Project Courses: A Bridge between Academia and the Labour Market

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Introduction

In today's world, education means much more than transmitting knowledge within the boundaries of the classroom. Educating students in political science or public policy implies bringing them out of the academic ivory tower and having them engage with real life processes in a professional environment. The key is finding the right balance between knowledge and skills-related learning objectives and designing a course setup that allows the students to immerse themselves in a real-life work environment while emphasizing the value of this process as a learning experience. The role of the teacher in this context is more that of a coach, a facilitator of the learning process, guiding the students in tackling the specific tasks. Project-based learning can be a useful complement to more traditional, theory-based pedagogical approach, providing an opportunity to bridge the gap between academia and the labour market.

This paper looks into the challenges of curriculum design in the case of project-based learning courses. To illustrate these challenges, the Project Courses organized at the Hertie School of Governance in Berlin are analysed as a case study. Project Courses have been offered as part of the Master in Public Policy curriculum since 2012. The concept is pretty straight-forward: students work in small groups on concrete projects, usually under the guidance and with the support of a partner organization alongside the course convener. After five years, the format is currently being revisited with the aim of ensuring more coherence and quality control. Some of the focal points of the paper are the role of the teacher as well as the relation with and the level of involvement of the partner organization- be it from the public, private or non-profit sector. The extent to which involving students in a real-life project, with everything that it entails, is in itself a positive learning experience is explored, as well as various ways of achieving a balance between exposure to the work environment and achieving the learning objectives of the course effectively. Lastly, the paper aims to provide some practical recommendations on designing a viable educational setup for engaging both students and practitioners and facilitating their collaboration.

Project-Based Learning as a Pedagogical Concept

An inquiry-based instructional approach, Project-Based Learning (PBL) "reflects a learner-centered environment that concentrates on students' use of disciplinary concepts, tools experiences and technologies to answer questions and solve real-world problems" (Lee et al, 2014: 19). Mergendoller et al. define Project-Based Learning as a "learning model that engages students in a series of complex tasks that include planning and design, problem-solving, decision-making, creating artifacts, and communicating results" (Mergendoller et al, 2006: 583).

Part of the broader family of Active Learning pedagogies, PBL is based on a paradigm that places the learners in the centre, in control of their own learning, while the instructor plays the role of a coach

or facilitator, similar to that of an orchestra conductor (Mergendoller et al, 2006: 585). This is not a role that comes naturally to instructors, mainly due to the fact that it emphasises a different relation with the students than the "lecture mode": they need to design a learning experience that will allow the students to reach the learning goals by themselves, working individually or in groups and learning how to manage their own work. The instructors guide students through this process, offering them resources and support but refraining from providing them with direct answers or closely controlling and directing the course progress.

Another important feature of PBL, and Active Learning approaches in general, is that it involves a mix of substantive knowledge and skills. While knowledge transmission does not necessarily need a student-centered methodology, skills training is often best achieved by actively engaging the students in learning activities aimed at developing certain skills such as presentation, communication, team work or project management. The instructors thus need to find a balance between the amount of input they provide and the guided and non-guided group activities (Lee et al, 2014: 21). Skills cannot be trained in a vacuum, so the substantive knowledge is a very important part of PBL; the challenge lies in incorporating it in an active learning methodology. This may require a reframing of the way instructors perceive the learning process and their role in it. Instead of one-way knowledge transmission, PBL facilitates knowledge construction, whereby students play an active role, which enables them to delve deeper into the subject at hand through a process of inquiry they design themselves and guided by instructors.

Although Project-Based Learning can involve individual work, it usually largely consists of activities performed in small groups, of ideally three to five students. This collaborative work in itself, by simulating team work in a regular work environment, is a way to train a series of skills that are very relevant on the labour market: distributing roles, independent work within a team, accountability to peers, shared responsibility as well as active listening. As group tasks run throughout the duration of the course, it is important to train students to regularly reflect on the group dynamic so that potential issues are spotted and addressed in time (Bell, 2010: 40-41). Moreover, in order to use group work as effectively as possible, team-building exercises can be organized in the beginning of the course and regular contact moments set up to discuss group dynamic (Oakley et al, 2004: 9; Lee et al, 2014: 25).

Maybe the most important component of Project-Based Learning is the direct involvement of practitioners in the learning process. As one of the main goals is to engage students in real-world tasks, practitioners from various disciplines can play a crucial role by bringing their expertise to the table and motivating students by involving them in either real-time or simulated projects. However, bringing together the academic and professional worlds does not come without challenges. Practitioners and partner organisations need to understand the aims and scope of the course and clearly delineate their role within the entire learning experience (Lee et al, 2014: 24). When designing the course, it is important that instructors fully integrate the practitioners in a way that is beneficial both for them and for the students and leads to a sustainable relation that continues throughout more academic years. For an effective involvement of practitioners, the structure and sometimes even the schedule of a course needs to be altered, while on their side, practitioners need to be fully aware of the time commitment they make by participating in the course (Lee et al, 2014: 25). Posner (2009: 16-17) talks about "pracademics", a specific category at the crossroads between academia and professional sphere, either commuting between the two or having switched from one to

another. They are a valuable resource for PBL courses as they have access to both perspectives and can act as a bridge to facilitate students' experience.

As far as learning outcomes are concerned, Project-Based Learning is considered to contribute to deeper learning and greater understanding of a specific topic, as well as to increased students' motivation throughout the course. Moreover, due to the practical, hands-on nature of this methodology, students are also thought to increase their sense of responsibility and discipline, while becoming independent learners (Bell, 2010: 39-40). Precisely because of these specific features of PBL, the assessment process needs special attention. The evaluation has to be more process-oriented rather than product-oriented and that is why it is useful to design several intermediate check-points throughout the course whereby feedback is provided (both by the instructor and by peers). Assessing soft skills and group work can be challenging, thus, in order to provide a balanced outcome, the overall evaluation needs to focus on students' performance during the course (Lee et al, 2014: 26). Instructors' own observations, as well as peer and self-evaluations can serve as tools to this aim.

From a theoretical perspective, PBL can be placed within a constructivist paradigm, whereby students, together with their instructors, are co-creators of knowledge and thus play an active role in the learning process. The idea that active inquiry leads to deeper understanding, already present in the works of educator and philosopher John Dewey (1959), has been further elaborated in the past decades and structured along four main pillars: (1) active construction of knowledge by students together with the instructor; (2) situated learning- taking place in an authentic, real-life context; (3) social interactions- consisting of group work as well as interaction with practitioners and (4) cognitive tools- including learning technologies (Krajcik & Blumenfeld, 2006: 318).

Based on the above mentioned characteristics of Project-Based Learning, one can evaluate the role courses adopting this approach play in the overall curriculum. Firstly, they provide a practical component that comes to complement more theoretical courses. Secondly, they offer students the opportunity to gain hands-on experience of a work environment, meet practitioners and try to solve real-life problems from their perspective and with their tools. Thirdly, they represent a useful venue for professional development, such as practicing various skills like team work, presentation and project management. Because of its versatility, PBL caters to different learning styles (Bell, 2010: 41) and can be perceived as a bridge between academia and the labour market. The case of Project Courses at the Hertie School of Governance will be analysed against the PBL features outlined above, with the aim of exploring various ways to address the main challenges and design an engaging and beneficial learning experience for students, instructors and practitioners alike.

Context

Project courses have been a part of the Hertie School of Governance curriculum since 2012. The courses take place in the spring semester and are a compulsory module for the Master of Public Policy (MPP) first year students. The concept points towards the student-centered learning and active learning paradigm: students work in small groups on concrete projects under the guidance and with the support of a partner organisation alongside the instructor/ course convener. In order to allow for a group size of 15-16 students on average, the School offers a portfolio of various Project courses from which each student has to choose one. The courses vary both from a substantive point of view- they cover different public policy related topics- and from a pedagogical perspective, the common denominator being that they provide students with a hands-on practical experience in the

chosen field, while training certain skills that facilitate their successful transition to the labour market.

Methodology

The current study is part of an endeavour to revisit the design of the project courses and bring more coherence in the pedagogical approach, by streamlining some of the learning objectives and framing the overall offer in a more consistent manner within the overall MPP curriculum. The study is undertaken by the Centre for Teaching Innovations (CTI) of the Hertie School, with the active participation of the course conveners.

The research focuses on the eight Project courses offered in spring 2017 (see Annex 1) and uses qualitative methodology to grasp both the essence and the variations among the courses. An initial group meeting with the course conveners was organized before the start of the semester, with the aim of discussing the various course-setups and expectations. This was followed by class observation throughout the semester (February to May 2017). The author audited several sessions in each of the eight courses, gathering information about the class design, student participation, interaction with the partner organisation, assessment and feedback. During or immediately after the class observation, short interviews with the conveners were conducted, mainly to obtain clarifications or reactions on specific issues revealed during the class. After the courses finished, a self-evaluation questionnaire was provided to all the conveners (see Annex 2). This was complemented by a group de-briefing session that allowed the instructors to discuss their own perceptions of how their courses went and suggest adjustments to be done in preparation for the next session in spring 2018. Individual de-briefing talks were held with the conveners who could not join the group session.

This mix of methods allowed for a better understanding of the various interpretations of the Project course concept, both as designed and evaluated by the conveners and as experienced in the classroom. On the practical side, the first output of the study was a report drafted by the CTI summarizing the findings and providing a series of practical recommendations that will be discussed in the last part of this paper. At a later stage, any additional input from the conveners will be integrated in the report and discussed with the Curricular Affairs department in preparation for the spring 2018 course programme. Thus, this study serves both a research purpose- analyzing the course design challenges in the case of professional courses involving practitioners- and a practical purpose- providing solid background for redesigning this specific part of the MPP curriculum.

Results and discussion

The results of this research will be outlined and discussed below following four main themes: (1) course typology, learning objectives and learning outcomes; (2) course conveners and partner organisations; (3) finding the right balance: real life vs. simulated situation; theory vs. practice and (3) pedagogical method and format. This will be the basis for the recommendations in the last part of the paper.

Course typology, learning objectives and learning outcomes

Currently the Project Courses are a “basket” of courses bound together by their Project-Based Learning approach and their focus on skills development. The eight courses that took place in the

spring semester 2017 can be placed in three categories, according to the professional area they were designed around:

- Policy analysis (four out of eight courses)
- Public Relations/ lobbying/ advocacy (two out of eight courses)
- Project management (two out of eight courses)

In close connection to the professional areas above, the learning outputs (or in project management language "the deliverables") and learning objectives can also be split into three categories, as can be seen in Table 1. Moreover, in order to emphasise the fact that this type of course brings together knowledge and skills, the learning objectives were divided into two categories: content-related and skills-related.

Professional area	**Learning output**	**Learning objectives**	
		Content-related	**Skills-related**
Policy analysis	Policy paper	Understanding of the respective policy area; Familiarity with the various stakeholders in the area.	Writing a policy paper; Presentation skills; Team work.
PR/ Lobbying/ Advocacy	Lobbying/ campaigning strategy and supporting documents	Understanding of the respective topic; Understanding of the sector (private, non-profit); Familiarity with the principles of lobbying/ advocacy.	Designing a lobbying/ campaign strategy; Team work; Presentation skills; Campaigning skills.
Project Management	Project proposal (and evaluation of a project proposal)	Understanding of project management principles; Familiarity with the constellation of actors involved; Familiarity with the topic of the proposal.	Writing a project proposal; Evaluating a project proposal; Project management skills; Team work; Presentation skills.

Table 1: Course typology, learning objectives and learning outcomes

Course conveners and partner organisations

Half of the courses were convened by full-time professors at the Hertie School while half were convened by professionals working in various organisations. Among the courses convened by Hertie Faculty members, one was in cooperation with a private company, one with an NGO and two with international organisations. The pedagogical approach based on which the courses were designed and run differed according to the type of convener (i.e. primarily academic or primarily professional).

The course conveners interpreted their role in a different way: while some went along the more traditional path that includes a substantial amount of input from the convener, complemented by a solid list of readings, others assumed the role of "coach", facilitating students' group work while putting the student at the centre of the learning process. In the latter case the courses included a limited amount of literature and usually of a practical rather than academic nature such as project management handbooks. Regardless of the approach chosen, the students had to work autonomously in their groups and even though they generally succeeded in their tasks they did feel the need for a clear structure and support from the convener throughout the course. Therefore, one needs to carefully balance the degree of independence and responsibility given to students with the degree of involvement still necessary to guide them through their tasks.

Among the courses run in cooperation with an organisation, the degree of involvement of the partner varied. While all of them were present at the final presentations and offered feedback, some partner organisations were also involved in deciding on the final output and supporting the students with their expertise throughout the semester, either by mini-lectures or by supporting/ coaching the individual groups. As an observation, the students seemed more motivated when they perceived the involvement of the partner as more substantial, as observed also by Lee et al (2014: 25).

Finding the right balance: real life vs. simulated situation; theory vs. practice

The Project Courses bring added value to the curriculum especially by offering the students a chance to immerse themselves in an environment as close as possible to that of the labour market. The more they perceived their work as useful and necessary to the respective organisation, the more motivated and committed the students were. Nevertheless, there is also a source of tension here: the real work environment is often unpredictable and highly demanding, thus creating potential stressful situations that could alter the learning experience and detract the students from the initial learning objectives. There is a fine line between exposing the students to an authentic work situation (i.e. a real project, a policy paper the organisation needs at a certain point in time) and simulating a situation that is close enough to reality but where the students are also offered a "safe space" to fail and learn, a luxury they can still afford while studying, but no longer once they enter the real labour market.

Linked to the points above, the concept of Project Course is currently interpreted in a very fluid manner. The approaches range from a regular (academic) course with a focus on group work on a specific task to an entirely practical/ applied course where the focus is shifted from content to skills. While skills cannot be developed in vacuum, the timeframe of one semester seems too short to offer both a solid background in the respective content area and an opportunity for students to get hands-on experience in a real (or near-real) project.

Pedagogical method and format

Beside the above mentioned differences, the pedagogical methods used by the instructors were similar. The focus was on group work (group size of three to five students) and presentations at regular intervals, followed by a final presentation, and sometimes a mock one in preparation. The class format chosen was either the allocated weekly two-hour slot or a four-hour slot every two weeks. In a few cases the conveners mixed the two formats, using the four-hour slot when they planned an intensive group work session or a session where representatives of the partner organisation were present. In all the courses the students did part of the group work in class (to

different extents) but were also expected to continue, and sometimes do the bulk of the work in their spare time, which requires a certain degree of self-discipline and organization. They then reported on their progress in the next class.

Apart from the general setup above, each course introduced various elements in order to enhance and diversify the learning experience. Visits and/or guest speakers (other than the partner organisation) were aimed to offer students a broader picture of the respective professional field. Specific sessions on teamwork, communication- skill development in general- were organized in order to support the students with their work throughout the semester but also to help them build up skills that are useful on the labour market. Peer feedback was introduced to complement the feedback given by the convener and sometimes the partner organisation; the students were asked and trained to give each other constructive feedback. Last but not least, each course included elements of self-reflection whereby students were asked to reflect on what they learned, on the dynamic in their group and in general on the learning process; this took the form of short essays, "one minute papers" at the end of each class or a specific section in the presentations.

Assessment was done mainly based on group work; however, in each course there was an individual element, either an essay or the self-reflection piece that allowed the convener to nuance the grade for specific students. The grade for "class participation", between 10 and 30%, was mostly used with the same purpose.

Both the class observations and the discussions with the conveners revealed the fact that the overall quality of the students was very good. However, in parallel with the quality, their expectations also increase, especially with regard to the level of involvement and commitment of the partner organisation and the relevance and usefulness of their specific task in the overall work of the organisation.

Even though- or perhaps precisely because- they are following a slightly different logic than traditional courses, Project Courses are very time-intensive (Lee et al, 2014: 21). Beside the support the convener offers the students in class, in most of the courses individual consultations for each group were offered, with a positive effect on the students' work. Moreover, the amount of time necessary to provide timely feedback to each group, and in the case of the individual assignments to each student, is substantial.

Recommendations

Based on the findings above, and especially taking into account the diversity of Project Courses and the overall aim of providing a quality assurance framework while making the offer more coherent for the students, some recommendations have been drafted. They focus on five specific areas: (1) positioning the courses in the curriculum; (2) recruiting and working with practitioners and/or partner organisations; (3) communication with the students; (4) pedagogical considerations and (5) exchanging teaching practices and pooling resources. Although largely based on the experience of the Project Courses at the Hertie School of Governance, these suggestions can be useful in designing or re-designing professional, project –based courses involving practitioners.

Firstly, because of the specific nature of these courses, they have to be very well integrated in the curriculum. Moreover, their role and learning objectives, as well as how they are linked to other past and future courses needs to be clearly explained. It is important that the practical character of the

courses and the potential employability skills they help train is spelled out. Grouping the courses according to specific categories (by professional area, by sector or other criteria) and describing the categories and the courses included in a detailed and comprehensive manner, maybe even with reference to potential job profiles, offers structure and allows students to better identify the course most suitable for them.

Secondly, finding an organisation that is willing to commit as a partner in the course, with all that this entails, can be challenging. When recruiting one needs to keep in mind what the respective organisation can gain from this cooperation (Lee et al, 2014: 24). Nevertheless, the effort is usually worth it, as students' motivation is increased by a partner organisation or a practitioner that are fully committed, with time and resources, to the goals of the course. Moreover, the more the task is linked and relevant to the current work of the partner organisation, the more engaged the students will be (Bell, 2010: 42). When working with practitioners it is very important to set the terms of collaboration from the beginning and to communicate them to the students (i.e. how many times the practitioners will be present – face-to-face or virtually; how approachable they are, etc). An interesting idea may be to approach alumni from the respective programme who have now moved to professional positions, as they might be able to act as a bridge between the two worlds and at the same time offer students insights into potential job opportunities after graduation.

Thirdly, the communication with students plays a very important part in in the context of project-based courses, primarily because students are at the centre of the learning experience but also because these courses often do not follow the traditional teaching patterns. Because students need to work mostly in groups, it is very important to create a good group atmosphere; getting to know the students and their backgrounds better can lead to a more fruitful learning experience. Group size should not exceed 16 students (preferably between 12 and 16), and small sub-teams should ideally consist of three to five students. Students should be explained clearly what the course is about, what are the learning objectives and what is expected from them; this can be done in the syllabus but also discussed in the first class and reminded to them whenever necessary. Managing students' expectations is a key point to keep in mind when designing and running a project-based course (Lee et al, 2014: 25).

Fourthly, a few pedagogical considerations need to be underlined when talking about project-based courses. Regarding structure, it appears that having one big task or project that the students work on the entire semester is an effective way to reach the learning goals. However, to enable deeper learning, it is advisable that this project is divided in smaller tasks that are completed at certain points during the course, giving the convener and the peers the chance to offer formative feedback that can improve students' overall performance (Lee et al, 2014: 26). Visits and guest lectures can play a very important role if they are well integrated in the syllabus and their role explained, as they offer a broader image of the respective professional fields, bringing students in contact with the labour market. Because all the courses have a skills element, organizing skills workshops in parallel with the project-based courses could allow conveners to focus more on their specific topic. Assessment proves to be one of the bigger challenges with this type of courses; one recurrent issue is balancing the individual and group grades and evaluating the overall performance of students. More coordination and exchange among the instructors regarding assignments, rubrics and grading strategies could lead to a more coherent overall picture. One potential way of enriching the course, while reducing the teaching workload is co-teaching. It provides students with different perspectives

and at the same time it makes more support available to them. An interesting co-teaching arrangement in this context could involve an academic and a practitioner.

Lastly, because teaching need not be done in isolation, exchanging teaching practices and pooling resources plays a very important part. This can take the shape of meetings of the conveners in the stage of course planning and syllabus design and then debriefing meetings at the end of the semester, possibly also including meetings or exchanges in the grading period to ensure the process is coherent. To complement the meetings and offer a more sustainable form of support, a resource repository can be developed, pooling resources applicable to all courses such as: types of assignments, guidelines, recommendations for skills development etc. Moreover, training sessions on designing and implementing Project-Based learning can prove very beneficial in order to train instructors' facilitation skills and support them in adapting their teaching to a student-centered environment (Lee et al, 2014: 28).

Conclusion

Offering students a learning experience that bridges the academic environment and the labour market is a very important initiative that more and more universities are currently taking. But despite the initial enthusiasm, this endeavour does not come without challenges. As outlined in this paper, the use of Project-Based Learning can lead to deeper understanding while at the same time training various skills students need in their future jobs. However, for the method to be as effective as possible, both students and instructors need to reframe their own thinking about how, when and where learning occurs. Team work becomes the norm and the course convener becomes a coach. New actors are involved in the process- the practitioners- enriching the experience, by bringing the "real life" element, and making it more complex. All this needs to be masterfully designed and managed by the instructor, while maintaining the students at the centre and in control of their learning, true to the active learning pedagogy. With new roles and responsibilities, project-based courses also require a clear position in the overall curricula in order to achieve their full potential.

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Annex 1

List of Project Courses, Spring Semester 2017

1. "Designing and Managing Projects: Improving Education in a Heterogeneous and Digitalized World", Partner: Bertelsmann Foundation
2. "Sustainable Development: Theory, Analysis, Practice", Partner: Bertelsmann Foundation
3. " Designing Project Proposals for Nature Conservation"
4. “Regulatory Policy and Governance”, Partner: World Bank
5. “International Advocacy”, Partner: Transparency International
6. “Stakeholder Communication and Public Affairs”, Partner: Evonik
7. “Tax Coordination Across Borders”, Partner: Organisation for Economic Co-operation and Development (OECD)
8. “Refugees as Foreign Policy Experts: Building a Political Advocacy Initiative”

Annex 2

Post-course self-evaluation questionnaire

Please reflect on the following aspects:

1. Could you achieve your course objectives?
2. How was your relation with the partner organisation (where applicable)?
3. How was your relation/ communication with the students?
4. Any thoughts on the grading process? Was the partner organisation involved? (if yes, how?)
5. What did you like the most about the course?
6. What you found most challenging?
7. Think of one “take-away” from this semester’s course.