rather than stagnate and become obsolescent.
- *The involvement of all disciplines.* The points addressed up to now should be developed jointly across disciplines. This practice would enrich the dialogue and make discussions more fruitful, since supervision is by nature a transdisciplinary practice, while contemporary problems that demand research can only be addressed from the perspectives of several disciplines.

## A protagonist role for supervisors

As key stakeholders in the PhD process, supervisors should become aware of the full extent of the importance of their role, thus moving beyond simply participating in the provision of PhD training, and taking further initiatives as individuals and as a group to ensure a satisfactory and enduring PhD experience for their supervisees.

- ✦ *Proactivity of supervisors towards professionalization.* The ideal situation for the effectiveness of this scenario would one in which supervisors commit to the professionalization of their endeavor, in terms of perceiving the added value of training programs, feeling motivated to follow them, and becoming architects of the quality of the doctoral experience in their institutions. This would imply actions like generating tools and forums that facilitate the interchange of experiences, and providing feedback to continually improve the doctoral program.
- ✦ *Research community evolving together.* To provide a positive doctoral experience, supervisors must be aware of the influence that they have on PhD researchers, realizing that they determine the first steps of the professional career of these young researchers. Thus, supervisors should be aware of their responsibility to build at least a satisfactory and at best an inspiring experience for PhD researchers to be remembered throughout their lives.

## Impact: How can effectiveness be demonstrated?

There has been increasing public investment in universities, which makes society require accountability and evidence of the benefits achieved. Thus, one of the key short-, medium- and long-term future challenges is how to assess the impact of the professionalization of PhD supervision. A wide range of issues must be evaluated, such as the satisfaction of all stakeholders involved in the process, the results achieved by PhD graduates, their employability, their contribution to institutional development and to society in general, etc.

The members participating in the Tarragona Think Tank focused their thoughts on the mechanisms that could be designed and established to evaluate these matters. A brainstorming activity was used in this part of the discussion to generate insights on how the system worked, so that this feedback could then be applied to the evaluation and improvement of the professionalization process. These actions should allow the generation of outputs that form qualitative measures of the impact of the training programs. The ideas that arose are summarized below, and should be understood as a first working draft of the possible actions envisaged.

The value of a professionalized supervisory role can be appreciated through the impact on the supervisors themselves, but also through results that pertain to PhD graduates, the institution as a whole, and beyond, in the form of the employability of PhD graduates and their contributions to society.

### Impact on supervisors

The impact of supervisory training can be assessed at different levels and in various time frames. The Think Tank meeting revealed the need to establish evaluations at different points after the supervisors completed their training programs. The participants in the Think Tank agreed that the evaluation should be supervisor centered using some of the following guidelines:

- ✦ *Satisfaction.* This is the most immediate evaluation of the outcomes of the supervisory training and the first indication that the efforts to implement the training have succeeded. It would be important to know if the training program increases supervisors' confidence in the performance of their tasks, especially for junior supervisors, and whether this generates a better level of personal and professional satisfaction that influences their motivation and their commitment.
- ✦ *Transfer from training to practice.* It is even more important to ascertain whether and how the performance of supervisory tasks has evolved after training. A survey can be drawn up to assess how supervisors conduct their tasks and roles before the training program, and whether the training is capable of generating any changes or improvements to their performance. It would also be important to know if the supervisor acquired or generated any particular tools or habits that have helped to improve the PhD supervisory process.
- ✦ *Effectiveness in the supervision process.* The effectiveness of the PhD supervision process could be evaluated based on several aspects, including: the completion of successful theses within the planned time; the quality and diversity of the outputs generated during the thesis period, with emphasis on the development of the researcher and their skills (as opposed to a focus on research products only); quality time devoted to supervisory tasks; the optimization of the interaction with other institutional stakeholders involved in doctoral education, which would indicate the level of supervisor engagement in the institutional commitment to PhD professionalization. This would facilitate the creation of a research culture in the institution that would provide easy access to an institutional repository of resources

(knowledge, norms, funding, etc.) that facilitates improved knowledge of the people and aspects of the institution relevant to the PhD process. This was summed up in the TTT meeting with the motto: 'Good supervisors imply good research.'

### Impact on PhD graduates and beyond

The ultimate impacts of PhD supervisory training must be assessed on the immediate stakeholders who will benefit from the effects of an improved supervisory role, namely the PhD graduates as they enter the labor market, the university and its PhD programs, and the organizations where they are employed. To this end, it is necessary to:

- ✦ Assess the value, suitability and utility of the transferable skills transmitted during doctoral education for professional careers. A survey should be conducted to identify, map and grade, from the point of view of PhD graduates, the relevant skills for their professional development. This survey should be addressed in a period of 3-5 years after graduation to obtain data corresponding to real jobs.
- ✦ Identify PhD graduates that undertake research-related tasks outside of academia. This information is valuable to overcome the myth that doctoral education and doctoral skills are not necessary or valuable outside of the academic context. It would promote adjustment of the higher education programs, supervisory tasks, research lines, and institutional strategies to the employment reality of graduates.
- ✦ Assess the satisfaction of employers. Achieving the satisfaction of employers represents the perfect complement to validate the institutional professionalization system of a PhD. It means recognizing the adequacy of the training undertaken, and it promotes the employability of PhD graduates, giving back to society the investment made and contributing to a transformation towards a knowledge-based society.

Above and beyond these impact indicators, the acid test of enhanced supervisory practice must be a positive doctoral experience. If both supervisor and supervisee report having had a positive, stimulating, less stressful experience during the doctoral process, this is a clear indication of the success of all the efforts devoted to PhD education. The participants of the TTT summed this up by proposing the goal 'contributing to making people happier.'

## **Concluding thoughts**

Enacting change in established cultures is never an easy task. People recognize good ideas but they are already, they contend, extremely busy. There will therefore inevitably be those who are advocates and early adopters of new attitudes and practices, those who join in rather than be left out and seen as 'old-fashioned', and those who cling tightly to the old ways that they perceive as safe and well-tried. But all professionals need to reflect on and improve their practice and many professions already have continuing professional development (CPD) obligations. The TTT participants suggest that it would be wise to develop our own CPD requirements and processes before others with a lesser understanding of the system and situation do it for us.