

CROSS-BORDER PHD COOPERATION

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Abstract. As part of a pilot, the Carinthia University of Applied Sciences (CUAS) offers to a research assistant the possibility of completing a doctoral program in cooperation with the University of Udine (Italy). The program is an “Industrial Doctorate” in management studies, enduring three years. A professor at the University of Udine and a co-supervisor at CUAS supervise the cumulative thesis. The training includes publication activities, as well as the attendance of university courses at both CUAS and the University of Udine and other institutions. In the course of the PhD cooperation, CUAS can profit from working on joint papers that target to be published in international journals, to build up international networks, and to promote the quality of research and publication activities. In addition, a main benefit is the development of an incentive as a personal qualification for research assistants and to attract highly motivated talents as future employees. Therefore, CUAS could sustainably compensate for the disadvantage of missing PhD opportunities with a promotion of the cooperation in the long term. This also advances the improvement of the standing of universities of applied sciences in terms of scientific qualifications. The pilot further contributes to working in scientific international teams. Thus, the cooperation helps to achieve the increasing objectives of internationalization.

Keywords: PhD program, cross-border cooperation, international cooperation

1 INITIAL SITUATION

The higher education sector in Austria, as in most European countries, is a dual university system. In contrast to universities, UAS may not grant doctoral degrees and the demand of UAS representatives to gain the rights to award UAS-specific doctoral degrees, i.e. as “professional doctorate”, was rejected (Schüll, 2019). Usually, a doctorate is a prerequisite for holding a key position in research and teaching. However, activities in teaching and research at a UAS require additional experience in the particular professional field. The main argument for not giving UAS the permission to reward doctoral degrees is that UAS and universities would have a different profile and a different focus. Therefore, they would not compete (Schüll, 2019). The right to award doctorates, however, might help to reduce the binary separation between UAS and universities (Schüll, 2019). Although in Europe, UAS may not award degrees at the doctoral level, exceptions exist. This is the case in the United Kingdom, for instance (Brennan & Williams, 2008). As the right to award doctorates is currently not possible, workarounds could help to overcome this issue.

To promote their scientific qualifications, employees of UAS that are interested in completing a PhD can either start a study individually or within partnerships that take over the supervision of the PhD candidate. A partnership provides several advantages. The most important one seems to offer an institutional framework that helps the PhD candidate to complete the scientific qualification within a certain time frame. In most cases, the development of PhD cooperation programs takes place on a national level. Cross-border cooperation programs that target PhD qualifications are rare.

In a pilot phase, the Carinthia University of Applied Sciences (CUAS) has started a PhD cooperation with the University of Udine (Italy). In the following, we describe the prerequisites for establishing the cooperation and how the cooperation was set up. Then, we will outline the advantages of the cooperation, and what we can learn from the experiences.

2 PREREQUISITES

UAS do not have the right to award doctorates. Therefore, two conditions had to be met. First, CUAS had to find a university that offers a PhD program with the possibility of completing the doctoral program practically alongside professional activities. Second, both institutions must have the willingness to support such a cooperation. CUAS already had an ongoing international study cooperation with the University of Udine. Hence, both institutions proved readiness and willingness for a PhD cooperation. The institutional framework for a PhD cooperation already existed at the University of Udine. The university provides the possibilities of a so called “Industrial Doctorate” for external companies to strengthen the relationship between university and industry.

The “Industrial Doctorate” contributes to foster interaction and integration between university research, enterprises and external bodies, including public administrations. With this intention, the university provides PhD positions within activated PhD courses for company employees that are engaged in scientific activities. Thus, the “Industrial Doctorate” is suitable for existing employees of a company or other external entities that have a highly scientific qualification. For the university, it is yet important that the PhD project complies with the internal regulations for the PhD courses and with a specific PhD call. Given that, CUAS can develop a research and training path for a research assistant, that (while keeping their jobs and salaries) can achieve the title of “Doctor of Philosophy”.

3 IMPLEMENTATION OF PHD COOPERATION

Implementing the PhD cooperation included three main aspects:

- the selection process of application at the university of Udine

- a qualification agreement between the entities and between UAS and the PhD candidate as employee
- general conditions for conducting a PhD in a limited time frame

The application for the “Industrial Doctorate” comprised the PhD candidate’s synopsis of a research project, the research questions and methods. Before the submission of the proposal, a supervisor at the University of Udine and a supervisor at the CUAS had to be found. The supervisors also helped to develop a research program that relates to a specific disciplinary area on which the program focuses. In the respective case, the PhD project fits to the university program of “Managerial and Actuarial Sciences” with an emphasis on “Innovation Management”. A commission at the university decided on the acceptance of the application.

In a next step, the two institutions set up and signed a qualification agreement. According to this contract, the PhD program is an “Industrial Doctorate”, and CUAS takes here the position of a “company”. The contract defines the role of the student, rights and obligations of the university and the partnering institution. In particular, the contract outlines that the PhD candidate is a researcher at an early stage of their career, who is involved in departmental research activities of the company, followed by a doctoral program. Moreover, continuous employment of the PhD student at the partnering institution is a requirement for the PhD cooperation. This guarantees that the PhD candidate can form and complete research work by maintaining the job and salary, and receives the title of research doctorate at the end. The PhD program ensures the development of skills and attitude toward research, and the ability to manage and explore frontier skills that are directly transferable to the field. The contract also defines that doctoral-level courses complement the research and the number of credits that the PhD student earns through participation in courses and further education activities. Given that, a commission approves the participation and evaluates outcomes. An individual curriculum includes both mandatory courses and an individual selection of courses that fit to the PhD research topic. Teaching activities involve training activities to support research activities and to provide tools with the target to shape the professional identity of the PhD candidate. The contract further regulates the budget for research and training activities of the PhD student. CUAS helps its employee to get a further qualification. Therefore, CUAS stipulated a qualification agreement in the employment contract of the PhD candidate.

Additionally, an attempt was made in order to be able to keep the time frame of the PhD program of three, maximum four, years. In order to organize the PhD program, the data used for the PhD project was collected within a commissioned research project. As it was possible to generate data within the framework of the respective research project the basis for combining study and work was given.

4 ADVANTAGES OF AN INTERNATIONAL PHD COOPERATION

The PhD cooperation is a cross-border cooperation. Against the background of internationalization of universities, working together on an international level offers the possibility to broaden and build up competences. Initiatives of cross-border collaborative arrangements mark an important part of internationalization in the higher education sector (Altbach & Knight, 2007). An intensive cooperation on an international level sometimes also marks a necessity in order to cope with the increasing specialization in research. In some research areas, it is also necessary to cooperate with partners in order to meet the investments that are required, as one institution might not provide the financial resources alone (Qiang, 2003). Such collaborations help to build up important competencies and networks in international cooperation that might be useful in a different context. Consequently, against the background of the internationalization of the university, cross-border cooperation comes along with an improvement in the international competitiveness of the UAS.

Another advantage is to foster research possibilities, to increase the quality of research and to advance publication activities. Research is an economic factor and publications make research and its results visible. To gain visibility, publication activities are therefore also relevant for UAS. Collaboration with other institutions helps researchers to promote publication activities. Although a meta-study (Hattie and Marsh, 1996) found no relationship between research productivity and teaching quality, both students and teachers believe there should be a strong relationship between research and teaching (Hu et al., 2015). Therefore, an establishment of a research culture stimulates the involvement of students also in UAS (Hu et al., 2015). Thus, a PhD cooperation influences the promotion of such a research culture.

The doctoral program also serves an incentive system for employees. Motivation contains the word motive. Many people find their motivation in the possibility of learning and growing. The opportunities for further development may, therefore, attract future talents and employees. In conclusion, cooperation with universities can compensate for the disadvantage of the lack of doctoral opportunities for UAS.

5 LEARNINGS TO DATE

The lessons from the pilot phase refer to cultural differences and different institutional settings, language skills, as well as the benefits of distance learning brought by the COVID-19 pandemic.

The cultural differences between Italy and Austria mainly relate to the institutional framework. For example, the application for the PhD program had to be submitted by mail. PEC mail was the only way to send an electronic delivery. However, in Italy, this certified

delivery is not possible for institutions in foreign countries. This means that it is technically not possible to send applications from a foreign email account. Therefore, we had to apply on time and by registered mail.

Language skills in Italian are not required for the PhD courses. The language of instruction in all courses is English. Nevertheless, it proved to be an advantage to communicate in Italian for administrative questions.

A particular advantage arose because of the COVID-19 pandemic and the resulting switch to online teaching, which made the organization much less complicated. Online class participation made it much easier to attend courses and seminars travelling to Italy to join on-site, especially against the background of the PhD candidate's professional life.

6 REFERENCES

Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of studies in international education*, 11(3-4), 290-305.

Brennan, J., & Williams, R. (2008). Higher education outside the universities: The UK case. In *Non-university higher education in Europe* Springer, Dordrecht. 231-244.

Hattie, J., & Marsh, H. W. (1996). The relationship between research and teaching: A meta-analysis. *Review of educational research*, 66(4), 507-542.

Healey, M., & Jenkins, A. (2009). *Developing undergraduate research and inquiry*. York: Higher Education Academy.

Hu, Y., Van Der Rijst, R., Van Veen, K., & Verloop, N. (2015). The role of research in teaching: A comparison of teachers from research universities and those from universities of applied sciences. *Higher Education Policy*, 28(4), 535-554.

Qiang, Z. (2003). Internationalization of higher education: Towards a conceptual framework. *Policy futures in education*, 1(2), 248-270.

Schüll, E. (2019). Current trends and future challenges of the Austrian universities of applied sciences. *Futures*, 111, 130-147.