THE CONTRIBUTION OF CASE STUDIES TO CONCEPTUALISING THE IMPLEMENTATION OF WORK-INTEGRATING HIGHER EDUCATION

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ABSTRACT

The implementation of work-integrating higher education programmes poses a challenge for universities worldwide. Given the lack of all-encompassing theoretical frameworks that consider pedagogic, institutional, structural and cultural dimensions, the onus lies on individual universities, if not faculties and departments, to develop their very own, uniquely tailored approaches to implementing work-integrating HE programmes. This paper reports on an international good practice case study research project that examined the successful implementation of work-integrating educational offers in the US, England and Denmark. Based on the empirical evidence of the case studies, the paper proposes four key factors that drive transformation and generate positive results. Following the assessment of our cases study design against Ridder’s (2017) framework on the contribution of case studies to formulating theory, the article argues that our research design was rigorous and aptly fitted the aimed contribution to theory, and that our findings contribute to building tentative conceptual building blocks for the implementation of work-integrating HE.

THE CHALLENGE OF IMPLEMENTATION

At the level of implementation, converting the conceptual building blocks of work-integrating Higher Education (HE) into real-life pedagogic, institutional, structural and cultural changes poses a plethora of challenges for educational providers worldwide (see e.g. Dadze-Arthur et al., 2020; Mulkeen et al., 2019; Tomei & Talbot, 2019; Zegwaard & Ford, 2017; Billett, 2014; Bridger et al., 2013). In realising the integration of academic studies with learning on the job, individual faculties and departments must not only grapple with disciplinary idiosyncrasies, but also work within the constraints of their respective universities’ internal institutions, structures and culture, such as rigid infrastructures, inflexible resource allocation, the stigma conjured up by vocational programme components and so on (ibid). Additionally, they must operate within the limits set by external conditions, such as regional and national educational policies, economic conditions, labour market demands, employer requirements, legal and financial frameworks, and so forth (ibid). Helpfully, the literature proffers conceptual building blocks for operationalising the pedagogy of work-integrating HE (see e.g. Billett, 2001; Boud et al., 2001; Cooper et al., 2010; Lester & Costley, 2010), as well as practical guides for resourcing and managing such programmes (see e.g. Cooper et al., 2010). However, all-encompassing frameworks that comprehensively conceptualise implementation along pedagogic, institutional, structural and cultural dimensions are not yet available (see e.g. Glass et al., 2020). In other words, there is no conceptual framework for implementing work-
integrating HE that takes account of the complexities of real-life, thus leaving faculties and departments to develop their own, bespoke approaches.

PURPOSE OF OUR CASE STUDY RESEARCH PROJECT

Given the lack of conceptual building blocks for implementing work-integrating HE, we undertook an international good practice case study research project to inform the implementation efforts of German actors in HE (see Dadze-Arthur et al., 2020 for the full-length case study research report). Within the context of the study, a good practice case was defined as “any successful approach to work-based HE at university level, programme level, course level or module level, leading to either a graduate or postgraduate degree, diploma, or certificate from an accredited university” (Dadze-Arthur et al., 2020, pp. 9). The study adopted a research strategy that was capable of capturing the complexity of diverse real-life approaches to implementing work-integrating HE. By examining in depth a small assortment of cases, the research project sought to extract and aggregate themes and dynamics that emerge as shared across the different approaches. Thereby, we were hoping to shed light on key factors pertinent to the implementation of work-integrating HE, and in so doing, systematically inform not just the practice of German HE actors but also those of other HE actors operating in different institutional, structural and cultural contexts.

STRUCTURE OF THIS ARTICLE

This article presents the knowledge and insights gained from our international case study research project on work-integrating HE programmes across the US, England and Denmark, and critically reflects on the value of the more widely shared lessons for developing conceptual building blocks for implementing work-integrating HE. In preparing the ground for such reflection, the following section briefly presents Ridder’s (2017) propositions regarding the contributions of different case study designs to informing conceptual or theoretical frameworks. Subsequently, the paper outlines the research design and methodology of our case study research project, before presenting three case studies and four shared factors that emerged from our analysis as conceptually pertinent to the implementation of work-integrating HE. The paper concludes by assessing our research process and its findings against Ridder’s (2017) propositions on the contribution of case study research to theory.

THE CONTRIBUTION OF CASE STUDY RESEARCH TO INFORMING THEORY

The literature concurs that case study research as a methodology is generally exploratory and well suited to surface insights that contribute to theory (see e.g. Corley & Gioia, 2011; Colquitt & Zapata-Phelan, 2007; Edmondson & McManus, 2007). Although principally agreeing with this claim, Ridder (2017) contends that the common generalisation of case study research obscures the heterogeneity of the underpinning methodologies, and their specific contributions to informing theory. Therefore, Ridder (2017) argues for an increasingly nuanced and fine-grained approach to analysing case study research designs, and proposes to map them along a continuum that gradually differentiates between contributions to building, developing, testing and reconstructing theory. In justifying the use of such a continuum, Ridder (2017) explicates that an acute awareness and clarification of a case study research project’s contribution to theory enables increased rigour of the research (ibid).

Correspondingly, Ridder’s (2017) proceeds to argue for four distinct case study research designs that inform theory in unique ways. The first category, labelled Social construction of
reality, is unique because it is not driven by a specific research question but a wider curiosity in a case or particular research issue. Grounding his argument in Stake’s (1995) propositions, Ridder (2017) posits that this category distinguishes between intrinsic case studies that emphasise learning from a case per se vis-à-vis instrumental case studies, that focus on understanding issues in one or across several cases – a process called categorical aggregation (Stake, 1995). Research designs of this category adopt purposive, also called expert, sampling and methods of thick description with a view to enable an interpretative and holistic understanding of the case(s). As a result, the research design Social construction of reality is best suited to construct concrete, contextual knowledge relating to new phenomena, and thus contributes to building theory (Ridder, 2017).

The second category, which Ridder (2017) coined No theory first, also sets out to investigate novel constructs, which are deduced from new research issues or phenomena, but is premised on a tentative, broad and unassuming research question. Such design employs theoretical sampling that allows for gathering construct- and variable-oriented data in order to reveal new insights about new or preliminary constructs. Consequently, so Ridder (2017) demonstrates, the No theory first research design is most productive in contributing to building and developing theory.

The third category, termed Gaps and holes (Ridder 2017), is distinguished by a research question that is theory-driven and addresses gaps in an existing theoretical or conceptual framework by focussing on the ‘why and how’. Sampling is contingent on the purpose of the case study project, which might range from examining a phenomenon in depth to investigating its generalisability. Data analysis aims at identifying regularities and discrepancies between empirical data and existing theoretical propositions. Hence, Gaps and holes is suited to validate, refine and expand a theory, and thus best contributes to developing or testing theory (ibid).

Ridder’s (2017) fourth category is labelled Anomalies, and is motivated by a research question that seeks to shed light on contradictions or anomalies that an existing theoretical or conceptual framework is unable to explain. The design’s theoretical sampling strategy seeks to enable the comparing and contrasting of differences. Following data collection from participant observation or a dialogue between participant and observer, the analysis focuses on recurring structural factors, which explain the failures of the existing theory. Anomalies is particularly productive for testing or reconstructing theory (ibid).

METHODOLOGY OF OUR CASE STUDY RESEARCH PROJECT

Being clear about a case study research project’s aims is imperative in choosing a research design that offers an appropriate methodological fit for generating findings that make a conceptual or theoretical contribution (Trochim, 2005; Ridder, 2017). Accordingly, our research inquiry adopted a case study design as both the methodology and method, “whereby the knowledge thus attained could be relayed in form of a ‘thick description’ for each approach to work-based HE that is situated, integrative of various accounts and perspectives, and meaningful to outsiders also” (Dadze-Arthur et al., 2020, pp.13). With the help of international experts, the study identified and recruited a non-probability sample that included five good practice cases of work-integrating HE from the US, England and Denmark – three of which are presented in this article (ibid).

The semi-formal interviews with stakeholders responsible for programme set-up, directing, delivery and assessment, as well as representatives of advocacy and regulatory bodies averaged 60 minutes and inquired about the organisational set-up of the programme, its pedagogic model, institutional embeddedness, lessons learned, governance structures and broader policy contexts, and aspects around equality and equity of access. The transcribed
interviews were interpreted employing thematic analysis, before being triangulated with information extracted from the case-specific documents and the literature review. This approach permitted to surface not only shared, explicit views, but also tacit, nuanced and informal knowledge. We presented the findings back to the interviewees in order to minimise any distortions, and confirm that the interpretative accounts were indeed authentic and reflective. On this basis, notwithstanding the widely differing cases and their diverse institutional, structural and cultural contexts, the study identified shared factors that emerged as conceptually relevant to successfully implementing work-integrating HE.

FIELDWORK RESULTS FROM OUR CASE STUDY RESEARCH PROJECT

Case 1: University of Pennsylvania’s LPS Coding Boot Camp (US)

The first case study features an example of HE workforce development, i.e. shorter work-based educational provisions that focus on occupation-specific skills and lead to non-degree certificates awarded by the HE institution. These programmes address skills gap in the labour market, and are delivered in cooperation with non-university learning providers that are specialised in occupation-specific training. The programmes challenge traditional universities to broaden their educational mandate and expand conceptions of academic learning. Despite being a workforce development programme, our good practice case is located at the University of Pennsylvania (UPENN), a private, research-intensive elite university in the US.

In 2017, UPenn’s Professional and Organizational Development (POD) team, a discrete unit in the Liberal and Professional Studies Division (LPS) in the School of Arts and Sciences, initiated a partnership with the private sector learning provider Trilogy Education Service (Trilogy) to be able to offer workforce development programmes in front- and back-end coding. The Coding Boot Camp is offered and accredited by the university, yet delivered by Trilogy in either a fulltime (12 weeks) or a part-time (24 weeks) format.

POD’s partnership with Trilogy leverages UPENN’s quality seal as an Ivy League university and Trilogy’s expertise in training adults to fill the nation’s digital skill gaps. The partnership is hallmarked by a particularly close collaboration that not only involves faculty members but also strategic decision-makers at leadership level. For instance, Trilogy’s Vice President attends fortnightly meetings with POD’s directors to review real-time data on student satisfaction, course performance, career services and labour market trends and, on that basis, refine curricula and teaching approaches, and address support needs or any other issues that might occur.

The Coding Boot Camp’s pedagogic model simulates real-world corporate environments by teaching students to apply what they have learned to real portfolio projects under the guidance of local employers. Delivered in a blended format that includes both on-campus lectures and online classes, individual and team exercises are designed based on the latest research into effective learning processes. The learner-centred teaching model involves lectures from industry professionals, and provides student support through teaching assistants, online tutors, peers, career advisers, and a dedicated student success manager.

The many stakeholders who form part of the programme are organised along a clearly delineated and purposeful division of roles. While those in student-facing roles, including Trilogy’s instructors, teaching assistants, and online tutors provide academic guidance, the student success manager monitors the performance of individual students and offers tailored welfare services. UPENN’s faculty members oversee the design and continual improvement of the curricula, while the POD team manages strategic and legal aspects. Trilogy’s career
services collaborate with employers and assist students with job search upon successful completion of the programme.

In order to establish the Coding Boot Camp, POD had to persuade UPENN’s academic and administrative stakeholders in six-month-long negotiations to live up to the university’s reputation as an innovator and its commitment to the local community, which required rethinking its remit as an educational provider. Key arguments included the possibility of generating revenues for the School, extending UPenn’s reach to new student segments, and boosting economic development in the region.

**Case 2: University of Birmingham’s MSc Public Management & Leadership Executive Degree Apprenticeship Level 7 (UK)**

In the UK, recent legislative changes introduced the so-called Degree Apprenticeships at Bachelor’s and Master’s Level, intended to create three million work-integrating study places by 2020. Typically, every degree apprenticeship is original as an employing organisation commissions a HE institute of its choice to design and deliver the programme in close cooperation with the employer and sector-specific industry body. Consequently, degree apprenticeships formally combine vocational and academic learning, and lead to both a HE qualification as well as a professional one.

Our case study is located at the Institute of Local Government Studies (INLOGOV), an academic department at the University of Birmingham, which is a traditional, research-intensive member of the world-class Russell Group. Deviating from the typical model, INLOGOV self-financed the university’s first master-level Public Management & Leadership Executive Degree Apprenticeship, and designed, marketed and delivered it in partnership with the Society of Local Authority Chief Executives (Solace), an accredited training provider and assessor of vocational leadership and management courses. INLOGOV’s model is particularly attractive because it allows individual employers to fund degree apprenticeships for as few or as many staff members as they can afford to.

INLOGOV’s partnership with Solace was key in realising the programme, considering the training provider’s experience in executive leadership coaching, and its practical insight following the delivery of a level 5 degree apprenticeship, which sits just below the bachelor level. Moreover, INLOGOV was able to capitalise on its existing links with sector bodies and local government organisations in recruiting employers and students. However, given the lack of a conducive infrastructure and culture at wider university level, INLOGOV could not have set up the programme without its dedicated staff members, who had to capitalise on their personal contacts in registration, admission, finance and other administrative and professional services in order to launch the degree apprenticeship.

Geared at senior-level public sector employees, the programme is delivered in a part-time, blended format, and leads to a master degree in Public Management and Leadership as well as a Chartered Management Institute Level 7 Diploma in Strategic Management and Leadership. It consists of six taught 20-credit modules and a work-based 60-credit dissertation, with academics convening the taught component and a management mentor appointed by the employing organisation overseeing the dissertation project. The academic modules are assessed by written assignments, while the work component involves students dedicating 20% of their time at work to experiential learning tasks that are gathered in an e-portfolio for assessment by the Chartered Management Institute. Knowledge exchange with peers is also an important tenet of the pedagogic approach.

A variety of roles underpins the delivery of the programme: Two academic directors oversee the programme, while the module convener is responsible for learning content and
assignments, and industry experts for lectures and workshops. An academic tutor and an INLOGOV practice tutor are assigned to each apprentice, with the former offering guidance on academic progress and pastoral questions, and the latter assisting with translating academic learning into practice at work. A welfare tutor supports apprentices in case of personal difficulties, and the programme administrator offers guidance on administrative matters. Nominated by the employer, the management mentor provides on-the-job support, and the line manager ensures that apprentices are able to meet both their work and learning related commitments. The apprenticeship coordinator manages the contracts with employers, while the degree apprenticeship facilitator oversees the operational activities around the university’s degree apprenticeships, functioning as the lynchpin between employers, the university, apprentices, and the central admissions team.

Importantly, at departmental level, INLOGOV already had the experience, pedagogy, culture and institutions necessary for realising work-integrating education, and thus was well equipped to take on the uphill struggle in lobbying stakeholders at wider university level to adapt existing infrastructures, central processes, and professional services. The process of setting up INLOGOV’s pioneering degree apprenticeship prompted the wider university leadership to initiate some institutional changes effectively to deliver work-integrating education. However, a deeper cultural shift, which truly facilitates further, much needed institutional, structural and operational improvements, is still outstanding.

Case 3: Aarhus University’s Module Experimental Management Practice (DK)

The third case study hails from the Danish School of Education (DPU) at Aarhus University in Denmark, one of the world’s best 100 universities. Following a string of New Public Management reforms between 2003 and 2000, Denmark was able to establish a coherent system of higher and higher vocational adult education and continuing training. Importantly, the new system of academic and professional education incentivised traditional HE institutes, such as Aarhus University, to provide executive master and diploma courses that are offered in part-time formats or as single modules. Typically, these programmes are aimed at mid-career practitioners in full time employment, who have managed to secure funding from their employers in order to prepare for leadership or change agent roles.

Our good practice case is the module Experimental Management Practice, which forms part of the two-year part-time Master of Educational Management (MEM). The programme was originally developed in collaboration with Copenhagen Business School and targets professional managers in educational institutes. Following two semesters on theory and research methods, learners take the module Experimental Management Practice in their third semester. It engages students through a problem based learning (PBL) approach that invites learners to apply theoretical knowledge to solving real-life problems.

DPU’s traditionally close links with schools and other service providers in the education sector, as well as its fruitful partnership with Copenhagen Business School, were pivotal factors in designing a programme that is relevant to the world of practice. These partnerships enabled DPU to identify the specific needs of employers and student practitioners, and on that basis design innovative modules, such as Experimental Management Practice, which offer value to employers and practitioner students by providing a creative space in which learners are able to experiment and generate theoretically informed solutions for problems at the work site.

Driven by the pedagogy of a PBL approach, the module Experimental Management Practice invites students to identify a management challenge at their own work site, and design and execute an intervention. Following the intervention at their respective workplaces, the students gather empirical data that they analyse, guided by relevant theoretical literature of their choice. They are able to test their ideas against academic and professional views by
engaging in discussions with teachers and peers. Thereby, students turn a practical issue at work into a theoretical issue, but also learn to switch perspectives and reframe a problem based on different epistemological assumptions. Similar to a PhD defence, students are assessed on the basis of presenting and defending their projects. The learning outcomes include the ability to self-direct learning in addition to critically experience and productively transform professional practice through the use of theoretical concepts. During the process, students acquire an ability for critical thinking and rigorous analysis, in addition to enhancing generic skills around collaboration, communication, and project management.

The module’s PBL approach involves three distinct key roles: First, the teacher’s role is to facilitate the linking of empirical knowledge to new theoretical concepts, and help students analyse their professional practice. Second, classmates, who are also experts of their own managerial practice, play a key role in debating and scrutinising their colleagues’ emerging hypotheses and findings relating to the theorising, reframing and solving of professional challenges. Third, colleagues at work, who are directly affected by the professional dilemma, offer input outside the classroom and inform the learner’s investigation and reflections within the particular, applied context.

Considering that the PBL approach has an established track record in Denmark’s traditional HEIs, DPU and Aarhus University already had the cultural and institutional prerequisites for realising the module *Experimental Management Practice*. Additionally, DPU’s willingness to allow its faculty members creative freedom and organisational discretion to tailor the application of the PBL model in the context of work-integrating education proved another noteworthy factor in designing and delivering the module.

**SHARED FACTORS DRIVING SUCCESSFUL IMPLEMENTATION**

Even though the international good-practice cases differ widely and are situated in the distinct educational landscapes of different localities, however, the analysis surfaces four factors that are shared across in assisting with the successful implementation of work-integrating HE:

**Productive and innovative partnerships**

Notwithstanding different cultures, languages, systems and priorities, the ability to negotiate productive partnerships with non-traditional external partners in the public, private and voluntary sphere, such as employers, professional organisations, learning providers, or community organisations, emerges as pertinent to effectively implementing work-integrating educational provisions in HE. The challenge is, of course, to make sure that calibrating such educational offers to the demands of partnering organisations happens with a long-term view that puts learners at the centre and is capable of managing, if not avoiding, the short-term priorities of stakeholders, industries and economic sectors.

**Systematic integration of theoretical, experiential and peer-based learning**

The systematic integration of academic learning with professional training, but also with peer-based learning, which involves knowledge exchange between practitioner students from within a community of practice, appears to be another pivotal factor in successfully implementing work-integrating HE programmes. The methodical linking of theory and practice results into educational stakeholders and employing organisations having to coordinate curricular and experiential activities, and possibly assessment, so that they complement each other. Thereby, it drives a pedagogy that overcomes the divisive binaries of ‘classroom’ and ‘workplace’, and ‘theory’ and ‘practice’, and results into a broadened
conception of ‘knowledge’. Furthermore, combining theoretical learning with both experiential and peer-based learning tends to ensure that learning outcomes are continually updated, and thus remain relevant, valid and appropriate. The caveat is, of course, that such systematic integration requires high-level negotiation skills, alongside the ability to design appropriate work-integrating programmes, which may lead to a plethora of learning outcomes, given that both academic and professional skills and competencies may need to be considered.

**A diverse and purposeful range of staff roles**

The case studies also demonstrate that the job roles involved in setting up, facilitating and assessing work-integrated teaching and learning, both at the worksite and the university, ought to be highly diversified and clearly demarcated to support effective implementation. In addition to the traditional teaching roles, there is a wide range of roles for student-facing personnel, who address the particular support needs of working adults in HE by providing personalised academic, welfare and career development services. Similarly, there is a variety of roles for employer-facing staff, who monitor labour markets, recruit employing organisations, manage relationships, assist with placing student practitioners and graduates into jobs, and support staff at the worksite effectively to participate in the teaching, and possibly assessment, of learners. Moreover, there is a range of roles for those staff members, who are responsible for back office functions and the promotion, alignment and coordination of work-integrating programmes across academic, administrative, legal and professional services departments. The challenge here is that some of these roles are unprecedented and will have to be newly developed.

**A willingness and capacity for structural, institutional, operational and cultural changes**

While the impulses for change that drive HEIs to adopt work-integrating HE education vary, all three case studies show that a willingness and capacity for reform are imperative for successful implementation. A university keen on realising work-integrating educational provisions must have the ability to be flexible, innovative and do things differently, which inevitably will require internal lobbying to change the culture, institutions and operational processes of the HEI and its individual faculties and departments. Ultimately, a culture is needed that embraces not just academic subject expertise but also practice-based expertise, while university infrastructures, departmental procedures and institutionalised practices need to respond to the different requirements of work-integrating programmes by becoming more flexible in terms of admission and assessment procedures, contracting and legal affairs, collaborative arrangements, and the way in which resources are allocated. Here, the obvious caveat is that HEIs are traditionally resistant to change and often too rigid to reform time-honoured cultural and institutional traditions.

**ASSESSING OUR STUDY AGAINST RIDDER’S (2017) PROPOSITIONS**

The design employed in our study features all of the characteristics, which according to Ridder (2017) define case study research designs labelled *Social construction of reality* – a term that evokes Berger’s and Luckmann’s (1966/1991) seminal work on the sociology of knowledge. The rationale for our case study research project was based on the premise that the phenomenon of interest, the effective implementation of work-integrating HE, has not yet been conceptually understood and theorised. Consequently, we opted to forego a concrete research question in order to avoid theoretical preconceptions and leave room for surfacing unexpected insights about the ways in which HE providers have implemented work-integrating HE (Dadze-Arthur et al., 2020). Underpinned by a constructivist epistemology and
idealistic ontology, our research design employed thick description to achieve holistic and situated insights into each case, reflecting meanings embedded in the respective contexts. Confirming Stake’s (1995) suggestion that intrinsic and instrumental case studies may merge into one, our research design facilitated learning both from each individual case per se as well as from categorically aggregated themes. Our study’s purposive non-probability sampling approach is also characteristic of case study research designs in this category.

By exhibiting all the characteristics of the category Social construction of reality, our case study research is most productive, according to Ridder (2017, pp. 298), in developing “tentative theory” and “building concrete, context-dependent knowledge with regard to the identification of new phenomena”. As this was indeed the purpose and achievement of our study, there is evidence to suggest that our research design is rigorous and aptly fits the aimed contribution to theory, which is “a prerequisite for the contribution of case study research to better theories” (Ridder, 2017, pp.302-303). Conversely, our study offers empirical evidence that confirms Ridder’s (2017) theoretical propositions regarding the category Social construction of reality, and thus endorses its usefulness in guiding the development of research designs that aim at building theory.

CONCLUSION

This article presented three good practice case studies and, on that basis, extracted four key factors that constitute preliminary conceptual building blocks for implementing work-integrating HE: productive and innovative partnerships, systematic integration of theoretical, experiential and peer-based learning, a diverse and purposeful range of staff roles, and a willingness and capacity for structural, institutional, operational and cultural changes. In aiming at informing the practice of HE actors operating in different institutional, structural and cultural contexts, the results could contribute to a more systematic approach to implementing work-integrating HE, and thus enhance the success of these programmes.

The greatest limitations of our study are those inherent to the methodology chosen. Undertaking case studies implies a series of choices and omissions – which cases do we select, which parts of the cases do we observe in depth, which parts do we present in what way – and which not. Grounded in an epistemology of the particular, we rely on the force of a few cases in assuming that what is found in these case can be found in others. Accordingly, further research is needed, for one, to probe whether the four factors can also be identified in other successful work-integrating HE programmes, and second, to elicit additional factors that eventually contribute to a more comprehensive implementation theory.
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