Introduction

Higher education is still confronted with a considerable challenge when it comes to direct attention, reflection, discussion, and action focused on excellence in teaching and learning. If faculty engagement in such matters remains relatively tepid, the needs for training in higher education pedagogy vary considerably according to individuals’ personal and professional interests. In order to promote quality teaching, many universities support their teachers by offering opportunities for pedagogical development at the various stages of their career. However, in order to do so, a coherent approach to higher education pedagogy is needed.

This chapter focuses on a continuum of pedagogical development designed by the learning and teaching center of the University of Liège in Belgium. Based on a set of five competencies, the continuum combines eight principles aiming at pedagogical quality, with three levels of development and corresponding accreditation. The three levels—basic, intermediate, and advanced—are respectively composed of a few thematic ‘à la carte’ sessions (the FormaStart
program), a personalized certificate program (the FormaPlus program), and a full master’s degree program (the FormaSup program).

The purpose of the continuum is twofold. It aims, on the one hand, at offering diversified training opportunities in response to faculty’s individual interests, needs, constraints, and teaching experience. On the other hand, it makes it possible for teachers to individualize their progression by leaning on previous achievements and by undertaking projects attuned to their pedagogical ambitions. We believe that such integrated approaches to higher education pedagogy are particularly apt to promote teaching and learning at the university level. They also enable learning and teaching centers to account effectively for their implication in staff development and for their bearing on institutional orientations.

Overview of the Institute for Research and Training in Higher Education

History and Missions

The learning and teaching center of the University of Liège is known as the Institute for Research and Training in Higher Education (IFRES). It was created in January 2005 by the management board of the university. Its missions as decreed in 2005 are to:

- Promote teaching at the university
- Support faculty and departments in their teaching activities, both in face-to-face and distance settings
- Coordinate the offer of pedagogical training
- Support and conduct research projects in higher education pedagogy
- Facilitate the development of technology-enhanced learning and teaching, especially by resorting to the university’s virtual campus.

Organizational Reporting, Structure, and Funding

The center is operated by a staff of about 30 members attached to four distinct domains of activities (see Fig. 34.1). The first domain consists of a secretary and teaching assistants under the responsibility of the IFRES president, while the second domain comprises staff related to a unit dedicated to freshmen pedagogy, under the responsibility of a lecturer. The third domain is a unit of
technology-enhanced learning and teaching supervised by a lecturer and combining two lines of action: (1) the information technology-management of the institutional ‘e-Campus’ e-learning platform and the organization of training sessions meant for teachers wishing to use it and (2) the management of a multimedia studio in charge of the production of video material for learning and teaching purposes. Finally, the fourth domain is the SMART Methodological System to Support Testing Unit, a unit supervised by a lecturer and specialized in assessment techniques and optical reading systems for tests and exams.

The head of IFRES is a full professor from a faculty background who keeps the major part of his/her regular academic duties during their mandate. This choice is deliberate: it prevents the risk that the learning and teaching center becomes disconnected from field reality (Bråten, 2014; Raaheim & Karjalainen, 2012). The president dedicates about 20% of his/her workload to the IFRES and acts as a strategic advisor as well as an interface between the university’s management board, the deans, and the IFRES staff. Practically, the day-to-day management of the center is left to the three lecturers.

With a few exceptions of external funding (i.e., projects supported by European, Belgian, and Walloon funds), the wages and operating costs of the IFRES are covered by the university. Overall, the total expenses of the
center equate to around €1.5 billion per year (equivalent to approximately $1.8 million) for a university of 23,700 students, 660 faculty members, and nearly 800 teaching assistants. As the IFRES is mainly concerned with staff training (since services for students have their own units and funding), the University of Liège displays a rounded ratio of one pedagogical advisor to every 100 staff members.

The IFRES Continuum of Pedagogical Development

The third mission of the center—to coordinate the offer of pedagogical training—has led to a reflection on the training needs of teachers and on how to meet them. The result was a training program that has been growing steadily since 2005. Progressively, the various initiatives took on the form of a training continuum based on five major pedagogical competencies (Palmer et al., 2011) (see Fig. 34.2).

This continuum of pedagogical development is sustained by eight ‘quality principles’ (Robson, 2017) serving as guidelines for the conceptualization, implementation, and adjustment of the training sessions and programs.

The Eight IFRES Quality Principles

Principle 1: Training in Higher Education Pedagogy Means Developing Five Key Competencies

To a lesser or larger extent, each IFRES training program seeks to promote the development of five competencies grouped in a referential framework named “CREER” for: (1) Conceive coherent courses; (2) Realize the course design; (3) Enact teaching face-to-face and at a distance; (4) Evaluate student learning and give feedback; and (5) Regulate one’s teaching through reflection-on-action. The referential framework is both used to communicate training goals to teaching staff and to monitor training programs, courses, and sessions. The framework is IFRES’s answer to the question: What kind of teachers do we want to train in regard to the future of higher education?
Principle 2: Promotion of Career-Long Pedagogical Development

The IFRES seeks to foster the career-long pedagogical development of teaching staff (Clarke & Hollingsworth, 2002) in the following ways:

- By offering a coherent training structure so as to meet the needs of teachers at any phase of their teaching career (Huberman, 1989)
- By enabling teaching staff to capitalize on previous pedagogical experiences; the developmental approach to pedagogical training adopted by the IFRES makes it possible for trainees to move from one level to the next while benefiting from reduced registration fees and/or program adjustments on the basis of previous achievements
- By supporting growing autonomy; the various training programs provide occasions and instruments of reflection on personal teaching practice with the purpose of fostering autonomous pedagogical development.
Principle 3: Promotion of Differentiated Mentoring

Although it is not possible to know about the specificities of each teaching context and, accordingly, to propose fully customized training activities, the IFRES tries to a certain extent to:

- Take into account the needs and specific interests of trainees, either by collecting relevant information at the outset of the training session, course, or program, or by enabling trainees to organize their learning activities according to considerations that make sense for them
- Adapt the training instrument and the learning pace to perceived and expressed needs
- Adapt learning demands to perceived capabilities of trainees; in this respect, the IFRES has experimented with a few practices of ipsative assessment (Hughes, 2011).

Principle 4: Practical Significance of Pedagogical Training

Without denying the relevance of knowledgeability regarding educational sciences, the IFRES favors action-oriented training. It seeks to highlight the practical aspects of pedagogical training by:

- Enabling trainees to discuss and reflect on their teaching experiences
- Adjusting training to trainees’ experiences so that it makes sense for them
- Offering learning experiences and training activities likely to be used and mobilized by trainees in their own teaching context
- Emphasizing the applicability of pedagogical concepts and approaches to authentic professional situations (Herrington & Herrington, 2006).

Principle 5: Isomorphism and Pedagogical Diversity

This can be achieved by adopting various strategies, including:

- Offering a variety of training programs and courses resorting to varied pedagogical methods such as lectures, workshops, simulations, and experiential learning
- Introducing trainees to innovative methods, such as serious games, hands-on activities, role-playing games, etc., according to the conviction that
Principle 6: Debate and Exchange of Experiences Across Varied Disciplinary Backgrounds

Beyond individual gains in pedagogy, the IFRES training programs and courses (especially the FormaStart training sessions) energize a larger debate about the institution’s teaching mission (Verpoorten et al., 2019). They do so by:

- Organizing programs and courses in a way that teaching staff from all faculties, departments, and disciplines can come together and talk about their teaching practice
- Soliciting testimonies from teachers with diverse disciplinary backgrounds
- Fostering debate and experience-sharing within each training session
- Granting hardly any exemption from participation in mandatory training courses as absenteeism impedes collective engagement in pedagogical issues.

Principle 7: Fostering Trainees’ Interest in Higher Education Pedagogy

In practical terms, that implies:

- Enthusiasm and dynamism on the part of the IFRES staff members in charge of training courses and sessions
- Availability of trainers and their attention to every trainee
- Demystification of abstruse theories by adopting a more pragmatic discourse on pedagogical issues.

Principle 8: Monitoring the Effects of Training with the View of Improving Programs

This means collecting and analyzing—as regularly as possible—data likely to provide information regarding the impact of the programs, courses, and sessions on participants (Detroz et al., 2019; Leduc & Verpoorten, 2017; Van de Poël & Verpoorten, 2014).
The Three Levels of Pedagogical Development

FormaStart or the Awareness-Raising Level of Pedagogical Development

In 2007, the University of Liège decided to impose a pedagogical training program on new teaching assistants as well as on newly appointed academic staff (Trowler & Bamber, 2005). Accordingly, since then, newcomers among the assistants (Edmond, 2010) and faculty must enroll in training sessions within the first two to five years of their appointment, in order to attain a total of 10 units of pedagogical training (UPTs). Most training sessions last half a day, which amounts to five days of mandatory training.

Each year, the IFRES publishes a catalogue of approximately 60 training sessions distributed according to topic and format. Sessions known to attract a large number of participants are organized several times during the academic year. The catalogue is distributed by mail to all members of the university and made available on the IFRES website, which means that those who are under no obligation to register can, all the same, attend sessions if they wish to do so. Thus, besides serving as initial training in higher education pedagogy, the FormaStart sessions can also be part of in-service training. Over the past five years, FormaStart training sessions have welcomed 1,000 participants, of which 179 were under no obligation to participate.

The FormaStart training program offers sessions of three different types or formats. Half-day sessions worth one UPT each fill up half of the annual catalogue and constitute the first type of FormaStart training. They are led by one or two IFRES collaborators (usually senior lecturers and/or adjunct staff) according to their familiarity with the topics in question. The half-day sessions are dedicated to generic and rather pragmatic topics, such as “Starting in a teaching position at the University of Liège: my survival kit”, syllabus design, constructive alignment, student motivation, active learning, introduction to learning assessment, avenues of professional development in higher education, introduction to e-learning, and so on. They can also be focused on more specific or technical issues such as the design of effective teaching materials, deontology, organization of practical or laboratory work, performance-based assessment, project-based learning, learning portfolio, dissertation tutoring, and guidelines on how to use the institutional e-Campus platform. The program also includes specific training sessions each year dedicated to the enhancement of first-year student learning. Thus, teachers and teaching
assistants can choose the sessions they wish to attend according to their needs or special interests, before registering via the IFRES website.

The second type of FormaStart training corresponds to ‘hands-on’ seminars organized in a tutored hybrid learning modality. Each seminar is worth three UPTs and entails a workload of approximately 10 hours. Such seminars (i.e., flipped classrooms, gamification, peer reviewing, bottlenecks to learning, media literacy, online course development, etc.) give trainees the opportunity to design and implement a small-scale teaching project with the support of a pedagogical advisor. The third type of FormaStart training takes place once a year in the form of a one-day conference dedicated to teaching and learning at the University of Liège first implemented in 2007. For newly recruited teaching staff, attendance at the conference is credited with one UPT.

To obtain validation of their mandatory training in higher education pedagogy, trainees have to write an end-of-program reflection report in which they list attended sessions and give a brief account of the benefits they received in terms of pedagogical knowledge, know-how, and reflection.

**FormaPlus or the Involvement Level of Pedagogical Development**

The intermediate level of pedagogical training corresponds to a 10-credit program called the Interfaculty Certificate of Pedagogical Development in Higher Education (CIDePES). The CIDePES program was created by the IFRES five years ago in order to complete its range of training programs in relation to higher education pedagogy. Teachers at the University of Liège are under no obligation to enroll in the CIDePES program; those who choose to do so are personally convinced of the added value that pedagogy can bring to their teaching practice. Participants are mostly young fellow lecturers and their interest in the CIDePES program often stems from their previous participation in the mandatory training sessions and/or from the urgency with which they have to prepare for and give courses. Therefore, the CIDePES program aims at their pedagogical development by means of the conceptualization and implementation of a personal pedagogical project in direct relation with their teaching practice. In addition, a variety of training activities (i.e., course design assignments, microteaching sessions, experimentation with methods of classroom assessment, etc.), ad hoc resources, and individual tutoring sessions are also part of the training program.

The main characteristics of the CIDePES program are flexibility, proximity to the participants’ individual teaching concerns, reasonable training requirements, and practice-related assignments. The underlying idea is to make
participants work on aspects of teaching that they would anyway have to tackle on their own as part of their professional activities. Thanks to the CIDePES program, they can benefit from encouragement, guidance, and feedback. The CIDePES also offers them the opportunity to evolve as teachers despite their endemic lack of time. Another boon is that teachers can put forward their participation in the program when trying for promotion. In order to do so, they can use the individual blogs (Poole et al., 2007) in which they have recorded their achievements and reflections during training to showcase their commitment to teaching and higher education pedagogy.

**FormaSup or the Evidence-Based Level of Pedagogical Development**

The upper part of the training continuum is the FormaSup program resulting in a specialized Master’s in Higher Education Pedagogy. This program is organized at the University of Liège by IFRES staff (two senior lecturers and two pedagogical counselors shoulder most training activities). The FormaSup program aims to target the professional development of college and university teachers from all over the world. In this respect, it offers organizational flexibility; participants may choose to attend the program either in a hybrid combination of face-to-face sessions and online activities or entirely from a distance. Each year, approximately 10 teachers enroll in the program. The FormaSup program amounts to 60 UPTs and lasts for one year, although it can also be divided into two years. It comprises three high-stake assignments due for summative assessment. Each assignment is related to one of the three courses or modules that compose the core curriculum: (1) framing and analyzing teaching and evaluation practice, (2) regulation of teaching and evaluation practice, and (3) a professional portfolio.

The end-of-course assignment for the first of these courses involves writing a syllabus describing accurately the pedagogical organization of a course they are in charge of. In order to prove and improve its pedagogical value, the syllabus must also contain appropriate references to pedagogical theories and models. For the second course, the end-of-course assignment consists of writing a ‘regulation article’ in which the participant reports in a scientific manner the main characteristics and the effects on their students’ learning of a pedagogical innovation implemented in one of their own courses (see the section below on scholarship of teaching and learning [SoTL] within the FormaSup program). Finally, the FormaSup master’s degree is awarded partly on the basis of a portfolio in which the participant shows evidence of their progress.
regarding the five key pedagogical competencies and of their professional development as a whole. The portfolio has to be presented and defended orally in front of a jury of three experts in higher education pedagogy.

Optional courses complete the core curriculum. Some of these are organized face-to-face whereas others can be attended online. Topics such as problem-based learning, student assessment, quality assessment, teaching methods, educational technologies, and so on enable participants to deepen their understanding of the aspects of teaching and learning in which they are particularly interested.

**SoTL within the FormaSup Program**

The most innovative and ambitious part of the FormaSup program consists in giving participants the opportunity to conduct full-scale SoTL research. The importance of SoTL as a means of enhancing teaching quality and developing professionally is widely acknowledged: “[SoTL] stimulates you to think about your teaching and what you expect students to gain from it. It enriches both your conceptual thinking about education and your repertoire of skills” (Svinicki & McKeachie, 2011, 343). The SoTL research is embedded in the regulation of teaching and evaluation practice module. The module amounts to 18 credits (out of the 60 credits for the whole program) and takes place in the second half of the academic year. The timespan of the SoTL project is rather short, so participants have to shoulder a heavy workload.

In order to initiate their SoTL project, participants have to single out one innovative aspect of their teaching practice in relation to one of their courses. The innovative course regulation often involves trying out new activities (i.e., problem-based learning, case studies, group work, fieldwork, experiential learning, etc.) in an otherwise routine context, with a view to enhancing student learning and motivation to learn. Participants have been led to reflect on their course regulation before starting the SoTL module. The final output is a SoTL-related article wherein participants describe their context, their initial problem, the solution they brought, the literature they inspected, the type of data they collected—with the FormaSup program imposing a ‘3P’ data sources matrix; that is, the gathering of participation, perception, and performance data (Parlascino et al., 2017)—an analysis of it, the limitations of the study, and recommendations for further work. The SoTL research is made public through a poster session and, for some participants, is disseminated further in a conference presentation or publication of an article in a SoTL-themed research journal (Fenton & Szala-Meneok, 2011).
The approach to SoTL research, as it is organized within the FormaSup program, is delineated and quite prescriptive in regard to methodology and final assignment. In order to meet this tight agenda, participants can also rely on the individualized support of a pedagogical counselor, either face-to-face or at a distance via online sessions. This counseling (Jérôme et al., 2017) is geared toward empowering participants to carry out their classroom research and to account for it in the form of a research article. The concept of utilizing mentorship to facilitate SoTL research is by no means new:

Situational support for SoTL research in complex academic (institutional, curricula and/or classroom) settings enhances the possibilities for such research in the already busy lives of academics and contextualizes theory in meaningful environments, thereby holding more relevance and immediate impact for both mentor and mentee. (Hubball et al., 2010)

**Discussion**

To date, nearly two-thirds of faculty and assistants of the University of Liège have had, at minimum, contact with the basic training program organized by the IFRES, resulting in a rather high level of satisfaction according to the feedback questionnaires that every training participant is required to complete. Regarding effects on the field, they are easy to assess for the FormaSup and CIDePES programs since training requirements include changes in the practice. As for the FormaStart program, small-scale actions are already claimed by participants to have taken place in their courses. Other participants only mention an increased awareness of the stakes of pedagogy and, sometimes, their intentions to do more (Leduc & Verpoorten, 2017; Van de Poël & Verpoorten, 2014). The IFRES is currently busy with a thorough analysis of the final reports which are soon to be incorporated alongside meetings with other staff members in order to initiate a longitudinal study of the short and long-term effects of the available training stages.

Another effort is also planned to populate the FormaPlus stage with more than the CIDePES. For instance, more and more teachers are involved in faculty initiatives regarding different aspects of teaching and learning; to acknowledge that this is part of the continuum makes sense. Although attendance has been growing since the program’s inception, CIDePES participants remain scarce. As the CIDePES is strategically important insofar as it constitutes an intermediary stage of pedagogical development between the basic FormaStart and the elaborate FormaSup programs, further efforts will take
place in future to better promote the program. Concerning the more mature FormaSup program, experience has taught us that, despite promotion and adaptation efforts, the average number of participants remains uniform. This gives credit to Ramsden’s (1999) early prediction regarding SoTL: “Just as only a small proportion of university staff are outstandingly productive and respected researchers, so only a few academics will emerge as brilliant scholars of teaching” (4). For this minority, the FormaSup is an essential program matching their needs and desire to go further in pedagogy. Some of them will become, at the institutional level, role models for their colleagues and natural relays and supporters for further IFRES actions in faculties and departments.

**Recommendations**

Consider staff development programs as ‘relationship boosters.’ A larger effect of the continuum should be mentioned—from the feedback questionnaires collected from participants, especially in FormaStart, it appears that teachers and assistants especially value the mixed audience in the training sessions, beyond the theoretical and practical gains in pedagogy. In addition, staff development programs may represent occasions of permanent pedagogical brainstorming. The training curriculum is worth seeing as an instrument to initiate and maintain a collective reflection on pedagogy by making it, individually and collectively, an object of attention, conversation, transformation, and study.

**References**


